RE-forMS
rammed earth for modelling and standardization
in seismically active areas

HRZZ
Hrvatska zaklada
za znanost

Numerički modeli razreda A za procjenu ponašanja modela kuća koje će biti eksperimentalno ispitivani u sljedećem razdoblju

Naziv projekta:	Nabijena zemlja za modeliranje i normizaciju u potresno aktivnim područjima
Akronim:	RE-forMS
Šifra projekta:	UIP-2020-02-7363
Ustanova s kojom je sklopljen ugovor o financiranju:	Građevinski i arhitektonski fakultet Osijek
Partnerske ustanove:	Fakultet agrobiotehničkih znanosti Osijek, Građevinski fakultet Sveučilišta u Rijeci
Voditelj:	izv. prof. dr. sc. Ivan Kraus
Izvještajno razdoblje:	4. razdoblje
Oznaka izvještaja:	D3
Sadržaj:	Opis računalnih modela za procjenu ponašanja modela kuća od nabijene zemlje koje će biti eksperimentalno ispitani u sljedećem razdoblju.
Autori izvještaja:	dr. sc. Ana Perić Fekete, izv. prof. dr. sc. Ivan Kraus, doc. dr. sc. Paulina Krolo, doc. dr. sc. Marin Grubišić
Datum:	5. 9. 2024.

Ovaj je materijal sufinancirala Hrvatska zaklada za znanost projektom UIP-2020-02-7363. Sadržaj ili preporuke navedene u ovom materijalu odnose se na autora i ne odražavaju nužno stajališta Hrvatske zaklade za znanost.

Sveučilište Josipa Jurja Strossmayera u Osijeku
Fakultet agrobiotehničkih znanosti Osijek

Sveučilište Josipa Jurja Strossmayera u Osijeku
Građevinski i arhitektonski fakultet Osijek
Josip Juraj Strossmayer University of Osijek
Faculty of Civil Engineering and Architecture Osijek

Sveučilište u Rijeci
Građevinski fakultet

Sažetak:

U sklopu istraživanja izrađeni su računalni modeli kuća od nabijene zemlje korištenjem studentske verzije računalnog programa ANSYS Workbench 2024 R2. Cilj simulacija bio je procijeniti mehaničko ponašanje konstrukcija pod vertikalnim i horizontalnim opterećenjima. Modeli su izrađeni u umanjenom mjerilu, uz primjenu Drucker-Präger modela materijala i dosljedno definiranje geometrijskih i materijalnih parametara temeljenih na prethodnim istraživanjima i validiranim podacima.

Simulacije su pokazale da jednoliko raspoređeno vertikalno opterećenje omogućuje znatno veću nosivost konstrukcija, s kapacitetom od 80 kN i horizontalnim pomakom do 9 mm prije sloma. Modeli s nejednolikim opterećenjem pokazali su slabije performanse, a nešto bolji rezultati uočeni su kod modela s opterećenjem raspoređenim na zidu s prozorom i njemu suprotnom zidu. Ovi nalazi naglašavaju važnost ravnomjernog rasporeda opterećenja i pažljivog dizajna otvora.

Rezultati pružaju smjernice za daljnju eksperimentalnu analizu, uključujući planiranu izradu i ispitivanje fizičkih modela na potresnoj platformi. Ovo istraživanje doprinosi razumijevanju otpornosti konstrukcija od nabijene zemlje, čineći ih potencijalno održivim i sigurnim građevinskim rješenjem, posebno u potresno aktivnim područjima.

Ključne riječi: nabijena zemlja, računalni modeli, nosivost konstrukcija, potresni stol, procjena ponašanja, ANSYS, kuća od nabijene zemlje

Abstract:

As part of the research, computational models of rammed earth houses were developed using the student version of the ANSYS Workbench 2024 R2 software. The simulations aimed to assess the mechanical behavior of the structures under vertical and horizontal loads. The models were created at a reduced scale, applying the Drucker-Prager material model and consistently defining geometric and material parameters based on previous research and validated data.

The simulations revealed that uniformly distributed vertical loads significantly enhance the load-bearing capacity of the structures, achieving a capacity of 80 kN and a horizontal displacement of up to 9 mm before failure. Models with non-uniform load distribution demonstrated weaker performance, with slightly better results observed in models where the load was applied to the wall with a window and its opposite wall. These findings emphasize the importance of uniform load distribution and careful design of openings.

The results provide guidelines for further experimental analysis, including the planned fabrication and testing of physical models on a seismic platform. This research contributes to understanding the resilience of rammed earth constructions, positioning them as potentially sustainable and safe building solutions, particularly in seismically active areas.

Key words: rammed earth, numeircal models, structural load capacity, shaking table, assessment of behaviour, ANSYS, rammed earth house

Sadržaj

1. Uvod 5
2. Opis modela zidova od nabijene zemlje 5
3. Izrada računalnih modela procjene ponašanja 6
4. Rezultati proračuna procjene ponašanja izradom računalnih modela 9
5. Zaključak 11
Literatura 12
PRILOG 1 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na svim zidovima 13
PRILOG 2 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na zidu s prozorom 250
PRILOG 3 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na zidu s vratima 509

1. Uvod

Izrađeni su računalni modeli kuća od nabijene zemlje primjenom studentske verzije računalnog programa ANSYS 2024 R2, uz korištenje suvremenih metoda modeliranja i simulacije. U sklopu projekta izrađena su tri odvojena računalna modela kuća u umanjenom mjerilu, kako je planirano i za izradu odgovarajućih fizičkih modela u laboratorijskim uvjetima.

Modeli kuća opterećeni su kombinacijom vertikalnog opterećenja, primijenjenog na vrhu konstrukcije, i horizontalnog cikličkog pomaka u istoj razini. Ova kombinacija opterećenja odabrana je kako bi se simulirali stvarni uvjeti u kojima bi se konstrukcija mogla naći tijekom svog vijeka trajanja, uključujući potresne i druge dinamičke utjecaje.

U glavnom dijelu izvještaja detaljno su opisani računalni modeli, uključujući osnovne pretpostavke, materijalne karakteristike i granične uvjete. Rezultati dobiveni računalnim proračunom prikazani su kroz grafičke prikaze, čime su omogućeni jasni uvidi u ključne pokazatelje otpornosti i stabilnosti konstrukcija. U prilozima na kraju izvještaja priloženi su i programski kôdovi za sve tri varijante računalnih modela, što omogućuje dodatnu transparentnost i mogućnost reproduciranja proračuna za daljnje istraživačke potrebe.

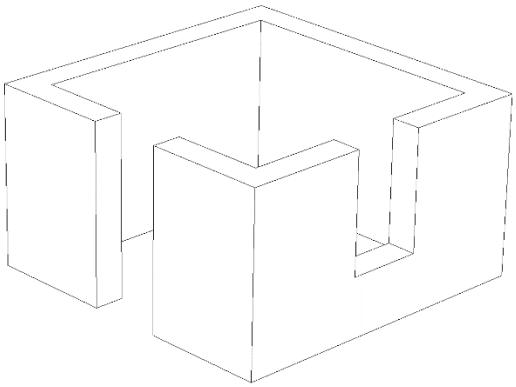
Ovakav pristup doprinosi razumijevanju ponašanja konstrukcija od nabijene zemlje, čineći ga ključnim korakom prema razvoju održivih i ekološki prihvatljivih građevinskih rješenja.

2. Opis modela zidova od nabijene zemlje

U idućem projektnom razdoblju planirana je izgradnja dvaju modela kuća od nabijene zemlje u umanjenom mjerilu, koji će biti podvrgnuti ispitivanju na potresnoj platformi u Žrnovici. Oba modela kuća bit će izrađena identičnih dimenzija (prikazano na slici 2.1), kako bi se omogućila precizna i pouzdana usporedba rezultata ispitivanja.

Tijekom terenskog istraživanja provedenog u prvoj godini projekta, utvrđeno je da visina zidova u tradicionalnim konstrukcijama od nabijene zemlje na području istočne Hrvatske uglavnom ne prelazi 2,5 metra. Slijedom toga, visina modela definirana je u iznosu od 1,20 metara, što omogućuje realističnu reprezentaciju u smanjenom mjerilu. Radi pojednostavljenja izvedbe i kasnijeg ispitivanja, duljina zidova definirana je u istom iznosu kao visina, čime se dobiva pravilna geometrija modela.

Dodatnim obilaskom kuća od nabijene zemlje na ovom području utvrđeno je kako debljina nosivih zidova najčešće iznosi približno 50 centimetara. Sukladno tome, debljina modela zidova od nabijene zemlje određena je na 20 centimetara, što predstavlja smanjenu, ali proporcionalnu dimenziju u odnosu na stvarne konstrukcije. Ovaj pristup osigurava vjerodostojnost modela i omogućuje detaljnu analizu ponašanja materijala i konstrukcije pod utjecajem potresnog opterećenja.



Slika 2.1 Dispozicija modela kuća od nabijene zemlje

3. Izrada računalnih modela procjene ponašanja

Izrađena su tri računalna modela kuća od nabijene zemlje s ciljem procjene njihovog ponašanja pod različitim uvjetima opterećenja. Računalni modeli izrađeni su korištenjem studentske verzije naprednog računalnog programa ANSYS Workbench 2024 R2. Svojstva materijala korištenih u modelima zidova definirana su na temelju podataka iz pregledane literature, kao i na temelju dosad izrađenih i validiranih računalnih modela u okviru prethodnih faza projekta. Dodatno, korišteni su i rezultati dobiveni prilikom izrade doktorskog rada doktorandice Ane Perić Fekete, čime je osigurana vjerodostojnost i konzistentnost primijenjenih parametara.

U svim modelima primijenjen je Drucker-Präger model materijala, koji omogućuje realističnu simulaciju ponašanja konstrukcija od nabijene zemlje. Pritom je dopušteno određeno popuštanje između slojeva modela kuće, kako bi se što preciznije simulirale stvarne karakteristike građevinskog materijala i njegovih međusobnih spojeva. Materijalna svojstva korištena u računalnim modelima detaljno su prikazana u tablici 3.1.

Za sva tri računalna modela primijenjen je identičan pristup izradi modela, uključujući izbor materijalnog modela i način definicije graničnih uvjeta. Ova konzistentnost omogućuje usporedivost rezultata simulacija te dodatno doprinosi pouzdanosti izvedenih zaključaka o ponašanju kuća od nabijene zemlje.

Tablica 3.1 Materijalna svojstva primijenjena u računalnim modelima

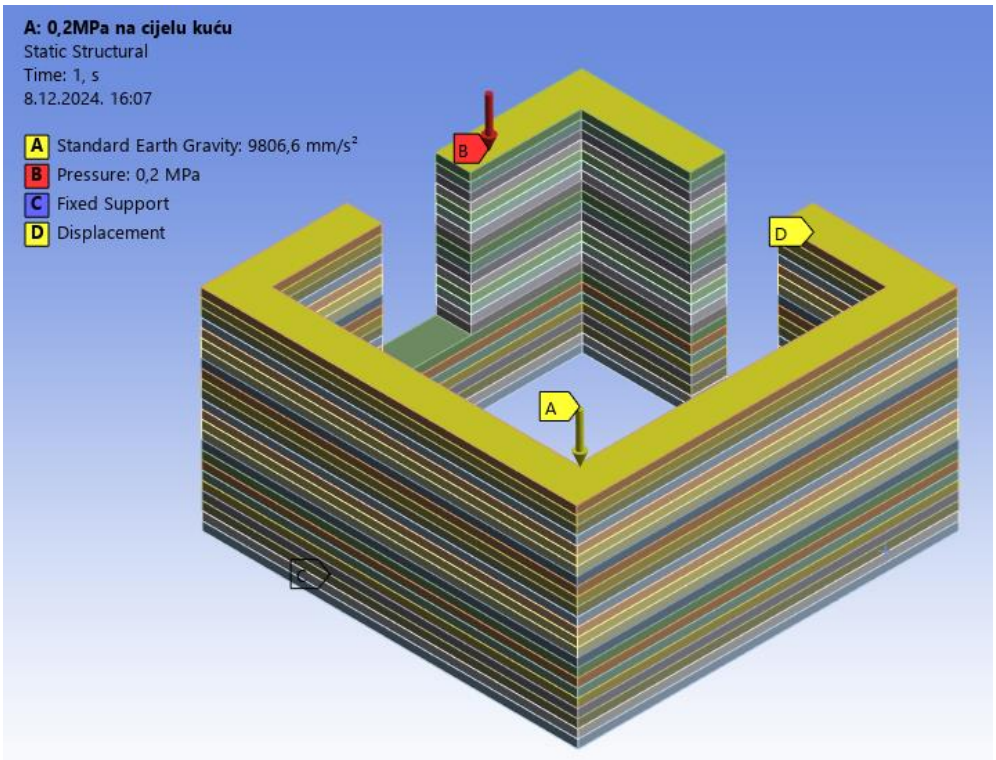
Materijalno svojstvo	**Oznaka**	**IP**
Specifična gustoća	d [kg/m^3]	2000
Poissonov omjer	v [-]	0,20
Modul elastičnosti	E [MPa]	350
Tlačna čvrstoća	f_c [MPa]	2,25
Vlačna čvrstoća	f_t [MPa]	0,87
Maks. tangencijalno naprezanje na kontaktu	τ_{max} [MPa]	0,05
Tangencijalno klizanje na kraju odvajanja	δ^c_t [m]	0,01
Koeficijent umjetnog prigušenja	η [s]	0,10

Računalni modeli kuća (slike 3.1 – 3.3) izrađeni su primjenom metode konačnih elemenata, pri čemu je veličina konačnih elemenata definirana na 50 mm, što je bilo uvjetovano ograničenjima studentske verzije računalnog programa ANSYS. Modeli su osigurani upetljavanjem u podnožju, čime je simulirana stabilna baza konstrukcije, dok je na vrh zidova primijenjeno odgovarajuće opterećenje.

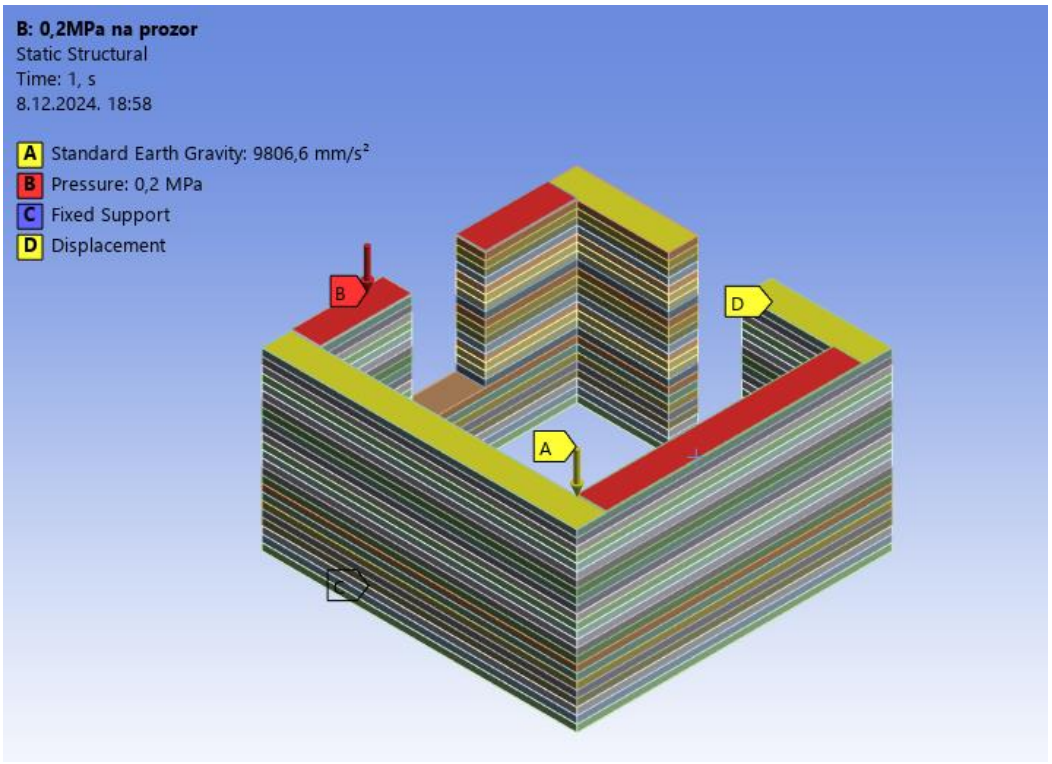
Vertikalno opterećenje, iznosilo je 0,2 MPa, što je procijenjeno na temelju težine elemenata krovišta (rogovi, podrožnice, biber crijep) te dodatnog uporabnog opterećenja u vidu skladištenja žitarica. U jednom od modela, ovo opterećenje naneseno je ravnomjerno na sve zidove, dok je u preostala dva modela opterećenje primijenjeno samo na dva suprotna zida, što je detaljno prikazano na slikama 3.2 i 3.3. Ova razlika u opterećenju omogućila je analizu ponašanja konstrukcije u različitim scenarijima opterećenja.

Horizontalni pomak definiran je kao ciklički promjenjiv smjer opterećenja, prema unaprijed određenom protokolu koji je ranije korišten za ispitivanje zidova od nabijene zemlje (slika 3.4). Ovakav način nanošenja horizontalnog opterećenja omogućuje simulaciju potresnog utjecaja i analizu sposobnosti konstrukcije da podnese cikličke promjene opterećenja.

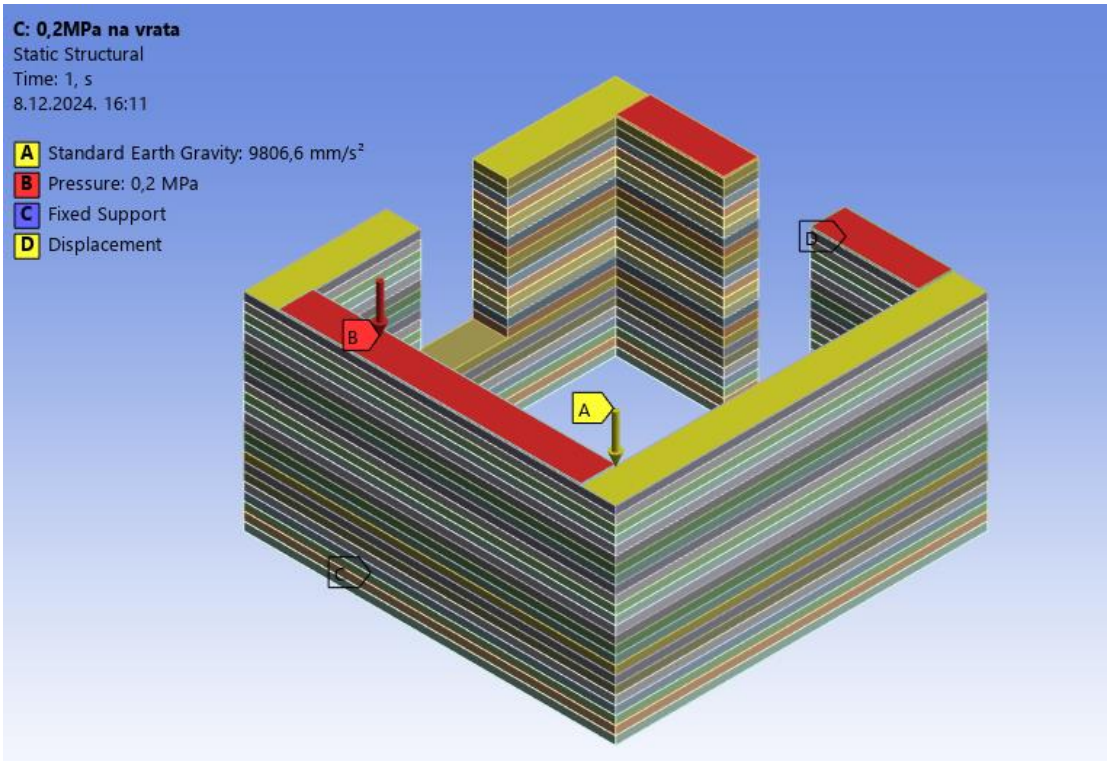
Slom modela identificiran je zaustavljanjem računalne simulacije, što je posljedica pada sposobnosti nosivosti materijala uslijed prekoračenja kritičnih naprezanja. Ovaj kriterij sloma omogućuje preciznu analizu otpornosti konstrukcije te identifikaciju ključnih točaka oslabljene stabilnosti. Rezultati ovakvih simulacija pružaju vrijedan uvid u ponašanje kuća od nabijene zemlje pod stvarnim opterećenjima.



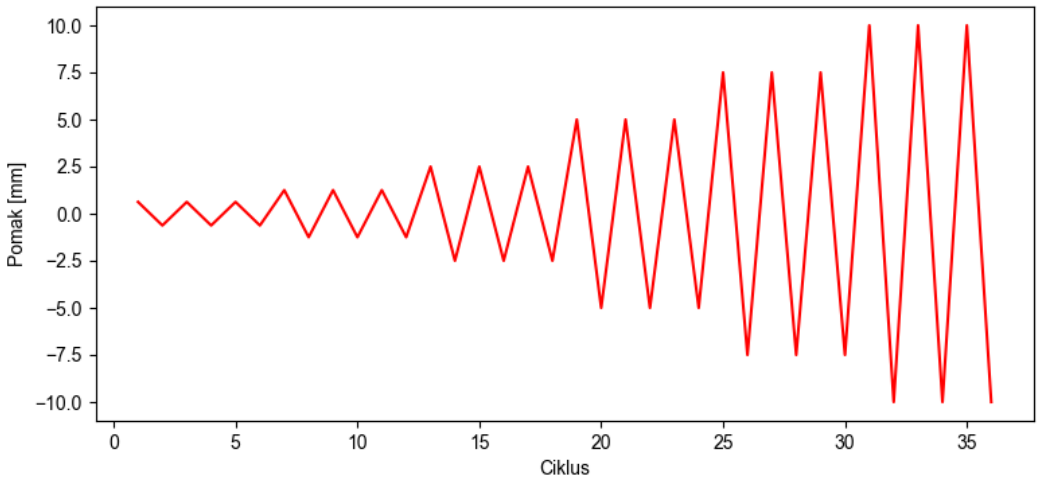
Slika 3.1 Model kuće jednoliko opterećen vertikalnim opterećenjem



Slika 3.2 Model kuće opterećen vertikalnim opterećenjem na zidu s prozorom



Slika 3.3 Model kuće opterećen vertikalnim opterećenjem na zidu s vratima



Slika 3.4 Protokol nanošenja horizontalnog pomaka na vrhu modela kuća

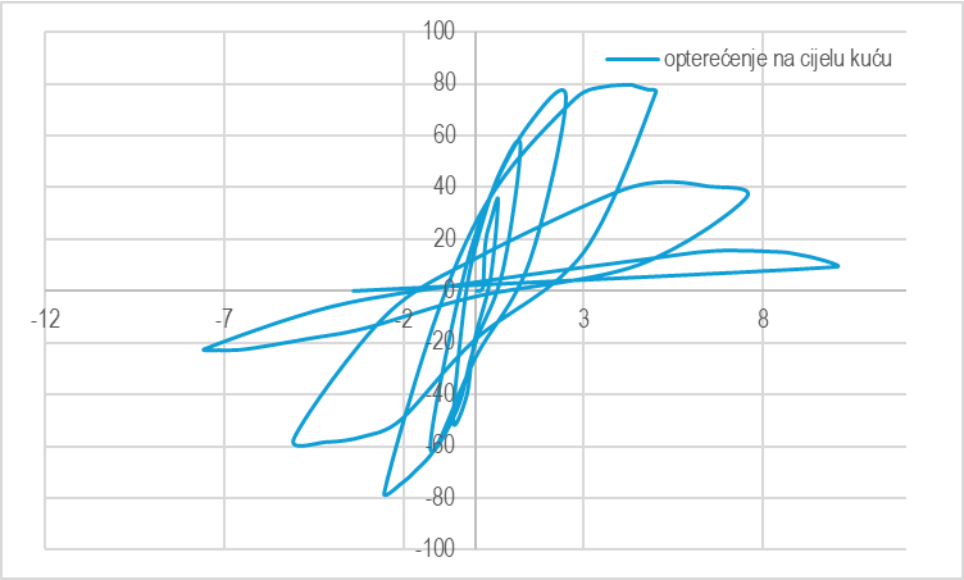
4. Rezultati proračuna procjene ponašanja izradom računalnih modela

Proračunom u računalnom programu ANSYS Workbench 2024 R2 određena je sposobnost nosivosti modela kuća od nabijene zemlje. Rezultati proračuna prikazani su grafički na slikama 4.1 – 4.3, gdje se jasno uočava razlika u ponašanju modela pod različitim uvjetima vertikalnog opterećenja.

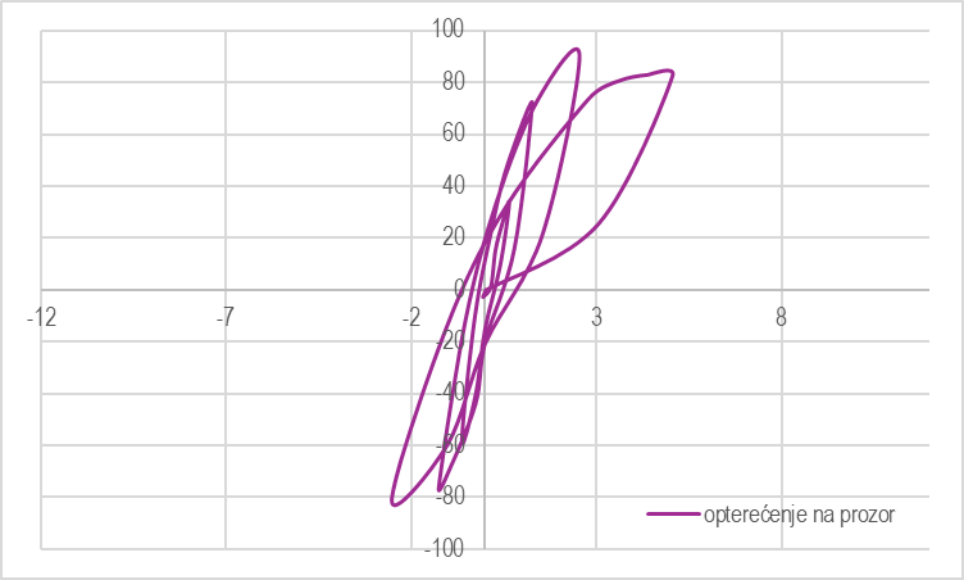
Grafikoni pokazuju da modeli kuća s jednoliko raspoređenim vertikalnim opterećenjem ostvaruju znatno veći kapacitet nosivosti u usporedbi s modelima kod kojih opterećenje nije raspoređeno jednoliko. Kuća s jednoliko raspoređenim opterećenjem podnijela je horizontalni pomak od približno 9 mm prije sloma, uz kapacitet nosivosti od oko 80 kN. Nasuprot tome, modeli s nejednolikim rasporedom opterećenja pokazali su znatno niži kapacitet nosivosti, što se odrazilo i u manjoj sposobnosti podnošenja horizontalnih pomaka.

Među modelima s nejednoliko raspoređenim opterećenjem, nešto bolje ponašanje uočeno je kod modela na kojem je vertikalno opterećenje bilo raspoređeno na zidu s prozorom i njemu suprotnom zidu. Pretpostavlja se da je to zbog činjenice da je zid s prozorom, unatoč otvoru, strukturno cjelovitiji zahvaljujući parapetu, dok je zid s otvorom za vrata manje čvrst zbog većeg gubitka materijala.

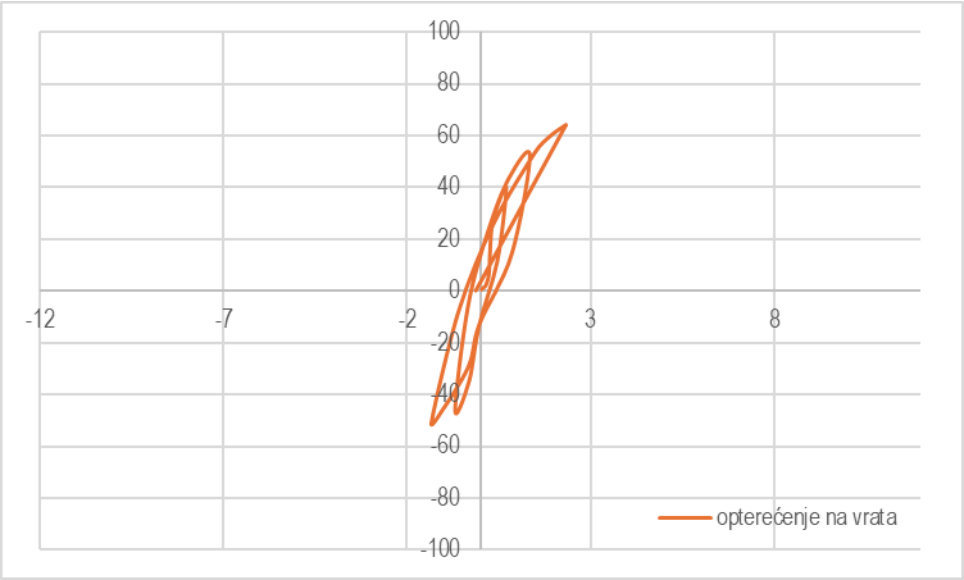
Ovi rezultati naglašavaju važnost ravnomjernog rasporeda opterećenja na svim zidovima kako bi se osigurala veća otpornost konstrukcija na horizontalne pomake. Osim toga, ukazuju na značaj dodatne analize utjecaja otvora na nosivost konstrukcija, što može poslužiti kao smjernica za buduće projekte i optimizaciju građevinskih elemenata kuća od nabijene zemlje.



Slika 4.1 Kapacitet nosivosti kuće od nabijene zemlje jednoliko opterećene vertikalnim opterećenjem (na ordinati sila u kN, na apscisi pomak u mm)



Slika 4.2 Kapacitet nosivosti kuće od nabijene zemlje s vertikalnim opterećenjem na zidove s prozorom (na ordinati sila u kN, na apscisi pomak u mm)



Slika 4.3 Kapacitet nosivosti kuće od nabijene zemlje s vertikalnim opterećenjem na zidove s vratima (na ordinati sila u kN, na apscisi pomak u mm)

5. Zaključak

Provedeno istraživanje i simulacije računalnih modela kuća od nabijene zemlje omogućile su vrijedan uvid u mehaničko ponašanje ovog tradicionalnog građevinskog materijala pod različitim uvjetima opterećenja. Korištenjem naprednog računalnog programa ANSYS Workbench 2024 R2, izrađeni su modeli u umanjenom mjerilu, čime je osigurana precizna analiza ponašanja konstrukcija u kontroliranim uvjetima. Ovaj pristup omogućio je simulaciju stvarnih opterećenja, uključujući vertikalna opterećenja uzrokovana težinom krovišta i skladištenja te horizontalne pomake koji imitiraju potresne utjecaje.

Rezultati simulacija ukazali su na ključnu važnost ravnomjernog rasporeda vertikalnog opterećenja za osiguranje nosivosti konstrukcije. Kuće s jednoliko raspoređenim opterećenjem pokazale su znatno veći kapacitet nosivosti, s najvećim horizontalnim pomakom od približno 9 mm i nosivošću od 80 kN prije sloma. S druge strane, modeli s nejednoliko raspoređenim opterećenjem postigli su niže vrijednosti nosivosti i manju sposobnost podnošenja horizontalnih pomaka, čime su se pokazali osjetljivijima na dinamičke utjecaje.

Osim toga, analiza je pokazala da zidovi s prozorima, zahvaljujući parapetima koji povećavaju njihovu strukturnu cjelovitost, pružaju veću otpornost u usporedbi sa zidovima s vratima. Ova razlika dodatno naglašava važnost razmatranja oblika i rasporeda otvora pri projektiranju kuća od nabijene zemlje. Ovi nalazi pružaju smjernice za optimizaciju dizajna, posebno u pogledu ravnomjernog rasporeda opterećenja i prilagodbe geometrije otvora za vrata i prozore.

Primjena Drucker-Präger modela materijala pokazala se prikladnom za simulaciju ponašanja nabijene zemlje, omogućujući procjenu otpornosti materijala i njegovih međusobnih slojeva. Vjerodostojnost simulacija osigurana je korištenjem validiranih parametara iz prethodnih istraživanja i doktorskog rada, čime su dobiveni rezultati dodatno podržani znanstvenim dokazima. Ovaj pristup značajno doprinosi razumijevanju mehaničkih svojstava nabijene zemlje, čineći ga temeljem za buduće eksperimentalne analize.

Planirana izrada fizičkih modela u laboratorijskim uvjetima te njihovo testiranje na potresnoj platformi u Žrnovici predstavlja sljedeći ključni korak u istraživanju. Rezultati eksperimentalnih

ispitivanja bit će uspoređeni s provedenim simulacijama, čime će se dodatno validirati računalni modeli i poboljšati njihova pouzdanost. Ova kombinacija računalnih i eksperimentalnih metoda omogućit će cjelovito razumijevanje ponašanja konstrukcija od nabijene zemlje pod različitim opterećenjima.

Zaključno, provedeno istraživanje značajno doprinosi razvoju održivih i ekološki prihvatljivih građevinskih rješenja. Korištenje nabijene zemlje, kao dostupnog i obnovljivog materijala, predstavlja potencijalno rješenje za smanjenje ekološkog otiska građevinskog sektora. Rezultati ovog projekta pružaju temelje za daljnji razvoj i optimizaciju konstrukcija od nabijene zemlje, čineći ih otpornijima na dinamičke utjecaje i sigurnijima za primjenu u potresno aktivnim područjima. S obzirom na sve navedeno, istraživanje otvara mogućnosti za širu primjenu tradicionalnih tehnika građenja uz suvremene metode analize i projektiranja.

Literatura

Perić, Ana; Kraus, Ivan; Kaluđer, Jelena; Kraus, Lucija. 2021. Experimental campaigns on mechanical properties and seismic performance of unstabilized rammed earth—A literature review. Buildings 11(8).

PRILOG 1 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na svim zidovima

Solver Output

```
 Ansys Mechanical Enterprise Academic Student



*------------------------------------------------------------------*
|                                                                  |
| W E L C O M E  T O  T H E  A N S Y S (R) P R O G R A M           |
|                                                                  |
*------------------------------------------------------------------*




***********************************************************
*        ANSYS MAPDL 2024 R2         LEGAL NOTICES        *
***********************************************************
*                                                         *
* Copyright 1971-2024 Ansys, Inc.  All rights reserved.   *
* Unauthorized use, distribution or duplication is        *
* prohibited.                                             *
*                                                         *
* Ansys is a registered trademark of Ansys, Inc. or its   *
* subsidiaries in the United States or other countries.   *
* See the Ansys, Inc. online documentation or the Ansys, Inc. *
* documentation CD or online help for the complete Legal  *
* Notice.                                                 *
*                                                         *
***********************************************************
```

*   *
* THIS ANSYS SOFTWARE PRODUCT AND PROGRAM DOCUMENTATION   *
* INCLUDE TRADE SECRETS AND CONFIDENTIAL AND PROPRIETARY   *
* PRODUCTS OF ANSYS, INC., ITS SUBSIDIARIES, OR LICENSORS.   *
* The software products and documentation are furnished by   *
* Ansys, Inc. or its subsidiaries under a software license   *
* agreement that contains provisions concerning   *
* non-disclosure, copying, length and nature of use,   *
* compliance with exporting laws, warranties, disclaimers,   *
* limitations of liability, and remedies, and other   *
* provisions. The software products and documentation may be *
* used, disclosed, transferred, or copied only in accordance *
* with the terms and conditions of that software license   *
* agreement.   *
*   *
* Ansys, Inc. is a UL registered   *
* ISO 9001:2015 company.   *
*   *
****
*   *
* This product is subject to U.S. laws governing export and *
* re-export.   *
*   *
* For U.S. Government users, except as specifically granted *
* by the Ansys, Inc. software license agreement, the use,   *
* duplication, or disclosure by the United States Government *
* is subject to restrictions stated in the Ansys, Inc.   *
* software license agreement and FAR 12.212 (for non-DOD   *
* licenses).   *
*   *
****

2024 R2

Point Releases and Patches installed:

Ansys Service Pack 2024 R2.15857956

Discovery 2024 R2.15857956

Core WB Files 2024 R2.15857956

Ansys Dynamic Reporting 2024 R2.15857956

SpaceClaim 2024 R2.15857956

CFX (includes CFD-Post) 2024 R2.15857956

Chemkin 2024 R2.15857956

EnSight 2024 R2.15857956

FENSAP-ICE 2024 R2.15857956

Fluent (includes CFD-Post) 2024 R2.15857956

Polyflow (includes CFD-Post) 2024 R2.15857956

Forte (includes EnSight) 2024 R2.15857956

TurboGrid 2024 R2.15857956

ACIS Geometry Interface 2024 R2.15857956

AutoCAD Geometry Interface 2024 R2.15857956

Catia, Version 4 Geometry Interface 2024 R2.15857956

Catia, Version 5 Geometry Interface 2024 R2.15857956

Catia, Version 6 Geometry Interface 2024 R2.15857956

Creo Elements/Direct Modeling Geometry Interface 2024 R2.15857956

Creo Parametric Geometry Interface 2024 R2.15857956

Inventor Geometry Interface 2024 R2.15857956

JTOpen Geometry Interface 2024 R2.15857956

NX Geometry Interface 2024 R2.15857956

Parasolid Geometry Interface 2024 R2.15857956

Solid Edge Geometry Interface 2024 R2.15857956

SOLIDWORKS Geometry Interface 2024 R2.15857956

Speos 2024 R2.15857956

Aqwa 2024 R2.15857956

Autodyn 2024 R2.15857956

Material Calibration App 2024 R2.15857956

Customization Files for User Programmable Features 2024 R2.15857956

Mechanical Products 2024 R2.15857956

Motion 2024 R2.15857956

Academic Student 2024 R2.15857956

***** MAPDL COMMAND LINE ARGUMENTS *****

BATCH MODE REQUESTED (-b) = NOLIST

INPUT FILE COPY MODE (-c) = COPY

DISTRIBUTED MEMORY PARALLEL REQUESTED

2 PARALLEL PROCESSES REQUESTED WITH SINGLE THREAD PER PROCESS

TOTAL OF 2 CORES REQUESTED

INPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\dummy.dat

OUTPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\solve.out

START-UP FILE MODE = NOREAD

STOP FILE MODE = NOREAD

RELEASE= 2024 R2 BUILD= 24.2 UP20240513 VERSION=WINDOWS x64

CURRENT JOBNAME=file0 11:24:23 SEP 04, 2024 CP= 0.031

PARAMETER _DS_PROGRESS = 999.0000000

/INPUT FILE= ds.dat LINE= 0

*** NOTE *** CP = 0.234 TIME= 11:24:23

The /CONFIG,NOELDB command is not valid in a distributed memory

parallel solution. Command is ignored.

*GET _WALLSTRT FROM ACTI ITEM=TIME WALL VALUE= 11.4063889

TITLE=

kuca_prelim_2--Static Structural (B5)

ACT Extensions:

LSDYNA, 2024.2

5f463412-bd3e-484b-87e7-cbc0a665e474, wbex

/COM, ANSYSMotion, 2024.2

20180725-3f81-49eb-9f31-41364844c769, wbex

SET PARAMETER DIMENSIONS ON _WB_PROJECTSCRATCH_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_PROJECTSCRATCH_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\

SET PARAMETER DIMENSIONS ON _WB_SOLVERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_SOLVERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\dp0\SYS-2\MECH\

SET PARAMETER DIMENSIONS ON _WB_USERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_USERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\user_files\

--- Data in consistent NMM units. See Solving Units in the help system for more

MPA UNITS SPECIFIED FOR INTERNAL

LENGTH = MILLIMETERS (mm)

MASS = TONNE (Mg)

TIME = SECONDS (sec)

TEMPERATURE = CELSIUS (C)

TOFFSET = 273.0

FORCE = NEWTON (N)

HEAT = MILLIJOULES (mJ)

INPUT UNITS ARE ALSO SET TO MPA

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 11:24:23 SEP 04, 2024 CP= 0.266

kuca_prelim_2--Static Structural (B5)

***** MAPDL ANALYSIS DEFINITION (PREP7) *****

********** Nodes for the whole assembly **********

********** Elements for Body 1 'Part 1' **********

********** Elements for Body 2 'Part 2' **********

********** Elements for Body 3 'Part 3' **********

********** Elements for Body 4 'Part 4' **********

********** Elements for Body 5 'Part 5' **********

********** Elements for Body 6 'Part 6' **********

********** Elements for Body 7 'Part 7' **********

********** Elements for Body 8 'Part 8' **********

********** Elements for Body 9 'Part 9' **********

********** Elements for Body 10 'Part 10' **********

********** Elements for Body 11 'Part 11' **********

********** Elements for Body 12 'Part 12' **********

********** Elements for Body 13 'Part 13' **********

********** Elements for Body 14 'Part 14' **********

********** Elements for Body 15 'Part 15' **********

********** Elements for Body 16 'Part 16' **********

********** Elements for Body 17 'Part 17' **********

********** Elements for Body 18 'Part 18' **********

********** Elements for Body 19 'Part 19' **********

********** Elements for Body 20 'Part 20' **********

********** Elements for Body 21 'Part 21' **********

********** Elements for Body 22 'Part 22' **********

********** Elements for Body 23 'Part 23' **********

********** Elements for Body 24 'Part 24' **********

********** Elements for Body 25 'Part 25' **********

********** Elements for Body 26 'Part 26' **********

********** Elements for Body 27 'Part 27' **********

********** Elements for Body 28 'Part 28' **********

********** Elements for Body 29 'Part 29' **********

********** Elements for Body 30 'Part 30' **********

********** Elements for Body 31 'Part 31' **********

********** Elements for Body 32 'Part 32' **********

********** Elements for Body 33 'Part 33' **********

********** Elements for Body 34 'Part 34' **********

********** Elements for Body 35 'Part 35' **********

********** Elements for Body 36 'Part 36' **********

********** Elements for Body 37 'Part 37' **********

********** Elements for Body 38 'Part 38' **********

********** Elements for Body 39 'Part 39' **********

********** Elements for Body 40 'Part 40' **********

********** Elements for Body 41 'Part 41' **********

********** Elements for Body 42 'Part 42' **********

********** Elements for Body 43 'Part 43' **********

********** Send User Defined Coordinate System(s) **********

********** Set Reference Temperature **********

********** Send Materials **********

********** Create Contact "Contact Region 4" **********

Real Constant Set For Above Contact Is 45 & 44

********** Create Contact "Contact Region 5" **********

Real Constant Set For Above Contact Is 47 & 46

********** Create Contact "Contact Region 6" **********

Real Constant Set For Above Contact Is 49 & 48

********** Create Contact "Contact Region 7" **********

Real Constant Set For Above Contact Is 51 & 50

********** Create Contact "Contact Region 8" **********

Real Constant Set For Above Contact Is 53 & 52

********** Create Contact "Contact Region 9" **********

Real Constant Set For Above Contact Is 55 & 54

********** Create Contact "Contact Region 10" **********

Real Constant Set For Above Contact Is 57 & 56

********** Create Contact "Contact Region 11" **********

Real Constant Set For Above Contact Is 59 & 58

********** Create Contact "Contact Region 12" **********

Real Constant Set For Above Contact Is 61 & 60

********** Create Contact "Contact Region 13" **********

Real Constant Set For Above Contact Is 63 & 62

********** Create Contact "Contact Region 14" **********

Real Constant Set For Above Contact Is 65 & 64

********** Create Contact "Contact Region 15" **********

Real Constant Set For Above Contact Is 67 & 66

********** Create Contact "Contact Region 16" **********

Real Constant Set For Above Contact Is 69 & 68

********** Create Contact "Contact Region 17" **********

Real Constant Set For Above Contact Is 71 & 70

********** Create Contact "Contact Region 18" **********

Real Constant Set For Above Contact Is 73 & 72

********** Create Contact "Contact Region 19" **********

Real Constant Set For Above Contact Is 75 & 74

********** Create Contact "Contact Region 20" **********

Real Constant Set For Above Contact Is 77 & 76

********** Create Contact "Contact Region 21" **********

Real Constant Set For Above Contact Is 79 & 78

********** Create Contact "Contact Region 22" **********

Real Constant Set For Above Contact Is 81 & 80

********** Create Contact "Contact Region 23" **********

Real Constant Set For Above Contact Is 83 & 82

********** Create Contact "Contact Region 24" **********

Real Constant Set For Above Contact Is 85 & 84

********** Create Contact "Contact Region 25" **********

Real Constant Set For Above Contact Is 87 & 86

********** Create Contact "Contact Region 26" **********

Real Constant Set For Above Contact Is 89 & 88

********** Create Contact "Contact Region 27" **********

Real Constant Set For Above Contact Is 91 & 90

********** Create Contact "Contact Region 28" **********

Real Constant Set For Above Contact Is 93 & 92

********** Create Contact "Contact Region 29" **********

Real Constant Set For Above Contact Is 95 & 94

********** Create Contact "Contact Region 30" **********

Real Constant Set For Above Contact Is 97 & 96

********** Create Contact "Contact Region 31" **********

Real Constant Set For Above Contact Is 99 & 98

********** Create Contact "Contact Region 32" **********

Real Constant Set For Above Contact Is 101 & 100

********** Create Contact "Contact Region 33" **********

Real Constant Set For Above Contact Is 103 & 102

********** Create Contact "Contact Region 34" **********

Real Constant Set For Above Contact Is 105 & 104

********** Create Contact "Contact Region 35" **********

Real Constant Set For Above Contact Is 107 & 106

********** Create Contact "Contact Region 36" **********

Real Constant Set For Above Contact Is 109 & 108

********** Create Contact "Contact Region 37" **********

Real Constant Set For Above Contact Is 111 & 110

********** Create Contact "Contact Region 38" **********

Real Constant Set For Above Contact Is 113 & 112

********** Create Contact "Contact Region 39" **********

Real Constant Set For Above Contact Is 115 & 114

********** Create Contact "Contact Region 40" **********

Real Constant Set For Above Contact Is 117 & 116

********** Create Contact "Contact Region 41" **********

Real Constant Set For Above Contact Is 119 & 118

********** Create Contact "Contact Region 42" **********

Real Constant Set For Above Contact Is 121 & 120

********** Create Contact "Contact Region 43" **********

Real Constant Set For Above Contact Is 123 & 122

********** Create Contact "Contact Region 44" **********

Real Constant Set For Above Contact Is 125 & 124

********** Create Contact "Contact Region 45" **********

Real Constant Set For Above Contact Is 127 & 126

********** Create Debonding "Contact Debonding 4" **********

********** Create Debonding "Contact Debonding 5" **********

********** Create Debonding "Contact Debonding 6" **********

********** Create Debonding "Contact Debonding 7" **********

********** Create Debonding "Contact Debonding 8" **********

********** Create Debonding "Contact Debonding 9" **********

********** Create Debonding "Contact Debonding 10" **********

********** Create Debonding "Contact Debonding 11" **********

********** Create Debonding "Contact Debonding 12" **********

********** Create Debonding "Contact Debonding 13" **********

********** Create Debonding "Contact Debonding 14" **********

********** Create Debonding "Contact Debonding 15" **********

********** Create Debonding "Contact Debonding 16" **********

********** Create Debonding "Contact Debonding 17" **********

********** Create Debonding "Contact Debonding 18" **********

********** Create Debonding "Contact Debonding 19" **********

********** Create Debonding "Contact Debonding 20" **********

********** Create Debonding "Contact Debonding 21" **********

********** Create Debonding "Contact Debonding 22" **********

********** Create Debonding "Contact Debonding 23" **********

********** Create Debonding "Contact Debonding 24" **********

********** Create Debonding "Contact Debonding 25" **********

********** Create Debonding "Contact Debonding 26" **********

********** Create Debonding "Contact Debonding 27" **********

********** Create Debonding "Contact Debonding 28" **********

********** Create Debonding "Contact Debonding 29" **********

********** Create Debonding "Contact Debonding 30" **********

********** Create Debonding "Contact Debonding 31" **********

********** Create Debonding "Contact Debonding 32" **********

********** Create Debonding "Contact Debonding 33" **********

********** Create Debonding "Contact Debonding 34" **********

********** Create Debonding "Contact Debonding 35" **********

********** Create Debonding "Contact Debonding 36" **********

********** Create Debonding "Contact Debonding 37" **********

********** Create Debonding "Contact Debonding 38" **********

********** Create Debonding "Contact Debonding 39" **********

********** Create Debonding "Contact Debonding 40" **********

********** Create Debonding "Contact Debonding 41" **********

********** Create Debonding "Contact Debonding 42" **********

********** Fixed Supports **********

********** Define Pressure Using Surface Effect Elements "Pressure" **********

********** Create Displacement Tables and Functions ******

***** ROUTINE COMPLETED ***** CP =   0.766

--- Number of total nodes = 114674

--- Number of contact elements = 53052

--- Number of spring elements = 0

--- Number of bearing elements = 0

--- Number of solid elements = 13780

--- Number of condensed parts = 0

--- Number of total elements = 66832

*GET _WALLBSOL FROM ACTI ITEM=TIME WALL VALUE= 11.4066667

****

********** SOLUTION **********

****

***** MAPDL SOLUTION ROUTINE *****

PERFORM A STATIC ANALYSIS

 THIS WILL BE A NEW ANALYSIS

LARGE DEFORMATION ANALYSIS

PARAMETER _THICKRATIO =   0.000000000

USE SPARSE MATRIX DIRECT SOLVER

USE THE FULL NEWTON-RAPHSON OPTION FOR ALL DEGREES OF FREEDOM

AND USE THE DEFAULT ADAPTIVE DESCENT OPTION

CONTACT INFORMATION PRINTOUT LEVEL 1

DO NOT COMBINE ELEMENT MATRIX FILES (.emat) AFTER DISTRIBUTED PARALLEL SOLUTION

DO NOT COMBINE ELEMENT SAVE DATA FILES (.esav) AFTER DISTRIBUTED PARALLEL SOLUTION

NLDIAG: Nonlinear diagnostics CONT option is set to ON.

Writing frequency : each ITERATION.

DEFINE RESTART CONTROL FOR LOADSTEP LAST

AT FREQUENCY OF LAST AND NUMBER FOR OVERWRITE IS -1

DELETE RESTART FILES OF ENDSTEP

****

********** SOLVE FOR LS 1 OF 14 **********

SELECT FOR ITEM=TYPE COMPONENT=

IN RANGE 128 TO 128 STEP 1

244 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

SELECT ALL NODES HAVING ANY ELEMENT IN ELEMENT SET.

881 NODES (OF 114674 DEFINED) SELECTED FROM

244 SELECTED ELEMENTS BY NSLE COMMAND.

GENERATE SURFACE LOAD PRES ON SURFACE DEFINED BY ALL SELECTED NODES

VALUES= 0.200000000 0.00000000

NUMBER OF PRES ELEMENT FACE LOADS STORED = 244

ALL SELECT FOR ITEM=NODE COMPONENT=
 IN RANGE 1 TO 114674 STEP 1

  114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT FOR ITEM=ELEM COMPONENT=
 IN RANGE 1 TO 101626 STEP 1

  66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

ACEL= 0.0000 9806.6 0.0000
*** Set Displacements ***
CMBLOCK read of NODE component _CM419UX_XP completed

SELECT COMPONENT _CM419UX_XP

SPECIFIED CONSTRAINT UX FOR SELECTED NODES 1 TO 114674 BY 1
SET ACCORDING TO TABLE PARAMETER = _LOADVARI419XP

ALL SELECT FOR ITEM=NODE COMPONENT=
 IN RANGE 1 TO 114674 STEP 1

  114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.
*** Component For All Non-Zero UX Displacements ***

SELECT COMPONENT _CM419UX_XP

DEFINITION OF COMPONENT = _DISPNONZEROUX ENTITY=NODE

ALL SELECT FOR ITEM=NODE COMPONENT=

IN RANGE 1 TO 114674 STEP 1

114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT FOR ITEM=ELEM COMPONENT=
IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 1.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

NONLINEAR STABILIZATION CONTROL:

KEY=CONS METHOD=ENER VALUE= 0.90000 SUBSTPOPT=NO FORCELIMIT= 0.20000

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

*GET ANSINTER_ FROM ACTI ITEM=INT VALUE= 0.00000000

*IF ANSINTER_ (= 0.00000) NE
0 (= 0.00000) THEN

*ENDIF

*** NOTE *** CP = 0.812 TIME= 11:24:24
The automatic domain decomposition logic has selected the MESH domain
decomposition method with 2 processes per solution.

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 1.000 TIME= 11:24:25
Element shape checking is currently inactive. Issue SHPP,ON or
SHPP,WARN to reactivate, if desired.

*** NOTE *** CP = 1.062 TIME= 11:24:25
The model data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\Scr5801\file0.err) for these warning
messages.

*** SELECTION OF ELEMENT TECHNOLOGIES FOR APPLICABLE ELEMENTS ***
--- GIVE SUGGESTIONS AND RESET THE KEY OPTIONS ---

ELEMENT TYPE 1 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 2 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 3 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 4 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 5 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 6 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 7 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 8 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 9 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 10 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 11 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 12 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 13 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 14 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 15 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 16 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 17 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 18 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 19 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 20 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 21 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 22 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 23 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 24 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 25 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 26 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 27 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 28 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 29 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 30 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 31 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 32 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 33 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 34 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 35 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 36 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 37 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 38 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 39 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 40 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 41 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 42 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 43 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 11:24:25 SEP 04, 2024 CP= 1.078

kuca_prelim_2--Static Structural (B5)

S O L U T I O N O P T I O N S

PROBLEM DIMENSIONALITY. 3-D

DEGREES OF FREEDOM. . . . . UX UY UZ

ANALYSIS TYPE . . . . . .STATIC (STEADY-STATE)

OFFSET TEMPERATURE FROM ABSOLUTE ZERO 273.15

NONLINEAR GEOMETRIC EFFECTS . . . . . .ON

EQUATION SOLVER OPTION. . . . . .SPARSE

PLASTIC MATERIAL PROPERTIES INCLUDED. . . . . .YES

NEWTON-RAPHSON OPTION . . . . . .FULL

GLOBALLY ASSEMBLED MATRIX . . . . . .SYMMETRIC

*** WARNING *** CP = 1.172 TIME= 11:24:25

Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1.172 TIME= 11:24:25

The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\file0.err) for these warning messages.

*** NOTE *** CP = 1.172 TIME= 11:24:25

The conditions for direct assembly have been met. No .emat or .erot files will be produced.

*** NOTE *** CP = 2.922 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 44 and contact element type 44 has been set up. The companion pair has real constant set ID 45. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 48695 and target element 48935.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 45 and contact element type 44 has been set up. The companion pair has real constant set ID 44. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 48695 and target element 48935.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 46 and contact element type 46 has been set up. The companion pair has real constant set ID 47. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 4.547473509E-13 was detected between contact element 49543 and target element 50407.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 47 and contact element type 46 has been set up. The companion pair has real constant set ID 46. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 4.547473509E-13 was detected between contact element 49543 and target element 50407.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 48 and contact element type 48 has been set up. The companion pair has real constant set ID 49. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 50903 and target element 51143.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 49 and contact element type 48 has been set up. The companion pair has real constant set ID 48. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 50903 and target element 51143.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 50 and contact element type 50 has been set up. The companion pair has real constant set ID 51. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 51 and contact element type 50 has been set up. The companion pair has real constant set ID 50. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 52 and contact element type 52 has been set up. The companion pair has real constant set ID 53. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 53116 and target element 53356.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 53 and contact element type 52 has been set up. The companion pair has real constant set ID 52. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 53116 and target element 53356.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 54 and contact element type 54 has been set up. The companion pair has real constant set ID 55. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 53904 and target element 54768.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 55 and contact element type 54 has been set up. The companion pair has real constant set ID 54. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 53904 and target element 54768.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 56 and contact element type 56 has been set up. The companion pair has real constant set ID 57. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 55327 and target element 55567.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 57 and contact element type 56 has been set up. The companion pair has real constant set ID 56. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 55327 and target element 55567.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 58 and contact element type 58 has been set up. The companion pair has real constant set ID 59. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 56132 and target element 56996.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 59 and contact element type 58 has been set up. The companion pair has real constant set ID 58. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 56132 and target element 56996.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 60 and contact element type 60 has been set up. The companion pair has real constant set ID 61. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 57528 and target element 57768.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 61 and contact element type 60 has been set up. The companion pair has real constant set ID 60. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 57528 and target element 57768.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 63 and contact element type 62 has been set up. The companion pair has real constant set ID 62. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 64 and contact element type 64 has been set up. The companion pair has real constant set ID 65. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 59742 and target element 59982.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 65 and contact element type 64 has been set up. The companion pair has real constant set ID 64. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 59742 and target element 59982.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 66 and contact element type 66 has been set up. The companion pair has real constant set ID 67. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 60543 and target element 61407.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 67 and contact element type 66 has been set up. The companion pair has real constant set ID 66. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 60543 and target element 61407.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 68 and contact element type 68 has been set up. The companion pair has real constant set ID 69. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 62069 and target element 61829.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 69 and contact element type 68 has been set up. The companion pair has real constant set ID 68. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 62069 and target element 61829.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 70 and contact element type 70 has been set up. The companion pair has real constant set ID 71. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 71 and contact element type 70 has been set up. The companion pair has real constant set ID 70. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 72 and contact element type 72 has been set up. The companion pair has real constant set ID 73. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 64158 and target element 64398.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 73 and contact element type 72 has been set up. The companion pair has real constant set ID 72. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 64158 and target element 64398.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 74 and contact element type 74 has been set up. The companion pair has real constant set ID 75. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 64944 and target element 65808.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 75 and contact element type 74 has been set up. The companion pair has real constant set ID 74. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 64944 and target element 65808.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 76 and contact element type 76 has been set up. The companion pair has real constant set ID 77. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 66571 and target element 66331.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 77 and contact element type 76 has been set up. The companion pair has real constant set ID 76. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 66571 and target element 66331.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 78 and contact element type 78 has been set up. The companion pair has real constant set ID 79. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 67596 and target element 66732.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 79 and contact element type 78 has been set up. The companion pair has real constant set ID 78. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 67596 and target element 66732.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 80 and contact element type 80 has been set up. The companion pair has real constant set ID 81. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 68573 and target element 68813.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 81 and contact element type 80 has been set up. The companion pair has real constant set ID 80. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 68573 and target element 68813.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 82 and contact element type 82 has been set up. The companion pair has real constant set ID 83. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 83 and contact element type 82 has been set up. The companion pair has real constant set ID 82. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 70778 and target element 71018.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 85 and contact element type 84 has been set up. The companion pair has real constant set ID 84. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 70778 and target element 71018.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 86 and contact element type 86 has been set up. The companion pair has real constant set ID 87. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 71568 and target element 72432.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 87 and contact element type 86 has been set up. The companion pair has real constant set ID 86. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 71568 and target element 72432.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 88 and contact element type 88 has been set up. The companion pair has real constant set ID 89. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 72988 and target element 73228.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 89 and contact element type 88 has been set up. The companion pair has real constant set ID 88. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 72988 and target element 73228.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 90 and contact element type 90 has been set up. The companion pair has real constant set ID 91. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 91 and contact element type 90 has been set up. The companion pair has real constant set ID 90. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 92 and contact element type 92 has been set up. The companion pair has real constant set ID 93. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 75365 and target element 75125.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 93 and contact element type 92 has been set up. The companion pair has real constant set ID 92. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 75365 and target element 75125.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 94 and contact element type 94 has been set up. The companion pair has real constant set ID 95. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 76445 and target element 75581.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 95 and contact element type 94 has been set up. The companion pair has real constant set ID 94. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 76445 and target element 75581.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 96 and contact element type 96 has been set up. The companion pair has real constant set ID 97. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 77400 and target element 77640.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 97 and contact element type 96 has been set up. The companion pair has real constant set ID 96. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 77400 and target element 77640.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 98 and contact element type 98 has been set up. The companion pair has real constant set ID 99. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 78191 and target element 79055.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 99 and contact element type 98 has been set up. The companion pair has real constant set ID 98. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 78191 and target element 79055.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 100 and contact element type 100 has been set up. The companion pair has real constant set ID 101. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 79612 and target element 79852.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 79612 and target element 79852.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 102 and contact element type 102 has been set up. The companion pair has real constant set ID 103. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 104 and contact element type 104 has been set up. The companion pair has real constant set ID 105. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.585

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 81848 and target element 82141.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 105 and contact element type 104 has been set up. The companion pair has real constant set ID 104. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 81848 and target element 82141.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 106 and contact element type 106 has been set up. The companion pair has real constant set ID 107. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.885

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 82631 and target element 83499.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 107 and contact element type 106 has been set up. The companion pair has real constant set ID 106. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 82631 and target element 83499.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 108 and contact element type 108 has been set up. The companion pair has real constant set ID 109. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.705302566E-13 was detected between contact element 84499 and target element 85675.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 109 and contact element type 108 has been set up. The companion pair has real constant set ID 108. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.705302566E-13 was detected between contact element 84499 and target element 85675.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 110 and contact element type 110 has been set up. The companion pair has real constant set ID 111. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 86852 and target element 88028.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 111 and contact element type 110 has been set up. The companion pair has real constant set ID 110. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 86852 and target element 88028.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 112 and contact element type 112 has been set up. The companion pair has real constant set ID 113. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 89226 and target element 90402.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 113 and contact element type 112 has been set up. The companion pair has real constant set ID 112. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 89226 and target element 90402.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 114 and contact element type 114 has been set up. The companion pair has real constant set ID 115. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 91555 and target element 92731.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 115 and contact element type 114 has been set up. The companion pair has real constant set ID 114. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 91555 and target element 92731.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 116 and contact element type 116 has been set up. The companion pair has real constant set ID 117. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 93917 and target element 95093.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 117 and contact element type 116 has been set up. The companion pair has real constant set ID 116. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 5.684341886E-14 was detected between contact element 93917 and target element 95093.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 118 and contact element type 118 has been set up. The companion pair has real constant set ID 119. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.842170943E-14 was detected between contact element 96254 and target element 97430.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 119 and contact element type 118 has been set up. The companion pair has real constant set ID 118. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.842170943E-14 was detected between contact element 96254 and target element 97430.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 120 and contact element type 120 has been set up. The companion pair has real constant set ID 121. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.421085472E-14 was detected between contact element 98611 and target element 99787.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 121 and contact element type 120 has been set up. The companion pair has real constant set ID 120. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 1.421085472E-14 was detected between contact element 98611 and target element 99787.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 122 and contact element type 122 has been set up. The companion pair has real constant set ID 123. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28

Contact related postprocess items (ETABLE, pressure ...) are not available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 2.938 TIME= 11:24:28
Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 416). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.
Average contact surface length 49.526
Average contact pair depth 14.858
Average target surface length 49.204
Default pinball region factor PINB 0.25000
The resulting pinball region 3.7145
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28
Max. Initial penetration 3.446132268E-13 was detected between contact element 100458 and target element 100569.
****

*** NOTE *** CP = 2.938 TIME= 11:24:28
Symmetric Deformable- deformable contact pair identified by real constant set 123 and contact element type 122 has been set up. The companion pair has real constant set ID 122. Both pairs should have the same behavior.
MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 49.602

Average contact pair depth 50.000

Average target surface length 49.038

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 4.547473509E-13 was detected between contact element 100503 and target element 100389.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 124 and contact element type 124 has been set up. The companion pair has real constant set ID 125. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 2.938 TIME= 11:24:28

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 868). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

Average contact surface length 49.526

Average contact pair depth 14.858

Average target surface length 49.182

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7145

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 100638 and target element 100748.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 125 and contact element type 124 has been set up. The companion pair has real constant set ID 124. Both pairs should have the same behavior.

MAPDL will deactivate the current pair and keep its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 48.803
Average contact pair depth 50.000
Average target surface length 49.038
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28
Max. Initial penetration 2.273736754E-13 was detected between contact
element 100690 and target element 100585.
****

*** NOTE *** CP = 2.938 TIME= 11:24:28
Symmetric Deformable- deformable contact pair identified by real
constant set 126 and contact element type 126 has been set up. The
companion pair has real constant set ID 127. Both pairs should have
the same behavior.
MAPDL will keep the current pair and deactivate its companion pair,
resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 2.938 TIME= 11:24:28

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 2010). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

Average contact surface length 50.000

Average contact pair depth 15.000

Average target surface length 49.991

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 101079 and target element 101237.

****

*** NOTE *** CP = 2.938 TIME= 11:24:28

Symmetric Deformable- deformable contact pair identified by real constant set 127 and contact element type 126 has been set up. The

companion pair has real constant set ID 126. Both pairs should have the same behavior.
MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 2.938 TIME= 11:24:28
Contact related postprocess items (ETABLE, pressure ...) are not available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 49.986
Average contact pair depth 50.000
Average target surface length 50.000
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 2.938 TIME= 11:24:28
Max. Initial penetration 2.273736754E-13 was detected between contact element 101105 and target element 100874.
****

*** WARNING *** CP = 2.938 TIME= 11:24:28
Overconstraint may occur for Lagrange multiplier or MPC based contact algorithm.
The reasons for possible overconstraint are:

*** WARNING *** CP = 2.938 TIME= 11:24:28
Boundary conditions, coupling, and/or constraint equations have been
applied on certain contact nodes (for example 2010).
****

D I S T R I B U T E D D O M A I N D E C O M P O S E R

...Number of elements: 66832
...Number of nodes: 114674
...Decompose to 2 CPU domains
...Element load balance ratio = 1.000

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 1
TIME AT END OF THE LOAD STEP. 1.0000
AUTOMATIC TIME STEPPING . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . NO
STRESS-STIFFENING . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

WARNING: Some contact elements on contact surface specified by real constant set 67 belong to symmetric contact (e.g. 67), some do not.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 46 and contact element type 46 has been set up. The companion pair has real constant set ID 47. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 49496 and target element 50360.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 47 and contact element type 46 has been set up. The companion pair has real constant set ID 46. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 49922 and target element 49058.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 50 and contact element type 50 has been set up. The companion pair has real constant set ID 51. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 51 and contact element type 50 has been set up. The companion pair has real constant set ID 50. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 4.547473509E-13 was detected between contact element 52157 and target element 51293.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 54 and contact element type 54 has been set up. The companion pair has real constant set ID 55. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 53903 and target element 54767.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 55 and contact element type 54 has been set up. The companion pair has real constant set ID 54. Both pairs should have

the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 54336 and target element 53472.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 58 and contact element type 58 has been set up. The companion pair has real constant set ID 59. Both pairs should have

the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and

deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact

element 56112 and target element 56976.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real

constant set 59 and contact element type 58 has been set up. The companion pair has real constant set ID 58. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 56546 and target element 55682.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real

constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 63 and contact element type 62 has been set up. The companion pair has real constant set ID 62. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 58752 and target element 57888.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 67 and contact element type 66 has been set up. The companion pair has real constant set ID 66. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 60960 and target element 60096.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 71 and contact element type 70 has been set up. The companion pair has real constant set ID 70. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 74 and contact element type 74 has been set up. The companion pair has real constant set ID 75. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 64949 and target element 65813.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 78 and contact element type 78 has been set up. The companion pair has real constant set ID 79. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 3.410605132E-13 was detected between contact

element 67208 and target element 68072.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 79 and contact element type 78 has been set up. The companion pair has real constant set ID 78. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 3.410605132E-13 was detected between contact

element 67606 and target element 66742.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 80 and contact element type 80 has been set up. The companion pair has real constant set ID 81. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 68631 and target element 68871.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 82 and contact element type 82 has been set up. The companion pair has real constant set ID 83. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 83 and contact element type 82 has been set up. The companion pair has real constant set ID 82. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 69793 and target element 68929.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 70843 and target element 71083.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 86 and contact element type 86 has been set up. The companion pair has real constant set ID 87. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 71592 and target element 72456.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 87 and contact element type 86 has been set up. The companion pair has real constant set ID 86. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 72022 and target element 71158.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 90 and contact element type 90 has been set up. The companion pair has real constant set ID 91. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 91 and contact element type 90 has been set up. The companion pair has real constant set ID 90. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 74244 and target element 73380.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 94 and contact element type 94 has been set up. The companion pair has real constant set ID 95. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 75984 and target element 76848.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 95 and contact element type 94 has been set up. The companion pair has real constant set ID 94. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 76417 and target element 75553.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 98 and contact element type 98 has been set up. The companion pair has real constant set ID 99. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 78192 and target element 79056.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 99 and contact element type 98 has been set up. The companion pair has real constant set ID 98. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 78626 and target element 77762.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 79729 and target element 79489.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 102 and contact element type 102 has been set up. The companion pair has real constant set ID 103. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 80834 and target element 79970.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 106 and contact element type 106 has been set up. The companion pair has real constant set ID 107. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.885

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 82618 and target element 83486.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 107 and contact element type 106 has been set up. The companion pair has real constant set ID 106. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 83042 and target element 82178.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 124 and contact element type 124 has been set up. The companion pair has real constant set ID 125. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 4.359 TIME= 11:24:31

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 4.359 TIME= 11:24:31

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 868). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

Average contact surface length 49.526

Average contact pair depth 14.858

Average target surface length 49.182

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7145

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 100638 and target element 100748.

****

*** NOTE *** CP = 4.359 TIME= 11:24:31

Symmetric Deformable- deformable contact pair identified by real constant set 125 and contact element type 124 has been set up. The companion pair has real constant set ID 124. Both pairs should have the same behavior.

MAPDL will deactivate the current pair and keep its companion pair,

resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 4.359 TIME= 11:24:31

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 48.803

Average contact pair depth 50.000

Average target surface length 49.038

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 4.359 TIME= 11:24:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 100690 and target element 100585.

****

*** WARNING *** CP = 4.469 TIME= 11:24:31

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 416). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

*** WARNING *** CP = 4.469 TIME= 11:24:31

Boundary conditions, coupling, and/or constraint equations have been

applied on all the contact nodes (for example 2010). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

The FEA model contains 0 external CE equations and 2643 internal CE equations.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46

Max. Penetration of 0 has been detected between contact element 49487 and target element 50351.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 49552 and target element 50416.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 49552 and target element 50416.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47

Max. Penetration of 0 has been detected between contact element 49487 and target element 50351.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 49552 and target element 50416.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 49552 and target element 50416.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 50

Max. Penetration of 0 has been detected between contact element 51695 and target element 52559.

Max. Geometrical gap of 4.547473509E-13 has been detected between contact element 52155 and target element 51291.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 52155 and target element 51291.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 51
Max. Penetration of 0 has been detected between contact element 51695
and target element 52559.

Max. Geometrical gap of 4.547473509E-13 has been detected between
contact element 52155 and target element 51291.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 52155 and target element 51291.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 54

Max. Penetration of 0 has been detected between contact element 53903
and target element 54767.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 53998 and target element 54862.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 53998 and target element 54862.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 55

Max. Penetration of 0 has been detected between contact element 53903 and target element 54767.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 53998 and target element 54862.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 53998 and target element 54862.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58

Max. Penetration of 0 has been detected between contact element 56111 and target element 56975.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 56112 and target element 56976.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 56112 and target element 56976.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 59
Max. Penetration of 0 has been detected between contact element 56111
and target element 56975.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 56112 and target element 56976.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 56112 and target element 56976.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62

Max. Penetration of 0 has been detected between contact element 58319
and target element 59183.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 58321 and target element 59185.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 58321 and target element 59185.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 63

Max. Penetration of 0 has been detected between contact element 58319 and target element 59183.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 58321 and target element 59185.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 58321 and target element 59185.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 67

Max. Penetration of 0 has been detected between contact element 60527 and target element 61391.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 60529 and target element 61393.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 60529 and target element 61393.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.455725737E-20 and criterion 2.455725773E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 71
Max. Penetration of 0 has been detected between contact element 62735
and target element 63599.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 63175 and target element 62311.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 63175 and target element 62311.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 7.268068437E-21 and criterion 7.268068545E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 74

Max. Penetration of 0 has been detected between contact element 64943
and target element 65807.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 64950 and target element 65814.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 64950 and target element 65814.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.279377539E-20 and criterion 1.279377558E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 78

Max. Penetration of 0 has been detected between contact element 67151 and target element 68015.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 67222 and target element 68086.

Max. Geometrical penetration of -3.410605132E-13 has been detected between contact element 67222 and target element 68086.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 79

Max. Penetration of 0 has been detected between contact element 67151 and target element 68015.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 67222 and target element 68086.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 67222 and target element 68086.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 80
Max. Penetration of 0 has been detected between contact element 68567
and target element 68807.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 68627 and target element 68867.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 68627 and target element 68867.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.

Max. Pressure/force 5.503294848E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 96.0837165.

Min. Tangential stiffness 96.0837165.

Contact pair force norm 3.200748787E-22 and criterion 3.200748835E-23.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 82

Max. Penetration of 0 has been detected between contact element 69359
and target element 70223.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 69803 and target element 68939.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 69803 and target element 68939.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 83

Max. Penetration of 0 has been detected between contact element 69359 and target element 70223.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 69803 and target element 68939.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 69803 and target element 68939.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84

Max. Penetration of 0 has been detected between contact element 70775 and target element 71015.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 70795 and target element 71035.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 70795 and target element 71035.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.
Max. Pressure/force 5.503294848E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 96.0837165.
Min. Tangential stiffness 96.0837165.
Contact pair force norm 5.899506708E-22 and criterion 5.899506796E-23.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 86
Max. Penetration of 0 has been detected between contact element 71567
and target element 72431.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 72011 and target element 71147.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 72011 and target element 71147.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 87

Max. Penetration of 0 has been detected between contact element 71567
and target element 72431.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 72011 and target element 71147.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 72011 and target element 71147.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 90

Max. Penetration of 0 has been detected between contact element 73775 and target element 74639.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 74235 and target element 73371.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 74235 and target element 73371.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 91

Max. Penetration of 0 has been detected between contact element 73775 and target element 74639.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 74235 and target element 73371.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 74235 and target element 73371.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 94
Max. Penetration of 0 has been detected between contact element 75983
and target element 76847.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 76427 and target element 75563.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 76427 and target element 75563.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 95

Max. Penetration of 0 has been detected between contact element 75983
and target element 76847.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 76427 and target element 75563.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 76427 and target element 75563.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 98

Max. Penetration of 0 has been detected between contact element 78191 and target element 79055.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 78194 and target element 79058.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 78194 and target element 79058.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 99

Max. Penetration of 0 has been detected between contact element 78191 and target element 79055.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 78194 and target element 79058.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 78194 and target element 79058.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101
Max. Penetration of 0 has been detected between contact element 79607
and target element 79847.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 79616 and target element 79856.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 79616 and target element 79856.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.

Max. Pressure/force 5.503294848E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 96.0837165.

Min. Tangential stiffness 96.0837165.

Contact pair force norm 5.458284458E-22 and criterion 5.458284539E-23.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 102

Max. Penetration of 0 has been detected between contact element 80399
and target element 81263.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 80401 and target element 81265.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 80401 and target element 81265.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103

Max. Penetration of 0 has been detected between contact element 80399 and target element 81263.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 80401 and target element 81265.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 80401 and target element 81265.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 106

Max. Penetration of 0 has been detected between contact element 82607 and target element 83471.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 82644 and target element 83508.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 82644 and target element 83508.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.579378303E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.7734664.
Min. Tangential stiffness 94.7734664.
Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 107
Max. Penetration of 0 has been detected between contact element 82607
and target element 83471.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 82644 and target element 83508.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 82644 and target element 83508.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.579378303E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.7734664.

Min. Tangential stiffness 94.7734664.

Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 124

Max. Penetration of 0 has been detected between contact element 100637
and target element 100747.

Max. Geometrical gap of 4.547473509E-13 has been detected between
contact element 100642 and target element 100752.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 100642 and target element 100752.

For total 52 contact elements, there are 52 elements are in contact.

There are 52 elements are in sticking.

Potential overconstraint is detected.

Max. Pinball distance 3.71446753.

One of the contact searching regions contains at least 12 target
elements.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 125

*** NOTE ***   CP =   11.031   TIME= 11:24:47

Contact pair is inactive.

********** PRECISE MASS SUMMARY **********

TOTAL RIGID BODY MASS MATRIX ABOUT ORIGIN

Translational mass			Coupled translational/rotational mass		
3.3560	0.0000	0.0000	0.0000	7475.8	-1988.9
0.0000	3.3560	0.0000	-7475.8	0.0000	7069.6
0.0000	0.0000	3.3560	1988.9	-7069.6	0.0000

Rotational mass (inertia)		
0.20402E+08	-0.42220E+07	-0.15737E+08
-0.42220E+07	0.35942E+08	-0.44333E+07
-0.15737E+08	-0.44333E+07	0.18717E+08

TOTAL MASS = 3.3560

The mass principal axes coincide with the global Cartesian axes

CENTER OF MASS (X,Y,Z)= 2106.5 592.63 2227.6

TOTAL INERTIA ABOUT CENTER OF MASS

0.25701E+07	-32350.	10968.
-32350.	0.43967E+07	-2919.1
10968.	-2919.1	0.26461E+07

PRINCIPAL INERTIAS = 0.25680E+07 0.43972E+07 0.26476E+07

ORIENTATION VECTORS OF THE INERTIA PRINCIPAL AXES IN GLOBAL CARTESIAN

(0.990, 0.017,-0.138) (-0.018, 1.000,-0.002) (0.138, 0.004, 0.990)

*** MASS SUMMARY BY ELEMENT TYPE ***

TYPE	MASS

1 0.250000E-02

2 0.250000E-02

3 0.700000E-02

4 0.290000E-01

5 0.107000

6 0.290000E-01

7 0.107000

8 0.290000E-01

9 0.107000

10 0.290000E-01

11 0.107000

12 0.290000E-01

13 0.107000

14 0.290000E-01

15 0.107000

16 0.290000E-01

17 0.107000

18 0.290000E-01

19 0.107000

20 0.290000E-01

21 0.107000

22 0.290000E-01

23 0.107000

24 0.290000E-01

25 0.107000

26 0.290000E-01

27 0.107000

28 0.290000E-01

29 0.107000

30 0.290000E-01

31 0.107000

32 0.290000E-01

33 0.107000

34 0.290000E-01

35 0.107000

36 0.146000

37 0.146000

38 0.146000

39 0.146000

40 0.146000

41 0.146000

42 0.146000

43 0.146000

Range of element maximum matrix coefficients in global coordinates

Maximum = 58045.2675 at element 216.

Minimum = 13640.2127 at element 2017.

*** ELEMENT MATRIX FORMULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.016	0.000300
2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.047	0.000335
4	120	SOLID186	0.047	0.000391
5	432	SOLID186	0.094	0.000217
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.094	0.000217
8	120	SOLID186	0.047	0.000391
9	432	SOLID186	0.109	0.000253
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.047	0.000109
12	120	SOLID186	0.031	0.000260
13	432	SOLID186	0.031	0.000072

14	120	SOLID186	0.000	0.000000
15	432	SOLID186	0.141	0.000326
16	120	SOLID186	0.031	0.000260
17	432	SOLID186	0.062	0.000145
18	120	SOLID186	0.000	0.000000
19	432	SOLID186	0.141	0.000326
20	120	SOLID186	0.016	0.000130
21	432	SOLID186	0.234	0.000543
22	120	SOLID186	0.000	0.000000
23	432	SOLID186	0.094	0.000217
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.094	0.000217
26	120	SOLID186	0.031	0.000260
27	432	SOLID186	0.094	0.000217
28	120	SOLID186	0.047	0.000391
29	432	SOLID186	0.125	0.000289
30	120	SOLID186	0.000	0.000000
31	432	SOLID186	0.125	0.000289
32	120	SOLID186	0.016	0.000130
33	432	SOLID186	0.047	0.000109
34	120	SOLID186	0.047	0.000391
35	432	SOLID186	0.109	0.000253
36	588	SOLID186	0.109	0.000186
37	588	SOLID186	0.188	0.000319
38	588	SOLID186	0.094	0.000159
39	588	SOLID186	0.172	0.000292
40	588	SOLID186	0.047	0.000080
41	588	SOLID186	0.016	0.000027
42	588	SOLID186	0.062	0.000106
43	588	SOLID186	0.125	0.000213
44	240	CONTA174	0.062	0.000260
45	240	TARGE170	0.000	0.000000

46	864	CONTA174	0.109	0.000127
47	864	TARGE170	0.000	0.000000
48	240	CONTA174	0.094	0.000391
49	240	TARGE170	0.000	0.000000
50	864	CONTA174	0.125	0.000145
51	864	TARGE170	0.000	0.000000
52	240	CONTA174	0.000	0.000000
53	240	TARGE170	0.000	0.000000
54	864	CONTA174	0.094	0.000109
55	864	TARGE170	0.000	0.000000
56	240	CONTA174	0.000	0.000000
57	240	TARGE170	0.000	0.000000
58	864	CONTA174	0.078	0.000090
59	864	TARGE170	0.000	0.000000
60	240	CONTA174	0.016	0.000065
61	240	TARGE170	0.000	0.000000
62	864	CONTA174	0.141	0.000163
63	864	TARGE170	0.000	0.000000
64	240	CONTA174	0.016	0.000065
65	240	TARGE170	0.000	0.000000
66	864	CONTA174	0.047	0.000054
67	864	TARGE170	0.000	0.000000
68	240	CONTA174	0.016	0.000065
69	240	TARGE170	0.000	0.000000
70	864	CONTA174	0.172	0.000199
71	864	TARGE170	0.000	0.000000
72	240	CONTA174	0.000	0.000000
73	240	TARGE170	0.000	0.000000
74	864	CONTA174	0.109	0.000127
75	864	TARGE170	0.000	0.000000
76	240	CONTA174	0.047	0.000195
77	240	TARGE170	0.000	0.000000

78	864	CONTA174	0.094	0.000109
79	864	TARGE170	0.000	0.000000
80	240	CONTA174	0.000	0.000000
81	240	TARGE170	0.000	0.000000
82	864	CONTA174	0.078	0.000090
83	864	TARGE170	0.000	0.000000
84	240	CONTA174	0.000	0.000000
85	240	TARGE170	0.000	0.000000
86	864	CONTA174	0.062	0.000072
87	864	TARGE170	0.000	0.000000
88	240	CONTA174	0.047	0.000195
89	240	TARGE170	0.000	0.000000
90	864	CONTA174	0.109	0.000127
91	864	TARGE170	0.000	0.000000
92	240	CONTA174	0.016	0.000065
93	240	TARGE170	0.000	0.000000
94	864	CONTA174	0.141	0.000163
95	864	TARGE170	0.000	0.000000
96	240	CONTA174	0.000	0.000000
97	240	TARGE170	0.000	0.000000
98	864	CONTA174	0.062	0.000072
99	864	TARGE170	0.000	0.000000
100	240	CONTA174	0.062	0.000260
101	240	TARGE170	0.000	0.000000
102	864	CONTA174	0.141	0.000163
103	864	TARGE170	0.000	0.000000
104	240	CONTA174	0.000	0.000000
105	240	TARGE170	0.000	0.000000
106	864	CONTA174	0.094	0.000109
107	864	TARGE170	0.000	0.000000
108	1176	CONTA174	0.047	0.000040
109	1176	TARGE170	0.000	0.000000

110	1176	CONTA174	0.031	0.000027
111	1176	TARGE170	0.000	0.000000
112	1176	CONTA174	0.156	0.000133
113	1176	TARGE170	0.000	0.000000
114	1176	CONTA174	0.078	0.000066
115	1176	TARGE170	0.000	0.000000
116	1176	CONTA174	0.047	0.000040
117	1176	TARGE170	0.000	0.000000
118	1176	CONTA174	0.203	0.000173
119	1176	TARGE170	0.000	0.000000
120	1176	CONTA174	0.156	0.000133
121	1176	TARGE170	0.000	0.000000
122	109	CONTA174	0.000	0.000000
123	109	TARGE170	0.000	0.000000
124	109	CONTA174	0.000	0.000000
125	109	TARGE170	0.000	0.000000
126	290	CONTA174	0.000	0.000000
127	290	TARGE170	0.000	0.000000
128	244	SURF154	0.000	0.000000

Time at end of element matrix formulation CP = 11.03125.

ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.rdb

FOR POSSIBLE RESUME FROM THIS POINT

FORCE CONVERGENCE VALUE = 1474. CRITERION= 7.371

*** NOTE *** CP = 12.641 TIME= 11:24:51

The initial memory allocation (-m) has been exceeded.

Supplemental memory allocations are being used.

DISTRIBUTED SPARSE MATRIX DIRECT SOLVER.

Number of equations = 333228, Maximum wavefront = 243

Memory allocated on only this MPI rank (rank 0)

Equation solver memory allocated = 698.284 MB

Equation solver memory required for in-core mode = 1649.083 MB

Equation solver memory required for out-of-core mode = 678.668 MB

Total (solver and non-solver) memory allocated = 1623.581 MB

Total memory summed across all MPI ranks on this machines

Equation solver memory allocated = 1188.970 MB

Equation solver memory required for in-core mode = 3133.499 MB

Equation solver memory required for out-of-core mode = 1153.377 MB

Total (solver and non-solver) memory allocated = 2420.814 MB

*** WARNING *** CP = 13.844 TIME= 11:24:54

The Distributed Sparse Matrix Solver is currently running in the
out-of-core memory mode. This memory mode may provide significantly
worse performance compared to the in-core memory mode, depending on
the amount of available system memory and I/O speed. Please monitor
the solver performance to ensure that the large amount of I/O to the
solver files does not create a bottleneck for performance.

curEqn= 130693 totEqn= 163349 Job CP sec= 18.484

Factor Done= 50% Factor Wall sec= 6.758 rate= 14.4 GFlops

curEqn= 163349 totEqn= 163349 Job CP sec= 21.141

Factor Done= 100% Factor Wall sec= 12.166 rate= 16.0 GFlops

Distributed sparse solver maximum pivot= 109897.119 at node 106602 UY.

Distributed sparse solver minimum pivot= 2277.41287 at node 4122 UY.

Distributed sparse solver minimum pivot in absolute value= 2277.41287
at node 4122 UY.

DISP CONVERGENCE VALUE = 0.1475 CRITERION= 0.7373E-02

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1475

DISP CONVERGENCE VALUE = 0.1475 CRITERION= 0.7373E-02

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1475

FORCE CONVERGENCE VALUE = 8492. CRITERION= 10.12

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6575E-01

DISP CONVERGENCE VALUE = 0.6575E-01 CRITERION= 0.1059E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.6575E-01

FORCE CONVERGENCE VALUE = 0.5421 CRITERION= 10.12 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.6292E-04

DISP CONVERGENCE VALUE = 0.6292E-04 CRITERION= 0.1059E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.6292E-04

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** ELEMENT RESULT CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.000	0.000000
2	52	SOLID186	0.016	0.000300
3	140	SOLID186	0.000	0.000000
4	120	SOLID186	0.047	0.000391
5	432	SOLID186	0.062	0.000145
6	120	SOLID186	0.094	0.000781
7	432	SOLID186	0.094	0.000217
8	120	SOLID186	0.031	0.000260
9	432	SOLID186	0.062	0.000145
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.156	0.000362
12	120	SOLID186	0.016	0.000130
13	432	SOLID186	0.047	0.000109
14	120	SOLID186	0.047	0.000391
15	432	SOLID186	0.156	0.000362
16	120	SOLID186	0.047	0.000391

17	432	SOLID186	0.062	0.000145
18	120	SOLID186	0.000	0.000000
19	432	SOLID186	0.156	0.000362
20	120	SOLID186	0.000	0.000000
21	432	SOLID186	0.047	0.000109
22	120	SOLID186	0.016	0.000130
23	432	SOLID186	0.062	0.000145
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.047	0.000109
26	120	SOLID186	0.016	0.000130
27	432	SOLID186	0.047	0.000109
28	120	SOLID186	0.016	0.000130
29	432	SOLID186	0.078	0.000181
30	120	SOLID186	0.000	0.000000
31	432	SOLID186	0.031	0.000072
32	120	SOLID186	0.031	0.000260
33	432	SOLID186	0.094	0.000217
34	120	SOLID186	0.000	0.000000
35	432	SOLID186	0.078	0.000181
36	588	SOLID186	0.078	0.000133
37	588	SOLID186	0.062	0.000106
38	588	SOLID186	0.062	0.000106
39	588	SOLID186	0.141	0.000239
40	588	SOLID186	0.125	0.000213
41	588	SOLID186	0.031	0.000053
42	588	SOLID186	0.078	0.000133
43	588	SOLID186	0.094	0.000159
44	240	CONTA174	0.000	0.000000
46	864	CONTA174	0.000	0.000000
48	240	CONTA174	0.000	0.000000
50	864	CONTA174	0.016	0.000018
52	240	CONTA174	0.000	0.000000

54	864	CONTA174	0.031	0.000036
56	240	CONTA174	0.016	0.000065
58	864	CONTA174	0.016	0.000018
60	240	CONTA174	0.000	0.000000
62	864	CONTA174	0.078	0.000090
64	240	CONTA174	0.016	0.000065
66	864	CONTA174	0.062	0.000072
68	240	CONTA174	0.016	0.000065
70	864	CONTA174	0.062	0.000072
72	240	CONTA174	0.000	0.000000
74	864	CONTA174	0.078	0.000090
76	240	CONTA174	0.016	0.000065
78	864	CONTA174	0.047	0.000054
80	240	CONTA174	0.016	0.000065
82	864	CONTA174	0.062	0.000072
84	240	CONTA174	0.016	0.000065
86	864	CONTA174	0.047	0.000054
88	240	CONTA174	0.016	0.000065
90	864	CONTA174	0.078	0.000090
92	240	CONTA174	0.000	0.000000
94	864	CONTA174	0.078	0.000090
96	240	CONTA174	0.000	0.000000
98	864	CONTA174	0.062	0.000072
100	240	CONTA174	0.000	0.000000
102	864	CONTA174	0.078	0.000090
104	240	CONTA174	0.000	0.000000
106	864	CONTA174	0.031	0.000036
108	1176	CONTA174	0.047	0.000040
110	1176	CONTA174	0.141	0.000120
112	1176	CONTA174	0.062	0.000053
114	1176	CONTA174	0.031	0.000027
116	1176	CONTA174	0.094	0.000080

118	1176	CONTA174	0.078	0.000066
120	1176	CONTA174	0.031	0.000027
122	109	CONTA174	0.000	0.000000
124	109	CONTA174	0.000	0.000000
126	290	CONTA174	0.016	0.000054
128	244	SURF154	0.000	0.000000

*** NODAL LOAD CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.000	0.000000
2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.000	0.000000
4	120	SOLID186	0.000	0.000000
5	432	SOLID186	0.000	0.000000
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.016	0.000036
8	120	SOLID186	0.000	0.000000
9	432	SOLID186	0.000	0.000000
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.000	0.000000
12	120	SOLID186	0.000	0.000000
13	432	SOLID186	0.000	0.000000
14	120	SOLID186	0.000	0.000000
15	432	SOLID186	0.016	0.000036
16	120	SOLID186	0.000	0.000000
17	432	SOLID186	0.000	0.000000
18	120	SOLID186	0.000	0.000000
19	432	SOLID186	0.000	0.000000
20	120	SOLID186	0.000	0.000000
21	432	SOLID186	0.000	0.000000
22	120	SOLID186	0.000	0.000000

23	432	SOLID186	0.000	0.000000
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.000	0.000000
26	120	SOLID186	0.000	0.000000
27	432	SOLID186	0.000	0.000000
28	120	SOLID186	0.000	0.000000
29	432	SOLID186	0.000	0.000000
30	120	SOLID186	0.000	0.000000
31	432	SOLID186	0.000	0.000000
32	120	SOLID186	0.000	0.000000
33	432	SOLID186	0.000	0.000000
34	120	SOLID186	0.000	0.000000
35	432	SOLID186	0.000	0.000000
36	588	SOLID186	0.000	0.000000
37	588	SOLID186	0.000	0.000000
38	588	SOLID186	0.000	0.000000
39	588	SOLID186	0.000	0.000000
40	588	SOLID186	0.047	0.000080
41	588	SOLID186	0.000	0.000000
42	588	SOLID186	0.000	0.000000
43	588	SOLID186	0.000	0.000000
44	240	CONTA174	0.000	0.000000
46	864	CONTA174	0.000	0.000000
48	240	CONTA174	0.000	0.000000
50	864	CONTA174	0.016	0.000018
52	240	CONTA174	0.000	0.000000
54	864	CONTA174	0.000	0.000000
56	240	CONTA174	0.000	0.000000
58	864	CONTA174	0.000	0.000000
60	240	CONTA174	0.000	0.000000
62	864	CONTA174	0.000	0.000000
64	240	CONTA174	0.000	0.000000

66	864	CONTA174	0.000	0.000000
68	240	CONTA174	0.000	0.000000
70	864	CONTA174	0.016	0.000018
72	240	CONTA174	0.000	0.000000
74	864	CONTA174	0.031	0.000036
76	240	CONTA174	0.000	0.000000
78	864	CONTA174	0.000	0.000000
80	240	CONTA174	0.000	0.000000
82	864	CONTA174	0.000	0.000000
84	240	CONTA174	0.000	0.000000
86	864	CONTA174	0.000	0.000000
88	240	CONTA174	0.000	0.000000
90	864	CONTA174	0.016	0.000018
92	240	CONTA174	0.000	0.000000
94	864	CONTA174	0.016	0.000018
96	240	CONTA174	0.000	0.000000
98	864	CONTA174	0.047	0.000054
100	240	CONTA174	0.000	0.000000
102	864	CONTA174	0.000	0.000000
104	240	CONTA174	0.000	0.000000
106	864	CONTA174	0.031	0.000036
108	1176	CONTA174	0.000	0.000000
110	1176	CONTA174	0.016	0.000013
112	1176	CONTA174	0.000	0.000000
114	1176	CONTA174	0.047	0.000040
116	1176	CONTA174	0.000	0.000000
118	1176	CONTA174	0.000	0.000000
120	1176	CONTA174	0.016	0.000013
122	109	CONTA174	0.000	0.000000
124	109	CONTA174	0.000	0.000000
126	290	CONTA174	0.000	0.000000
128	244	SURF154	0.000	0.000000

*** LOAD STEP 1 SUBSTEP 1 COMPLETED. CUM ITER = 3

*** TIME = 0.200000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1743E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 1040. CRITERION= 19.10

DISP CONVERGENCE VALUE = 0.7119E-01 CRITERION= 0.1059E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7119E-01

DISP CONVERGENCE VALUE = 0.7119E-01 CRITERION= 0.1059E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7119E-01

FORCE CONVERGENCE VALUE = 1.537 CRITERION= 17.38 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1772E-03

DISP CONVERGENCE VALUE = 0.1761E-03 CRITERION= 0.1059E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9940 SCALED MAX DOF INC = 0.1761E-03

FORCE CONVERGENCE VALUE = 0.1817 CRITERION= 17.38 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 1 SUBSTEP 2 COMPLETED. CUM ITER = 5

*** TIME = 0.400000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 563.7 CRITERION= 29.12

DISP CONVERGENCE VALUE = 0.5784E-01 CRITERION= 0.1512E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5784E-01

DISP CONVERGENCE VALUE = 0.5784E-01 CRITERION= 0.1512E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.5784E-01

FORCE CONVERGENCE VALUE = 18.08 CRITERION= 30.56 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3075E-03

DISP CONVERGENCE VALUE = 0.2582E-03 CRITERION= 0.1512E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8398 SCALED MAX DOF INC = 0.2582E-03

FORCE CONVERGENCE VALUE = 5.447 CRITERION= 30.56 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP   1   SUBSTEP   3 COMPLETED.   CUM ITER =   7

*** TIME = 0.700000   TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000   UNCHANGED

    FORCE CONVERGENCE VALUE =   689.8   CRITERION=   44.10

    DISP CONVERGENCE VALUE   = 0.2318E-01 CRITERION= 0.1564E-01

   EQUIL ITER   1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2318E-01

    DISP CONVERGENCE VALUE   = 0.2318E-01 CRITERION= 0.1564E-01

    LINE SEARCH PARAMETER =   1.000   SCALED MAX DOF INC = -0.2318E-01

    FORCE CONVERGENCE VALUE =   43.30   CRITERION=   44.78   <<< CONVERGED

   EQUIL ITER   2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.4239E-03

    DISP CONVERGENCE VALUE = 0.2816E-03 CRITERION= 0.1564E-01 <<< CONVERGED

    LINE SEARCH PARAMETER = 0.6643   SCALED MAX DOF INC = -0.2816E-03

    FORCE CONVERGENCE VALUE =   16.09   CRITERION=   44.78   <<< CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

*** LOAD STEP   1   SUBSTEP   4 COMPLETED.   CUM ITER =   9

*** TIME =   1.00000   TIME INC = 0.300000

*** MAPDL BINARY FILE STATISTICS

 BUFFER SIZE USED= 16384

     155.000 MB WRITTEN ON ELEMENT SAVED DATA FILE: file0.esav

     224.938 MB WRITTEN ON ASSEMBLED MATRIX FILE: file0.full

      51.188 MB WRITTEN ON RESULTS FILE: file0.rst

********** Write FE CONNECTORS *********

WRITE OUT CONSTRAINT EQUATIONS TO FILE= file.ce

****

********** FINISHED SOLVE FOR LS 1 *************

****

****************** SOLVE FOR LS 2 OF 14 ****************

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

    66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 2.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 243.969 TIME= 11:33:08
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 244.016 TIME= 11:33:08
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\Scr5801\file0.err) for these warning

messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   11:33:08 SEP 04, 2024 CP=   244.172

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 2
TIME AT END OF THE LOAD STEP. 2.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
  ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
  ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
DATABASE OUTPUT CONTROLS
  ITEM FREQUENCY COMPONENT
   ALL NONE

NSOL ALL

RSOL ALL

EANG ALL

ETMP ALL

VENG ALL

STRS ALL

EPEL ALL

EPPL ALL

CONT ALL

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.2231E+06 CRITERION= 1116.

DISP CONVERGENCE VALUE = 0.1272 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1272

DISP CONVERGENCE VALUE = 0.1272 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1272

FORCE CONVERGENCE VALUE = 402.0 CRITERION= 50.60

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5715E-02

DISP CONVERGENCE VALUE = 0.5707E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9986 SCALED MAX DOF INC = -0.5707E-02

FORCE CONVERGENCE VALUE = 19.29 CRITERION= 50.60 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 2 SUBSTEP 1 COMPLETED. CUM ITER = 11

*** TIME = 1.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1283E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.1047E+05 CRITERION= 48.63

DISP CONVERGENCE VALUE = 0.1054 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1054

DISP CONVERGENCE VALUE = 0.1052 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9979 SCALED MAX DOF INC = 0.1052

FORCE CONVERGENCE VALUE = 583.7 CRITERION= 51.04

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1985E-02

DISP CONVERGENCE VALUE = 0.1967E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9910 SCALED MAX DOF INC = 0.1967E-02

FORCE CONVERGENCE VALUE = 31.67 CRITERION= 51.04 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3388E-03

DISP CONVERGENCE VALUE = 0.3388E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3388E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 2 SUBSTEP 2 COMPLETED. CUM ITER = 14

*** TIME = 1.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2202. CRITERION= 52.46

DISP CONVERGENCE VALUE = 0.3158E-01 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3158E-01

DISP CONVERGENCE VALUE = 0.3129E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9907 SCALED MAX DOF INC = 0.3129E-01

FORCE CONVERGENCE VALUE = 325.3 CRITERION= 51.57

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1482E-02

DISP CONVERGENCE VALUE = 0.1056E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7127 SCALED MAX DOF INC = 0.1056E-02

FORCE CONVERGENCE VALUE = 112.5 CRITERION= 51.57

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7171E-03

DISP CONVERGENCE VALUE = 0.3690E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5146 SCALED MAX DOF INC = -0.3690E-03

FORCE CONVERGENCE VALUE = 46.26 CRITERION= 51.57 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2065E-03

DISP CONVERGENCE VALUE = 0.2065E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2065E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 2 SUBSTEP 3 COMPLETED. CUM ITER = 18

*** TIME = 1.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 2001. CRITERION= 52.31

DISP CONVERGENCE VALUE = 0.2730E-01 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2730E-01

DISP CONVERGENCE VALUE = 0.2714E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9941 SCALED MAX DOF INC = 0.2714E-01

FORCE CONVERGENCE VALUE = 131.8 CRITERION= 51.96

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1909E-02

DISP CONVERGENCE VALUE = 0.9320E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4883 SCALED MAX DOF INC = 0.9320E-03

FORCE CONVERGENCE VALUE = 34.14 CRITERION= 51.96 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2406E-03

DISP CONVERGENCE VALUE = 0.2406E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2406E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 2 SUBSTEP 4 COMPLETED. CUM ITER = 21

*** TIME = 2.00000 TIME INC = 0.300000

****

********** FINISHED SOLVE FOR LS 2 **********

****

********** SOLVE FOR LS 3 OF 14 **********

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=

IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 3.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 589.641 TIME= 11:44:36
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 589.656 TIME= 11:44:36
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64   11:44:37 SEP 04, 2024 CP=   589.734

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 3

TIME AT END OF THE LOAD STEP. 3.0000

AUTOMATIC TIME STEPPING . . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO

STRESS-STIFFENING . . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM FREQUENCY COMPONENT

ALL NONE

NSOL ALL

RSOL ALL

EANG ALL

ETMP ALL

VENG ALL

STRS ALL

EPEL ALL

EPPL ALL

CONT ALL

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.4461E+06 CRITERION= 2232.

DISP CONVERGENCE VALUE = 0.2561 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2561

DISP CONVERGENCE VALUE = 0.2561 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.2561

FORCE CONVERGENCE VALUE = 133.2 CRITERION= 51.02

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1761E-02

DISP CONVERGENCE VALUE = 0.1758E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9984 SCALED MAX DOF INC = 0.1758E-02

FORCE CONVERGENCE VALUE = 5.083 CRITERION= 51.02 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 3 SUBSTEP 1 COMPLETED. CUM ITER = 23

*** TIME = 2.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.4854E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.1379E+05 CRITERION= 53.03

DISP CONVERGENCE VALUE = 0.4982E-01 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4982E-01

DISP CONVERGENCE VALUE = 0.4979E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9994 SCALED MAX DOF INC = 0.4979E-01

FORCE CONVERGENCE VALUE = 140.0 CRITERION= 51.07

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1365E-02

DISP CONVERGENCE VALUE = 0.1228E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8998 SCALED MAX DOF INC = 0.1228E-02

FORCE CONVERGENCE VALUE = 29.73 CRITERION= 51.07 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2284E-03

DISP CONVERGENCE VALUE = 0.2284E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2284E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 3 SUBSTEP 2 COMPLETED. CUM ITER = 26

*** TIME = 2.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3145. CRITERION= 52.80

DISP CONVERGENCE VALUE = 0.4080E-01 CRITERION= 0.1913E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.4080E-01

DISP CONVERGENCE VALUE = 0.4022E-01 CRITERION= 0.1913E-01

LINE SEARCH PARAMETER = 0.9857 SCALED MAX DOF INC = -0.4022E-01

FORCE CONVERGENCE VALUE = 508.4 CRITERION= 51.89

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3299E-02

DISP CONVERGENCE VALUE = 0.2973E-02 CRITERION= 0.1913E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9012 SCALED MAX DOF INC = 0.2973E-02

FORCE CONVERGENCE VALUE = 115.6 CRITERION= 51.88

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1667E-02

DISP CONVERGENCE VALUE = 0.6791E-03 CRITERION= 0.1913E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4074 SCALED MAX DOF INC = 0.6791E-03

FORCE CONVERGENCE VALUE = 32.53 CRITERION= 51.88 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3025E-03

DISP CONVERGENCE VALUE = 0.3025E-03 CRITERION= 0.1913E-01 <<< CONVERGED

```
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.3025E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

*** LOAD STEP     3   SUBSTEP     3  COMPLETED.    CUM ITER =     30

*** TIME =   2.70000         TIME INC =  0.300000

*** AUTO STEP TIME:  NEXT TIME INC = 0.30000      UNCHANGED


    FORCE CONVERGENCE VALUE  =   4047.      CRITERION=   53.41

    DISP CONVERGENCE VALUE   =  0.6098E-01  CRITERION=  0.1914E-01

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6098E-01

    DISP CONVERGENCE VALUE   =  0.6078E-01  CRITERION=  0.1914E-01

    LINE SEARCH PARAMETER =  0.9967     SCALED MAX DOF INC =  0.6078E-01

    FORCE CONVERGENCE VALUE  =   202.0      CRITERION=   52.57

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2024E-02

    DISP  CONVERGENCE  VALUE      =   0.1323E-02    CRITERION=    0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.6535     SCALED MAX DOF INC =  0.1323E-02

    FORCE CONVERGENCE VALUE  =   67.85      CRITERION=   52.57

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6452E-03

    DISP  CONVERGENCE  VALUE      =   0.3870E-03    CRITERION=    0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.5998     SCALED MAX DOF INC =  0.3870E-03

    FORCE CONVERGENCE VALUE  =   27.36      CRITERION=   52.57    <<< CONVERGED

   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2082E-03

    DISP  CONVERGENCE  VALUE      =   0.2082E-03    CRITERION=    0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.2082E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

*** LOAD STEP     3   SUBSTEP     4  COMPLETED.    CUM ITER =     34

*** TIME =   3.00000         TIME INC =  0.300000

**************************************************

********** FINISHED SOLVE FOR LS 3 **********

**************************************************

****************** SOLVE FOR LS 4 OF 14 ****************
```

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

    66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 4.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 960.203 TIME= 11:56:48
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 960.219 TIME= 11:56:48
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -

preliminarno_ProjectScratch\Scr5801\file0.err) for these warning
messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   11:56:49 SEP 04, 2024 CP=   960.391

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 4
TIME AT END OF THE LOAD STEP. 4.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS   X   Y   Z
  ACEL 0.0000   9806.6   0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
                                ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
DATABASE OUTPUT CONTROLS
  ITEM   FREQUENCY   COMPONENT

```
 ALL       NONE
 NSOL      ALL
 RSOL      ALL
 EANG      ALL
 ETMP      ALL
 VENG      ALL
 STRS      ALL
 EPEL      ALL
 EPPL      ALL
 CONT      ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


  FORCE CONVERGENCE VALUE  =  0.6693E+06  CRITERION=   3347.
  DISP CONVERGENCE VALUE   =  0.3888      CRITERION=  0.1944E-01
 EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.3888
  DISP CONVERGENCE VALUE   =  0.3888      CRITERION=  0.1944E-01
  LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.3888
  FORCE CONVERGENCE VALUE  =   49.63     CRITERION=   51.16    <<< CONVERGED
 EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.1641E-02
  DISP CONVERGENCE VALUE      =  0.1641E-02    CRITERION=    0.1945E-01  <<<
CONVERGED
  LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.1641E-02
  FORCE CONVERGENCE VALUE  =  0.8061     CRITERION=   51.15    <<< CONVERGED
 >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
*** LOAD STEP     4   SUBSTEP     1  COMPLETED.    CUM ITER =     36
*** TIME =   3.20000         TIME INC =  0.200000
*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.4217E-02
*** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


  FORCE CONVERGENCE VALUE  =   7066.      CRITERION=   51.28
  DISP CONVERGENCE VALUE   =  0.2163      CRITERION=  0.1945E-01
```

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2163

DISP CONVERGENCE VALUE = 0.2119 CRITERION= 0.1945E-01

LINE SEARCH PARAMETER = 0.9797 SCALED MAX DOF INC = 0.2119

FORCE CONVERGENCE VALUE = 2490. CRITERION= 51.56

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.9499E-02

DISP CONVERGENCE VALUE = 0.9466E-02 CRITERION= 0.1945E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9964 SCALED MAX DOF INC = -0.9466E-02

FORCE CONVERGENCE VALUE = 43.47 CRITERION= 51.60 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1751E-02

DISP CONVERGENCE VALUE = 0.1751E-02 CRITERION= 0.1945E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1751E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 4 SUBSTEP 2 COMPLETED. CUM ITER = 39

*** TIME = 3.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3549. CRITERION= 54.15

DISP CONVERGENCE VALUE = 0.7285E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7285E-01

DISP CONVERGENCE VALUE = 0.7245E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9945 SCALED MAX DOF INC = 0.7245E-01

FORCE CONVERGENCE VALUE = 277.9 CRITERION= 52.83

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4438E-02

DISP CONVERGENCE VALUE = 0.3053E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6879 SCALED MAX DOF INC = 0.3053E-02

FORCE CONVERGENCE VALUE = 91.56 CRITERION= 52.82

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3524E-02

DISP CONVERGENCE VALUE = 0.1818E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5160 SCALED MAX DOF INC = -0.1818E-02

FORCE CONVERGENCE VALUE = 40.14 CRITERION= 52.82 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1205E-02

DISP CONVERGENCE VALUE = 0.1205E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1205E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 3 COMPLETED. CUM ITER = 43

*** TIME = 3.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 3016. CRITERION= 54.64

DISP CONVERGENCE VALUE = 0.5626E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5626E-01

DISP CONVERGENCE VALUE = 0.5588E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9932 SCALED MAX DOF INC = 0.5588E-01

FORCE CONVERGENCE VALUE = 194.9 CRITERION= 53.79

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8494E-02

DISP CONVERGENCE VALUE = 0.4822E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5677 SCALED MAX DOF INC = 0.4822E-02

FORCE CONVERGENCE VALUE = 66.52 CRITERION= 53.79

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1780E-02

DISP CONVERGENCE VALUE = 0.1180E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6632 SCALED MAX DOF INC = -0.1180E-02

FORCE CONVERGENCE VALUE = 25.65 CRITERION= 53.79 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7424E-03

DISP CONVERGENCE VALUE = 0.7424E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7424E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 4 COMPLETED. CUM ITER = 47

*** TIME = 4.00000 TIME INC = 0.300000

****

********** FINISHED SOLVE FOR LS 4 **********

```
************************************************
****************** SOLVE FOR LS 5 OF 14 ****************
*** Set Displacements ***

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE        1 TO     101626 STEP         1

     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE      1 SUBSTEPS AS A MINIMUM

TIME=  5.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.


WRITE ALL  ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES
```

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE   COMMAND *****

*** WARNING ***   CP =   1323.172   TIME= 12:09:02
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE ***   CP =   1323.203   TIME= 12:09:02
The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   12:09:02 SEP 04, 2024 CP=   1323.312

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 5
TIME AT END OF THE LOAD STEP. 5.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
  ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
  ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.8924E+06 CRITERION= 4462.

DISP CONVERGENCE VALUE = 0.5185 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5185

DISP CONVERGENCE VALUE = 0.5185 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.5185

FORCE CONVERGENCE VALUE = 738.1 CRITERION= 51.59

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.9966E-02

DISP CONVERGENCE VALUE = 0.9937E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9971 SCALED MAX DOF INC = 0.9937E-02

FORCE CONVERGENCE VALUE = 16.64 CRITERION= 51.60 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 5 SUBSTEP 1 COMPLETED. CUM ITER = 49

*** TIME = 4.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.3950E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 8056. CRITERION= 50.95

DISP CONVERGENCE VALUE = 0.2293 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2293

DISP CONVERGENCE VALUE = 0.2277 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9932 SCALED MAX DOF INC = -0.2277

FORCE CONVERGENCE VALUE = 1169. CRITERION= 51.59

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1124E-01

DISP CONVERGENCE VALUE = 0.1109E-01 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9865 SCALED MAX DOF INC = 0.1109E-01

FORCE CONVERGENCE VALUE = 71.04 CRITERION= 51.60

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1815E-02

DISP CONVERGENCE VALUE = 0.9953E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5484 SCALED MAX DOF INC = -0.9953E-03

FORCE CONVERGENCE VALUE = 10.46 CRITERION= 51.60 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1753E-03

DISP CONVERGENCE VALUE = 0.1753E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1753E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 5 SUBSTEP 2 COMPLETED. CUM ITER = 53

*** TIME = 4.40000 TIME INC = 0.200000

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 1190. CRITERION= 52.39

DISP CONVERGENCE VALUE = 0.5523E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5523E-01

DISP CONVERGENCE VALUE = 0.5498E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9955 SCALED MAX DOF INC = -0.5498E-01

FORCE CONVERGENCE VALUE = 136.7 CRITERION= 52.07

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1453E-02

DISP CONVERGENCE VALUE = 0.1250E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8602 SCALED MAX DOF INC = 0.1250E-02

FORCE CONVERGENCE VALUE = 29.20 CRITERION= 52.07 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1054E-02

DISP CONVERGENCE VALUE = 0.1054E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1054E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 5 SUBSTEP 3 COMPLETED. CUM ITER = 56

*** TIME = 4.60000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2264. CRITERION= 53.42

DISP CONVERGENCE VALUE = 0.7217E-01 CRITERION= 0.3832E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7217E-01

DISP CONVERGENCE VALUE = 0.7133E-01 CRITERION= 0.3832E-01

LINE SEARCH PARAMETER = 0.9883 SCALED MAX DOF INC = 0.7133E-01

FORCE CONVERGENCE VALUE = 267.0 CRITERION= 53.10

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5360E-02

DISP CONVERGENCE VALUE = 0.4252E-02 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7934 SCALED MAX DOF INC = -0.4252E-02

FORCE CONVERGENCE VALUE = 79.08 CRITERION= 53.09

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5000E-02

DISP CONVERGENCE VALUE = 0.2233E-02 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4466 SCALED MAX DOF INC = 0.2233E-02

FORCE CONVERGENCE VALUE = 32.69 CRITERION= 53.09 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8850E-03

DISP CONVERGENCE VALUE = 0.8850E-03 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.8850E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 5 SUBSTEP 4 COMPLETED. CUM ITER = 60

*** TIME = 4.90000 TIME INC = 0.300000

*** AUTO TIME STEP: NEXT TIME INC = 0.10000   DECREASED (FACTOR = 0.3333)

FORCE CONVERGENCE VALUE = 707.4   CRITERION= 53.51

DISP CONVERGENCE VALUE = 0.2095E-01 CRITERION= 0.3832E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2095E-01

DISP CONVERGENCE VALUE = 0.2087E-01 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9961 SCALED MAX DOF INC = 0.2087E-01

FORCE CONVERGENCE VALUE = 40.50 CRITERION= 53.43 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1563E-02

DISP CONVERGENCE VALUE = 0.1563E-02 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1563E-02

FORCE CONVERGENCE VALUE = 19.96 CRITERION= 53.43 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 5 SUBSTEP 5 COMPLETED. CUM ITER = 62

*** TIME = 5.00000 TIME INC = 0.100000

****

********** FINISHED SOLVE FOR LS 5 **********

****

********** SOLVE FOR LS 6 OF 14 **********

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=

IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM

FOR AUTOMATIC TIME STEPPING:

USE 1000 SUBSTEPS AS A MAXIMUM

USE 1 SUBSTEPS AS A MINIMUM

TIME= 6.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE

FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 1750.078 TIME= 12:22:58
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1750.109 TIME= 12:22:58
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64 12:22:59 SEP 04, 2024 CP= 1750.297

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 6

TIME AT END OF THE LOAD STEP. 6.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.1339E+07 CRITERION= 6693.

DISP CONVERGENCE VALUE = 0.7802 CRITERION= 0.3901E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7802

DISP CONVERGENCE VALUE = 0.7802 CRITERION= 0.3901E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7802

FORCE CONVERGENCE VALUE = 964.4 CRITERION= 51.64

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7250E-02

DISP CONVERGENCE VALUE = 0.7250E-02 CRITERION= 0.3901E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7250E-02

FORCE CONVERGENCE VALUE = 12.24 CRITERION= 51.63 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 6 SUBSTEP 1 COMPLETED. CUM ITER = 64

*** TIME = 5.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.2277E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 8610. CRITERION= 52.58

DISP CONVERGENCE VALUE = 0.2743 CRITERION= 0.3901E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2743

DISP CONVERGENCE VALUE = 0.2714 CRITERION= 0.3901E-01

LINE SEARCH PARAMETER = 0.9893 SCALED MAX DOF INC = 0.2714

FORCE CONVERGENCE VALUE = 2053. CRITERION= 52.26

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1556E-01

DISP CONVERGENCE VALUE = 0.1554E-01 CRITERION= 0.3901E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9985 SCALED MAX DOF INC = 0.1554E-01

FORCE CONVERGENCE VALUE = 23.78 CRITERION= 52.25 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6723E-03

DISP CONVERGENCE VALUE = 0.6723E-03 CRITERION= 0.3901E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.6723E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 2 COMPLETED. CUM ITER = 67

*** TIME = 5.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2908. CRITERION= 55.49

DISP CONVERGENCE VALUE = 0.1315 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1315

DISP CONVERGENCE VALUE = 0.1300 CRITERION= 0.5753E-01

LINE SEARCH PARAMETER = 0.9890 SCALED MAX DOF INC = 0.1300

FORCE CONVERGENCE VALUE = 694.1 CRITERION= 54.21

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1008E-01

DISP CONVERGENCE VALUE = 0.7914E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7848 SCALED MAX DOF INC = 0.7914E-02

FORCE CONVERGENCE VALUE = 169.8 CRITERION= 54.20

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8136E-02

DISP CONVERGENCE VALUE = 0.4099E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5038 SCALED MAX DOF INC = -0.4099E-02

FORCE CONVERGENCE VALUE = 74.75 CRITERION= 54.20

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2769E-02

DISP CONVERGENCE VALUE = 0.1509E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5448 SCALED MAX DOF INC = 0.1509E-02

FORCE CONVERGENCE VALUE = 34.17 CRITERION= 54.20 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1900E-02

DISP CONVERGENCE VALUE = 0.1900E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1900E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 6 SUBSTEP 3 COMPLETED. CUM ITER = 72

*** TIME = 5.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

*** WARNING *** CP = 2031.781 TIME= 12:32:01

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2032.859 TIME= 12:32:03

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 4 NOT COMPLETED. CUM ITER = 73

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10500

FORCE CONVERGENCE VALUE = 0.7028E+06 CRITERION= 3514.

DISP CONVERGENCE VALUE = 0.4020 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4020

DISP CONVERGENCE VALUE = 0.4020 CRITERION= 0.5753E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4020

FORCE CONVERGENCE VALUE = 780.9 CRITERION= 55.09

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2273E-01

DISP CONVERGENCE VALUE = 0.2273E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9998 SCALED MAX DOF INC = 0.2273E-01

FORCE CONVERGENCE VALUE = 77.07 CRITERION= 54.88

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1831E-02

DISP CONVERGENCE VALUE = 0.1573E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8591 SCALED MAX DOF INC = 0.1573E-02

FORCE CONVERGENCE VALUE = 13.61 CRITERION= 54.88 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 4 COMPLETED. CUM ITER = 75

*** TIME = 5.80500 TIME INC = 0.105000

*** AUTO STEP TIME: NEXT TIME INC = 0.10500 UNCHANGED

FORCE CONVERGENCE VALUE = 725.6 CRITERION= 55.61

DISP CONVERGENCE VALUE = 0.2347E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2347E-01

DISP CONVERGENCE VALUE = 0.2340E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9973 SCALED MAX DOF INC = -0.2340E-01

FORCE CONVERGENCE VALUE = 108.0 CRITERION= 55.48

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2764E-02

DISP CONVERGENCE VALUE = 0.2299E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8317 SCALED MAX DOF INC = 0.2299E-02

FORCE CONVERGENCE VALUE = 20.17 CRITERION= 55.48 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7808E-03

DISP CONVERGENCE VALUE = 0.7808E-03 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.7808E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 5 COMPLETED. CUM ITER = 78

*** TIME = 5.91000 TIME INC = 0.105000

*** AUTO TIME STEP: NEXT TIME INC = 0.90000E-01 DECREASED (FACTOR = 0.8571)

*** WARNING *** CP = 2198.750 TIME= 12:37:38

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2199.859 TIME= 12:37:40

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 6 NOT COMPLETED. CUM ITER = 79

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.31500E-01

FORCE CONVERGENCE VALUE = 0.2109E+06 CRITERION= 1056.

DISP CONVERGENCE VALUE = 0.1203 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1203

*** WARNING *** CP = 2220.250 TIME= 12:38:27

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2221.219 TIME= 12:38:29

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 6 NOT COMPLETED. CUM ITER = 80

*** BEGIN BISECTION NUMBER 2 NEW TIME INCREMENT= 0.11025E-01

FORCE CONVERGENCE VALUE = 0.7386E+05 CRITERION= 373.0

DISP CONVERGENCE VALUE = 0.4208E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4208E-01

DISP CONVERGENCE VALUE = 0.4208E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4208E-01

FORCE CONVERGENCE VALUE = 18.57 CRITERION= 55.54 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 6 SUBSTEP 6 COMPLETED. CUM ITER = 80

*** TIME = 5.92102 TIME INC = 0.110250E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.11025E-01 UNCHANGED

*** WARNING *** CP = 2256.469 TIME= 12:39:43

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2257.594 TIME= 12:39:45

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 7 NOT COMPLETED. CUM ITER = 81

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.38588E-02

FORCE CONVERGENCE VALUE = 0.2596E+05 CRITERION= 140.4

DISP CONVERGENCE VALUE = 0.1478E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1478E-01

*** WARNING *** CP = 2281.859 TIME= 12:40:32

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2283.234 TIME= 12:40:34

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 7 NOT COMPLETED. CUM ITER = 82

*** BEGIN BISECTION NUMBER 2 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 7081. CRITERION= 64.59

DISP CONVERGENCE VALUE = 0.3971E-02 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3971E-02

DISP CONVERGENCE VALUE = 0.3971E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.3971E-02

FORCE CONVERGENCE VALUE = 0.3756 CRITERION= 55.54 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 6 SUBSTEP 7 COMPLETED. CUM ITER = 82

*** TIME = 5.92202 TIME INC = 0.100000E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.10000E-02 UNCHANGED

FORCE CONVERGENCE VALUE = 17.26 CRITERION= 55.54

DISP CONVERGENCE VALUE = 0.2640E-03 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2640E-03

DISP CONVERGENCE VALUE = 0.2640E-03 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9999 SCALED MAX DOF INC = -0.2640E-03

FORCE CONVERGENCE VALUE = 0.3493E-01 CRITERION= 55.55 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5525E-06

DISP CONVERGENCE VALUE = 0.5525E-06 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.5525E-06

FORCE CONVERGENCE VALUE = 0.6772E-04 CRITERION= 55.55 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 6 SUBSTEP 8 COMPLETED. CUM ITER = 84

*** TIME = 5.92302 TIME INC = 0.100000E-02

*** AUTO TIME STEP: NEXT TIME INC = 0.15000E-02 INCREASED (FACTOR = 1.5000)

*** WARNING *** CP = 2363.672 TIME= 12:43:51

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2364.516 TIME= 12:43:53

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 9 NOT COMPLETED. CUM ITER = 85

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 7080. CRITERION= 64.59

DISP CONVERGENCE VALUE = 0.3815E-02 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3815E-02

*** WARNING *** CP = 2385.609 TIME= 12:44:49

The material solution failed for element 3987 with material 17.

*** WARNING *** CP = 2386.406 TIME= 12:44:51

The material solution failed for element 3987 with material 17.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46

Max. Penetration of -1.724871412E-02 has been detected between contact element 49992 and target element 49128.

Max. Geometrical gap of 3.721754904E-02 has been detected between contact element 49984 and target element 49120.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 3.28043159 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47
Max. Penetration of -1.724871412E-02 has been detected between contact element 49992 and target element 49128.

Max. Geometrical gap of 3.721754904E-02 has been detected between contact element 49984 and target element 49120.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 3.28043159 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 50
Max. Penetration of -1.805058269E-02 has been detected between contact element 51768 and target element 52632.

Max. Geometrical gap of 3.096216863E-02 has been detected between contact element 52191 and target element 51327.
Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.12311426 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 51
Max. Penetration of -1.805058269E-02 has been detected between contact
element 51768 and target element 52632.

Max. Geometrical gap of 3.096216863E-02 has been detected between
contact element 52191 and target element 51327.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.12311426 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 54
Max. Penetration of -1.881715411E-02 has been detected between contact
element 53976 and target element 54840.

Max. Geometrical gap of 2.134835178E-02 has been detected between
contact element 54399 and target element 53535.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 2.23126713 and criterion 5.55459845.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 55

Max. Penetration of -1.881715411E-02 has been detected between contact element 53976 and target element 54840.

Max. Geometrical gap of 2.134835178E-02 has been detected between contact element 54399 and target element 53535.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 2.23126713 and criterion 5.55459845.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58

Max. Penetration of -1.942384275E-02 has been detected between contact element 56616 and target element 55752.

Max. Geometrical gap of 2.736432495E-02 has been detected between contact element 56683 and target element 55819.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 2.29982449 and criterion 5.55459845.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 59

Max. Penetration of -1.942384275E-02 has been detected between contact element 56616 and target element 55752.

Max. Geometrical gap of 2.736432495E-02 has been detected between contact element 56683 and target element 55819.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 2.29982449 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62
Max. Penetration of -2.238137464E-02 has been detected between contact
element 58450 and target element 59314.

Max. Geometrical gap of 3.612117127E-02 has been detected between
contact element 58891 and target element 58027.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.9494052 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 63
Max. Penetration of -2.238137464E-02 has been detected between contact
element 58450 and target element 59314.

Max. Geometrical gap of 3.612117127E-02 has been detected between
contact element 58891 and target element 58027.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.9494052 and criterion 5.55459845.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 67

Max. Penetration of -2.801879438E-02 has been detected between contact element 60919 and target element 61783.

Max. Geometrical gap of 4.823542615E-02 has been detected between contact element 61231 and target element 60367.

For total 864 contact elements, there are 432 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.24029193 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 71

Max. Penetration of -2.925880487E-02 has been detected between contact element 63559 and target element 62695.

Max. Geometrical gap of 4.396593877E-02 has been detected between contact element 63435 and target element 62571.

For total 864 contact elements, there are 432 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.789687506 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 74

Max. Penetration of -2.390824041E-02 has been detected between contact element 65728 and target element 64864.

Max. Geometrical gap of 3.841945396E-02 has been detected between contact element 65639 and target element 64775.
For total 864 contact elements, there are 432 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.18084433 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 78
Max. Penetration of -1.992866334E-02 has been detected between contact element 67706 and target element 66842.

Max. Geometrical gap of 2.912309672E-02 has been detected between contact element 67847 and target element 66983.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.13694235 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 79
Max. Penetration of -1.992866334E-02 has been detected between contact element 67706 and target element 66842.

Max. Geometrical gap of 2.912309672E-02 has been detected between contact element 67847 and target element 66983.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target

elements.
Contact pair force norm 1.13694235 and criterion 5.55459845.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 80
Max. Penetration of -3.56154638E-02 has been detected between contact element 68742 and target element 68502.
For total 240 contact elements, there are 120 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 6 target elements.
Contact pair force norm 0.967318175 and criterion 5.55459845.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 82
Max. Penetration of -1.864559584E-02 has been detected between contact element 69865 and target element 69001.

Max. Geometrical gap of 1.984831531E-02 has been detected between contact element 70051 and target element 69187.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.10908827 and criterion 5.55459845.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 83
Max. Penetration of -1.864559584E-02 has been detected between contact element 69865 and target element 69001.

Max. Geometrical gap of 1.984831531E-02 has been detected between contact element 70051 and target element 69187.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.10908827 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84
Max. Penetration of -3.312768367E-02 has been detected between contact element 70949 and target element 70709.
For total 240 contact elements, there are 120 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 6 target elements.
Contact pair force norm 0.816897427 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 86
Max. Penetration of -1.742232109E-02 has been detected between contact element 72074 and target element 71210.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.08747425 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 87

Max. Penetration of -1.742232109E-02 has been detected between contact element 72074 and target element 71210.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.08747425 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 90
Max. Penetration of -1.738834622E-02 has been detected between contact element 74183 and target element 75047.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.1667901 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 91
Max. Penetration of -1.738834622E-02 has been detected between contact element 74183 and target element 75047.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.1667901 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 94
Max. Penetration of -1.754825858E-02 has been detected between contact element 76391 and target element 77255.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.14638864 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 95
Max. Penetration of -1.754825858E-02 has been detected between contact
element 76391 and target element 77255.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.14638864 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 98
Max. Penetration of -1.768034743E-02 has been detected between contact
element 78599 and target element 79463.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.0303657 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 99
Max. Penetration of -1.768034743E-02 has been detected between contact
element 78599 and target element 79463.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target

elements.

Contact pair force norm 1.0303657 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101

Max. Penetration of -2.728140801E-02 has been detected between contact element 79779 and target element 79539.

For total 240 contact elements, there are 120 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 6 target elements.

Contact pair force norm 0.499689539 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 102

Max. Penetration of -1.778488666E-02 has been detected between contact element 80807 and target element 81671.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.908039221 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103

Max. Penetration of -1.778488666E-02 has been detected between contact element 80807 and target element 81671.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.908039221 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 106

Max. Penetration of -1.785914455E-02 has been detected between contact element 83015 and target element 83599.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 32.3579134 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 107

Max. Penetration of -1.785914455E-02 has been detected between contact element 83015 and target element 83599.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 32.3579134 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 124

Max. Penetration of -6.8273877E-13 has been detected between contact element 100685 and target element 100795.

For total 52 contact elements, there are 52 elements are in contact.

There are 52 elements are in sticking.

Potential overconstraint is detected.

Max. Pinball distance 3.71446753.

One of the contact searching regions contains at least 6 target

elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 125

*** NOTE *** CP = 2388.031 TIME= 12:44:55

Contact pair is inactive.

*** WARNING *** CP = 2388.031 TIME= 12:44:55

The unconverged solution (identified as time 6 substep 999999) is output for analysis debug purposes. Results should not be used for any other purpose.

R E S T A R T I N F O R M A T I O N

REASON FOR TERMINATION. . . . . .ERROR IN ELEMENT FORMULATION

FILES NEEDED FOR RESTARTING file0.Rnnn

file.ldhi

file.rdb

TIME OF LAST SOLUTION 5.9230

TIME AT START OF THE LOAD STEP 5.0000

TIME AT END OF THE LOAD STEP 6.0000

ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.db

FOR POSSIBLE RESUME FROM THIS POINT

NUMBER OF WARNING MESSAGES ENCOUNTERED= 31

NUMBER OF ERROR MESSAGES ENCOUNTERED= 0

***** PROBLEM TERMINATED BY INDICATED ERROR(S) OR BY END OF INPUT DATA *****

*** WARNING *** CP = 2389.406 TIME= 12:45:08

During this session the elapsed time exceeds the CPU time by 103%.
This often indicates either a lack of physical memory (RAM) required
to efficiently handle this simulation or a particularly slow hard
drive configuration. This simulation can be expected to run faster on
identical hardware if additional RAM or a faster hard drive
configuration is made available. For more details, please see the
Mechanical APDL Performance Guide which is part of the Ansys Help
system.

+---------- M A P D L S T A T I S T I C S ----------+

Release: 2024 R2 Build: 24.2 Update: UP20240513 Platform: WINDOWS x64

Date Run: 09/04/2024 Time: 12:45 Process ID: 4008

Operating System: Windows 11 (Build: 22631)

Processor Model: 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz

Compiler: Intel(R) Fortran Compiler Classic Version 2021.9 (Build: 20230302)
Intel(R) C/C++ Compiler Classic Version 2021.9 (Build: 20230302)
Intel(R) oneAPI Math Kernel Library Version 2023.1-Product Build 20230303

Number of machines requested : 1

Total number of cores available : 8

Number of physical cores available : 4

Number of processes requested : 2

Number of threads per process requested : 1

Total number of cores requested : 2 (Distributed Memory Parallel)

MPI Type: INTELMPI

MPI Version: Intel(R) MPI Library 2021.11 for Windows* OS

GPU Acceleration: Not Requested

Job Name: file0

Input File: dummy.dat

Core	Machine Name	Working Directory
0	DESKTOP-0L1F7R6	C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801
1	DESKTOP-0L1F7R6	C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr5801

Latency time from master to core 1 = 3.964 microseconds

Communication speed from master to core 1 = 2606.39 MB/sec

Total CPU time for main thread : 2386.8 seconds

Total CPU time summed for all threads : 2389.4 seconds

Elapsed time spent obtaining a license : 0.5 seconds

Elapsed time spent pre-processing model (/PREP7) : 0.8 seconds

Elapsed time spent solution - preprocessing : 9.2 seconds

Elapsed time spent computing solution : 4820.3 seconds

Elapsed time spent solution - postprocessing : 7.2 seconds

Elapsed time spent post-processing model (/POST1) : 0.0 seconds

Equation solver used : Sparse (symmetric)
Equation solver computational rate : 21.3 Gflops
Equation solver effective I/O rate : 136.9 GB/sec

Sum of disk space used on all processes : 4420.0 MB

Sum of memory used on all processes : 4161.0 MB
Sum of memory allocated on all processes : 7300.0 MB
Physical memory available : 8 GB
Total amount of I/O written to disk : 102.9 GB
Total amount of I/O read from disk : 564.9 GB

+---------- E N D M A P D L S T A T I S T I C S ----------+

--
| |
| RUN COMPLETED |
Ansys MAPDL 2024 R2   Build 24.2   UP20240513   WINDOWS x64
Database Requested(-db)   1024 MB   Scratch Memory Requested   1024 MB
Max Database Used(Master)   126 MB   Max Scratch Used(Master)   2221 MB
Max Database Used(Workers)   1 MB   Max Scratch Used(Workers) 1813 MB
Sum Database Used(All)   127 MB   Sum Scratch Used(All)   4034 MB

```
|--------------------------------------------------------------------------------|
|                                                                                |
|       CP Time      (sec) =       2389.406       Time  =  12:45:08          |
|       Elapsed Time (sec) =       4846.000       Date  =  09/04/2024        |
|                                                                                |
*--------------------------------------------------------------------------------*
```

All

PRILOG 2 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na zidu s prozorom

Solver Output

Ansys Mechanical Enterprise Academic Student

```
*------------------------------------------------------------------*
|                                                                  |
| W E L C O M E  T O  T H E  A N S Y S (R) P R O G R A M  |
|                                                                  |
*------------------------------------------------------------------*
```

```
************************************************************
*       ANSYS MAPDL 2024 R2        LEGAL NOTICES       *
************************************************************
*                                                          *
* Copyright 1971-2024 Ansys, Inc.  All rights reserved.    *
* Unauthorized use, distribution or duplication is         *
* prohibited.                                              *
*                                                          *
* Ansys is a registered trademark of Ansys, Inc. or its    *
* subsidiaries in the United States or other countries.    *
* See the Ansys, Inc. online documentation or the Ansys, Inc. *
* documentation CD or online help for the complete Legal   *
* Notice.                                                  *
*                                                          *
```

****
*
* THIS ANSYS SOFTWARE PRODUCT AND PROGRAM DOCUMENTATION *
* INCLUDE TRADE SECRETS AND CONFIDENTIAL AND PROPRIETARY *
* PRODUCTS OF ANSYS, INC., ITS SUBSIDIARIES, OR LICENSORS. *
* The software products and documentation are furnished by *
* Ansys, Inc. or its subsidiaries under a software license *
* agreement that contains provisions concerning *
* non-disclosure, copying, length and nature of use, *
* compliance with exporting laws, warranties, disclaimers, *
* limitations of liability, and remedies, and other *
* provisions. The software products and documentation may be *
* used, disclosed, transferred, or copied only in accordance *
* with the terms and conditions of that software license *
* agreement. *
*
* Ansys, Inc. is a UL registered *
* ISO 9001:2015 company. *
*
****
*
* This product is subject to U.S. laws governing export and *
* re-export. *
*
* For U.S. Government users, except as specifically granted *
* by the Ansys, Inc. software license agreement, the use, *
* duplication, or disclosure by the United States Government *
* is subject to restrictions stated in the Ansys, Inc. *
* software license agreement and FAR 12.212 (for non-DOD *
* licenses). *
*
****

2024 R2

Point Releases and Patches installed:

Ansys Service Pack 2024 R2.15857956

Discovery 2024 R2.15857956

Core WB Files 2024 R2.15857956

Ansys Dynamic Reporting 2024 R2.15857956

SpaceClaim 2024 R2.15857956

CFX (includes CFD-Post) 2024 R2.15857956

Chemkin 2024 R2.15857956

EnSight 2024 R2.15857956

FENSAP-ICE 2024 R2.15857956

Fluent (includes CFD-Post) 2024 R2.15857956

Polyflow (includes CFD-Post) 2024 R2.15857956

Forte (includes EnSight) 2024 R2.15857956

TurboGrid 2024 R2.15857956

ACIS Geometry Interface 2024 R2.15857956

AutoCAD Geometry Interface 2024 R2.15857956

Catia, Version 4 Geometry Interface 2024 R2.15857956

Catia, Version 5 Geometry Interface 2024 R2.15857956

Catia, Version 6 Geometry Interface 2024 R2.15857956

Creo Elements/Direct Modeling Geometry Interface 2024 R2.15857956

Creo Parametric Geometry Interface 2024 R2.15857956

Inventor Geometry Interface 2024 R2.15857956

JTOpen Geometry Interface 2024 R2.15857956

NX Geometry Interface 2024 R2.15857956

Parasolid Geometry Interface 2024 R2.15857956

Solid Edge Geometry Interface 2024 R2.15857956

SOLIDWORKS Geometry Interface 2024 R2.15857956

Speos 2024 R2.15857956

Aqwa 2024 R2.15857956

Autodyn 2024 R2.15857956

Material Calibration App 2024 R2.15857956

Customization Files for User Programmable Features 2024 R2.15857956

Mechanical Products 2024 R2.15857956

Motion 2024 R2.15857956

Academic Student 2024 R2.15857956

***** MAPDL COMMAND LINE ARGUMENTS *****

BATCH MODE REQUESTED (-b) = NOLIST

INPUT FILE COPY MODE (-c) = COPY

DISTRIBUTED MEMORY PARALLEL REQUESTED

2 PARALLEL PROCESSES REQUESTED WITH SINGLE THREAD PER PROCESS

TOTAL OF 2 CORES REQUESTED

INPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\dummy.dat

OUTPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\solve.out

START-UP FILE MODE = NOREAD

STOP FILE MODE = NOREAD

RELEASE= 2024 R2 BUILD= 24.2 UP20240513 VERSION=WINDOWS x64

CURRENT JOBNAME=file0 16:20:24 DEC 08, 2024 CP= 0.031

PARAMETER _DS_PROGRESS = 999.0000000

/INPUT FILE= ds.dat LINE= 0

*** NOTE *** CP = 0.109 TIME= 16:20:25

The /CONFIG,NOELDB command is not valid in a distributed memory

parallel solution. Command is ignored.

*GET _WALLSTRT FROM ACTI ITEM=TIME WALL VALUE= 16.3402778

TITLE=

kuca_prelim_2--Static Structural (B5)

ACT Extensions:

LSDYNA, 2024.2

5f463412-bd3e-484b-87e7-cbc0a665e474, wbex

/COM, ANSYSMotion, 2024.2

20180725-3f81-49eb-9f31-41364844c769, wbex

SET PARAMETER DIMENSIONS ON _WB_PROJECTSCRATCH_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_PROJECTSCRATCH_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\

SET PARAMETER DIMENSIONS ON _WB_SOLVERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_SOLVERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\dp0\SYS-2\MECH\

SET PARAMETER DIMENSIONS ON _WB_USERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_USERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\user_files\

--- Data in consistent NMM units. See Solving Units in the help system for more

MPA UNITS SPECIFIED FOR INTERNAL

LENGTH = MILLIMETERS (mm)

MASS = TONNE (Mg)

TIME = SECONDS (sec)

TEMPERATURE = CELSIUS (C)

TOFFSET = 273.0

FORCE = NEWTON (N)

HEAT = MILLIJOULES (mJ)

INPUT UNITS ARE ALSO SET TO MPA

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 16:20:25 DEC 08, 2024 CP= 0.109

kuca_prelim_2--Static Structural (B5)

***** MAPDL ANALYSIS DEFINITION (PREP7) *****

********** Nodes for the whole assembly **********

********** Elements for Body 1 'Part 1' **********

********** Elements for Body 2 'Part 2' **********

********** Elements for Body 3 'Part 3' **********

********** Elements for Body 4 'Part 4' **********

********** Elements for Body 5 'Part 5' **********

********** Elements for Body 6 'Part 6' **********

********** Elements for Body 7 'Part 7' **********

********** Elements for Body 8 'Part 8' **********

********** Elements for Body 9 'Part 9' **********

********** Elements for Body 10 'Part 10' **********

********** Elements for Body 11 'Part 11' **********

********** Elements for Body 12 'Part 12' **********

********** Elements for Body 13 'Part 13' **********

********** Elements for Body 14 'Part 14' **********

********** Elements for Body 15 'Part 15' **********

********** Elements for Body 16 'Part 16' **********

********** Elements for Body 17 'Part 17' **********

********** Elements for Body 18 'Part 18' **********

********** Elements for Body 19 'Part 19' **********

********** Elements for Body 20 'Part 20' **********

********** Elements for Body 21 'Part 21' **********

********** Elements for Body 22 'Part 22' **********

********** Elements for Body 23 'Part 23' **********

********** Elements for Body 24 'Part 24' **********

********** Elements for Body 25 'Part 25' **********

********** Elements for Body 26 'Part 26' **********

********** Elements for Body 27 'Part 27' **********

********** Elements for Body 28 'Part 28' **********

********** Elements for Body 29 'Part 29' **********

********** Elements for Body 30 'Part 30' **********

********** Elements for Body 31 'Part 31' **********

********** Elements for Body 32 'Part 32' **********

********** Elements for Body 33 'Part 33' **********

********** Elements for Body 34 'Part 34' **********

********** Elements for Body 35 'Part 35' **********

********** Elements for Body 36 'Part 36' **********

********** Elements for Body 37 'Part 37' **********

********** Elements for Body 38 'Part 38' **********

********** Elements for Body 39 'Part 39' **********

********** Elements for Body 40 'Part 40' **********

********** Elements for Body 41 'Part 41' **********

********** Elements for Body 42 'Part 42' **********

********** Elements for Body 43 'Part 43' **********

********** Send User Defined Coordinate System(s) **********

********** Set Reference Temperature **********

********** Send Materials **********

********** Create Contact "Contact Region 4" **********

Real Constant Set For Above Contact Is 45 & 44

********** Create Contact "Contact Region 5" **********

Real Constant Set For Above Contact Is 47 & 46

********** Create Contact "Contact Region 6" **********

Real Constant Set For Above Contact Is 49 & 48

********** Create Contact "Contact Region 7" **********

Real Constant Set For Above Contact Is 51 & 50

********** Create Contact "Contact Region 8" **********

Real Constant Set For Above Contact Is 53 & 52

********** Create Contact "Contact Region 9" **********

Real Constant Set For Above Contact Is 55 & 54

********** Create Contact "Contact Region 10" **********

Real Constant Set For Above Contact Is 57 & 56

********** Create Contact "Contact Region 11" **********

Real Constant Set For Above Contact Is 59 & 58

********** Create Contact "Contact Region 12" **********

Real Constant Set For Above Contact Is 61 & 60

********** Create Contact "Contact Region 13" **********

Real Constant Set For Above Contact Is 63 & 62

********** Create Contact "Contact Region 14" **********

Real Constant Set For Above Contact Is 65 & 64

********** Create Contact "Contact Region 15" **********

Real Constant Set For Above Contact Is 67 & 66

********** Create Contact "Contact Region 16" **********

Real Constant Set For Above Contact Is 69 & 68

********** Create Contact "Contact Region 17" **********

Real Constant Set For Above Contact Is 71 & 70

********** Create Contact "Contact Region 18" **********

Real Constant Set For Above Contact Is 73 & 72

********** Create Contact "Contact Region 19" **********

Real Constant Set For Above Contact Is 75 & 74

********** Create Contact "Contact Region 20" **********

Real Constant Set For Above Contact Is 77 & 76

********** Create Contact "Contact Region 21" **********

Real Constant Set For Above Contact Is 79 & 78

********** Create Contact "Contact Region 22" **********

Real Constant Set For Above Contact Is 81 & 80

********** Create Contact "Contact Region 23" **********

Real Constant Set For Above Contact Is 83 & 82

********** Create Contact "Contact Region 24" **********

Real Constant Set For Above Contact Is 85 & 84

********** Create Contact "Contact Region 25" **********

Real Constant Set For Above Contact Is 87 & 86

********** Create Contact "Contact Region 26" **********

Real Constant Set For Above Contact Is 89 & 88

********** Create Contact "Contact Region 27" **********

Real Constant Set For Above Contact Is 91 & 90

********** Create Contact "Contact Region 28" **********

Real Constant Set For Above Contact Is 93 & 92

********** Create Contact "Contact Region 29" **********

Real Constant Set For Above Contact Is 95 & 94

********** Create Contact "Contact Region 30" **********

Real Constant Set For Above Contact Is 97 & 96

********** Create Contact "Contact Region 31" **********

Real Constant Set For Above Contact Is 99 & 98

********** Create Contact "Contact Region 32" **********

Real Constant Set For Above Contact Is 101 & 100

********** Create Contact "Contact Region 33" **********

Real Constant Set For Above Contact Is 103 & 102

********** Create Contact "Contact Region 34" **********

Real Constant Set For Above Contact Is 105 & 104

********** Create Contact "Contact Region 35" **********

Real Constant Set For Above Contact Is 107 & 106

********** Create Contact "Contact Region 36" **********

Real Constant Set For Above Contact Is 109 & 108

********** Create Contact "Contact Region 37" **********

Real Constant Set For Above Contact Is 111 & 110

********** Create Contact "Contact Region 38" **********

Real Constant Set For Above Contact Is 113 & 112

********** Create Contact "Contact Region 39" **********

Real Constant Set For Above Contact Is 115 & 114

********** Create Contact "Contact Region 40" **********

Real Constant Set For Above Contact Is 117 & 116

********** Create Contact "Contact Region 41" **********

Real Constant Set For Above Contact Is 119 & 118

********** Create Contact "Contact Region 42" **********

Real Constant Set For Above Contact Is 121 & 120

********** Create Contact "Contact Region 46" **********

Real Constant Set For Above Contact Is 123 & 122

********** Create Contact "Contact Region 47" **********

Real Constant Set For Above Contact Is 125 & 124

********** Create Contact "Contact Region 48" **********

Real Constant Set For Above Contact Is 127 & 126

********** Create Debonding "Contact Debonding 4" **********

********** Create Debonding "Contact Debonding 5" **********

********** Create Debonding "Contact Debonding 6" **********

********** Create Debonding "Contact Debonding 7" **********

********** Create Debonding "Contact Debonding 8" **********

********** Create Debonding "Contact Debonding 9" **********

********** Create Debonding "Contact Debonding 10" **********

********** Create Debonding "Contact Debonding 11" **********

********** Create Debonding "Contact Debonding 12" **********

********** Create Debonding "Contact Debonding 13" **********

********** Create Debonding "Contact Debonding 14" **********

********** Create Debonding "Contact Debonding 15" **********

********** Create Debonding "Contact Debonding 16" **********

********** Create Debonding "Contact Debonding 17" **********

********** Create Debonding "Contact Debonding 18" **********

********** Create Debonding "Contact Debonding 19" **********

********** Create Debonding "Contact Debonding 20" **********

********** Create Debonding "Contact Debonding 21" **********

********** Create Debonding "Contact Debonding 22" **********

********** Create Debonding "Contact Debonding 23" **********

********** Create Debonding "Contact Debonding 24" **********

********** Create Debonding "Contact Debonding 25" **********

********** Create Debonding "Contact Debonding 26" **********

********** Create Debonding "Contact Debonding 27" **********

********** Create Debonding "Contact Debonding 28" **********

********** Create Debonding "Contact Debonding 29" **********

********** Create Debonding "Contact Debonding 30" **********

********** Create Debonding "Contact Debonding 31" **********

********** Create Debonding "Contact Debonding 32" **********

********** Create Debonding "Contact Debonding 33" **********

********** Create Debonding "Contact Debonding 34" **********

********** Create Debonding "Contact Debonding 35" **********

********** Create Debonding "Contact Debonding 36" **********

********** Create Debonding "Contact Debonding 37" **********

********** Create Debonding "Contact Debonding 38" **********

********** Create Debonding "Contact Debonding 39" **********

********** Create Debonding "Contact Debonding 40" **********

********** Create Debonding "Contact Debonding 41" **********

********** Create Debonding "Contact Debonding 42" **********

********** Fixed Supports **********

********** Define Pressure Using Surface Effect Elements "Pressure" **********

********** Create Displacement Tables and Functions ******

***** ROUTINE COMPLETED ***** CP =   0.766

--- Number of total nodes = 114674

--- Number of contact elements = 53052

--- Number of spring elements = 0

--- Number of bearing elements = 0

--- Number of solid elements = 13780

--- Number of condensed parts = 0

--- Number of total elements = 66832

*GET _WALLBSOL FROM ACTI ITEM=TIME WALL VALUE= 16.3402778

****

************************   SOLUTION   *******************************

****

***** MAPDL SOLUTION ROUTINE *****

PERFORM A STATIC ANALYSIS

 THIS WILL BE A NEW ANALYSIS

LARGE DEFORMATION ANALYSIS

PARAMETER _THICKRATIO =   0.000000000

USE SPARSE MATRIX DIRECT SOLVER

USE THE FULL NEWTON-RAPHSON OPTION FOR ALL DEGREES OF FREEDOM

AND USE THE DEFAULT ADAPTIVE DESCENT OPTION

CONTACT INFORMATION PRINTOUT LEVEL 1

DO NOT COMBINE ELEMENT MATRIX FILES (.emat) AFTER DISTRIBUTED PARALLEL SOLUTION

DO NOT COMBINE ELEMENT SAVE DATA FILES (.esav) AFTER DISTRIBUTED PARALLEL SOLUTION

NLDIAG: Nonlinear diagnostics CONT option is set to ON.

Writing frequency : each ITERATION.

DEFINE RESTART CONTROL FOR LOADSTEP LAST

AT FREQUENCY OF LAST AND NUMBER FOR OVERWRITE IS -1

DELETE RESTART FILES OF ENDSTEP

****

********** SOLVE FOR LS 1 OF 14 **********

SELECT FOR ITEM=TYPE COMPONENT=

IN RANGE 128 TO 128 STEP 1

244 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

SELECT ALL NODES HAVING ANY ELEMENT IN ELEMENT SET.

881 NODES (OF 114674 DEFINED) SELECTED FROM

244 SELECTED ELEMENTS BY NSLE COMMAND.

GENERATE SURFACE LOAD PRES ON SURFACE DEFINED BY ALL SELECTED NODES

VALUES= 0.200000000 0.00000000

NUMBER OF PRES ELEMENT FACE LOADS STORED = 244

ALL SELECT FOR ITEM=NODE COMPONENT=
IN RANGE 1 TO 114674 STEP 1

114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT FOR ITEM=ELEM COMPONENT=
IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

ACEL= 0.0000 9806.6 0.0000

*** Set Displacements ***

CMBLOCK read of NODE component _CM419UX_XP completed

SELECT COMPONENT _CM419UX_XP

SPECIFIED CONSTRAINT UX FOR SELECTED NODES 1 TO 114674 BY 1

SET ACCORDING TO TABLE PARAMETER = _LOADVARI419XP

ALL SELECT FOR ITEM=NODE COMPONENT=
IN RANGE 1 TO 114674 STEP 1

114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.

*** Component For All Non-Zero UX Displacements ***

SELECT COMPONENT _CM419UX_XP

DEFINITION OF COMPONENT = _DISPNONZEROUX ENTITY=NODE

ALL SELECT   FOR ITEM=NODE COMPONENT=
 IN RANGE   1 TO   114674 STEP   1

    114674 NODES (OF   114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

     66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 1.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

NONLINEAR STABILIZATION CONTROL:

KEY=CONS METHOD=ENER VALUE= 0.90000 SUBSTPOPT=NO FORCELIMIT= 0.20000

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

*GET ANSINTER_ FROM ACTI ITEM=INT VALUE= 0.00000000

*IF ANSINTER_ (= 0.00000) NE

0 (= 0.00000) THEN

*ENDIF

*** NOTE *** CP = 0.812 TIME= 16:20:25
The automatic domain decomposition logic has selected the MESH domain
decomposition method with 2 processes per solution.

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 0.984 TIME= 16:20:26
Element shape checking is currently inactive. Issue SHPP,ON or
SHPP,WARN to reactivate, if desired.

*** NOTE *** CP = 1.031 TIME= 16:20:26
The model data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning
messages.

*** SELECTION OF ELEMENT TECHNOLOGIES FOR APPLICABLE ELEMENTS ***
--- GIVE SUGGESTIONS AND RESET THE KEY OPTIONS ---

ELEMENT TYPE 1 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 2 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 3 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 4 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 5 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 6 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 7 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 8 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 9 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 10 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 11 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 12 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 13 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 14 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 15 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 16 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 17 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 18 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 19 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 20 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 21 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 22 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 23 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 24 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 25 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 26 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 27 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 28 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 29 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 30 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 31 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 32 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 33 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 34 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 35 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 36 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 37 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 38 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 39 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 40 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 41 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 42 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 43 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 16:20:26 DEC 08, 2024 CP= 1.031

kuca_prelim_2--Static Structural (B5)

S O L U T I O N O P T I O N S

PROBLEM DIMENSIONALITY. 3-D

DEGREES OF FREEDOM. . . . . UX UY UZ

ANALYSIS TYPE . . . . . .STATIC (STEADY-STATE)

OFFSET TEMPERATURE FROM ABSOLUTE ZERO 273.15

NONLINEAR GEOMETRIC EFFECTS . . . . . .ON

EQUATION SOLVER OPTION. . . . . .SPARSE

PLASTIC MATERIAL PROPERTIES INCLUDED. . . . . .YES

NEWTON-RAPHSON OPTION . . . . . .FULL

GLOBALLY ASSEMBLED MATRIX . . . . . .SYMMETRIC

*** WARNING *** CP = 1.078 TIME= 16:20:26

Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1.125 TIME= 16:20:26

The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** NOTE *** CP = 1.125 TIME= 16:20:26

The conditions for direct assembly have been met. No .emat or .erot files will be produced.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 44 and contact element type 44 has been set up. The companion pair has real constant set ID 45. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 48695 and target element 48935.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 45 and contact element type 44 has been set up. The companion pair has real constant set ID 44. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 48695 and target element 48935.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 46 and contact element type 46 has been set up. The companion pair has real constant set ID 47. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 4.547473509E-13 was detected between contact element 49543 and target element 50407.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 47 and contact element type 46 has been set up. The companion pair has real constant set ID 46. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 4.547473509E-13 was detected between contact element 49543 and target element 50407.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 48 and contact element type 48 has been set up. The companion pair has real constant set ID 49. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 50903 and target element 51143.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 49 and contact element type 48 has been set up. The companion pair has real constant set ID 48. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 50903 and target element 51143.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 50 and contact element type 50 has been set up. The companion pair has real constant set ID 51. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 51 and contact element type 50 has been set up. The companion pair has real constant set ID 50. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 2.609 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 52 and contact element type 52 has been set up. The companion pair has real constant set ID 53. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.609 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 53116 and target element 53356.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 53 and contact element type 52 has been set up. The companion pair has real constant set ID 52. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 53116 and target element 53356.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 54 and contact element type 54 has been set up. The companion pair has real constant set ID 55. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 53904 and target element 54768.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 55 and contact element type 54 has been set up. The companion pair has real constant set ID 54. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 53904 and target element 54768.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 56 and contact element type 56 has been set up. The companion pair has real constant set ID 57. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 55327 and target element 55567.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 57 and contact element type 56 has been set up. The companion pair has real constant set ID 56. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 55327 and target element 55567.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 58 and contact element type 58 has been set up. The companion pair has real constant set ID 59. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 56132 and target element 56996.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 59 and contact element type 58 has been set up. The companion pair has real constant set ID 58. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 56132 and target element 56996.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 60 and contact element type 60 has been set up. The companion pair has real constant set ID 61. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 57528 and target element 57768.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 61 and contact element type 60 has been set up. The companion pair has real constant set ID 60. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 57528 and target element 57768.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 63 and contact element type 62 has been set up. The companion pair has real constant set ID 62. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 64 and contact element type 64 has been set up. The companion pair has real constant set ID 65. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 59742 and target element 59982.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 65 and contact element type 64 has been set up. The companion pair has real constant set ID 64. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 59742 and target element 59982.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 66 and contact element type 66 has been set up. The companion pair has real constant set ID 67. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 60543 and target element 61407.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 67 and contact element type 66 has been set up. The companion pair has real constant set ID 66. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 60543 and target element 61407.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 68 and contact element type 68 has been set up. The companion pair has real constant set ID 69. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 62069 and target element 61829.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 69 and contact element type 68 has been set up. The companion pair has real constant set ID 68. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 62069 and target element 61829.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 70 and contact element type 70 has been set up. The companion pair has real constant set ID 71. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 71 and contact element type 70 has been set up. The companion pair has real constant set ID 70. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 72 and contact element type 72 has been set up. The companion pair has real constant set ID 73. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 64158 and target element 64398.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 73 and contact element type 72 has been set up. The companion pair has real constant set ID 72. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 64158 and target element 64398.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 74 and contact element type 74 has been set up. The companion pair has real constant set ID 75. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 64944 and target element 65808.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 75 and contact element type 74 has been set up. The companion pair has real constant set ID 74. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 64944 and target element 65808.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 76 and contact element type 76 has been set up. The companion pair has real constant set ID 77. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 66571 and target element 66331.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 77 and contact element type 76 has been set up. The companion pair has real constant set ID 76. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 66571 and target element 66331.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 78 and contact element type 78 has been set up. The companion pair has real constant set ID 79. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 67596 and target element 66732.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 79 and contact element type 78 has been set up. The companion pair has real constant set ID 78. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 67596 and target element 66732.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 80 and contact element type 80 has been set up. The companion pair has real constant set ID 81. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 68573 and target element 68813.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 81 and contact element type 80 has been set up. The companion pair has real constant set ID 80. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 3.410605132E-13 was detected between contact element 68573 and target element 68813.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 82 and contact element type 82 has been set up. The companion pair has real constant set ID 83. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 83 and contact element type 82 has been set up. The companion pair has real constant set ID 82. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 70778 and target element 71018.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 85 and contact element type 84 has been set up. The companion pair has real constant set ID 84. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 70778 and target element 71018.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 86 and contact element type 86 has been set up. The companion pair has real constant set ID 87. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 71568 and target element 72432.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 87 and contact element type 86 has been set up. The companion pair has real constant set ID 86. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 71568 and target element 72432.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 88 and contact element type 88 has been set up. The companion pair has real constant set ID 89. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 72988 and target element 73228.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 89 and contact element type 88 has been set up. The companion pair has real constant set ID 88. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 72988 and target element 73228.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 90 and contact element type 90 has been set up. The companion pair has real constant set ID 91. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 91 and contact element type 90 has been set up. The companion pair has real constant set ID 90. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 92 and contact element type 92 has been set up. The companion pair has real constant set ID 93. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 75365 and target element 75125.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 93 and contact element type 92 has been set up. The companion pair has real constant set ID 92. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 75365 and target element 75125.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 94 and contact element type 94 has been set up. The companion pair has real constant set ID 95. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 76445 and target element 75581.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 95 and contact element type 94 has been set up. The companion pair has real constant set ID 94. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 76445 and target element 75581.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 96 and contact element type 96 has been set up. The companion pair has real constant set ID 97. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 77400 and target element 77640.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 97 and contact element type 96 has been set up. The companion pair has real constant set ID 96. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 77400 and target element 77640.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 98 and contact element type 98 has been set up. The companion pair has real constant set ID 99. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 78191 and target element 79055.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 99 and contact element type 98 has been set up. The companion pair has real constant set ID 98. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 78191 and target element 79055.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 100 and contact element type 100 has been set up. The companion pair has real constant set ID 101. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 79612 and target element 79852.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 79612 and target element 79852.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 102 and contact element type 102 has been set up. The companion pair has real constant set ID 103. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 104 and contact element type 104 has been set up. The companion pair has real constant set ID 105. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.585

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 81848 and target element 82141.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 105 and contact element type 104 has been set up. The companion pair has real constant set ID 104. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 81848 and target element 82141.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 106 and contact element type 106 has been set up. The companion pair has real constant set ID 107. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.885

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 82631 and target element 83499.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 107 and contact element type 106 has been set up. The companion pair has real constant set ID 106. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 82631 and target element 83499.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 108 and contact element type 108 has been set up. The companion pair has real constant set ID 109. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.705302566E-13 was detected between contact element 84499 and target element 85675.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 109 and contact element type 108 has been set up. The companion pair has real constant set ID 108. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.705302566E-13 was detected between contact element 84499 and target element 85675.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 110 and contact element type 110 has been set up. The companion pair has real constant set ID 111. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 86852 and target element 88028.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 111 and contact element type 110 has been set up. The companion pair has real constant set ID 110. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.136868377E-13 was detected between contact element 86852 and target element 88028.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 112 and contact element type 112 has been set up. The companion pair has real constant set ID 113. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 89226 and target element 90402.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 113 and contact element type 112 has been set up. The companion pair has real constant set ID 112. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 89226 and target element 90402.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 114 and contact element type 114 has been set up. The companion pair has real constant set ID 115. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 91555 and target element 92731.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 115 and contact element type 114 has been set up. The companion pair has real constant set ID 114. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 91555 and target element 92731.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 116 and contact element type 116 has been set up. The companion pair has real constant set ID 117. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 93917 and target element 95093.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 117 and contact element type 116 has been set up. The companion pair has real constant set ID 116. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 5.684341886E-14 was detected between contact element 93917 and target element 95093.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 118 and contact element type 118 has been set up. The companion pair has real constant set ID 119. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.842170943E-14 was detected between contact element 96254 and target element 97430.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 119 and contact element type 118 has been set up. The companion pair has real constant set ID 118. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.842170943E-14 was detected between contact element 96254 and target element 97430.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 120 and contact element type 120 has been set up. The companion pair has real constant set ID 121. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.421085472E-14 was detected between contact element 98611 and target element 99787.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 121 and contact element type 120 has been set up. The companion pair has real constant set ID 120. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 1.421085472E-14 was detected between contact element 98611 and target element 99787.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 122 and contact element type 122 has been set up. The companion pair has real constant set ID 123. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29
Contact related postprocess items (ETABLE, pressure ...) are not available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 48.565
Average contact pair depth 14.569
Average target surface length 49.204
Default pinball region factor PINB 0.25000
The resulting pinball region 3.6424
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29
Max. Initial penetration 2.273736754E-13 was detected between contact element 100420 and target element 100530.
****

*** NOTE *** CP = 2.625 TIME= 16:20:29
Symmetric Deformable- deformable contact pair identified by real constant set 123 and contact element type 122 has been set up. The companion pair has real constant set ID 122. Both pairs should have the same behavior.
MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 48.817

Average contact pair depth 50.000

Average target surface length 49.038

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 4.547473509E-13 was detected between contact element 100471 and target element 100374.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 124 and contact element type 124 has been set up. The companion pair has real constant set ID 125. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29

Contact related postprocess items (ETABLE, pressure ...) are not

available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 49.526

Average contact pair depth 14.858

Average target surface length 49.182

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7145

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 4.547473509E-13 was detected between contact element 100655 and target element 100764.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 125 and contact element type 124 has been set up. The companion pair has real constant set ID 124. Both pairs should have the same behavior.

MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.
Average contact surface length 49.558
Average contact pair depth 50.000
Average target surface length 49.038
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29
Max. Initial penetration 3.215205879E-13 was detected between contact element 100729 and target element 100586.
****

*** NOTE *** CP = 2.625 TIME= 16:20:29
Symmetric Deformable- deformable contact pair identified by real constant set 126 and contact element type 126 has been set up. The companion pair has real constant set ID 127. Both pairs should have the same behavior.
MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29
Contact related postprocess items (ETABLE, pressure ...) are not available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 50.000

Average contact pair depth 15.000

Average target surface length 49.991

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 2.273736754E-13 was detected between contact element 100943 and target element 101234.

****

*** NOTE *** CP = 2.625 TIME= 16:20:29

Symmetric Deformable- deformable contact pair identified by real constant set 127 and contact element type 126 has been set up. The companion pair has real constant set ID 126. Both pairs should have the same behavior.

MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 2.625 TIME= 16:20:29

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 49.997

Average contact pair depth 50.000

Average target surface length 50.000

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 2.625 TIME= 16:20:29

Max. Initial penetration 0 was detected between contact element 101083 and target element 100803.

****

D I S T R I B U T E D D O M A I N D E C O M P O S E R

...Number of elements: 66832

...Number of nodes: 114674

...Decompose to 2 CPU domains

...Element load balance ratio = 1.000

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 1

TIME AT END OF THE LOAD STEP. 1.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

WARNING: Some contact elements on contact surface specified by real constant set 67 belong to symmetric contact (e.g. 67), some do not.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 46 and contact element type 46 has been set up. The

companion pair has real constant set ID 47. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
For asymmetric contact analysis, you may keep the current pair and
deactivate its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN   0.90000
The resulting initial contact stiffness   126.00
Default penetration tolerance factor FTOLN   0.10000
The resulting penetration tolerance   5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT   1.0000
User defined elastic slip tolerance SLTOL   10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX   0.10000E+21
Average contact surface length   49.771
Average contact pair depth   50.000
Average target surface length   49.770
Default pinball region factor PINB   0.25000
The resulting pinball region   12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE ***   CP =   3.688   TIME= 16:20:31
Max. Initial penetration 2.273736754E-13 was detected between contact
element 49496 and target element 50360.
****

*** NOTE ***   CP =   3.688   TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 47 and contact element type 46 has been set up. The companion pair has real constant set ID 46. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 49922 and target element 49058.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 50 and contact element type 50 has been set up. The companion pair has real constant set ID 51. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 51699 and target element 52563.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 51 and contact element type 50 has been set up. The companion pair has real constant set ID 50. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 4.547473509E-13 was detected between contact element 52157 and target element 51293.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 54 and contact element type 54 has been set up. The companion pair has real constant set ID 55. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 53903 and target element 54767.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 55 and contact element type 54 has been set up. The companion pair has real constant set ID 54. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 54336 and target element 53472.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 58 and contact element type 58 has been set up. The companion pair has real constant set ID 59. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 56112 and target element 56976.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 59 and contact element type 58 has been set up. The companion pair has real constant set ID 58. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 56546 and target element 55682.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 58320 and target element 59184.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 63 and contact element type 62 has been set up. The companion pair has real constant set ID 62. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 58752 and target element 57888.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 67 and contact element type 66 has been set up. The companion pair has real constant set ID 66. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 60960 and target element 60096.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 71 and contact element type 70 has been set up. The companion pair has real constant set ID 70. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 63168 and target element 62304.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 74 and contact element type 74 has been set up. The companion pair has real constant set ID 75. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 64949 and target element 65813.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 78 and contact element type 78 has been set up. The companion pair has real constant set ID 79. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 67208 and target element 68072.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 79 and contact element type 78 has been set up. The companion pair has real constant set ID 78. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 67606 and target element 66742.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 80 and contact element type 80 has been set up. The companion pair has real constant set ID 81. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 68631 and target element 68871.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 82 and contact element type 82 has been set up. The companion pair has real constant set ID 83. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 69360 and target element 70224.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 83 and contact element type 82 has been set up. The companion pair has real constant set ID 82. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 69793 and target element 68929.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 3.410605132E-13 was detected between contact element 70843 and target element 71083.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 86 and contact element type 86 has been set up. The companion pair has real constant set ID 87. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 71592 and target element 72456.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 87 and contact element type 86 has been set up. The companion pair has real constant set ID 86. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 72022 and target element 71158.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 90 and contact element type 90 has been set up. The companion pair has real constant set ID 91. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 73811 and target element 74675.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 91 and contact element type 90 has been set up. The companion pair has real constant set ID 90. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 2.273736754E-13 was detected between contact element 74244 and target element 73380.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 94 and contact element type 94 has been set up. The companion pair has real constant set ID 95. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 75984 and target element 76848.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 95 and contact element type 94 has been set up. The companion pair has real constant set ID 94. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 76417 and target element 75553.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 98 and contact element type 98 has been set up. The companion pair has real constant set ID 99. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 78192 and target element 79056.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 99 and contact element type 98 has been set up. The companion pair has real constant set ID 98. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 78626 and target element 77762.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 79729 and target element 79489.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 102 and contact element type 102 has been set up. The companion pair has real constant set ID 103. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and

deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 80411 and target element 81275.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31

Max. Initial penetration 1.136868377E-13 was detected between contact element 80834 and target element 79970.

****

*** NOTE *** CP = 3.688 TIME= 16:20:31

Symmetric Deformable- deformable contact pair identified by real constant set 106 and contact element type 106 has been set up. The companion pair has real constant set ID 107. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.
For asymmetric contact analysis, you may keep the current pair and
deactivate its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.856
Average contact pair depth 50.000
Average target surface length 49.885
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31
Max. Initial penetration 1.136868377E-13 was detected between contact
element 82618 and target element 83486.
****

*** NOTE *** CP = 3.688 TIME= 16:20:31
Symmetric Deformable- deformable contact pair identified by real
constant set 107 and contact element type 106 has been set up. The

companion pair has real constant set ID 106. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.856
Average contact pair depth 50.000
Average target surface length 49.770
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31
Max. Initial penetration 1.136868377E-13 was detected between contact
element 83042 and target element 82178.
****

*** NOTE *** CP = 3.688 TIME= 16:20:31
Symmetric Deformable- deformable contact pair identified by real
constant set 124 and contact element type 124 has been set up. The

companion pair has real constant set ID 125. Both pairs should have
the same behavior.
MAPDL will keep the current pair and deactivate its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE ***   CP =   3.688   TIME= 16:20:31
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length   49.526
Average contact pair depth   14.858
Average target surface length   49.182
Default pinball region factor PINB   0.25000
The resulting pinball region   3.7145
Default target edge extension factor TOLS   2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE ***   CP =   3.688   TIME= 16:20:31
Max. Initial penetration 4.547473509E-13 was detected between contact
element 100655 and target element 100764.
****

*** NOTE ***   CP =   3.688   TIME= 16:20:31
Symmetric Deformable- deformable contact pair identified by real
constant set 125 and contact element type 124 has been set up. The
companion pair has real constant set ID 124. Both pairs should have
the same behavior.

MAPDL will deactivate the current pair and keep its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 3.688 TIME= 16:20:31
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 49.558
Average contact pair depth 50.000
Average target surface length 49.038
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 3.688 TIME= 16:20:31
Max. Initial penetration 3.215205879E-13 was detected between contact
element 100729 and target element 100586.
****

The FEA model contains 0 external CE equations and 2643 internal CE
equations.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46
Max. Penetration of 0 has been detected between contact element 49487

and target element 50351.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 49552 and target element 50416.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 49552 and target element 50416.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47
Max. Penetration of 0 has been detected between contact element 49487 and target element 50351.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 49552 and target element 50416.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 49552 and target element 50416.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 50

Max. Penetration of 0 has been detected between contact element 51695 and target element 52559.

Max. Geometrical gap of 4.547473509E-13 has been detected between contact element 52155 and target element 51291.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 52155 and target element 51291.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 51

Max. Penetration of 0 has been detected between contact element 51695

and target element 52559.

Max. Geometrical gap of 4.547473509E-13 has been detected between

contact element 52155 and target element 51291.

Max. Geometrical penetration of -4.547473509E-13 has been detected

between contact element 52155 and target element 51291.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target

elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 54

Max. Penetration of 0 has been detected between contact element 53903

and target element 54767.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 53998 and target element 54862.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 53998 and target element 54862.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 55
Max. Penetration of 0 has been detected between contact element 53903 and target element 54767.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 53998 and target element 54862.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 53998 and target element 54862.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58
Max. Penetration of 0 has been detected between contact element 56111
and target element 56975.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 56112 and target element 56976.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 56112 and target element 56976.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 59

Max. Penetration of 0 has been detected between contact element 56111
and target element 56975.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 56112 and target element 56976.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 56112 and target element 56976.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62

Max. Penetration of 0 has been detected between contact element 58319

and target element 59183.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 58321 and target element 59185.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 58321 and target element 59185.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 63
Max. Penetration of 0 has been detected between contact element 58319 and target element 59183.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 58321 and target element 59185.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 58321 and target element 59185.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 67

Max. Penetration of 0 has been detected between contact element 60527 and target element 61391.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 60529 and target element 61393.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 60529 and target element 61393.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 2.455725737E-20 and criterion 2.455725773E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 71

Max. Penetration of 0 has been detected between contact element 62735
and target element 63599.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 63175 and target element 62311.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 63175 and target element 62311.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 7.268068437E-21 and criterion 7.268068545E-22.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 74

Max. Penetration of 0 has been detected between contact element 64943

and target element 65807.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 64950 and target element 65814.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 64950 and target element 65814.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.279377539E-20 and criterion 1.279377558E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 78
Max. Penetration of 0 has been detected between contact element 67151 and target element 68015.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 67222 and target element 68086.

Max. Geometrical penetration of -3.410605132E-13 has been detected between contact element 67222 and target element 68086.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 79
Max. Penetration of 0 has been detected between contact element 67151
and target element 68015.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 67222 and target element 68086.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 67222 and target element 68086.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 80

Max. Penetration of 0 has been detected between contact element 68567
and target element 68807.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 68627 and target element 68867.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 68627 and target element 68867.

For total 240 contact elements, there are 240 elements are in contact.

There are 120 elements are in sticking.

Contacting area 290000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 12 target
elements.

Max. Pressure/force 5.503294848E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 96.0837165.

Min. Tangential stiffness 96.0837165.

Contact pair force norm 3.200748787E-22 and criterion 3.200748835E-23.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 82

Max. Penetration of 0 has been detected between contact element 69359

and target element 70223.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 69803 and target element 68939.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 69803 and target element 68939.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 83
Max. Penetration of 0 has been detected between contact element 69359 and target element 70223.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 69803 and target element 68939.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 69803 and target element 68939.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84
Max. Penetration of 0 has been detected between contact element 70775
and target element 71015.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 70795 and target element 71035.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 70795 and target element 71035.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.
Max. Pressure/force 5.503294848E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.

Max. Tangential stiffness 96.0837165.

Min. Tangential stiffness 96.0837165.

Contact pair force norm 5.899506708E-22 and criterion 5.899506796E-23.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 86

Max. Penetration of 0 has been detected between contact element 71567
and target element 72431.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 72011 and target element 71147.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 72011 and target element 71147.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 87

Max. Penetration of 0 has been detected between contact element 71567

and target element 72431.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 72011 and target element 71147.

Max. Geometrical penetration of -3.410605132E-13 has been detected between contact element 72011 and target element 71147.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 90
Max. Penetration of 0 has been detected between contact element 73775 and target element 74639.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 74235 and target element 73371.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 74235 and target element 73371.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 91

Max. Penetration of 0 has been detected between contact element 73775 and target element 74639.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 74235 and target element 73371.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 74235 and target element 73371.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 94

Max. Penetration of 0 has been detected between contact element 75983
and target element 76847.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 76427 and target element 75563.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 76427 and target element 75563.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 95

Max. Penetration of 0 has been detected between contact element 75983

and target element 76847.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 76427 and target element 75563.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 76427 and target element 75563.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 98
Max. Penetration of 0 has been detected between contact element 78191 and target element 79055.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 78194 and target element 79058.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 78194 and target element 79058.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 99

Max. Penetration of 0 has been detected between contact element 78191 and target element 79055.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 78194 and target element 79058.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 78194 and target element 79058.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101

Max. Penetration of 0 has been detected between contact element 79607
and target element 79847.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 79616 and target element 79856.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 79616 and target element 79856.

For total 240 contact elements, there are 240 elements are in contact.

There are 120 elements are in sticking.

Contacting area 290000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 12 target
elements.

Max. Pressure/force 5.503294848E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 96.0837165.

Min. Tangential stiffness 96.0837165.

Contact pair force norm 5.458284458E-22 and criterion 5.458284539E-23.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 102

Max. Penetration of 0 has been detected between contact element 80399

and target element 81263.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 80401 and target element 81265.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 80401 and target element 81265.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103
Max. Penetration of 0 has been detected between contact element 80399 and target element 81263.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 80401 and target element 81265.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 80401 and target element 81265.
For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 106
Max. Penetration of 0 has been detected between contact element 82607
and target element 83471.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 82644 and target element 83508.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 82644 and target element 83508.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.579378303E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.

Max. Tangential stiffness 94.7734664.

Min. Tangential stiffness 94.7734664.

Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 107

Max. Penetration of 0 has been detected between contact element 82607
and target element 83471.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 82644 and target element 83508.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 82644 and target element 83508.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target
elements.

Max. Pressure/force 5.579378303E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.7734664.

Min. Tangential stiffness 94.7734664.

Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.

****

****

 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 124

Max. Penetration of 0 has been detected between contact element 100637

and target element 100772.

Max. Geometrical gap of 4.547473509E-13 has been detected between contact element 100669 and target element 100752.

Max. Geometrical penetration of -3.410605132E-13 has been detected between contact element 100669 and target element 100752.
For total 52 contact elements, there are 52 elements are in contact.
There are 52 elements are in sticking.
Max. Pinball distance 3.71446753.
One of the contact searching regions contains at least 12 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 125

*** NOTE *** CP = 11.031 TIME= 16:20:48
Contact pair is inactive.

********** PRECISE MASS SUMMARY **********

TOTAL RIGID BODY MASS MATRIX ABOUT ORIGIN

Translational mass		Coupled translational/rotational mass
3.3560	0.0000	0.0000	0.0000	7473.8	-1988.9
0.0000	3.3560	0.0000	-7473.8	0.0000	7071.5
0.0000	0.0000	3.3560	1988.9	-7071.5	0.0000

Rotational mass (inertia)		
0.20385E+08	-0.42243E+07	-0.15737E+08
-0.42243E+07	0.35942E+08	-0.44309E+07

| -0.15737E+08 -0.44309E+07 0.18733E+08

TOTAL MASS = 3.3560

The mass principal axes coincide with the global Cartesian axes

CENTER OF MASS (X,Y,Z)= 2107.1 592.63 2227.0

TOTAL INERTIA ABOUT CENTER OF MASS

0.25624E+07 -33544. 11013.

-33544. 0.43968E+07 -1725.0

11013. -1725.0 0.26539E+07

PRINCIPAL INERTIAS = 0.25605E+07 0.43974E+07 0.26551E+07

ORIENTATION VECTORS OF THE INERTIA PRINCIPAL AXES IN GLOBAL CARTESIAN

(0.993, 0.018,-0.117) (-0.018, 1.000,-0.001) (0.117, 0.003, 0.993)

*** MASS SUMMARY BY ELEMENT TYPE ***

TYPE	MASS
1	0.250000E-02
2	0.250000E-02
3	0.700000E-02
4	0.290000E-01
5	0.107000
6	0.290000E-01
7	0.107000
8	0.290000E-01
9	0.107000
10	0.290000E-01
11	0.107000
12	0.290000E-01

13 0.107000

14 0.290000E-01

15 0.107000

16 0.290000E-01

17 0.107000

18 0.290000E-01

19 0.107000

20 0.290000E-01

21 0.107000

22 0.290000E-01

23 0.107000

24 0.290000E-01

25 0.107000

26 0.290000E-01

27 0.107000

28 0.290000E-01

29 0.107000

30 0.290000E-01

31 0.107000

32 0.290000E-01

33 0.107000

34 0.290000E-01

35 0.107000

36 0.146000

37 0.146000

38 0.146000

39 0.146000

40 0.146000

41 0.146000

42 0.146000

43 0.146000

Range of element maximum matrix coefficients in global coordinates

Maximum = 58045.2675 at element 189.

Minimum = 13640.2127 at element 2017.

*** ELEMENT MATRIX FORMULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.047	0.000901
2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.000	0.000000
4	120	SOLID186	0.047	0.000391
5	432	SOLID186	0.031	0.000072
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.078	0.000181
8	120	SOLID186	0.047	0.000391
9	432	SOLID186	0.156	0.000362
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.109	0.000253
12	120	SOLID186	0.047	0.000391
13	432	SOLID186	0.047	0.000109
14	120	SOLID186	0.031	0.000260
15	432	SOLID186	0.000	0.000000
16	120	SOLID186	0.031	0.000260
17	432	SOLID186	0.172	0.000398
18	120	SOLID186	0.016	0.000130
19	432	SOLID186	0.141	0.000326
20	120	SOLID186	0.000	0.000000
21	432	SOLID186	0.094	0.000217
22	120	SOLID186	0.016	0.000130
23	432	SOLID186	0.062	0.000145
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.109	0.000253

26	120	SOLID186	0.000	0.000000
27	432	SOLID186	0.094	0.000217
28	120	SOLID186	0.016	0.000130
29	432	SOLID186	0.078	0.000181
30	120	SOLID186	0.000	0.000000
31	432	SOLID186	0.031	0.000072
32	120	SOLID186	0.047	0.000391
33	432	SOLID186	0.156	0.000362
34	120	SOLID186	0.031	0.000260
35	432	SOLID186	0.094	0.000217
36	588	SOLID186	0.047	0.000080
37	588	SOLID186	0.047	0.000080
38	588	SOLID186	0.141	0.000239
39	588	SOLID186	0.016	0.000027
40	588	SOLID186	0.094	0.000159
41	588	SOLID186	0.078	0.000133
42	588	SOLID186	0.141	0.000239
43	588	SOLID186	0.172	0.000292
44	240	CONTA174	0.000	0.000000
45	240	TARGE170	0.000	0.000000
46	864	CONTA174	0.188	0.000217
47	864	TARGE170	0.000	0.000000
48	240	CONTA174	0.000	0.000000
49	240	TARGE170	0.000	0.000000
50	864	CONTA174	0.125	0.000145
51	864	TARGE170	0.000	0.000000
52	240	CONTA174	0.000	0.000000
53	240	TARGE170	0.000	0.000000
54	864	CONTA174	0.125	0.000145
55	864	TARGE170	0.000	0.000000
56	240	CONTA174	0.016	0.000065
57	240	TARGE170	0.000	0.000000

58	864	CONTA174	0.141	0.000163
59	864	TARGE170	0.000	0.000000
60	240	CONTA174	0.047	0.000195
61	240	TARGE170	0.000	0.000000
62	864	CONTA174	0.094	0.000109
63	864	TARGE170	0.000	0.000000
64	240	CONTA174	0.000	0.000000
65	240	TARGE170	0.000	0.000000
66	864	CONTA174	0.141	0.000163
67	864	TARGE170	0.000	0.000000
68	240	CONTA174	0.016	0.000065
69	240	TARGE170	0.000	0.000000
70	864	CONTA174	0.078	0.000090
71	864	TARGE170	0.016	0.000018
72	240	CONTA174	0.031	0.000130
73	240	TARGE170	0.000	0.000000
74	864	CONTA174	0.219	0.000253
75	864	TARGE170	0.000	0.000000
76	240	CONTA174	0.031	0.000130
77	240	TARGE170	0.000	0.000000
78	864	CONTA174	0.172	0.000199
79	864	TARGE170	0.000	0.000000
80	240	CONTA174	0.000	0.000000
81	240	TARGE170	0.000	0.000000
82	864	CONTA174	0.172	0.000199
83	864	TARGE170	0.000	0.000000
84	240	CONTA174	0.031	0.000130
85	240	TARGE170	0.000	0.000000
86	864	CONTA174	0.156	0.000181
87	864	TARGE170	0.000	0.000000
88	240	CONTA174	0.000	0.000000
89	240	TARGE170	0.000	0.000000

90	864	CONTA174	0.188	0.000217
91	864	TARGE170	0.000	0.000000
92	240	CONTA174	0.016	0.000065
93	240	TARGE170	0.000	0.000000
94	864	CONTA174	0.172	0.000199
95	864	TARGE170	0.000	0.000000
96	240	CONTA174	0.031	0.000130
97	240	TARGE170	0.000	0.000000
98	864	CONTA174	0.109	0.000127
99	864	TARGE170	0.000	0.000000
100	240	CONTA174	0.031	0.000130
101	240	TARGE170	0.000	0.000000
102	864	CONTA174	0.125	0.000145
103	864	TARGE170	0.000	0.000000
104	240	CONTA174	0.000	0.000000
105	240	TARGE170	0.000	0.000000
106	864	CONTA174	0.172	0.000199
107	864	TARGE170	0.000	0.000000
108	1176	CONTA174	0.094	0.000080
109	1176	TARGE170	0.000	0.000000
110	1176	CONTA174	0.062	0.000053
111	1176	TARGE170	0.016	0.000013
112	1176	CONTA174	0.078	0.000066
113	1176	TARGE170	0.000	0.000000
114	1176	CONTA174	0.109	0.000093
115	1176	TARGE170	0.000	0.000000
116	1176	CONTA174	0.078	0.000066
117	1176	TARGE170	0.000	0.000000
118	1176	CONTA174	0.078	0.000066
119	1176	TARGE170	0.000	0.000000
120	1176	CONTA174	0.047	0.000040
121	1176	TARGE170	0.000	0.000000

```
    122       109  CONTA174      0.000   0.000000
    123       109  TARGE170      0.000   0.000000
    124       109  CONTA174      0.000   0.000000
    125       109  TARGE170      0.000   0.000000
    126       290  CONTA174      0.000   0.000000
    127       290  TARGE170      0.000   0.000000
    128       244  SURF154       0.000   0.000000
Time at end of element matrix formulation CP = 11.03125.

ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.rdb
 FOR POSSIBLE RESUME FROM THIS POINT
   FORCE CONVERGENCE VALUE  =   1474.      CRITERION=   7.371

DISTRIBUTED SPARSE MATRIX DIRECT SOLVER.
 Number of equations =      332347,    Maximum wavefront =    285

*** NOTE ***                          CP =      13.203   TIME= 16:20:54
The initial memory allocation (-m) has been exceeded.
 Supplemental memory allocations are being used.


 Memory allocated on only this MPI rank (rank     0)
 ------------------------------------------------------------------
 Equation solver memory allocated                  =   679.024 MB
 Equation solver memory required for in-core mode     =  1646.130 MB
 Equation solver memory required for out-of-core mode =   659.483 MB
 Total (solver and non-solver) memory allocated       =  1659.461 MB


 Total memory summed across all MPI ranks on this machines
 ------------------------------------------------------------------
 Equation solver memory allocated                  =  1175.571 MB
```

Equation solver memory required for in-core mode = 3124.071 MB

Equation solver memory required for out-of-core mode = 1140.252 MB

Total (solver and non-solver) memory allocated = 2514.649 MB

*** WARNING *** CP = 13.203 TIME= 16:20:54

The Distributed Sparse Matrix Solver is currently running in the

out-of-core memory mode. This memory mode may provide significantly

worse performance compared to the in-core memory mode, depending on

the amount of available system memory and I/O speed. Please monitor

the solver performance to ensure that the large amount of I/O to the

solver files does not create a bottleneck for performance.

curEqn= 129039 totEqn= 164868 Job CP sec= 16.391

Factor Done= 50% Factor Wall sec= 7.118 rate= 13.6 GFlops

curEqn= 164868 totEqn= 164868 Job CP sec= 18.469

Factor Done= 100% Factor Wall sec= 12.425 rate= 15.6 GFlops

Distributed sparse solver maximum pivot= 126739.237 at node 78272 UY.

Distributed sparse solver minimum pivot= 1682.84354 at node 124 UY.

Distributed sparse solver minimum pivot in absolute value= 1682.84354

at node 124 UY.

DISP CONVERGENCE VALUE = 0.1725 CRITERION= 0.8623E-02

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1725

DISP CONVERGENCE VALUE = 0.1725 CRITERION= 0.8623E-02

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1725

FORCE CONVERGENCE VALUE = 8600. CRITERION= 9.954

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8060E-01

DISP CONVERGENCE VALUE = 0.8060E-01 CRITERION= 0.1265E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.8060E-01

FORCE CONVERGENCE VALUE = 0.3493 CRITERION= 9.942 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.4940E-04

DISP CONVERGENCE VALUE = 0.4940E-04 CRITERION= 0.1265E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.4940E-04

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** ELEMENT RESULT CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.016	0.000300
2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.031	0.000223
4	120	SOLID186	0.031	0.000260
5	432	SOLID186	0.125	0.000289
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.125	0.000289
8	120	SOLID186	0.062	0.000521
9	432	SOLID186	0.125	0.000289
10	120	SOLID186	0.016	0.000130
11	432	SOLID186	0.094	0.000217
12	120	SOLID186	0.016	0.000130
13	432	SOLID186	0.094	0.000217
14	120	SOLID186	0.062	0.000521
15	432	SOLID186	0.156	0.000362
16	120	SOLID186	0.047	0.000391
17	432	SOLID186	0.109	0.000253
18	120	SOLID186	0.047	0.000391
19	432	SOLID186	0.109	0.000253
20	120	SOLID186	0.031	0.000260
21	432	SOLID186	0.125	0.000289
22	120	SOLID186	0.031	0.000260
23	432	SOLID186	0.188	0.000434
24	120	SOLID186	0.016	0.000130
25	432	SOLID186	0.109	0.000253
26	120	SOLID186	0.016	0.000130
27	432	SOLID186	0.078	0.000181

28	120	SOLID186	0.047	0.000391
29	432	SOLID186	0.016	0.000036
30	120	SOLID186	0.047	0.000391
31	432	SOLID186	0.125	0.000289
32	120	SOLID186	0.016	0.000130
33	432	SOLID186	0.125	0.000289
34	120	SOLID186	0.031	0.000260
35	432	SOLID186	0.125	0.000289
36	588	SOLID186	0.156	0.000266
37	588	SOLID186	0.125	0.000213
38	588	SOLID186	0.188	0.000319
39	588	SOLID186	0.172	0.000292
40	588	SOLID186	0.172	0.000292
41	588	SOLID186	0.250	0.000425
42	588	SOLID186	0.188	0.000319
43	588	SOLID186	0.188	0.000319
44	240	CONTA174	0.016	0.000065
46	864	CONTA174	0.016	0.000018
48	240	CONTA174	0.031	0.000130
50	864	CONTA174	0.094	0.000109
52	240	CONTA174	0.000	0.000000
54	864	CONTA174	0.000	0.000000
56	240	CONTA174	0.000	0.000000
58	864	CONTA174	0.109	0.000127
60	240	CONTA174	0.016	0.000065
62	864	CONTA174	0.000	0.000000
64	240	CONTA174	0.016	0.000065
66	864	CONTA174	0.125	0.000145
68	240	CONTA174	0.000	0.000000
70	864	CONTA174	0.078	0.000090
72	240	CONTA174	0.016	0.000065
74	864	CONTA174	0.047	0.000054

76	240	CONTA174	0.000	0.000000
78	864	CONTA174	0.047	0.000054
80	240	CONTA174	0.000	0.000000
82	864	CONTA174	0.078	0.000090
84	240	CONTA174	0.047	0.000195
86	864	CONTA174	0.094	0.000109
88	240	CONTA174	0.031	0.000130
90	864	CONTA174	0.141	0.000163
92	240	CONTA174	0.000	0.000000
94	864	CONTA174	0.078	0.000090
96	240	CONTA174	0.031	0.000130
98	864	CONTA174	0.047	0.000054
100	240	CONTA174	0.031	0.000130
102	864	CONTA174	0.031	0.000036
104	240	CONTA174	0.031	0.000130
106	864	CONTA174	0.094	0.000109
108	1176	CONTA174	0.078	0.000066
110	1176	CONTA174	0.094	0.000080
112	1176	CONTA174	0.031	0.000027
114	1176	CONTA174	0.078	0.000066
116	1176	CONTA174	0.094	0.000080
118	1176	CONTA174	0.109	0.000093
120	1176	CONTA174	0.188	0.000159
122	109	CONTA174	0.000	0.000000
124	109	CONTA174	0.000	0.000000
126	290	CONTA174	0.016	0.000054
128	244	SURF154	0.000	0.000000

*** NODAL LOAD CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.000	0.000000

2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.000	0.000000
4	120	SOLID186	0.000	0.000000
5	432	SOLID186	0.047	0.000109
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.000	0.000000
8	120	SOLID186	0.016	0.000130
9	432	SOLID186	0.000	0.000000
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.016	0.000036
12	120	SOLID186	0.000	0.000000
13	432	SOLID186	0.000	0.000000
14	120	SOLID186	0.000	0.000000
15	432	SOLID186	0.016	0.000036
16	120	SOLID186	0.000	0.000000
17	432	SOLID186	0.000	0.000000
18	120	SOLID186	0.000	0.000000
19	432	SOLID186	0.031	0.000072
20	120	SOLID186	0.016	0.000130
21	432	SOLID186	0.000	0.000000
22	120	SOLID186	0.000	0.000000
23	432	SOLID186	0.000	0.000000
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.000	0.000000
26	120	SOLID186	0.000	0.000000
27	432	SOLID186	0.016	0.000036
28	120	SOLID186	0.016	0.000130
29	432	SOLID186	0.031	0.000072
30	120	SOLID186	0.016	0.000130
31	432	SOLID186	0.000	0.000000
32	120	SOLID186	0.000	0.000000
33	432	SOLID186	0.000	0.000000

34	120	SOLID186	0.000	0.000000
35	432	SOLID186	0.000	0.000000
36	588	SOLID186	0.000	0.000000
37	588	SOLID186	0.000	0.000000
38	588	SOLID186	0.000	0.000000
39	588	SOLID186	0.000	0.000000
40	588	SOLID186	0.016	0.000027
41	588	SOLID186	0.000	0.000000
42	588	SOLID186	0.016	0.000027
43	588	SOLID186	0.000	0.000000
44	240	CONTA174	0.016	0.000065
46	864	CONTA174	0.016	0.000018
48	240	CONTA174	0.000	0.000000
50	864	CONTA174	0.031	0.000036
52	240	CONTA174	0.000	0.000000
54	864	CONTA174	0.000	0.000000
56	240	CONTA174	0.000	0.000000
58	864	CONTA174	0.000	0.000000
60	240	CONTA174	0.000	0.000000
62	864	CONTA174	0.000	0.000000
64	240	CONTA174	0.000	0.000000
66	864	CONTA174	0.000	0.000000
68	240	CONTA174	0.016	0.000065
70	864	CONTA174	0.000	0.000000
72	240	CONTA174	0.000	0.000000
74	864	CONTA174	0.000	0.000000
76	240	CONTA174	0.000	0.000000
78	864	CONTA174	0.016	0.000018
80	240	CONTA174	0.000	0.000000
82	864	CONTA174	0.000	0.000000
84	240	CONTA174	0.000	0.000000
86	864	CONTA174	0.000	0.000000

```
      88      240  CONTA174      0.016   0.000065
      90      864  CONTA174      0.000   0.000000
      92      240  CONTA174      0.000   0.000000
      94      864  CONTA174      0.031   0.000036
      96      240  CONTA174      0.000   0.000000
      98      864  CONTA174      0.016   0.000018
     100      240  CONTA174      0.000   0.000000
     102      864  CONTA174      0.031   0.000036
     104      240  CONTA174      0.000   0.000000
     106      864  CONTA174      0.031   0.000036
     108     1176  CONTA174      0.000   0.000000
     110     1176  CONTA174      0.016   0.000013
     112     1176  CONTA174      0.000   0.000000
     114     1176  CONTA174      0.000   0.000000
     116     1176  CONTA174      0.000   0.000000
     118     1176  CONTA174      0.016   0.000013
     120     1176  CONTA174      0.016   0.000013
     122      109  CONTA174      0.000   0.000000
     124      109  CONTA174      0.000   0.000000
     126      290  CONTA174      0.000   0.000000
     128      244  SURF154       0.000   0.000000
*** LOAD STEP     1   SUBSTEP     1  COMPLETED.    CUM ITER =      3
*** TIME =  0.200000         TIME INC =  0.200000
*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1748E-02
*** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED

    FORCE CONVERGENCE VALUE  =   1011.      CRITERION=   18.83
    DISP CONVERGENCE VALUE   =  0.6127E-01  CRITERION=  0.1265E-01
   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.6127E-01
    DISP CONVERGENCE VALUE   =  0.6126E-01  CRITERION=  0.1265E-01
    LINE SEARCH PARAMETER =  0.9999     SCALED MAX DOF INC = -0.6126E-01
    FORCE CONVERGENCE VALUE  =   20.47      CRITERION=   17.19
```

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4670E-03

DISP CONVERGENCE VALUE = 0.4669E-03 CRITERION= 0.1265E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9998 SCALED MAX DOF INC = 0.4669E-03

FORCE CONVERGENCE VALUE = 0.7991E-02 CRITERION= 17.19 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 1 SUBSTEP 2 COMPLETED. CUM ITER = 5

*** TIME = 0.400000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 534.9 CRITERION= 28.86

DISP CONVERGENCE VALUE = 0.5726E-01 CRITERION= 0.1779E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5726E-01

DISP CONVERGENCE VALUE = 0.5726E-01 CRITERION= 0.1779E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.5726E-01

FORCE CONVERGENCE VALUE = 25.68 CRITERION= 30.22 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4115E-03

DISP CONVERGENCE VALUE = 0.3880E-03 CRITERION= 0.1780E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9430 SCALED MAX DOF INC = 0.3880E-03

FORCE CONVERGENCE VALUE = 5.007 CRITERION= 30.22 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 1 SUBSTEP 3 COMPLETED. CUM ITER = 7

*** TIME = 0.700000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 599.5 CRITERION= 43.57

DISP CONVERGENCE VALUE = 0.2183E-01 CRITERION= 0.1860E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2183E-01

DISP CONVERGENCE VALUE = 0.2183E-01 CRITERION= 0.1860E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2183E-01

```
    FORCE CONVERGENCE VALUE  =   40.25      CRITERION=   44.22     <<<
CONVERGED

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.4005E-03

    DISP CONVERGENCE VALUE   =  0.2855E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.7127     SCALED MAX DOF INC = -0.2855E-03

    FORCE CONVERGENCE VALUE  =   15.37      CRITERION=   44.22     <<<
CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

*** LOAD STEP     1   SUBSTEP     4  COMPLETED.    CUM ITER =      9

*** TIME =   1.00000         TIME INC =  0.300000



*** MAPDL BINARY FILE STATISTICS

 BUFFER SIZE USED= 16384

     155.000 MB WRITTEN ON ELEMENT SAVED DATA FILE: file0.esav

     211.062 MB WRITTEN ON ASSEMBLED MATRIX FILE: file0.full

      51.688 MB WRITTEN ON RESULTS FILE: file0.rst

*************** Write FE CONNECTORS *********


WRITE OUT CONSTRAINT EQUATIONS TO FILE= file.ce

***************************************************

*************** FINISHED SOLVE FOR LS 1 *************

***************************************************

******************* SOLVE FOR LS 2 OF 14 ****************

*** Set Displacements ***


ALL SELECT   FOR ITEM=ELEM COMPONENT=

 IN RANGE         1 TO     101626 STEP          1


     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.


PRINTOUT RESUMED BY /GOP
```

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 2.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 210.828 TIME= 16:31:42
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 210.859 TIME= 16:31:42
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64 16:31:42 DEC 08, 2024 CP= 211.047

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 2

TIME AT END OF THE LOAD STEP. 2.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	

```
     EPPL        ALL
     CONT        ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


     FORCE CONVERGENCE VALUE  =  0.1848E+06  CRITERION=   925.3
     DISP CONVERGENCE VALUE   =  0.1637      CRITERION=  0.1860E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.1637
     DISP CONVERGENCE VALUE   =  0.1637      CRITERION=  0.1860E-01
     LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.1637
     FORCE CONVERGENCE VALUE  =   278.5      CRITERION=   50.01
    EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6022E-02
     DISP CONVERGENCE VALUE   =  0.6016E-02  CRITERION=  0.1860E-01 <<<
CONVERGED
     LINE SEARCH PARAMETER =  0.9991     SCALED MAX DOF INC =  0.6016E-02
     FORCE CONVERGENCE VALUE  =   8.251      CRITERION=   50.02     <<<
CONVERGED
    >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
 *** LOAD STEP     2   SUBSTEP     1  COMPLETED.    CUM ITER =     11
 *** TIME =   1.20000         TIME INC =  0.200000
 *** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.9998E-02
 *** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


     FORCE CONVERGENCE VALUE  =  0.1033E+05  CRITERION=   48.25
     DISP CONVERGENCE VALUE   =  0.1435      CRITERION=  0.1860E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.1435
     DISP CONVERGENCE VALUE   =  0.1434      CRITERION=  0.1860E-01
     LINE SEARCH PARAMETER =  0.9992     SCALED MAX DOF INC = -0.1434
     FORCE CONVERGENCE VALUE  =   253.4      CRITERION=   52.28
    EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2077E-02
     DISP CONVERGENCE VALUE   =  0.1980E-02  CRITERION=  0.1860E-01 <<<
CONVERGED
```

```
    LINE SEARCH PARAMETER =  0.9535     SCALED MAX DOF INC =  0.1980E-02

    FORCE CONVERGENCE VALUE  =   37.17      CRITERION=   52.29     <<<
CONVERGED

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6357E-03

    DISP CONVERGENCE VALUE   =  0.6357E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.6357E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   3

 *** LOAD STEP     2   SUBSTEP     2  COMPLETED.    CUM ITER =     14

 *** TIME =   1.40000         TIME INC =  0.200000

 *** AUTO TIME STEP:  NEXT TIME INC = 0.30000      INCREASED (FACTOR = 1.5000)


    FORCE CONVERGENCE VALUE  =   790.0      CRITERION=   60.35

    DISP CONVERGENCE VALUE   =  0.3467E-01  CRITERION=  0.1860E-01

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.3467E-01

    DISP CONVERGENCE VALUE   =  0.3449E-01  CRITERION=  0.1860E-01

    LINE SEARCH PARAMETER =  0.9947     SCALED MAX DOF INC =  0.3449E-01

    FORCE CONVERGENCE VALUE  =   175.9      CRITERION=   57.29

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.3153E-02

    DISP CONVERGENCE VALUE   =  0.1629E-02  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.5167     SCALED MAX DOF INC =  0.1629E-02

    FORCE CONVERGENCE VALUE  =   60.74      CRITERION=   57.28

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.8804E-03

    DISP CONVERGENCE VALUE   =  0.5742E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.6522     SCALED MAX DOF INC = -0.5742E-03

    FORCE CONVERGENCE VALUE  =   24.97      CRITERION=   57.28     <<<
CONVERGED

   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.5162E-03

    DISP CONVERGENCE VALUE   =  0.5162E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.5162E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4
```

```
 *** LOAD STEP     2   SUBSTEP     3  COMPLETED.    CUM ITER =     18

 *** TIME =   1.70000        TIME INC =  0.300000

 *** AUTO STEP TIME:  NEXT TIME INC = 0.30000      UNCHANGED


    FORCE CONVERGENCE VALUE  =   1172.      CRITERION=   64.39

    DISP CONVERGENCE VALUE   =  0.1653E-01  CRITERION=  0.1860E-01 <<<
CONVERGED

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1653E-01

    DISP CONVERGENCE VALUE   =  0.1649E-01  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.9972     SCALED MAX DOF INC =  0.1649E-01

    FORCE CONVERGENCE VALUE  =   74.91      CRITERION=   63.23

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1566E-02

    DISP CONVERGENCE VALUE   =  0.7280E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.4649     SCALED MAX DOF INC =  0.7280E-03

    FORCE CONVERGENCE VALUE  =   24.53      CRITERION=   63.23     <<<
CONVERGED

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2550E-03

    DISP CONVERGENCE VALUE   =  0.2550E-03  CRITERION=  0.1860E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.2550E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   3

 *** LOAD STEP     2   SUBSTEP     4  COMPLETED.    CUM ITER =     21

 *** TIME =   2.00000        TIME INC =  0.300000

 ************************************************

 ********** FINISHED SOLVE FOR LS 2 **********

 ************************************************

 ****************** SOLVE FOR LS 3 OF 14 ****************

 *** Set Displacements ***


 ALL SELECT   FOR ITEM=ELEM COMPONENT=

  IN RANGE        1 TO     101626 STEP         1
```

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 3.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 566.953 TIME= 16:47:26
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 566.969 TIME= 16:47:26
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 3
TIME AT END OF THE LOAD STEP. 3.0000
AUTOMATIC TIME STEPPING . . . . . ON
INITIAL NUMBER OF SUBSTEPS 5
MAXIMUM NUMBER OF SUBSTEPS 1000
MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . NO
STRESS-STIFFENING . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
DATABASE OUTPUT CONTROLS
ITEM FREQUENCY COMPONENT
ALL NONE
NSOL ALL
RSOL ALL
EANG ALL
ETMP ALL

VENG ALL

STRS ALL

EPEL ALL

EPPL ALL

CONT ALL

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.3697E+06 CRITERION= 1850.

DISP CONVERGENCE VALUE = 0.2503 CRITERION= 0.1860E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2503

DISP CONVERGENCE VALUE = 0.2503 CRITERION= 0.1860E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.2503

FORCE CONVERGENCE VALUE = 98.23 CRITERION= 52.05

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3477E-02

DISP CONVERGENCE VALUE = 0.3470E-02 CRITERION= 0.1860E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9979 SCALED MAX DOF INC = 0.3470E-02

FORCE CONVERGENCE VALUE = 4.243 CRITERION= 52.01 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 3 SUBSTEP 1 COMPLETED. CUM ITER = 23

*** TIME = 2.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.6524E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.1652E+05 CRITERION= 57.76

DISP CONVERGENCE VALUE = 0.8773E-01 CRITERION= 0.1860E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8773E-01

DISP CONVERGENCE VALUE = 0.8770E-01 CRITERION= 0.1860E-01

LINE SEARCH PARAMETER = 0.9996 SCALED MAX DOF INC = -0.8770E-01

FORCE CONVERGENCE VALUE = 137.0 CRITERION= 53.51

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3270E-02

DISP CONVERGENCE VALUE = 0.2073E-02 CRITERION= 0.1860E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6340 SCALED MAX DOF INC = 0.2073E-02

FORCE CONVERGENCE VALUE = 39.42 CRITERION= 53.51 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3941E-03

DISP CONVERGENCE VALUE = 0.3941E-03 CRITERION= 0.1860E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3941E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 3 SUBSTEP 2 COMPLETED. CUM ITER = 26

*** TIME = 2.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2075. CRITERION= 77.24

DISP CONVERGENCE VALUE = 0.4449E-01 CRITERION= 0.1877E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.4449E-01

DISP CONVERGENCE VALUE = 0.4395E-01 CRITERION= 0.1877E-01

LINE SEARCH PARAMETER = 0.9879 SCALED MAX DOF INC = -0.4395E-01

FORCE CONVERGENCE VALUE = 552.1 CRITERION= 71.71

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3608E-02

DISP CONVERGENCE VALUE = 0.2684E-02 CRITERION= 0.1877E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7438 SCALED MAX DOF INC = -0.2684E-02

FORCE CONVERGENCE VALUE = 175.6 CRITERION= 71.58

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1578E-02

DISP CONVERGENCE VALUE = 0.8163E-03 CRITERION= 0.1877E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5174 SCALED MAX DOF INC = -0.8163E-03

FORCE CONVERGENCE VALUE = 69.74 CRITERION= 71.56 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3922E-03

DISP CONVERGENCE VALUE = 0.3922E-03 CRITERION= 0.1877E-01 <<< CONVERGED

```
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.3922E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

*** LOAD STEP     3   SUBSTEP     3  COMPLETED.    CUM ITER =     30

*** TIME =   2.70000         TIME INC =  0.300000

*** AUTO STEP TIME:  NEXT TIME INC = 0.30000      UNCHANGED


    FORCE CONVERGENCE VALUE  =   3271.      CRITERION=   98.16

    DISP CONVERGENCE VALUE   =  0.2987E-01  CRITERION=  0.1892E-01

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2987E-01

    DISP CONVERGENCE VALUE   =  0.2970E-01  CRITERION=  0.1892E-01

    LINE SEARCH PARAMETER =  0.9943     SCALED MAX DOF INC =  0.2970E-01

    FORCE CONVERGENCE VALUE  =   299.9      CRITERION=   95.11

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.2571E-02

    DISP CONVERGENCE VALUE   =  0.1466E-02  CRITERION=  0.1892E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.5704     SCALED MAX DOF INC = -0.1466E-02

    FORCE CONVERGENCE VALUE  =   114.9      CRITERION=   95.11

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.1106E-02

    DISP CONVERGENCE VALUE   =  0.6308E-03  CRITERION=  0.1892E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.5704     SCALED MAX DOF INC = -0.6308E-03

    FORCE CONVERGENCE VALUE  =   51.11      CRITERION=   95.11     <<<
CONVERGED

   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.4648E-03

    DISP CONVERGENCE VALUE   =  0.4648E-03  CRITERION=  0.1892E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.4648E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

*** LOAD STEP     3   SUBSTEP     4  COMPLETED.    CUM ITER =     34

*** TIME =   3.00000         TIME INC =  0.300000

************************************************

********** FINISHED SOLVE FOR LS 3 **********

************************************************

****************** SOLVE FOR LS 4 OF 14 ****************
```

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

    66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 4.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 941.406 TIME= 17:03:13
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 941.438 TIME= 17:03:13
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -

preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning
messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   17:03:13 DEC 08, 2024 CP=   941.656

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 4
TIME AT END OF THE LOAD STEP. 4.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
  ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
  ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
DATABASE OUTPUT CONTROLS
  ITEM FREQUENCY COMPONENT

```
 ALL       NONE
 NSOL      ALL
 RSOL      ALL
 EANG      ALL
 ETMP      ALL
 VENG      ALL
 STRS      ALL
 EPEL      ALL
 EPPL      ALL
 CONT      ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


    FORCE CONVERGENCE VALUE  =  0.5545E+06  CRITERION=   2774.
    DISP CONVERGENCE VALUE   =  0.3991      CRITERION=  0.1996E-01
   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.3991
    DISP CONVERGENCE VALUE   =  0.3991      CRITERION=  0.1996E-01
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.3991
    FORCE CONVERGENCE VALUE  =   452.0      CRITERION=   50.96
   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.5017E-02
    DISP CONVERGENCE VALUE   =  0.5015E-02  CRITERION=  0.2004E-01 <<<
CONVERGED
    LINE SEARCH PARAMETER =  0.9997     SCALED MAX DOF INC =  0.5015E-02
    FORCE CONVERGENCE VALUE  =   13.34      CRITERION=   50.89     <<<
CONVERGED
   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
 *** LOAD STEP     4   SUBSTEP     1  COMPLETED.    CUM ITER =     36
 *** TIME =   3.20000         TIME INC =  0.200000
 *** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1292E-01
 *** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


    FORCE CONVERGENCE VALUE  =  0.1620E+05  CRITERION=   80.45
```

DISP CONVERGENCE VALUE = 0.3711 CRITERION= 0.2004E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3711

DISP CONVERGENCE VALUE = 0.3696 CRITERION= 0.2004E-01

LINE SEARCH PARAMETER = 0.9959 SCALED MAX DOF INC = 0.3696

FORCE CONVERGENCE VALUE = 2045. CRITERION= 58.88

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3885E-02

DISP CONVERGENCE VALUE = 0.3840E-02 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9883 SCALED MAX DOF INC = -0.3840E-02

FORCE CONVERGENCE VALUE = 116.7 CRITERION= 58.72

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1812E-02

DISP CONVERGENCE VALUE = 0.9350E-03 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5160 SCALED MAX DOF INC = -0.9350E-03

FORCE CONVERGENCE VALUE = 16.51 CRITERION= 58.72 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2321E-03

DISP CONVERGENCE VALUE = 0.2321E-03 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.2321E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 2 COMPLETED. CUM ITER = 40

*** TIME = 3.40000 TIME INC = 0.200000

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 1523. CRITERION= 86.91

DISP CONVERGENCE VALUE = 0.4084E-01 CRITERION= 0.2004E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4084E-01

DISP CONVERGENCE VALUE = 0.4053E-01 CRITERION= 0.2004E-01

LINE SEARCH PARAMETER = 0.9924 SCALED MAX DOF INC = 0.4053E-01

FORCE CONVERGENCE VALUE = 307.7 CRITERION= 81.63

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1299E-02

DISP CONVERGENCE VALUE = 0.9852E-03 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7582 SCALED MAX DOF INC = -0.9852E-03

FORCE CONVERGENCE VALUE = 90.81 CRITERION= 81.52

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8894E-03

DISP CONVERGENCE VALUE = 0.4947E-03 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5563 SCALED MAX DOF INC = -0.4947E-03

FORCE CONVERGENCE VALUE = 32.64 CRITERION= 81.51 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2780E-03

DISP CONVERGENCE VALUE = 0.2780E-03 CRITERION= 0.2004E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.2780E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 3 COMPLETED. CUM ITER = 44

*** TIME = 3.60000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 4347. CRITERION= 125.2

DISP CONVERGENCE VALUE = 0.6106E-01 CRITERION= 0.2814E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6106E-01

DISP CONVERGENCE VALUE = 0.6060E-01 CRITERION= 0.2814E-01

LINE SEARCH PARAMETER = 0.9926 SCALED MAX DOF INC = -0.6060E-01

FORCE CONVERGENCE VALUE = 507.6 CRITERION= 118.3

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4025E-02

DISP CONVERGENCE VALUE = 0.2800E-02 CRITERION= 0.2814E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6957 SCALED MAX DOF INC = 0.2800E-02

FORCE CONVERGENCE VALUE = 171.4 CRITERION= 118.3

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1186E-02

DISP CONVERGENCE VALUE = 0.6598E-03 CRITERION= 0.2814E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5563 SCALED MAX DOF INC = -0.6598E-03

FORCE CONVERGENCE VALUE = 70.29 CRITERION= 118.3 <<< CONVERGED

```
   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.4712E-03

    DISP CONVERGENCE VALUE   =  0.4712E-03  CRITERION=  0.2814E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.4712E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

 *** LOAD STEP     4   SUBSTEP     4  COMPLETED.    CUM ITER =     48

 *** TIME =   3.90000         TIME INC =  0.300000

 *** AUTO TIME STEP:  NEXT TIME INC = 0.10000      DECREASED (FACTOR = 0.3333)


    FORCE CONVERGENCE VALUE  =   1561.      CRITERION=   131.4

    DISP CONVERGENCE VALUE   =  0.2403E-01  CRITERION=  0.2814E-01 <<<
CONVERGED

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.2403E-01

    DISP CONVERGENCE VALUE   =  0.2393E-01  CRITERION=  0.2814E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.9958     SCALED MAX DOF INC = -0.2393E-01

    FORCE CONVERGENCE VALUE  =   89.15      CRITERION=   130.2     <<<
CONVERGED

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1025E-02

    DISP CONVERGENCE VALUE   =  0.1025E-02  CRITERION=  0.2814E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.1025E-02

    FORCE CONVERGENCE VALUE  =   41.80      CRITERION=   130.3     <<<
CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

 *** LOAD STEP     4   SUBSTEP     5  COMPLETED.    CUM ITER =     50

 *** TIME =   4.00000         TIME INC =  0.100000

 ***************************************************

 ********** FINISHED SOLVE FOR LS 4 *************

 ***************************************************

 ****************** SOLVE FOR LS 5 OF 14 ****************

 *** Set Displacements ***


 ALL SELECT   FOR ITEM=ELEM COMPONENT=
```

IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 5.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE   COMMAND *****

*** WARNING ***   CP =   1346.641   TIME= 17:19:33
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE ***   CP =   1346.656   TIME= 17:19:33
The step data was checked and warning messages were found.
 Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning
messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   17:19:33 DEC 08, 2024 CP=   1346.797

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

 LOAD STEP NUMBER. 5
 TIME AT END OF THE LOAD STEP. 5.0000
 AUTOMATIC TIME STEPPING . . . . . . ON
   INITIAL NUMBER OF SUBSTEPS 5
   MAXIMUM NUMBER OF SUBSTEPS 1000
   MINIMUM NUMBER OF SUBSTEPS 1
 MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000
 NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
 STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
 STRESS-STIFFENING . . . . . . ON
 TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
 CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
 INERTIA LOADS   X   Y   Z
   ACEL 0.0000   9806.6   0.0000
 COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
                                ACTIVE MAT. NONLINEARITIES
 PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
 DATABASE OUTPUT CONTROLS
   ITEM   FREQUENCY   COMPONENT
    ALL   NONE
   NSOL   ALL
   RSOL   ALL

```
     EANG        ALL
     ETMP        ALL
     VENG        ALL
     STRS        ALL
     EPEL        ALL
     EPPL        ALL
     CONT        ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


     FORCE CONVERGENCE VALUE  =  0.7394E+06  CRITERION=   3700.
     DISP CONVERGENCE VALUE   =  0.5900      CRITERION=  0.2950E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.5900
     DISP CONVERGENCE VALUE   =  0.5900      CRITERION=  0.2950E-01
     LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.5900
     FORCE CONVERGENCE VALUE  =   763.6      CRITERION=   57.90
    EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.7477E-02
     DISP CONVERGENCE VALUE   =  0.7477E-02  CRITERION=  0.2963E-01 <<<
CONVERGED
     LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.7477E-02
     FORCE CONVERGENCE VALUE  =   5.226      CRITERION=   57.71     <<<
CONVERGED
    >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
 *** LOAD STEP     5   SUBSTEP     1  COMPLETED.    CUM ITER =     52
 *** TIME =   4.20000         TIME INC =  0.200000
 *** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.7395E-02
 *** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


     FORCE CONVERGENCE VALUE  =  0.1891E+05  CRITERION=   89.96
     DISP CONVERGENCE VALUE   =  0.5323      CRITERION=  0.2963E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.5323
     DISP CONVERGENCE VALUE   =  0.5303      CRITERION=  0.2963E-01
```

LINE SEARCH PARAMETER = 0.9964 SCALED MAX DOF INC = -0.5303

FORCE CONVERGENCE VALUE = 2282. CRITERION= 59.37

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1327E-01

DISP CONVERGENCE VALUE = 0.1258E-01 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9477 SCALED MAX DOF INC = 0.1258E-01

FORCE CONVERGENCE VALUE = 244.8 CRITERION= 59.23

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.9315E-02

DISP CONVERGENCE VALUE = 0.5142E-02 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5520 SCALED MAX DOF INC = -0.5142E-02

FORCE CONVERGENCE VALUE = 58.44 CRITERION= 59.23 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4821E-03

DISP CONVERGENCE VALUE = 0.4821E-03 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4821E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 5 SUBSTEP 2 COMPLETED. CUM ITER = 56

*** TIME = 4.40000 TIME INC = 0.200000

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 1549. CRITERION= 95.38

DISP CONVERGENCE VALUE = 0.5404E-01 CRITERION= 0.2963E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5404E-01

DISP CONVERGENCE VALUE = 0.5354E-01 CRITERION= 0.2963E-01

LINE SEARCH PARAMETER = 0.9906 SCALED MAX DOF INC = -0.5354E-01

FORCE CONVERGENCE VALUE = 318.9 CRITERION= 88.72

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2664E-02

DISP CONVERGENCE VALUE = 0.1692E-02 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6352 SCALED MAX DOF INC = 0.1692E-02

FORCE CONVERGENCE VALUE = 96.36 CRITERION= 88.58

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7870E-03

DISP CONVERGENCE VALUE = 0.5267E-03 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6693 SCALED MAX DOF INC = -0.5267E-03

FORCE CONVERGENCE VALUE = 34.51 CRITERION= 88.56 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3366E-03

DISP CONVERGENCE VALUE = 0.3366E-03 CRITERION= 0.2963E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.3366E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 5 SUBSTEP 3 COMPLETED. CUM ITER = 60

*** TIME = 4.60000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3462. CRITERION= 146.7

DISP CONVERGENCE VALUE = 0.7777E-01 CRITERION= 0.3752E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7777E-01

DISP CONVERGENCE VALUE = 0.7698E-01 CRITERION= 0.3752E-01

LINE SEARCH PARAMETER = 0.9898 SCALED MAX DOF INC = 0.7698E-01

FORCE CONVERGENCE VALUE = 440.1 CRITERION= 135.3

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5917E-02

DISP CONVERGENCE VALUE = 0.3422E-02 CRITERION= 0.3752E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5783 SCALED MAX DOF INC = 0.3422E-02

FORCE CONVERGENCE VALUE = 131.9 CRITERION= 135.4 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2097E-02

DISP CONVERGENCE VALUE = 0.2097E-02 CRITERION= 0.3752E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2097E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 5 SUBSTEP 4 COMPLETED. CUM ITER = 63

*** TIME = 4.90000 TIME INC = 0.300000

*** AUTO TIME STEP: NEXT TIME INC = 0.10000 DECREASED (FACTOR = 0.3333)

```
    FORCE CONVERGENCE VALUE  =   1325.      CRITERION=   152.1

    DISP CONVERGENCE VALUE   =  0.2570E-01  CRITERION=  0.3752E-01 <<<
CONVERGED

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2570E-01

    DISP CONVERGENCE VALUE   =  0.2535E-01  CRITERION=  0.3752E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.9861     SCALED MAX DOF INC =  0.2535E-01

    FORCE CONVERGENCE VALUE  =   112.3      CRITERION=   149.4     <<<
CONVERGED

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1842E-02

    DISP CONVERGENCE VALUE   =  0.1842E-02  CRITERION=  0.3752E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.1842E-02

    FORCE CONVERGENCE VALUE  =   49.17      CRITERION=   149.4     <<<
CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

 *** LOAD STEP     5   SUBSTEP     5  COMPLETED.    CUM ITER =     65

 *** TIME =   5.00000        TIME INC =  0.100000

 ************************************************

 ********** FINISHED SOLVE FOR LS 5 *************

 ************************************************

 ****************** SOLVE FOR LS 6 OF 14 ****************

 *** Set Displacements ***


 ALL SELECT   FOR ITEM=ELEM COMPONENT=

  IN RANGE        1 TO     101626 STEP         1


     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.


 PRINTOUT RESUMED BY /GOP


 USE AUTOMATIC TIME STEPPING THIS LOAD STEP
```

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM

FOR AUTOMATIC TIME STEPPING:

USE 1000 SUBSTEPS AS A MAXIMUM

USE 1 SUBSTEPS AS A MINIMUM

TIME= 6.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE

FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 1804.047 TIME= 17:35:35
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1804.078 TIME= 17:35:35
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64 17:35:35 DEC 08, 2024 CP= 1804.250

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 6

TIME AT END OF THE LOAD STEP. 6.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.1109E+07 CRITERION= 5548.

DISP CONVERGENCE VALUE = 0.7511 CRITERION= 0.3756E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7511

DISP CONVERGENCE VALUE = 0.7511 CRITERION= 0.3756E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7511

FORCE CONVERGENCE VALUE = 4633. CRITERION= 54.08

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3310E-01

DISP CONVERGENCE VALUE = 0.3307E-01 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9990 SCALED MAX DOF INC = 0.3307E-01

FORCE CONVERGENCE VALUE = 58.03 CRITERION= 53.94

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1257E-02

DISP CONVERGENCE VALUE = 0.8167E-03 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6495 SCALED MAX DOF INC = -0.8167E-03

FORCE CONVERGENCE VALUE = 15.82 CRITERION= 53.94 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2505E-03

DISP CONVERGENCE VALUE = 0.2505E-03 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2505E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 6 SUBSTEP 1 COMPLETED. CUM ITER = 69

*** TIME = 5.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.4663E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.2053E+05 CRITERION= 114.8

DISP CONVERGENCE VALUE = 0.6577 CRITERION= 0.3756E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.6577

DISP CONVERGENCE VALUE = 0.6550 CRITERION= 0.3756E-01

LINE SEARCH PARAMETER = 0.9959 SCALED MAX DOF INC = 0.6550

FORCE CONVERGENCE VALUE = 2996. CRITERION= 72.44

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1043E-01

DISP CONVERGENCE VALUE = 0.1018E-01 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9758 SCALED MAX DOF INC = 0.1018E-01

FORCE CONVERGENCE VALUE = 247.8 CRITERION= 72.22

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3705E-02

DISP CONVERGENCE VALUE = 0.1929E-02 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5206 SCALED MAX DOF INC = -0.1929E-02

FORCE CONVERGENCE VALUE = 44.55 CRITERION= 72.21 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3841E-03

DISP CONVERGENCE VALUE = 0.3841E-03 CRITERION= 0.3756E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3841E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 6 SUBSTEP 2 COMPLETED. CUM ITER = 73

*** TIME = 5.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 4461. CRITERION= 165.5

DISP CONVERGENCE VALUE = 0.1291 CRITERION= 0.5629E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1291

DISP CONVERGENCE VALUE = 0.1251 CRITERION= 0.5629E-01

LINE SEARCH PARAMETER = 0.9695 SCALED MAX DOF INC = 0.1251

FORCE CONVERGENCE VALUE = 1952. CRITERION= 140.8

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1450E-01

DISP CONVERGENCE VALUE = 0.1268E-01 CRITERION= 0.5629E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8743 SCALED MAX DOF INC = 0.1268E-01

FORCE CONVERGENCE VALUE = 367.3 CRITERION= 140.7

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.9814E-02

DISP CONVERGENCE VALUE = 0.4225E-02 CRITERION= 0.5629E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4305 SCALED MAX DOF INC = 0.4225E-02

FORCE CONVERGENCE VALUE = 144.9 CRITERION= 140.7

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2746E-02

DISP CONVERGENCE VALUE = 0.1497E-02 CRITERION= 0.5629E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5450 SCALED MAX DOF INC = -0.1497E-02

FORCE CONVERGENCE VALUE = 66.32 CRITERION= 140.7 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1717E-02

DISP CONVERGENCE VALUE = 0.1717E-02 CRITERION= 0.5629E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1717E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 6 SUBSTEP 3 COMPLETED. CUM ITER = 78

*** TIME = 5.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 6504. CRITERION= 206.0

DISP CONVERGENCE VALUE = 0.1517 CRITERION= 0.5675E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1517

DISP CONVERGENCE VALUE = 0.1451 CRITERION= 0.5675E-01

LINE SEARCH PARAMETER = 0.9565 SCALED MAX DOF INC = 0.1451

FORCE CONVERGENCE VALUE = 1673. CRITERION= 185.8

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1504E-01

DISP CONVERGENCE VALUE = 0.1154E-01 CRITERION= 0.5675E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7673 SCALED MAX DOF INC = 0.1154E-01

FORCE CONVERGENCE VALUE = 444.0 CRITERION= 186.9

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6760E-02

DISP CONVERGENCE VALUE = 0.3862E-02 CRITERION= 0.5675E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5713 SCALED MAX DOF INC = -0.3862E-02

```
    FORCE CONVERGENCE VALUE  =   180.1      CRITERION=   187.0     <<<
CONVERGED

   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2472E-02

    DISP CONVERGENCE VALUE   =  0.2472E-02  CRITERION=  0.5675E-01 <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.2472E-02

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

*** LOAD STEP     6   SUBSTEP     4  COMPLETED.    CUM ITER =     82

*** TIME =   6.00000        TIME INC =  0.300000

*** MAX PLASTIC STRAIN STEP = 0.9317E-03   CRITERION = 0.1500

**************************************************

*************** FINISHED SOLVE FOR LS 6 *************

**************************************************

****************** SOLVE FOR LS 7 OF 14 ****************

*** Set Displacements ***


ALL SELECT   FOR ITEM=ELEM COMPONENT=

 IN RANGE        1 TO     101626 STEP         1


    66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.


PRINTOUT RESUMED BY /GOP


USE AUTOMATIC TIME STEPPING THIS LOAD STEP


USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM

FOR AUTOMATIC TIME STEPPING:

  USE   1000 SUBSTEPS AS A MAXIMUM

  USE      1 SUBSTEPS AS A MINIMUM


TIME=  7.0000


ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.
```

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE   COMMAND *****

*** WARNING ***   CP =   2289.766   TIME= 17:52:19
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE ***   CP =   2289.797   TIME= 17:52:19
The step data was checked and warning messages were found.
 Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning
messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   17:52:20 DEC 08, 2024 CP=   2289.922

kuca_prelim_2--Static Structural (B5)

L O A D   S T E P   O P T I O N S

 LOAD STEP NUMBER. 7
 TIME AT END OF THE LOAD STEP. 7.0000
 AUTOMATIC TIME STEPPING . . . . . . ON
   INITIAL NUMBER OF SUBSTEPS 5
   MAXIMUM NUMBER OF SUBSTEPS 1000
   MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.1344E+07 CRITERION= 6721.

DISP CONVERGENCE VALUE = 1.225 CRITERION= 0.6123E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 1.225

DISP CONVERGENCE VALUE = 1.222 CRITERION= 0.6123E-01

LINE SEARCH PARAMETER = 0.9981 SCALED MAX DOF INC = 1.222

FORCE CONVERGENCE VALUE = 0.1297E+05 CRITERION= 73.01

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1037

DISP CONVERGENCE VALUE = 0.1037 CRITERION= 0.6123E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1037

FORCE CONVERGENCE VALUE = 63.64 CRITERION= 73.51 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.9465E-03

DISP CONVERGENCE VALUE = 0.7717E-03 CRITERION= 0.6123E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8153 SCALED MAX DOF INC = 0.7717E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 7 SUBSTEP 1 COMPLETED. CUM ITER = 85

*** TIME = 6.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.3062E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.2960E+05 CRITERION= 100.3

DISP CONVERGENCE VALUE = 1.056 CRITERION= 0.6123E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -1.056

DISP CONVERGENCE VALUE = 1.051 CRITERION= 0.6123E-01

LINE SEARCH PARAMETER = 0.9952 SCALED MAX DOF INC = -1.051

FORCE CONVERGENCE VALUE = 5395. CRITERION= 56.50

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3821E-01

DISP CONVERGENCE VALUE = 0.3784E-01 CRITERION= 0.6123E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9904 SCALED MAX DOF INC = 0.3784E-01

FORCE CONVERGENCE VALUE = 251.9 CRITERION= 56.59

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7106E-02

DISP CONVERGENCE VALUE = 0.3772E-02 CRITERION= 0.6123E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5309 SCALED MAX DOF INC = -0.3772E-02

FORCE CONVERGENCE VALUE = 43.16 CRITERION= 56.58 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7496E-03

DISP CONVERGENCE VALUE = 0.7496E-03 CRITERION= 0.6123E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.7496E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 7 SUBSTEP 2 COMPLETED. CUM ITER = 89

*** TIME = 6.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3830. CRITERION= 129.5

DISP CONVERGENCE VALUE = 0.1607 CRITERION= 0.7518E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1607

DISP CONVERGENCE VALUE = 0.1575 CRITERION= 0.7518E-01

LINE SEARCH PARAMETER = 0.9803 SCALED MAX DOF INC = -0.1575

FORCE CONVERGENCE VALUE = 899.0 CRITERION= 113.5

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2232E-01

DISP CONVERGENCE VALUE = 0.1559E-01 CRITERION= 0.7519E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6986 SCALED MAX DOF INC = 0.1559E-01

FORCE CONVERGENCE VALUE = 295.7 CRITERION= 113.2

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.9742E-02

DISP CONVERGENCE VALUE = 0.5508E-02 CRITERION= 0.7519E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5654 SCALED MAX DOF INC = -0.5508E-02

FORCE CONVERGENCE VALUE = 118.8 CRITERION= 113.2

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3144E-02

DISP CONVERGENCE VALUE = 0.1924E-02 CRITERION= 0.7519E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6118 SCALED MAX DOF INC = 0.1924E-02

FORCE CONVERGENCE VALUE = 47.73 CRITERION= 113.2 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1622E-02

DISP CONVERGENCE VALUE = 0.1622E-02 CRITERION= 0.7519E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1622E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 7 SUBSTEP 3 COMPLETED. CUM ITER = 94

*** TIME = 6.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 4995. CRITERION= 186.4

DISP CONVERGENCE VALUE = 0.1846 CRITERION= 0.7537E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1846

DISP CONVERGENCE VALUE = 0.1740 CRITERION= 0.7537E-01

LINE SEARCH PARAMETER = 0.9423 SCALED MAX DOF INC = 0.1740

FORCE CONVERGENCE VALUE = 2451. CRITERION= 157.1

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4247E-01

DISP CONVERGENCE VALUE = 0.3339E-01 CRITERION= 0.7538E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7861 SCALED MAX DOF INC = 0.3339E-01

FORCE CONVERGENCE VALUE = 600.2 CRITERION= 157.8

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3467E-01

DISP CONVERGENCE VALUE = 0.1546E-01 CRITERION= 0.7538E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4460 SCALED MAX DOF INC = -0.1546E-01

FORCE CONVERGENCE VALUE = 302.5 CRITERION= 157.8

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1270E-01

DISP CONVERGENCE VALUE = 0.6783E-02 CRITERION= 0.7538E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5339 SCALED MAX DOF INC = 0.6783E-02

FORCE CONVERGENCE VALUE = 144.0 CRITERION= 157.9 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.9393E-02

DISP CONVERGENCE VALUE = 0.9393E-02 CRITERION= 0.7538E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.9393E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 7 SUBSTEP 4 COMPLETED. CUM ITER = 99

*** TIME = 7.00000 TIME INC = 0.300000

*** MAX PLASTIC STRAIN STEP = 0.5488E-03 CRITERION = 0.1500

****

********** FINISHED SOLVE FOR LS 7 **********

****

********** SOLVE FOR LS 8 OF 14 **********

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=

IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM

FOR AUTOMATIC TIME STEPPING:

USE 1000 SUBSTEPS AS A MAXIMUM

USE 1 SUBSTEPS AS A MINIMUM

TIME= 8.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE

FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 2735.031 TIME= 18:06:41
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 2735.031 TIME= 18:06:41

The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 18:06:41 DEC 08, 2024 CP= 2735.250

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 8

TIME AT END OF THE LOAD STEP. 8.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.2180E+07 CRITERION= 0.1090E+05

DISP CONVERGENCE VALUE = 1.519 CRITERION= 0.7595E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 1.519

DISP CONVERGENCE VALUE = 1.518 CRITERION= 0.7595E-01

LINE SEARCH PARAMETER = 0.9997 SCALED MAX DOF INC = 1.518

FORCE CONVERGENCE VALUE = 0.1231E+05 CRITERION= 62.67

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8978E-01

DISP CONVERGENCE VALUE = 0.8971E-01 CRITERION= 0.7599E-01

LINE SEARCH PARAMETER = 0.9993 SCALED MAX DOF INC = 0.8971E-01

FORCE CONVERGENCE VALUE = 338.4 CRITERION= 61.84

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3946E-02

DISP CONVERGENCE VALUE = 0.3754E-02 CRITERION= 0.7599E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9513 SCALED MAX DOF INC = 0.3754E-02

FORCE CONVERGENCE VALUE = 41.87 CRITERION= 61.83 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8689E-03

DISP CONVERGENCE VALUE = 0.8689E-03 CRITERION= 0.7600E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.8689E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 8 SUBSTEP 1 COMPLETED. CUM ITER = 103

*** TIME = 7.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1908E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.3683E+05 CRITERION= 96.48

DISP CONVERGENCE VALUE = 1.405 CRITERION= 0.7600E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 1.405

DISP CONVERGENCE VALUE = 1.400 CRITERION= 0.7600E-01

LINE SEARCH PARAMETER = 0.9965 SCALED MAX DOF INC = 1.400

FORCE CONVERGENCE VALUE = 5590. CRITERION= 60.04

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3140E-01

DISP CONVERGENCE VALUE = 0.3089E-01 CRITERION= 0.7600E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9838 SCALED MAX DOF INC = 0.3089E-01

FORCE CONVERGENCE VALUE = 372.3 CRITERION= 60.17

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.6096E-02

DISP CONVERGENCE VALUE = 0.3307E-02 CRITERION= 0.7600E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5424 SCALED MAX DOF INC = 0.3307E-02

FORCE CONVERGENCE VALUE = 77.46 CRITERION= 60.17

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2035E-02

DISP CONVERGENCE VALUE = 0.1517E-02 CRITERION= 0.7600E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7455 SCALED MAX DOF INC = 0.1517E-02

FORCE CONVERGENCE VALUE = 26.14 CRITERION= 60.16 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.9442E-03

DISP CONVERGENCE VALUE = 0.9442E-03 CRITERION= 0.7600E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.9442E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 8 SUBSTEP 2 COMPLETED. CUM ITER = 108

*** TIME = 7.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 6060. CRITERION= 140.3

DISP CONVERGENCE VALUE = 0.1773 CRITERION= 0.1126

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1773

DISP CONVERGENCE VALUE = 0.1664 CRITERION= 0.1126

LINE SEARCH PARAMETER = 0.9386 SCALED MAX DOF INC = 0.1664

FORCE CONVERGENCE VALUE = 1922. CRITERION= 126.6

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1127

DISP CONVERGENCE VALUE = 0.9867E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8751 SCALED MAX DOF INC = 0.9867E-01

FORCE CONVERGENCE VALUE = 545.7 CRITERION= 126.2

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2513E-01

DISP CONVERGENCE VALUE = 0.1172E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4661 SCALED MAX DOF INC = -0.1172E-01

FORCE CONVERGENCE VALUE = 188.8 CRITERION= 126.1

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1121E-01

DISP CONVERGENCE VALUE = 0.5918E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5279 SCALED MAX DOF INC = 0.5918E-02

FORCE CONVERGENCE VALUE = 91.54 CRITERION= 126.1 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8762E-02

DISP CONVERGENCE VALUE = 0.8762E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.8762E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 8 SUBSTEP 3 COMPLETED. CUM ITER = 113

*** TIME = 7.70000 TIME INC = 0.300000

*** MAX PLASTIC STRAIN STEP = 0.3894E-04 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 7822. CRITERION= 195.6

DISP CONVERGENCE VALUE = 0.5084 CRITERION= 0.1135

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5084

*** WARNING *** CP = 3091.484 TIME= 18:18:21

The material solution failed for element 641 with material 5.

*** LOAD STEP 8 SUBSTEP 4 NOT COMPLETED. CUM ITER = 115

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10500

FORCE CONVERGENCE VALUE = 0.1165E+07 CRITERION= 5825.

DISP CONVERGENCE VALUE = 0.7879 CRITERION= 0.1126

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7879

DISP CONVERGENCE VALUE = 0.7879 CRITERION= 0.1126

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7879

FORCE CONVERGENCE VALUE = 1270. CRITERION= 150.8

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8800E-01

DISP CONVERGENCE VALUE = 0.8713E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9901 SCALED MAX DOF INC = -0.8713E-01

FORCE CONVERGENCE VALUE = 208.0 CRITERION= 144.7

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1508E-01

DISP CONVERGENCE VALUE = 0.1416E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9390 SCALED MAX DOF INC = 0.1416E-01

FORCE CONVERGENCE VALUE = 27.03 CRITERION= 144.8 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 8 SUBSTEP 4 COMPLETED. CUM ITER = 117

*** TIME = 7.80500 TIME INC = 0.105000

*** MAX PLASTIC STRAIN STEP = 0.7287E-03 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.10500 UNCHANGED

FORCE CONVERGENCE VALUE = 1316. CRITERION= 163.3

DISP CONVERGENCE VALUE = 0.8579E-01 CRITERION= 0.1126 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8579E-01

DISP CONVERGENCE VALUE = 0.8469E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9871 SCALED MAX DOF INC = -0.8469E-01

FORCE CONVERGENCE VALUE = 274.4 CRITERION= 156.9

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1422E-01

DISP CONVERGENCE VALUE = 0.1157E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8140 SCALED MAX DOF INC = 0.1157E-01

FORCE CONVERGENCE VALUE = 56.03 CRITERION= 157.1 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2635E-02

DISP CONVERGENCE VALUE = 0.2635E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2635E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 8 SUBSTEP 5 COMPLETED. CUM ITER = 120

*** TIME = 7.91000 TIME INC = 0.105000

*** MAX PLASTIC STRAIN STEP = 0.6630E-03 CRITERION = 0.1500

*** AUTO TIME STEP: NEXT TIME INC = 0.90000E-01 DECREASED (FACTOR = 0.8571)

FORCE CONVERGENCE VALUE = 880.0 CRITERION= 167.1

DISP CONVERGENCE VALUE = 0.6999E-01 CRITERION= 0.1126 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6999E-01

```
    DISP CONVERGENCE VALUE   =  0.6955E-01  CRITERION=  0.1126     <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.9938     SCALED MAX DOF INC = -0.6955E-01

    FORCE CONVERGENCE VALUE  =   160.1      CRITERION=   163.1     <<<
CONVERGED

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.8780E-02

    DISP CONVERGENCE VALUE   =  0.8780E-02  CRITERION=  0.1126     <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.8780E-02

    FORCE CONVERGENCE VALUE  =   12.21      CRITERION=   163.2     <<<
CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

 *** LOAD STEP     8   SUBSTEP     6  COMPLETED.    CUM ITER =    122

 *** TIME =   8.00000         TIME INC =  0.900000E-01

 *** MAX PLASTIC STRAIN STEP = 0.3739E-03   CRITERION = 0.1500

 ************************************************

 ********** FINISHED SOLVE FOR LS 8 *************

 ************************************************

 ******************* SOLVE FOR LS 9 OF 14 ****************

 *** Set Displacements ***


 ALL SELECT   FOR ITEM=ELEM COMPONENT=

  IN RANGE         1 TO     101626 STEP          1


     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.


 PRINTOUT RESUMED BY /GOP


 USE AUTOMATIC TIME STEPPING THIS LOAD STEP


 USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM

 FOR AUTOMATIC TIME STEPPING:

   USE   1000 SUBSTEPS AS A MAXIMUM

   USE      1 SUBSTEPS AS A MINIMUM
```

TIME= 9.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 3281.109 TIME= 18:24:35
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 3281.109 TIME= 18:24:35
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64 18:24:36 DEC 08, 2024 CP= 3281.312

kuca_prelim_2--Static Structural (B5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 9
TIME AT END OF THE LOAD STEP. 9.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.2897E+07 CRITERION= 0.1449E+05

DISP CONVERGENCE VALUE = 2.188 CRITERION= 0.1126

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 2.188

DISP CONVERGENCE VALUE = 2.188 CRITERION= 0.1126

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 2.188

FORCE CONVERGENCE VALUE = 0.1269E+05 CRITERION= 96.20

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1004

DISP CONVERGENCE VALUE = 0.9679E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9644 SCALED MAX DOF INC = 0.9679E-01

FORCE CONVERGENCE VALUE = 2276. CRITERION= 94.83

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3086E-01

DISP CONVERGENCE VALUE = 0.3086E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.3086E-01

FORCE CONVERGENCE VALUE = 53.08 CRITERION= 94.86 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 9 SUBSTEP 1 COMPLETED. CUM ITER = 125

*** TIME = 8.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.2085E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.5444E+05 CRITERION= 66.75

DISP CONVERGENCE VALUE = 2.148 CRITERION= 0.1126

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -2.148

DISP CONVERGENCE VALUE = 2.141 CRITERION= 0.1126

LINE SEARCH PARAMETER = 0.9970 SCALED MAX DOF INC = -2.141

FORCE CONVERGENCE VALUE = 6896. CRITERION= 63.46

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7664E-01

DISP CONVERGENCE VALUE = 0.7619E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9941 SCALED MAX DOF INC = 0.7619E-01

FORCE CONVERGENCE VALUE = 309.9 CRITERION= 63.30

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1195E-01

DISP CONVERGENCE VALUE = 0.6805E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5694 SCALED MAX DOF INC = 0.6805E-02

FORCE CONVERGENCE VALUE = 76.08 CRITERION= 63.31

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8282E-02

DISP CONVERGENCE VALUE = 0.6431E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7765 SCALED MAX DOF INC = 0.6431E-02

FORCE CONVERGENCE VALUE = 39.18 CRITERION= 63.31 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2149E-02

DISP CONVERGENCE VALUE = 0.2149E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2149E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 9 SUBSTEP 2 COMPLETED. CUM ITER = 130

*** TIME = 8.40000 TIME INC = 0.200000

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.2151E+05 CRITERION= 61.56

DISP CONVERGENCE VALUE = 0.2576 CRITERION= 0.1126

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2576

DISP CONVERGENCE VALUE = 0.2572 CRITERION= 0.1126

LINE SEARCH PARAMETER = 0.9984 SCALED MAX DOF INC = 0.2572

FORCE CONVERGENCE VALUE = 735.8 CRITERION= 61.72

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1974E-01

DISP CONVERGENCE VALUE = 0.1902E-01 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9636 SCALED MAX DOF INC = 0.1902E-01

FORCE CONVERGENCE VALUE = 219.7 CRITERION= 61.65

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8967E-02

DISP CONVERGENCE VALUE = 0.5052E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5635 SCALED MAX DOF INC = 0.5052E-02

FORCE CONVERGENCE VALUE = 89.94 CRITERION= 61.65

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.6233E-02

DISP CONVERGENCE VALUE = 0.4340E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6962 SCALED MAX DOF INC = 0.4340E-02

FORCE CONVERGENCE VALUE = 53.57 CRITERION= 61.65 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2824E-02

DISP CONVERGENCE VALUE = 0.2824E-02 CRITERION= 0.1126 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2824E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 9 SUBSTEP 3 COMPLETED. CUM ITER = 135

*** TIME = 8.60000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 6810. CRITERION= 115.3

DISP CONVERGENCE VALUE = 0.5890 CRITERION= 0.1503

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5890

DISP CONVERGENCE VALUE = 0.4162 CRITERION= 0.1503

LINE SEARCH PARAMETER = 0.7066 SCALED MAX DOF INC = 0.4162

FORCE CONVERGENCE VALUE = 5076. CRITERION= 107.5

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1374

DISP CONVERGENCE VALUE = 0.1274 CRITERION= 0.1503 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9272 SCALED MAX DOF INC = 0.1274

FORCE CONVERGENCE VALUE = 572.1 CRITERION= 104.3

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1782

DISP CONVERGENCE VALUE = 0.5158E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.2895 SCALED MAX DOF INC = -0.5158E-01

FORCE CONVERGENCE VALUE = 338.7 CRITERION= 104.2

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3432E-01

DISP CONVERGENCE VALUE = 0.1257E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.3662 SCALED MAX DOF INC = 0.1257E-01

FORCE CONVERGENCE VALUE = 211.3 CRITERION= 104.2

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2632E-01

DISP CONVERGENCE VALUE = 0.8565E-02 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.3254 SCALED MAX DOF INC = -0.8565E-02

FORCE CONVERGENCE VALUE = 143.8 CRITERION= 104.1

EQUIL ITER 6 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1526E-01

DISP CONVERGENCE VALUE = 0.5545E-02 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.3635 SCALED MAX DOF INC = 0.5545E-02

FORCE CONVERGENCE VALUE = 92.80 CRITERION= 104.1 <<< CONVERGED

EQUIL ITER 7 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1275E-01

DISP CONVERGENCE VALUE = 0.1275E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1275E-01

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 7

*** LOAD STEP 9 SUBSTEP 4 COMPLETED. CUM ITER = 142

*** TIME = 8.90000 TIME INC = 0.300000

*** AUTO TIME STEP: NEXT TIME INC = 0.10000 DECREASED (FACTOR = 0.3333)

*** WARNING *** CP = 3781.844 TIME= 18:40:10

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 3782.344 TIME= 18:40:11

The material solution failed for element 1779 with material 9.

*** LOAD STEP 9 SUBSTEP 5 NOT COMPLETED. CUM ITER = 143

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.35000E-01

FORCE CONVERGENCE VALUE = 0.5177E+06 CRITERION= 2590.

DISP CONVERGENCE VALUE = 0.3510 CRITERION= 0.1504

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3510

DISP CONVERGENCE VALUE = 0.3510 CRITERION= 0.1504

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3510

FORCE CONVERGENCE VALUE = 132.7 CRITERION= 109.5

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2195E-01

DISP CONVERGENCE VALUE = 0.2189E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9974 SCALED MAX DOF INC = 0.2189E-01

FORCE CONVERGENCE VALUE = 8.600 CRITERION= 109.2 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 9 SUBSTEP 5 COMPLETED. CUM ITER = 144

*** TIME = 8.93500 TIME INC = 0.350000E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.35000E-01 UNCHANGED

FORCE CONVERGENCE VALUE = 202.3 CRITERION= 114.4

DISP CONVERGENCE VALUE = 0.2668E-01 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2668E-01

DISP CONVERGENCE VALUE = 0.2625E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9839 SCALED MAX DOF INC = 0.2625E-01

FORCE CONVERGENCE VALUE = 13.08 CRITERION= 113.7 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2527E-02

DISP CONVERGENCE VALUE = 0.2527E-02 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.2527E-02

FORCE CONVERGENCE VALUE = 1.264 CRITERION= 113.7 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 9 SUBSTEP 6 COMPLETED. CUM ITER = 146

*** TIME = 8.97000 TIME INC = 0.350000E-01

*** MAX PLASTIC STRAIN STEP = 0.7174E-04 CRITERION = 0.1500

*** AUTO TIME STEP: NEXT TIME INC = 0.30000E-01 DECREASED (FACTOR = 0.8571)

*** WARNING *** CP = 3883.438 TIME= 18:43:28

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 3883.969 TIME= 18:43:29

The material solution failed for element 1779 with material 9.

*** LOAD STEP 9 SUBSTEP 7 NOT COMPLETED. CUM ITER = 147

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10500E-01

FORCE CONVERGENCE VALUE = 0.1554E+06 CRITERION= 784.6

DISP CONVERGENCE VALUE = 0.1053 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1053

DISP CONVERGENCE VALUE = 0.1053 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1053

FORCE CONVERGENCE VALUE = 18.19 CRITERION= 114.9 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 9 SUBSTEP 7 COMPLETED. CUM ITER = 147

*** TIME = 8.98050 TIME INC = 0.105000E-01

*** MAX PLASTIC STRAIN STEP = 0.4076E-04 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.10500E-01 UNCHANGED

*** WARNING *** CP = 3917.250 TIME= 18:44:34

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 3917.859 TIME= 18:44:34

The material solution failed for element 1779 with material 9.

*** LOAD STEP 9 SUBSTEP 8 NOT COMPLETED. CUM ITER = 148

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.36750E-02

FORCE CONVERGENCE VALUE = 0.5453E+05 CRITERION= 294.9

DISP CONVERGENCE VALUE = 0.3690E-01 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3690E-01

DISP CONVERGENCE VALUE = 0.3690E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3690E-01

FORCE CONVERGENCE VALUE = 4.522 CRITERION= 115.3 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 9 SUBSTEP 8 COMPLETED. CUM ITER = 148

*** TIME = 8.98417 TIME INC = 0.367500E-02

*** MAX PLASTIC STRAIN STEP = 0.1183E-04 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.36750E-02 UNCHANGED

*** WARNING *** CP = 3951.922 TIME= 18:45:38

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 3952.422 TIME= 18:45:39

The material solution failed for element 1779 with material 9.

*** LOAD STEP 9 SUBSTEP 9 NOT COMPLETED. CUM ITER = 149

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 0.1525E+05 CRITERION= 136.7

DISP CONVERGENCE VALUE = 0.1004E-01 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1004E-01

DISP CONVERGENCE VALUE = 0.1004E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1004E-01

FORCE CONVERGENCE VALUE = 1.837 CRITERION= 115.5 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 9 SUBSTEP 9 COMPLETED. CUM ITER = 149

*** TIME = 8.98517 TIME INC = 0.100000E-02

*** MAX PLASTIC STRAIN STEP = 0.1013E-04 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.10000E-02 UNCHANGED

FORCE CONVERGENCE VALUE = 5.697 CRITERION= 115.6

DISP CONVERGENCE VALUE = 0.1662E-03 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1662E-03

DISP CONVERGENCE VALUE = 0.1659E-03 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9985 SCALED MAX DOF INC = -0.1659E-03

FORCE CONVERGENCE VALUE = 0.6518E-01 CRITERION= 115.6 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4828E-05

DISP CONVERGENCE VALUE = 0.4828E-05 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4828E-05

FORCE CONVERGENCE VALUE = 0.6008E-01 CRITERION= 115.6 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 9 SUBSTEP 10 COMPLETED. CUM ITER = 151

*** TIME = 8.98617 TIME INC = 0.100000E-02

*** MAX PLASTIC STRAIN STEP = 0.2341E-04 CRITERION = 0.1500

*** AUTO TIME STEP: NEXT TIME INC = 0.15000E-02 INCREASED (FACTOR = 1.5000)

*** WARNING *** CP = 4040.969 TIME= 18:48:26

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 4041.484 TIME= 18:48:27

The material solution failed for element 1779 with material 9.

*** LOAD STEP 9 SUBSTEP 11 NOT COMPLETED. CUM ITER = 152

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 0.1526E+05 CRITERION= 136.9

DISP CONVERGENCE VALUE = 0.1003E-01 CRITERION= 0.1504 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1003E-01

DISP CONVERGENCE VALUE = 0.1003E-01 CRITERION= 0.1504 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1003E-01

FORCE CONVERGENCE VALUE = 1.010 CRITERION= 115.7 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 9 SUBSTEP 11 COMPLETED. CUM ITER = 152

*** TIME = 8.98717 TIME INC = 0.100000E-02

*** MAX PLASTIC STRAIN STEP = 0.2863E-05 CRITERION = 0.1500

*** AUTO STEP TIME: NEXT TIME INC = 0.10000E-02 UNCHANGED

*** WARNING *** CP = 4073.266 TIME= 18:49:30

The material solution failed for element 1779 with material 9.

*** WARNING *** CP = 4073.797 TIME= 18:49:30

The material solution failed for element 1779 with material 9.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46

Max. Penetration of -2.160499576E-02 has been detected between contact element 49526 and target element 50390.

Max. Geometrical gap of 0.195040439 has been detected between contact element 49607 and target element 50471.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47
Max. Penetration of -2.160499576E-02 has been detected between contact
element 49526 and target element 50390.

Max. Geometrical gap of 0.195040439 has been detected between contact
element 49607 and target element 50471.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 50
Max. Penetration of -2.161875258E-02 has been detected between contact
element 52331 and target element 51467.

Max. Geometrical gap of 0.301849702 has been detected between contact
element 52250 and target element 51386.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 51
Max. Penetration of -2.161875258E-02 has been detected between contact

element 52331 and target element 51467.

Max. Geometrical gap of 0.301849702 has been detected between contact element 52250 and target element 51386.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 54
Max. Penetration of -2.590693433E-02 has been detected between contact element 54067 and target element 54931.

Max. Geometrical gap of 0.229538624 has been detected between contact element 54458 and target element 53594.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 55
Max. Penetration of -2.590693433E-02 has been detected between contact element 54067 and target element 54931.

Max. Geometrical gap of 0.229538624 has been detected between contact element 54458 and target element 53594.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58

Max. Penetration of -3.031577408E-02 has been detected between contact element 56351 and target element 57215.

Max. Geometrical gap of 0.138989408 has been detected between contact element 56974 and target element 56110.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 59

Max. Penetration of -3.031577408E-02 has been detected between contact element 56351 and target element 57215.

Max. Geometrical gap of 0.138989408 has been detected between contact element 56974 and target element 56110.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62

Max. Penetration of -3.440388028E-02 has been detected between contact element 58563 and target element 59427.

Max. Geometrical gap of 5.694986431E-02 has been detected between contact element 58750 and target element 59614.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 63
Max. Penetration of -3.440388028E-02 has been detected between contact
element 58563 and target element 59427.

Max. Geometrical gap of 5.694986431E-02 has been detected between
contact element 58750 and target element 59614.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 67
Max. Penetration of -3.73185996E-02 has been detected between contact
element 60775 and target element 61639.
For total 864 contact elements, there are 432 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 71
Max. Penetration of -3.73743195E-02 has been detected between contact
element 62987 and target element 63851.
For total 864 contact elements, there are 432 elements are in contact.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 74
Max. Penetration of -3.476937304E-02 has been detected between contact
element 64967 and target element 65831.
For total 864 contact elements, there are 432 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 78
Max. Penetration of -3.222826757E-02 has been detected between contact
element 67587 and target element 66723.

Max. Geometrical gap of 3.264548771E-02 has been detected between
contact element 67936 and target element 67072.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 79
Max. Penetration of -3.222826757E-02 has been detected between contact
element 67587 and target element 66723.

Max. Geometrical gap of 3.264548771E-02 has been detected between contact element 67936 and target element 67072.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 80
Max. Penetration of -3.174905641E-02 has been detected between contact element 68687 and target element 68447.
For total 240 contact elements, there are 120 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 6 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 82
Max. Penetration of -3.10010663E-02 has been detected between contact element 69791 and target element 68927.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 83
Max. Penetration of -3.10010663E-02 has been detected between contact element 69791 and target element 68927.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target

elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84

Max. Penetration of -3.060747112E-02 has been detected between contact element 70895 and target element 70655.

For total 240 contact elements, there are 120 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 6 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 86

Max. Penetration of -2.978983694E-02 has been detected between contact element 71999 and target element 71135.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 87

Max. Penetration of -2.978983694E-02 has been detected between contact element 71999 and target element 71135.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 90

Max. Penetration of -2.86546753E-02 has been detected between contact element 74207 and target element 73343.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 91

Max. Penetration of -2.86546753E-02 has been detected between contact element 74207 and target element 73343.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 94

Max. Penetration of -2.772318025E-02 has been detected between contact element 76415 and target element 75551.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 95

Max. Penetration of -2.772318025E-02 has been detected between contact element 76415 and target element 75551.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target

elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 98

Max. Penetration of -2.7224209E-02 has been detected between contact element 78191 and target element 79055.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 99

Max. Penetration of -2.7224209E-02 has been detected between contact element 78191 and target element 79055.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101

Max. Penetration of -3.056333062E-02 has been detected between contact element 79646 and target element 79886.

For total 240 contact elements, there are 120 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 6 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 102

Max. Penetration of -2.962683046E-02 has been detected between contact element 80402 and target element 81266.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103

Max. Penetration of -2.962683046E-02 has been detected between contact element 80402 and target element 81266.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 106

Max. Penetration of -4.865854411E-02 has been detected between contact element 82610 and target element 83474.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 107

Max. Penetration of -4.865854411E-02 has been detected between contact element 82610 and target element 83474.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target

elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 124
Max. Penetration of -4.555263407E-13 has been detected between contact element 100638 and target element 100773.

Max. Geometrical gap of 6.823994896E-13 has been detected between contact element 100638 and target element 100773.

Max. Geometrical penetration of -6.829000161E-13 has been detected between contact element 100638 and target element 100773.
For total 52 contact elements, there are 52 elements are in contact.
There are 52 elements are in sticking.
Max. Pinball distance 3.71446753.
One of the contact searching regions contains at least 6 target elements.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 125

*** NOTE *** CP = 4076.656 TIME= 18:49:37
Contact pair is inactive.

*** WARNING *** CP = 4076.656 TIME= 18:49:37
The unconverged solution (identified as time 9 substep 999999) is output for analysis debug purposes. Results should not be used for any other purpose.

R E S T A R T I N F O R M A T I O N

REASON FOR TERMINATION. . . . . .ERROR IN ELEMENT FORMULATION
FILES NEEDED FOR RESTARTING file0.Rnnn
file.ldhi
file.rdb
TIME OF LAST SOLUTION 8.9872
TIME AT START OF THE LOAD STEP 8.0000
TIME AT END OF THE LOAD STEP 9.0000

ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.db
FOR POSSIBLE RESUME FROM THIS POINT

NUMBER OF WARNING MESSAGES ENCOUNTERED= 25
NUMBER OF ERROR MESSAGES ENCOUNTERED= 0

***** PROBLEM TERMINATED BY INDICATED ERROR(S) OR BY END OF INPUT DATA *****

*** WARNING *** CP = 4079.328 TIME= 18:49:48
During this session the elapsed time exceeds the CPU time by 120%.
This often indicates either a lack of physical memory (RAM) required
to efficiently handle this simulation or a particularly slow hard
drive configuration. This simulation can be expected to run faster on
identical hardware if additional RAM or a faster hard drive

configuration is made available. For more details, please see the
Mechanical APDL Performance Guide which is part of the Ansys Help
system.

+---------- M A P D L S T A T I S T I C S ----------+

Release: 2024 R2 Build: 24.2 Update: UP20240513 Platform: WINDOWS x64
Date Run: 12/08/2024 Time: 18:49 Process ID: 9264
Operating System: Windows 11 (Build: 22631)

Processor Model: 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz

Compiler: Intel(R) Fortran Compiler Classic Version 2021.9 (Build: 20230302)
        Intel(R) C/C++ Compiler Classic Version 2021.9 (Build: 20230302)
        Intel(R) oneAPI Math Kernel Library Version 2023.1-Product Build 20230303

Number of machines requested : 1
Total number of cores available : 8
Number of physical cores available : 4
Number of processes requested : 2
Number of threads per process requested : 1
Total number of cores requested : 2 (Distributed Memory Parallel)
MPI Type: INTELMPI
MPI Version: Intel(R) MPI Library 2021.11 for Windows* OS

GPU Acceleration: Not Requested

Job Name: file0
Input File: dummy.dat

 Core Machine Name Working Directory

---

0 DESKTOP-0L1F7R6 C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03

1 DESKTOP-0L1F7R6 C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\ScrAD03

Latency time from master to core 1 = 1.990 microseconds

Communication speed from master to core 1 = 2793.78 MB/sec

Total CPU time for main thread : 4075.4 seconds

Total CPU time summed for all threads : 4079.3 seconds

Elapsed time spent obtaining a license : 0.5 seconds

Elapsed time spent pre-processing model (/PREP7) : 0.6 seconds

Elapsed time spent solution - preprocessing : 12.8 seconds

Elapsed time spent computing solution : 8935.4 seconds

Elapsed time spent solution - postprocessing : 5.9 seconds

Elapsed time spent post-processing model (/POST1) : 0.0 seconds

Equation solver used : Sparse (symmetric)

Equation solver computational rate : 29.4 Gflops

Equation solver effective I/O rate : 6.5 GB/sec

Sum of disk space used on all processes : 4770.2 MB

Sum of memory used on all processes : 4064.0 MB

Sum of memory allocated on all processes : 7225.0 MB

Physical memory available : 8 GB

Total amount of I/O written to disk : 194.3 GB

Total amount of I/O read from disk : 1035.5 GB

+---------- E N D M A P D L S T A T I S T I C S ----------+

```
*------------------------------------------------------------------------------*
|                                                                              |
|                          RUN COMPLETED                                       |
|                                                                              |
|------------------------------------------------------------------------------|
|                                                                              |
| Ansys MAPDL 2024 R2        Build 24.2        UP20240513    WINDOWS x64   |
|                                                                              |
|------------------------------------------------------------------------------|
|                                                                              |
| Database Requested(-db)     1024 MB     Scratch Memory Requested   1024 MB |
| Max Database Used(Master)    126 MB     Max Scratch Used(Master)   2149 MB |
| Max Database Used(Workers)     1 MB     Max Scratch Used(Workers)  1788 MB |
| Sum Database Used(All)       127 MB     Sum Scratch Used(All)      3937 MB |
|                                                                              |
|------------------------------------------------------------------------------|
|                                                                              |
|       CP Time      (sec) =       4079.328       Time  =  18:49:48         |
|       Elapsed Time (sec) =       8965.000       Date  =  12/08/2024       |
|                                                                              |
*------------------------------------------------------------------------------*
```

All

PRILOG 3 - Programski kôd proračuna modela kuće s vertikalnim opterećenjem na zidu s vratima

Solver Output

Ansys Mechanical Enterprise Academic Student

```
*------------------------------------------------------------------*
|                                                                  |
| W E L C O M E  T O  T H E  A N S Y S (R) P R O G R A M  |
|                                                                  |
*------------------------------------------------------------------*
```

```
************************************************************
*       ANSYS MAPDL 2024 R2        LEGAL NOTICES        *
************************************************************
*                                                          *
* Copyright 1971-2024 Ansys, Inc.  All rights reserved.    *
* Unauthorized use, distribution or duplication is         *
* prohibited.                                              *
*                                                          *
* Ansys is a registered trademark of Ansys, Inc. or its    *
* subsidiaries in the United States or other countries.    *
* See the Ansys, Inc. online documentation or the Ansys, Inc. *
* documentation CD or online help for the complete Legal   *
* Notice.                                                  *
```

*   *
****
*   *
* THIS ANSYS SOFTWARE PRODUCT AND PROGRAM DOCUMENTATION   *
* INCLUDE TRADE SECRETS AND CONFIDENTIAL AND PROPRIETARY   *
* PRODUCTS OF ANSYS, INC., ITS SUBSIDIARIES, OR LICENSORS.   *
* The software products and documentation are furnished by   *
* Ansys, Inc. or its subsidiaries under a software license   *
* agreement that contains provisions concerning   *
* non-disclosure, copying, length and nature of use,   *
* compliance with exporting laws, warranties, disclaimers,   *
* limitations of liability, and remedies, and other   *
* provisions. The software products and documentation may be *
* used, disclosed, transferred, or copied only in accordance *
* with the terms and conditions of that software license   *
* agreement.   *
*   *
* Ansys, Inc. is a UL registered   *
* ISO 9001:2015 company.   *
*   *
****
*   *
* This product is subject to U.S. laws governing export and *
* re-export.   *
*   *
* For U.S. Government users, except as specifically granted *
* by the Ansys, Inc. software license agreement, the use,   *
* duplication, or disclosure by the United States Government *
* is subject to restrictions stated in the Ansys, Inc.   *
* software license agreement and FAR 12.212 (for non-DOD   *
* licenses).   *
*   *

****

2024 R2

Point Releases and Patches installed:

Ansys Service Pack 2024 R2.15857956
Discovery 2024 R2.15857956
Core WB Files 2024 R2.15857956
Ansys Dynamic Reporting 2024 R2.15857956
SpaceClaim 2024 R2.15857956
CFX (includes CFD-Post) 2024 R2.15857956
Chemkin 2024 R2.15857956
EnSight 2024 R2.15857956
FENSAP-ICE 2024 R2.15857956
Fluent (includes CFD-Post) 2024 R2.15857956
Polyflow (includes CFD-Post) 2024 R2.15857956
Forte (includes EnSight) 2024 R2.15857956
TurboGrid 2024 R2.15857956
ACIS Geometry Interface 2024 R2.15857956
AutoCAD Geometry Interface 2024 R2.15857956
Catia, Version 4 Geometry Interface 2024 R2.15857956
Catia, Version 5 Geometry Interface 2024 R2.15857956
Catia, Version 6 Geometry Interface 2024 R2.15857956
Creo Elements/Direct Modeling Geometry Interface 2024 R2.15857956
Creo Parametric Geometry Interface 2024 R2.15857956
Inventor Geometry Interface 2024 R2.15857956
JTOpen Geometry Interface 2024 R2.15857956
NX Geometry Interface 2024 R2.15857956
Parasolid Geometry Interface 2024 R2.15857956
Solid Edge Geometry Interface 2024 R2.15857956
SOLIDWORKS Geometry Interface 2024 R2.15857956

Speos 2024 R2.15857956

Aqwa 2024 R2.15857956

Autodyn 2024 R2.15857956

Material Calibration App 2024 R2.15857956

Customization Files for User Programmable Features 2024 R2.15857956

Mechanical Products 2024 R2.15857956

Motion 2024 R2.15857956

Academic Student 2024 R2.15857956

***** MAPDL COMMAND LINE ARGUMENTS *****

BATCH MODE REQUESTED (-b) = NOLIST

INPUT FILE COPY MODE (-c) = COPY

DISTRIBUTED MEMORY PARALLEL REQUESTED

2 PARALLEL PROCESSES REQUESTED WITH SINGLE THREAD PER PROCESS

TOTAL OF 2 CORES REQUESTED

INPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\dummy.dat

OUTPUT FILE NAME = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\solve.out

START-UP FILE MODE = NOREAD

STOP FILE MODE = NOREAD

RELEASE= 2024 R2 BUILD= 24.2 UP20240513 VERSION=WINDOWS x64

CURRENT JOBNAME=file0 12:52:21 SEP 04, 2024 CP= 0.000

PARAMETER _DS_PROGRESS = 999.0000000

/INPUT FILE= ds.dat LINE= 0

*** NOTE *** CP = 0.125 TIME= 12:52:21

The /CONFIG,NOELDB command is not valid in a distributed memory

parallel solution. Command is ignored.

*GET _WALLSTRT FROM ACTI ITEM=TIME WALL VALUE= 12.8725000

TITLE=

kuca_prelim_2--Static Structural (C5)

ACT Extensions:

LSDYNA, 2024.2

5f463412-bd3e-484b-87e7-cbc0a665e474, wbex

/COM, ANSYSMotion, 2024.2

20180725-3f81-49eb-9f31-41364844c769, wbex

SET PARAMETER DIMENSIONS ON _WB_PROJECTSCRATCH_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_PROJECTSCRATCH_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\

SET PARAMETER DIMENSIONS ON _WB_SOLVERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_SOLVERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\dp0\SYS-3\MECH\

SET PARAMETER DIMENSIONS ON _WB_USERFILES_DIR

TYPE=STRI DIMENSIONS= 248 1 1

PARAMETER _WB_USERFILES_DIR(1) = C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno\kuca_prelim_2_files\user_files\

--- Data in consistent NMM units. See Solving Units in the help system for more

MPA UNITS SPECIFIED FOR INTERNAL
 LENGTH   = MILLIMETERS (mm)
 MASS   = TONNE (Mg)
 TIME   = SECONDS (sec)
 TEMPERATURE = CELSIUS (C)
 TOFFSET   = 273.0
 FORCE   = NEWTON (N)
 HEAT   = MILLIJOULES (mJ)

INPUT UNITS ARE ALSO SET TO MPA

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   12:52:21 SEP 04, 2024 CP=   0.125

kuca_prelim_2--Static Structural (C5)

        ***** MAPDL ANALYSIS DEFINITION (PREP7) *****
********** Nodes for the whole assembly **********
********** Elements for Body 1 'Part 1' **********
********** Elements for Body 2 'Part 2' **********
********** Elements for Body 3 'Part 3' **********
********** Elements for Body 4 'Part 4' **********
********** Elements for Body 5 'Part 5' **********
********** Elements for Body 6 'Part 6' **********
********** Elements for Body 7 'Part 7' **********
********** Elements for Body 8 'Part 8' **********
********** Elements for Body 9 'Part 9' **********

********** Elements for Body 10 'Part 10' **********

********** Elements for Body 11 'Part 11' **********

********** Elements for Body 12 'Part 12' **********

********** Elements for Body 13 'Part 13' **********

********** Elements for Body 14 'Part 14' **********

********** Elements for Body 15 'Part 15' **********

********** Elements for Body 16 'Part 16' **********

********** Elements for Body 17 'Part 17' **********

********** Elements for Body 18 'Part 18' **********

********** Elements for Body 19 'Part 19' **********

********** Elements for Body 20 'Part 20' **********

********** Elements for Body 21 'Part 21' **********

********** Elements for Body 22 'Part 22' **********

********** Elements for Body 23 'Part 23' **********

********** Elements for Body 24 'Part 24' **********

********** Elements for Body 25 'Part 25' **********

********** Elements for Body 26 'Part 26' **********

********** Elements for Body 27 'Part 27' **********

********** Elements for Body 28 'Part 28' **********

********** Elements for Body 29 'Part 29' **********

********** Elements for Body 30 'Part 30' **********

********** Elements for Body 31 'Part 31' **********

********** Elements for Body 32 'Part 32' **********

********** Elements for Body 33 'Part 33' **********

********** Elements for Body 34 'Part 34' **********

********** Elements for Body 35 'Part 35' **********

********** Elements for Body 36 'Part 36' **********

********** Elements for Body 37 'Part 37' **********

********** Elements for Body 38 'Part 38' **********

********** Elements for Body 39 'Part 39' **********

********** Elements for Body 40 'Part 40' **********

********** Elements for Body 41 'Part 41' **********

********** Elements for Body 42 'Part 42' **********

********** Elements for Body 43 'Part 43' **********

********** Send User Defined Coordinate System(s) **********

********** Set Reference Temperature **********

********** Send Materials **********

********** Create Contact "Contact Region" **********

Real Constant Set For Above Contact Is 45 & 44

********** Create Contact "Contact Region 2" **********

Real Constant Set For Above Contact Is 47 & 46

********** Create Contact "Contact Region 3" **********

Real Constant Set For Above Contact Is 49 & 48

********** Create Contact "Contact Region 4" **********

Real Constant Set For Above Contact Is 51 & 50

********** Create Contact "Contact Region 5" **********

Real Constant Set For Above Contact Is 53 & 52

********** Create Contact "Contact Region 6" **********

Real Constant Set For Above Contact Is 55 & 54

********** Create Contact "Contact Region 7" **********

Real Constant Set For Above Contact Is 57 & 56

********** Create Contact "Contact Region 8" **********

Real Constant Set For Above Contact Is 59 & 58

********** Create Contact "Contact Region 9" **********

Real Constant Set For Above Contact Is 61 & 60

********** Create Contact "Contact Region 10" **********

Real Constant Set For Above Contact Is 63 & 62

********** Create Contact "Contact Region 11" **********

Real Constant Set For Above Contact Is 65 & 64

********** Create Contact "Contact Region 12" **********

Real Constant Set For Above Contact Is 67 & 66

********** Create Contact "Contact Region 13" **********

Real Constant Set For Above Contact Is 69 & 68

********** Create Contact "Contact Region 14" **********

Real Constant Set For Above Contact Is 71 & 70

********** Create Contact "Contact Region 15" **********

Real Constant Set For Above Contact Is 73 & 72

********** Create Contact "Contact Region 16" **********

Real Constant Set For Above Contact Is 75 & 74

********** Create Contact "Contact Region 17" **********

Real Constant Set For Above Contact Is 77 & 76

********** Create Contact "Contact Region 18" **********

Real Constant Set For Above Contact Is 79 & 78

********** Create Contact "Contact Region 19" **********

Real Constant Set For Above Contact Is 81 & 80

********** Create Contact "Contact Region 20" **********

Real Constant Set For Above Contact Is 83 & 82

********** Create Contact "Contact Region 21" **********

Real Constant Set For Above Contact Is 85 & 84

********** Create Contact "Contact Region 22" **********

Real Constant Set For Above Contact Is 87 & 86

********** Create Contact "Contact Region 23" **********

Real Constant Set For Above Contact Is 89 & 88

********** Create Contact "Contact Region 24" **********

Real Constant Set For Above Contact Is 91 & 90

********** Create Contact "Contact Region 25" **********

Real Constant Set For Above Contact Is 93 & 92

********** Create Contact "Contact Region 26" **********

Real Constant Set For Above Contact Is 95 & 94

********** Create Contact "Contact Region 27" **********

Real Constant Set For Above Contact Is 97 & 96

********** Create Contact "Contact Region 28" **********

Real Constant Set For Above Contact Is 99 & 98

********** Create Contact "Contact Region 29" **********

Real Constant Set For Above Contact Is 101 & 100

********** Create Contact "Contact Region 30" **********

Real Constant Set For Above Contact Is 103 & 102

********** Create Contact "Contact Region 31" **********

Real Constant Set For Above Contact Is 105 & 104

********** Create Contact "Contact Region 32" **********

Real Constant Set For Above Contact Is 107 & 106

********** Create Contact "Contact Region 33" **********

Real Constant Set For Above Contact Is 109 & 108

********** Create Contact "Contact Region 34" **********

Real Constant Set For Above Contact Is 111 & 110

********** Create Contact "Contact Region 35" **********

Real Constant Set For Above Contact Is 113 & 112

********** Create Contact "Contact Region 36" **********

Real Constant Set For Above Contact Is 115 & 114

********** Create Contact "Contact Region 37" **********

Real Constant Set For Above Contact Is 117 & 116

********** Create Contact "Contact Region 38" **********

Real Constant Set For Above Contact Is 119 & 118

********** Create Contact "Contact Region 39" **********

Real Constant Set For Above Contact Is 121 & 120

********** Create Contact "Contact Region 40" **********

Real Constant Set For Above Contact Is 123 & 122

********** Create Contact "Contact Region 41" **********

Real Constant Set For Above Contact Is 125 & 124

********** Create Contact "Contact Region 42" **********

Real Constant Set For Above Contact Is 127 & 126

********** Create Debonding "Contact Debonding" **********

********** Create Debonding "Contact Debonding 2" **********

********** Create Debonding "Contact Debonding 3" **********

********** Create Debonding "Contact Debonding 4" **********

********** Create Debonding "Contact Debonding 5" **********

********** Create Debonding "Contact Debonding 6" **********

********** Create Debonding "Contact Debonding 7" **********

********** Create Debonding "Contact Debonding 8" **********

********** Create Debonding "Contact Debonding 9" **********

********** Create Debonding "Contact Debonding 10" **********

********** Create Debonding "Contact Debonding 11" **********

********** Create Debonding "Contact Debonding 12" **********

********** Create Debonding "Contact Debonding 13" **********

********** Create Debonding "Contact Debonding 14" **********

********** Create Debonding "Contact Debonding 15" **********

********** Create Debonding "Contact Debonding 16" **********

********** Create Debonding "Contact Debonding 17" **********

********** Create Debonding "Contact Debonding 18" **********

********** Create Debonding "Contact Debonding 19" **********

********** Create Debonding "Contact Debonding 20" **********

********** Create Debonding "Contact Debonding 21" **********

********** Create Debonding "Contact Debonding 22" **********

********** Create Debonding "Contact Debonding 23" **********

********** Create Debonding "Contact Debonding 24" **********

********** Create Debonding "Contact Debonding 25" **********

********** Create Debonding "Contact Debonding 26" **********

********** Create Debonding "Contact Debonding 27" **********

********** Create Debonding "Contact Debonding 28" **********

********** Create Debonding "Contact Debonding 29" **********

********** Create Debonding "Contact Debonding 30" **********

********** Create Debonding "Contact Debonding 31" **********

********** Create Debonding "Contact Debonding 32" **********

********** Create Debonding "Contact Debonding 33" **********

********** Create Debonding "Contact Debonding 34" **********

********** Create Debonding "Contact Debonding 35" **********

********** Create Debonding "Contact Debonding 36" **********

********** Create Debonding "Contact Debonding 37" **********

********** Create Debonding "Contact Debonding 38" **********

********** Create Debonding "Contact Debonding 39" **********

********** Fixed Supports **********

********** Define Pressure Using Surface Effect Elements "Pressure" **********

********** Create Displacement Tables and Functions ******

***** ROUTINE COMPLETED ***** CP =   0.750

--- Number of total nodes = 114674

--- Number of contact elements = 53052

--- Number of spring elements = 0

--- Number of bearing elements = 0

--- Number of solid elements = 13780

--- Number of condensed parts = 0

--- Number of total elements = 66832

*GET _WALLBSOL FROM ACTI ITEM=TIME WALL VALUE= 12.8727778

****

********** SOLUTION **********

****

***** MAPDL SOLUTION ROUTINE *****

PERFORM A STATIC ANALYSIS

 THIS WILL BE A NEW ANALYSIS

LARGE DEFORMATION ANALYSIS

PARAMETER _THICKRATIO =   0.000000000

USE SPARSE MATRIX DIRECT SOLVER

USE THE FULL NEWTON-RAPHSON OPTION FOR ALL DEGREES OF FREEDOM

AND USE THE DEFAULT ADAPTIVE DESCENT OPTION

CONTACT INFORMATION PRINTOUT LEVEL 1

DO NOT COMBINE ELEMENT MATRIX FILES (.emat) AFTER DISTRIBUTED PARALLEL SOLUTION

DO NOT COMBINE ELEMENT SAVE DATA FILES (.esav) AFTER DISTRIBUTED PARALLEL SOLUTION

NLDIAG: Nonlinear diagnostics CONT option is set to ON.

Writing frequency : each ITERATION.

DEFINE RESTART CONTROL FOR LOADSTEP LAST

AT FREQUENCY OF LAST AND NUMBER FOR OVERWRITE IS -1

DELETE RESTART FILES OF ENDSTEP

****

********** SOLVE FOR LS 1 OF 14 **********

SELECT FOR ITEM=TYPE COMPONENT=

IN RANGE 128 TO 128 STEP 1

244 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

SELECT ALL NODES HAVING ANY ELEMENT IN ELEMENT SET.

881 NODES (OF 114674 DEFINED) SELECTED FROM

244 SELECTED ELEMENTS BY NSLE COMMAND.

GENERATE SURFACE LOAD PRES ON SURFACE DEFINED BY ALL SELECTED NODES

VALUES= 0.200000000 0.00000000

NUMBER OF PRES ELEMENT FACE LOADS STORED = 244

ALL SELECT FOR ITEM=NODE COMPONENT=
IN RANGE 1 TO 114674 STEP 1

114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT FOR ITEM=ELEM COMPONENT=
IN RANGE 1 TO 101626 STEP 1

66832 ELEMENTS (OF 66832 DEFINED) SELECTED BY ESEL COMMAND.

ACEL= 0.0000 9806.6 0.0000
*** Set Displacements ***
CMBLOCK read of NODE component _CM419UX_XP completed

SELECT COMPONENT _CM419UX_XP

SPECIFIED CONSTRAINT UX FOR SELECTED NODES 1 TO 114674 BY 1
SET ACCORDING TO TABLE PARAMETER = _LOADVARI419XP

ALL SELECT FOR ITEM=NODE COMPONENT=
IN RANGE 1 TO 114674 STEP 1

114674 NODES (OF 114674 DEFINED) SELECTED BY NSEL COMMAND.
*** Component For All Non-Zero UX Displacements ***

SELECT COMPONENT _CM419UX_XP

DEFINITION OF COMPONENT = _DISPNONZEROUX ENTITY=NODE

ALL SELECT   FOR ITEM=NODE COMPONENT=
 IN RANGE   1 TO   114674 STEP   1

    114674 NODES (OF   114674 DEFINED) SELECTED BY NSEL COMMAND.

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

     66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 1.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

NONLINEAR STABILIZATION CONTROL:

KEY=CONS METHOD=ENER VALUE= 0.90000 SUBSTPOPT=NO FORCELIMIT= 0.20000

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

*GET ANSINTER_ FROM ACTI ITEM=INT VALUE= 0.00000000

*IF ANSINTER_ (= 0.00000) NE

0 (= 0.00000) THEN

*ENDIF

*** NOTE *** CP = 0.797 TIME= 12:52:22
The automatic domain decomposition logic has selected the MESH domain
decomposition method with 2 processes per solution.

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 0.953 TIME= 12:52:22
Element shape checking is currently inactive. Issue SHPP,ON or
SHPP,WARN to reactivate, if desired.

*** NOTE *** CP = 1.031 TIME= 12:52:22
The model data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -
preliminarno_ProjectScratch\Scr2455\file0.err) for these warning
messages.

*** SELECTION OF ELEMENT TECHNOLOGIES FOR APPLICABLE ELEMENTS ***
--- GIVE SUGGESTIONS AND RESET THE KEY OPTIONS ---

ELEMENT TYPE 1 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 2 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.
KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 3 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 4 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 5 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 6 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 7 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 8 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 9 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 10 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 11 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 12 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 13 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 14 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 15 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 16 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 17 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 18 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 19 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 20 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 21 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 22 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 23 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 24 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 25 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 26 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 27 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 28 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 29 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 30 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 31 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 32 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 33 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 34 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 35 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 36 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 37 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 38 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 39 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 40 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 41 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 42 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

ELEMENT TYPE 43 IS SOLID186. KEYOPT(2)=0 IS SUGGESTED AND HAS BEEN RESET.

KEYOPT(1-12)= 0 0 0 0 0 0 0 0 0 0 0 0

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 12:52:22 SEP 04, 2024 CP= 1.047

kuca_prelim_2--Static Structural (C5)

S O L U T I O N O P T I O N S

PROBLEM DIMENSIONALITY. 3-D

DEGREES OF FREEDOM. . . . . UX UY UZ

ANALYSIS TYPE . . . . . .STATIC (STEADY-STATE)

OFFSET TEMPERATURE FROM ABSOLUTE ZERO 273.15

NONLINEAR GEOMETRIC EFFECTS . . . . . .ON

EQUATION SOLVER OPTION. . . . . .SPARSE

PLASTIC MATERIAL PROPERTIES INCLUDED. . . . . .YES

NEWTON-RAPHSON OPTION . . . . . .FULL

GLOBALLY ASSEMBLED MATRIX . . . . . .SYMMETRIC

*** WARNING *** CP = 1.156 TIME= 12:52:22

Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1.156 TIME= 12:52:22

The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\file0.err) for these warning messages.

*** NOTE *** CP = 1.172 TIME= 12:52:22

The conditions for direct assembly have been met. No .emat or .erot files will be produced.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real constant set 44 and contact element type 44 has been set up. The companion pair has real constant set ID 45. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 3.141 TIME= 12:52:25
Boundary conditions, coupling, and/or constraint equations have been
applied on all the contact nodes (for example 416). Overconstraint
will occur. For deformable-deformable contact, switch contact and
target surfaces.
Average contact surface length 49.526
Average contact pair depth 14.858
Average target surface length 49.204
Default pinball region factor PINB 0.25000
The resulting pinball region 3.7145
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 3.446132268E-13 was detected between contact
element 48666 and target element 48777.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real
constant set 45 and contact element type 44 has been set up. The
companion pair has real constant set ID 44. Both pairs should have

the same behavior.
MAPDL will deactivate the current pair and keep its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 49.602
Average contact pair depth 50.000
Average target surface length 49.038
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 4.547473509E-13 was detected between contact
element 48711 and target element 48597.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real
constant set 46 and contact element type 46 has been set up. The
companion pair has real constant set ID 47. Both pairs should have
the same behavior.
MAPDL will keep the current pair and deactivate its companion pair,

resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 3.141 TIME= 12:52:25

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 868). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

Average contact surface length 49.526

Average contact pair depth 14.858

Average target surface length 49.182

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7145

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 48846 and target element 48956.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 47 and contact element type 46 has been set up. The companion pair has real constant set ID 46. Both pairs should have the same behavior.
MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25
Contact related postprocess items (ETABLE, pressure ...) are not available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length 48.803
Average contact pair depth 50.000
Average target surface length 49.038
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact element 48898 and target element 48793.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real constant set 48 and contact element type 48 has been set up. The companion pair has real constant set ID 49. Both pairs should have

the same behavior.
MAPDL will keep the current pair and deactivate its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 3.141 TIME= 12:52:25
Boundary conditions, coupling, and/or constraint equations have been
applied on all the contact nodes (for example 2010). Overconstraint
will occur. For deformable-deformable contact, switch contact and
target surfaces.
Average contact surface length 50.000
Average contact pair depth 15.000
Average target surface length 49.991
Default pinball region factor PINB 0.25000
The resulting pinball region 3.7500
Default target edge extension factor TOLS 2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 49287 and target element 49445.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real constant set 49 and contact element type 48 has been set up. The companion pair has real constant set ID 48. Both pairs should have the same behavior.

MAPDL will deactivate the current pair and keep its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 3.141 TIME= 12:52:25

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

Average contact surface length 49.986

Average contact pair depth 50.000

Average target surface length 50.000

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 49313 and target element 49082.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 50 and contact element type 50 has been set up. The companion pair has real constant set ID 51. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 49711 and target element 49951.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 51 and contact element type 50 has been set up. The companion pair has real constant set ID 50. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 49711 and target element 49951.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 52 and contact element type 52 has been set up. The companion pair has real constant set ID 53. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 4.547473509E-13 was detected between contact element 50559 and target element 51423.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 53 and contact element type 52 has been set up. The companion pair has real constant set ID 52. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 4.547473509E-13 was detected between contact element 50559 and target element 51423.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 54 and contact element type 54 has been set up. The companion pair has real constant set ID 55. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 51919 and target element 52159.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 55 and contact element type 54 has been set up. The companion pair has real constant set ID 54. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 51919 and target element 52159.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 56 and contact element type 56 has been set up. The companion pair has real constant set ID 57. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 52715 and target element 53579.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 57 and contact element type 56 has been set up. The
companion pair has real constant set ID 56. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.771
Average contact pair depth 50.000
Average target surface length 49.770
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 52715 and target element 53579.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 58 and contact element type 58 has been set up. The
companion pair has real constant set ID 59. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.176
Average contact pair depth 50.000
Average target surface length 49.171
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 54132 and target element 54372.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 59 and contact element type 58 has been set up. The companion pair has real constant set ID 58. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 54132 and target element 54372.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 60 and contact element type 60 has been set up. The companion pair has real constant set ID 61. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 54920 and target element 55784.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 61 and contact element type 60 has been set up. The companion pair has real constant set ID 60. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 54920 and target element 55784.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 56343 and target element 56583.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 63 and contact element type 62 has been set up. The companion pair has real constant set ID 62. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 56343 and target element 56583.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 64 and contact element type 64 has been set up. The companion pair has real constant set ID 65. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 57148 and target element 58012.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 65 and contact element type 64 has been set up. The companion pair has real constant set ID 64. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 57148 and target element 58012.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 66 and contact element type 66 has been set up. The companion pair has real constant set ID 67. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 58544 and target element 58784.

****

*** NOTE *** CP = 3.141 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 67 and contact element type 66 has been set up. The
companion pair has real constant set ID 66. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.176
Average contact pair depth 50.000
Average target surface length 49.171
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.141 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 58544 and target element 58784.
****

*** NOTE *** CP = 3.141 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 68 and contact element type 68 has been set up. The companion pair has real constant set ID 69. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 59336 and target element 60200.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 69 and contact element type 68 has been set up. The companion pair has real constant set ID 68. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 59336 and target element 60200.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 70 and contact element type 70 has been set up. The companion pair has real constant set ID 71. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 60758 and target element 60998.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 71 and contact element type 70 has been set up. The companion pair has real constant set ID 70. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 60758 and target element 60998.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 72 and contact element type 72 has been set up. The companion pair has real constant set ID 73. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 61559 and target element 62423.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 73 and contact element type 72 has been set up. The companion pair has real constant set ID 72. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 61559 and target element 62423.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 74 and contact element type 74 has been set up. The companion pair has real constant set ID 75. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 63085 and target element 62845.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 75 and contact element type 74 has been set up. The companion pair has real constant set ID 74. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 63085 and target element 62845.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 76 and contact element type 76 has been set up. The companion pair has real constant set ID 77. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 64184 and target element 63320.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 77 and contact element type 76 has been set up. The companion pair has real constant set ID 76. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 64184 and target element 63320.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 78 and contact element type 78 has been set up. The
companion pair has real constant set ID 79. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.176
Average contact pair depth 50.000
Average target surface length 49.171
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 65174 and target element 65414.
****

*** NOTE *** CP = 3.156 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 79 and contact element type 78 has been set up. The companion pair has real constant set ID 78. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 65174 and target element 65414.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 80 and contact element type 80 has been set up. The companion pair has real constant set ID 81. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 65960 and target element 66824.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 81 and contact element type 80 has been set up. The companion pair has real constant set ID 80. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 65960 and target element 66824.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 82 and contact element type 82 has been set up. The companion pair has real constant set ID 83. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 67587 and target element 67347.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 83 and contact element type 82 has been set up. The
companion pair has real constant set ID 82. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.176
Average contact pair depth 50.000
Average target surface length 49.171
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25
Max. Initial penetration 3.410605132E-13 was detected between contact
element 67587 and target element 67347.
****

*** NOTE *** CP = 3.156 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 68612 and target element 67748.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 85 and contact element type 84 has been set up. The companion pair has real constant set ID 84. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 68612 and target element 67748.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 86 and contact element type 86 has been set up. The companion pair has real constant set ID 87. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 69589 and target element 69829.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 87 and contact element type 86 has been set up. The companion pair has real constant set ID 86. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 3.410605132E-13 was detected between contact element 69589 and target element 69829.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 88 and contact element type 88 has been set up. The companion pair has real constant set ID 89. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 70376 and target element 71240.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 89 and contact element type 88 has been set up. The companion pair has real constant set ID 88. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 70376 and target element 71240.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 90 and contact element type 90 has been set up. The companion pair has real constant set ID 91. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 71794 and target element 72034.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 91 and contact element type 90 has been set up. The companion pair has real constant set ID 90. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 71794 and target element 72034.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 92 and contact element type 92 has been set up. The companion pair has real constant set ID 93. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 72584 and target element 73448.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 93 and contact element type 92 has been set up. The companion pair has real constant set ID 92. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 72584 and target element 73448.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 94 and contact element type 94 has been set up. The companion pair has real constant set ID 95. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 74004 and target element 74244.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 95 and contact element type 94 has been set up. The companion pair has real constant set ID 94. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 74004 and target element 74244.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 96 and contact element type 96 has been set up. The companion pair has real constant set ID 97. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 74827 and target element 75691.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 97 and contact element type 96 has been set up. The companion pair has real constant set ID 96. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 74827 and target element 75691.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 98 and contact element type 98 has been set up. The companion pair has real constant set ID 99. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 76381 and target element 76141.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 99 and contact element type 98 has been set up. The
companion pair has real constant set ID 98. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.176
Average contact pair depth 50.000
Average target surface length 49.171
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25
Max. Initial penetration 2.273736754E-13 was detected between contact
element 76381 and target element 76141.
****

*** NOTE *** CP = 3.156 TIME= 12:52:25
Symmetric Deformable- deformable contact pair identified by real

constant set 100 and contact element type 100 has been set up. The companion pair has real constant set ID 101. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 77461 and target element 76597.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.273736754E-13 was detected between contact element 77461 and target element 76597.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 102 and contact element type 102 has been set up. The companion pair has real constant set ID 103. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 78416 and target element 78656.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 78416 and target element 78656.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 104 and contact element type 104 has been set up. The companion pair has real constant set ID 105. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 79207 and target element 80071.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 105 and contact element type 104 has been set up. The companion pair has real constant set ID 104. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 79207 and target element 80071.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 106 and contact element type 106 has been set up. The companion pair has real constant set ID 107. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 80628 and target element 80868.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 107 and contact element type 106 has been set up. The companion pair has real constant set ID 106. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 80628 and target element 80868.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 108 and contact element type 108 has been set up. The companion pair has real constant set ID 109. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 81427 and target element 82291.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 109 and contact element type 108 has been set up. The companion pair has real constant set ID 108. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 81427 and target element 82291.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 110 and contact element type 110 has been set up. The companion pair has real constant set ID 111. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.585

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 82864 and target element 83157.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 111 and contact element type 110 has been set up. The companion pair has real constant set ID 110. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.283

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 82864 and target element 83157.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 112 and contact element type 112 has been set up. The companion pair has real constant set ID 113. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.885

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 83647 and target element 84515.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 113 and contact element type 112 has been set up. The companion pair has real constant set ID 112. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 83647 and target element 84515.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 114 and contact element type 114 has been set up. The companion pair has real constant set ID 115. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.705302566E-13 was detected between contact element 85515 and target element 86691.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 115 and contact element type 114 has been set up. The companion pair has real constant set ID 114. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.705302566E-13 was detected between contact element 85515 and target element 86691.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 116 and contact element type 116 has been set up. The companion pair has real constant set ID 117. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 87868 and target element 89044.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 117 and contact element type 116 has been set up. The companion pair has real constant set ID 116. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.136868377E-13 was detected between contact element 87868 and target element 89044.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 118 and contact element type 118 has been set up. The companion pair has real constant set ID 119. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 90242 and target element 91418.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 119 and contact element type 118 has been set up. The companion pair has real constant set ID 118. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 90242 and target element 91418.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 120 and contact element type 120 has been set up. The companion pair has real constant set ID 121. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 92571 and target element 93747.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 121 and contact element type 120 has been set up. The companion pair has real constant set ID 120. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 92571 and target element 93747.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 122 and contact element type 122 has been set up. The companion pair has real constant set ID 123. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 94933 and target element 96109.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 123 and contact element type 122 has been set up. The companion pair has real constant set ID 122. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 5.684341886E-14 was detected between contact element 94933 and target element 96109.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 124 and contact element type 124 has been set up. The companion pair has real constant set ID 125. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.842170943E-14 was detected between contact element 97270 and target element 98446.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 125 and contact element type 124 has been set up. The companion pair has real constant set ID 124. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 2.842170943E-14 was detected between contact element 97270 and target element 98446.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 126 and contact element type 126 has been set up. The companion pair has real constant set ID 127. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.421085472E-14 was detected between contact element 99627 and target element 100803.

****

*** NOTE *** CP = 3.156 TIME= 12:52:25

Symmetric Deformable- deformable contact pair identified by real

constant set 127 and contact element type 126 has been set up. The companion pair has real constant set ID 126. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.832

Average contact pair depth 50.000

Average target surface length 49.831

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 3.156 TIME= 12:52:25

Max. Initial penetration 1.421085472E-14 was detected between contact element 99627 and target element 100803.

****

*** WARNING *** CP = 3.156 TIME= 12:52:25

Overconstraint may occur for Lagrange multiplier or MPC based contact

algorithm.

The reasons for possible overconstraint are:

*** WARNING *** CP = 3.156 TIME= 12:52:25

Boundary conditions, coupling, and/or constraint equations have been applied on certain contact nodes (for example 2010).

****

D I S T R I B U T E D D O M A I N D E C O M P O S E R

...Number of elements: 66832

...Number of nodes: 114674

...Decompose to 2 CPU domains

...Element load balance ratio = 1.000

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 1

TIME AT END OF THE LOAD STEP. 1.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

WARNING: Some contact elements on contact surface specified by real constant set 58 belong to symmetric contact (e.g. 58), some do not.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 46 and contact element type 46 has been set up. The companion pair has real constant set ID 47. Both pairs should have the same behavior.

MAPDL will keep the current pair and deactivate its companion pair, resulting in asymmetric contact.

Auto surface constraint is built

Contact algorithm: MPC based approach

*** NOTE *** CP = 4.641 TIME= 12:52:28

Contact related postprocess items (ETABLE, pressure ...) are not available.

Contact detection at: nodal point (normal to target surface)

MPC will be built internally to handle bonded contact.

*** WARNING *** CP = 4.641 TIME= 12:52:28

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 868). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

Average contact surface length 49.526

Average contact pair depth 14.858

Average target surface length 49.182

Default pinball region factor PINB 0.25000

The resulting pinball region 3.7145

Default target edge extension factor TOLS 2.0000

Initial penetration/gap is excluded.

Bonded contact (always) is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 48846 and target element 48956.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 47 and contact element type 46 has been set up. The

companion pair has real constant set ID 46. Both pairs should have
the same behavior.
MAPDL will deactivate the current pair and keep its companion pair,
resulting in asymmetric contact.
Auto surface constraint is built
Contact algorithm: MPC based approach

*** NOTE ***   CP =   4.641   TIME= 12:52:28
Contact related postprocess items (ETABLE, pressure ...) are not
available.
Contact detection at: nodal point (normal to target surface)
MPC will be built internally to handle bonded contact.
Average contact surface length   48.803
Average contact pair depth   50.000
Average target surface length   49.038
Default pinball region factor PINB   0.25000
The resulting pinball region   12.500
Default target edge extension factor TOLS   2.0000
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE ***   CP =   4.641   TIME= 12:52:28
Max. Initial penetration 2.273736754E-13 was detected between contact
element 48898 and target element 48793.
****

*** NOTE ***   CP =   4.641   TIME= 12:52:28
Symmetric Deformable- deformable contact pair identified by real
constant set 52 and contact element type 52 has been set up. The
companion pair has real constant set ID 53. Both pairs should have
the same behavior.

The same contact characteristics will be used for both pairs.
For asymmetric contact analysis, you may keep the current pair and
deactivate its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.771
Average contact pair depth 50.000
Average target surface length 49.770
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28
Max. Initial penetration 2.273736754E-13 was detected between contact
element 50512 and target element 51376.
****

*** NOTE *** CP = 4.641 TIME= 12:52:28
Symmetric Deformable- deformable contact pair identified by real
constant set 53 and contact element type 52 has been set up. The

companion pair has real constant set ID 52. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN 0.90000
The resulting initial contact stiffness 126.00
Default penetration tolerance factor FTOLN 0.10000
The resulting penetration tolerance 5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT 1.0000
User defined elastic slip tolerance SLTOL 10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX 0.10000E+21
Average contact surface length 49.771
Average contact pair depth 50.000
Average target surface length 49.770
Default pinball region factor PINB 0.25000
The resulting pinball region 12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28
Max. Initial penetration 2.273736754E-13 was detected between contact
element 50938 and target element 50074.
****

*** NOTE *** CP = 4.641 TIME= 12:52:28
Symmetric Deformable- deformable contact pair identified by real
constant set 56 and contact element type 56 has been set up. The

companion pair has real constant set ID 57. Both pairs should have
the same behavior.
The same contact characteristics will be used for both pairs.
For asymmetric contact analysis, you may keep the current pair and
deactivate its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Aggressive variation of normal stiffness is activated,
Contact stiffness factor FKN   0.90000
The resulting initial contact stiffness   126.00
Default penetration tolerance factor FTOLN   0.10000
The resulting penetration tolerance   5.0000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT   1.0000
User defined elastic slip tolerance SLTOL   10.000
Update contact stiffness at each iteration
Default Max. friction stress TAUMAX   0.10000E+21
Average contact surface length   49.771
Average contact pair depth   50.000
Average target surface length   49.770
Default pinball region factor PINB   0.25000
The resulting pinball region   12.500
Initial penetration/gap is excluded.
Bonded contact (always) with debonding is defined.

*** NOTE ***   CP =   4.641   TIME= 12:52:28
Max. Initial penetration 2.273736754E-13 was detected between contact
element 52715 and target element 53579.
****

*** NOTE ***   CP =   4.641   TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 57 and contact element type 56 has been set up. The companion pair has real constant set ID 56. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 4.547473509E-13 was detected between contact element 53173 and target element 52309.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 58 and contact element type 58 has been set up. The companion pair has real constant set ID 59. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 54131 and target element 54371.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 60 and contact element type 60 has been set up. The companion pair has real constant set ID 61. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 54919 and target element 55783.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 61 and contact element type 60 has been set up. The companion pair has real constant set ID 60. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 55352 and target element 54488.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 62 and contact element type 62 has been set up. The companion pair has real constant set ID 63. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 56341 and target element 56581.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 64 and contact element type 64 has been set up. The companion pair has real constant set ID 65. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 57128 and target element 57992.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 65 and contact element type 64 has been set up. The companion pair has real constant set ID 64. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 57562 and target element 56698.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 68 and contact element type 68 has been set up. The companion pair has real constant set ID 69. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 59336 and target element 60200.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 69 and contact element type 68 has been set up. The companion pair has real constant set ID 68. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 59768 and target element 58904.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 72 and contact element type 72 has been set up. The companion pair has real constant set ID 73. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 61551 and target element 62415.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 77 and contact element type 76 has been set up. The companion pair has real constant set ID 76. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 64184 and target element 63320.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 81 and contact element type 80 has been set up. The companion pair has real constant set ID 80. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 66392 and target element 65528.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 84 and contact element type 84 has been set up. The companion pair has real constant set ID 85. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 68224 and target element 69088.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 85 and contact element type 84 has been set up. The companion pair has real constant set ID 84. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 3.410605132E-13 was detected between contact element 68622 and target element 67758.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 88 and contact element type 88 has been set up. The companion pair has real constant set ID 89. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 70376 and target element 71240.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 89 and contact element type 88 has been set up. The companion pair has real constant set ID 88. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 70809 and target element 69945.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 92 and contact element type 92 has been set up. The companion pair has real constant set ID 93. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 72608 and target element 73472.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 93 and contact element type 92 has been set up. The companion pair has real constant set ID 92. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 73038 and target element 72174.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 96 and contact element type 96 has been set up. The companion pair has real constant set ID 97. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 74827 and target element 75691.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 97 and contact element type 96 has been set up. The companion pair has real constant set ID 96. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 2.273736754E-13 was detected between contact element 75260 and target element 74396.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 100 and contact element type 100 has been set up. The companion pair has real constant set ID 101. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 77000 and target element 77864.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 101 and contact element type 100 has been set up. The companion pair has real constant set ID 100. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 77433 and target element 76569.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 103 and contact element type 102 has been set up. The companion pair has real constant set ID 102. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.176

Average contact pair depth 50.000

Average target surface length 49.171

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 78541 and target element 78301.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 104 and contact element type 104 has been set up. The companion pair has real constant set ID 105. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 79208 and target element 80072.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 105 and contact element type 104 has been set up. The companion pair has real constant set ID 104. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 79642 and target element 78778.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 108 and contact element type 108 has been set up. The companion pair has real constant set ID 109. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 81427 and target element 82291.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 109 and contact element type 108 has been set up. The companion pair has real constant set ID 108. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.771

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 81850 and target element 80986.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 112 and contact element type 112 has been set up. The companion pair has real constant set ID 113. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

For asymmetric contact analysis, you may keep the current pair and

deactivate its companion pair.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.885

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 83634 and target element 84502.

****

*** NOTE *** CP = 4.641 TIME= 12:52:28

Symmetric Deformable- deformable contact pair identified by real constant set 113 and contact element type 112 has been set up. The companion pair has real constant set ID 112. Both pairs should have the same behavior.

The same contact characteristics will be used for both pairs.

Contact algorithm: Penalty method

Contact detection at: Gauss integration point

Aggressive variation of normal stiffness is activated,

Contact stiffness factor FKN 0.90000

The resulting initial contact stiffness 126.00

Default penetration tolerance factor FTOLN 0.10000

The resulting penetration tolerance 5.0000

Default opening contact stiffness OPSF will be used.

Default tangent stiffness factor FKT 1.0000

User defined elastic slip tolerance SLTOL 10.000

Update contact stiffness at each iteration

Default Max. friction stress TAUMAX 0.10000E+21

Average contact surface length 49.856

Average contact pair depth 50.000

Average target surface length 49.770

Default pinball region factor PINB 0.25000

The resulting pinball region 12.500

Initial penetration/gap is excluded.

Bonded contact (always) with debonding is defined.

*** NOTE *** CP = 4.641 TIME= 12:52:28

Max. Initial penetration 1.136868377E-13 was detected between contact element 84058 and target element 83194.

****

*** WARNING *** CP = 4.688 TIME= 12:52:28

Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 416). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

*** WARNING *** CP = 4.688 TIME= 12:52:28
Boundary conditions, coupling, and/or constraint equations have been applied on all the contact nodes (for example 2010). Overconstraint will occur. For deformable-deformable contact, switch contact and target surfaces.

The FEA model contains 0 external CE equations and 2643 internal CE equations.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46

Max. Penetration of 0 has been detected between contact element 48845 and target element 48955.

Max. Geometrical gap of 4.547473509E-13 has been detected between contact element 48850 and target element 48960.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 48850 and target element 48960.
For total 52 contact elements, there are 52 elements are in contact.
There are 52 elements are in sticking.
Potential overconstraint is detected.
Max. Pinball distance 3.71446753.
One of the contact searching regions contains at least 12 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47

*** NOTE *** CP = 13.281 TIME= 12:52:45

Contact pair is inactive.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 52

Max. Penetration of 0 has been detected between contact element 50503 and target element 51367.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 50568 and target element 51432.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 50568 and target element 51432.

For total 864 contact elements, there are 864 elements are in contact.

There are 432 elements are in sticking.

Contacting area 1070000.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 15 target elements.

Max. Pressure/force 5.569911896E-12.

Max. Normal stiffness 126.

Min. Normal stiffness 126.

Max. Tangential stiffness 94.9345397.

Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 53

Max. Penetration of 0 has been detected between contact element 50503 and target element 51367.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 50568 and target element 51432.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 50568 and target element 51432.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.801008789E-20 and criterion 1.801008816E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 56
Max. Penetration of 0 has been detected between contact element 52711 and target element 53575.

Max. Geometrical gap of 4.547473509E-13 has been detected between contact element 53171 and target element 52307.

Max. Geometrical penetration of -4.547473509E-13 has been detected between contact element 53171 and target element 52307.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 57
Max. Penetration of 0 has been detected between contact element 52711
and target element 53575.

Max. Geometrical gap of 4.547473509E-13 has been detected between
contact element 53171 and target element 52307.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 53171 and target element 52307.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.723635228E-20 and criterion 1.723635254E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58
Max. Penetration of 0 has been detected between contact element 54127
and target element 54367.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 54129 and target element 54369.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 54129 and target element 54369.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.
Max. Pressure/force 5.503294848E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 96.0837165.
Min. Tangential stiffness 96.0837165.
Contact pair force norm 3.230959219E-22 and criterion 3.230959267E-23.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 60
Max. Penetration of 0 has been detected between contact element 54919
and target element 55783.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 55014 and target element 55878.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 55014 and target element 55878.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 61
Max. Penetration of 0 has been detected between contact element 54919
and target element 55783.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 55014 and target element 55878.

Max. Geometrical penetration of -4.547473509E-13 has been detected
between contact element 55014 and target element 55878.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 5.337804479E-21 and criterion 5.337804559E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62
Max. Penetration of 0 has been detected between contact element 56335
and target element 56575.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 56340 and target element 56580.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 56340 and target element 56580.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target
elements.
Max. Pressure/force 5.503294848E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 96.0837165.
Min. Tangential stiffness 96.0837165.

Contact pair force norm 1.324182027E-21 and criterion 1.324182047E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 64
Max. Penetration of 0 has been detected between contact element 57127
and target element 57991.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 57128 and target element 57992.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 57128 and target element 57992.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 65
Max. Penetration of 0 has been detected between contact element 57127
and target element 57991.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 57128 and target element 57992.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 57128 and target element 57992.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 3.674004608E-20 and criterion 3.674004662E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 68
Max. Penetration of 0 has been detected between contact element 59335 and target element 60199.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 59337 and target element 60201.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 59337 and target element 60201.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 69
Max. Penetration of 0 has been detected between contact element 59335
and target element 60199.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 59337 and target element 60201.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 59337 and target element 60201.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.930816772E-20 and criterion 1.930816801E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 72
Max. Penetration of 0 has been detected between contact element 61543
and target element 62407.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 61545 and target element 62409.

Max. Geometrical penetration of -2.273736754E-13 has been detected
between contact element 61545 and target element 62409.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.455725737E-20 and criterion 2.455725773E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 77
Max. Penetration of 0 has been detected between contact element 63751
and target element 64615.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 64191 and target element 63327.

Max. Geometrical penetration of -3.410605132E-13 has been detected between contact element 64191 and target element 63327.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 7.268068437E-21 and criterion 7.268068545E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 81
Max. Penetration of 0 has been detected between contact element 65959 and target element 66823.

Max. Geometrical gap of 2.273736754E-13 has been detected between contact element 65966 and target element 66830.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 65966 and target element 66830.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.279377539E-20 and criterion 1.279377558E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84
Max. Penetration of 0 has been detected between contact element 68167
and target element 69031.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 68238 and target element 69102.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 68238 and target element 69102.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 85
Max. Penetration of 0 has been detected between contact element 68167
and target element 69031.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 68238 and target element 69102.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 68238 and target element 69102.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 6.694307202E-21 and criterion 6.694307301E-22.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 88
Max. Penetration of 0 has been detected between contact element 70375
and target element 71239.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 70819 and target element 69955.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 70819 and target element 69955.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 89
Max. Penetration of 0 has been detected between contact element 70375 and target element 71239.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 70819 and target element 69955.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 70819 and target element 69955.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.764222683E-21 and criterion 2.764222724E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 92
Max. Penetration of 0 has been detected between contact element 72583
and target element 73447.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 73027 and target element 72163.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 73027 and target element 72163.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 93
Max. Penetration of 0 has been detected between contact element 72583
and target element 73447.

Max. Geometrical gap of 3.410605132E-13 has been detected between
contact element 73027 and target element 72163.

Max. Geometrical penetration of -3.410605132E-13 has been detected
between contact element 73027 and target element 72163.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.017126363E-20 and criterion 1.017126378E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 96
Max. Penetration of 0 has been detected between contact element 74791
and target element 75655.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 75251 and target element 74387.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 75251 and target element 74387.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 97
Max. Penetration of 0 has been detected between contact element 74791 and target element 75655.

Max. Geometrical gap of 3.410605132E-13 has been detected between contact element 75251 and target element 74387.

Max. Geometrical penetration of -2.273736754E-13 has been detected between contact element 75251 and target element 74387.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 2.542206423E-21 and criterion 2.542206461E-22.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 100
Max. Penetration of 0 has been detected between contact element 76999
and target element 77863.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 77443 and target element 76579.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 77443 and target element 76579.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101
Max. Penetration of 0 has been detected between contact element 76999
and target element 77863.

Max. Geometrical gap of 2.273736754E-13 has been detected between
contact element 77443 and target element 76579.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 77443 and target element 76579.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 8.618176141E-21 and criterion 8.61817627E-22.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103
Max. Penetration of 0 has been detected between contact element 78415
and target element 78655.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 78420 and target element 78660.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 78420 and target element 78660.
For total 240 contact elements, there are 240 elements are in contact.
There are 120 elements are in sticking.
Contacting area 290000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 12 target elements.
Max. Pressure/force 5.503294848E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 96.0837165.
Min. Tangential stiffness 96.0837165.
Contact pair force norm 6.705034659E-22 and criterion 6.705034759E-23.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 104
Max. Penetration of 0 has been detected between contact element 79207 and target element 80071.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 79210 and target element 80074.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 79210 and target element 80074.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 105
Max. Penetration of 0 has been detected between contact element 79207
and target element 80071.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 79210 and target element 80074.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 79210 and target element 80074.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.

Contact pair force norm 1.896455415E-20 and criterion 1.896455443E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 108
Max. Penetration of 0 has been detected between contact element 81415
and target element 82279.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 81417 and target element 82281.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 81417 and target element 82281.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.
****

****
SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 109
Max. Penetration of 0 has been detected between contact element 81415
and target element 82279.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 81417 and target element 82281.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 81417 and target element 82281.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target elements.
Max. Pressure/force 5.569911896E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.9345397.
Min. Tangential stiffness 94.9345397.
Contact pair force norm 1.326182457E-20 and criterion 1.326182476E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 112
Max. Penetration of 0 has been detected between contact element 83623 and target element 84487.

Max. Geometrical gap of 1.136868377E-13 has been detected between contact element 83660 and target element 84524.

Max. Geometrical penetration of -1.136868377E-13 has been detected between contact element 83660 and target element 84524.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.579378303E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.7734664.
Min. Tangential stiffness 94.7734664.
Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 113
Max. Penetration of 0 has been detected between contact element 83623
and target element 84487.

Max. Geometrical gap of 1.136868377E-13 has been detected between
contact element 83660 and target element 84524.

Max. Geometrical penetration of -1.136868377E-13 has been detected
between contact element 83660 and target element 84524.
For total 864 contact elements, there are 864 elements are in contact.
There are 432 elements are in sticking.
Contacting area 1070000.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 15 target
elements.
Max. Pressure/force 5.579378303E-12.
Max. Normal stiffness 126.
Min. Normal stiffness 126.
Max. Tangential stiffness 94.7734664.
Min. Tangential stiffness 94.7734664.

Contact pair force norm 2.265256433E-20 and criterion 2.265256466E-21.

****

********** PRECISE MASS SUMMARY **********

TOTAL RIGID BODY MASS MATRIX ABOUT ORIGIN

Translational mass			Coupled translational/rotational mass		
3.3560	0.0000	0.0000	0.0000	7475.8	-1988.9
0.0000	3.3560	0.0000	-7475.8	0.0000	7069.6
0.0000	0.0000	3.3560	1988.9	-7069.6	0.0000

Rotational mass (inertia)		
0.20402E+08	-0.42220E+07	-0.15737E+08
-0.42220E+07	0.35942E+08	-0.44333E+07
-0.15737E+08	-0.44333E+07	0.18717E+08

TOTAL MASS = 3.3560

The mass principal axes coincide with the global Cartesian axes

CENTER OF MASS (X,Y,Z)= 2106.5 592.63 2227.6

TOTAL INERTIA ABOUT CENTER OF MASS

0.25701E+07	-32350.	10968.
-32350.	0.43967E+07	-2919.1
10968.	-2919.1	0.26461E+07

PRINCIPAL INERTIAS = 0.25680E+07 0.43972E+07 0.26476E+07

ORIENTATION VECTORS OF THE INERTIA PRINCIPAL AXES IN GLOBAL CARTESIAN

(0.990, 0.017,-0.138) (-0.018, 1.000,-0.002) (0.138, 0.004, 0.990)

*** MASS SUMMARY BY ELEMENT TYPE ***

TYPE	MASS
1	0.250000E-02
2	0.250000E-02
3	0.700000E-02
4	0.290000E-01
5	0.107000
6	0.290000E-01
7	0.107000
8	0.290000E-01
9	0.107000
10	0.290000E-01
11	0.107000
12	0.290000E-01
13	0.107000
14	0.290000E-01
15	0.107000
16	0.290000E-01
17	0.107000
18	0.290000E-01
19	0.107000
20	0.290000E-01
21	0.107000
22	0.290000E-01
23	0.107000
24	0.290000E-01
25	0.107000
26	0.290000E-01
27	0.107000
28	0.290000E-01
29	0.107000

30 0.290000E-01

31 0.107000

32 0.290000E-01

33 0.107000

34 0.290000E-01

35 0.107000

36 0.146000

37 0.146000

38 0.146000

39 0.146000

40 0.146000

41 0.146000

42 0.146000

43 0.146000

Range of element maximum matrix coefficients in global coordinates

Maximum = 58045.2675 at element 216.

Minimum = 13640.2127 at element 2017.

*** ELEMENT MATRIX FORMULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.000	0.000000
2	52	SOLID186	0.047	0.000901
3	140	SOLID186	0.062	0.000446
4	120	SOLID186	0.031	0.000260
5	432	SOLID186	0.125	0.000289
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.219	0.000506
8	120	SOLID186	0.000	0.000000
9	432	SOLID186	0.141	0.000326
10	120	SOLID186	0.031	0.000260

11	432	SOLID186	0.078	0.000181
12	120	SOLID186	0.047	0.000391
13	432	SOLID186	0.078	0.000181
14	120	SOLID186	0.078	0.000651
15	432	SOLID186	0.109	0.000253
16	120	SOLID186	0.062	0.000521
17	432	SOLID186	0.094	0.000217
18	120	SOLID186	0.031	0.000260
19	432	SOLID186	0.125	0.000289
20	120	SOLID186	0.016	0.000130
21	432	SOLID186	0.172	0.000398
22	120	SOLID186	0.016	0.000130
23	432	SOLID186	0.078	0.000181
24	120	SOLID186	0.031	0.000260
25	432	SOLID186	0.125	0.000289
26	120	SOLID186	0.031	0.000260
27	432	SOLID186	0.031	0.000072
28	120	SOLID186	0.047	0.000391
29	432	SOLID186	0.094	0.000217
30	120	SOLID186	0.078	0.000651
31	432	SOLID186	0.062	0.000145
32	120	SOLID186	0.062	0.000521
33	432	SOLID186	0.109	0.000253
34	120	SOLID186	0.000	0.000000
35	432	SOLID186	0.188	0.000434
36	588	SOLID186	0.125	0.000213
37	588	SOLID186	0.266	0.000452
38	588	SOLID186	0.125	0.000213
39	588	SOLID186	0.141	0.000239
40	588	SOLID186	0.109	0.000186
41	588	SOLID186	0.156	0.000266
42	588	SOLID186	0.125	0.000213

43	588	SOLID186	0.094	0.000159
44	109	CONTA174	0.016	0.000143
45	109	TARGE170	0.000	0.000000
46	109	CONTA174	0.000	0.000000
47	109	TARGE170	0.000	0.000000
48	290	CONTA174	0.000	0.000000
49	290	TARGE170	0.000	0.000000
50	240	CONTA174	0.094	0.000391
51	240	TARGE170	0.000	0.000000
52	864	CONTA174	0.172	0.000199
53	864	TARGE170	0.000	0.000000
54	240	CONTA174	0.031	0.000130
55	240	TARGE170	0.000	0.000000
56	864	CONTA174	0.250	0.000289
57	864	TARGE170	0.000	0.000000
58	240	CONTA174	0.000	0.000000
59	240	TARGE170	0.000	0.000000
60	864	CONTA174	0.094	0.000109
61	864	TARGE170	0.000	0.000000
62	240	CONTA174	0.031	0.000130
63	240	TARGE170	0.000	0.000000
64	864	CONTA174	0.141	0.000163
65	864	TARGE170	0.000	0.000000
66	240	CONTA174	0.031	0.000130
67	240	TARGE170	0.000	0.000000
68	864	CONTA174	0.062	0.000072
69	864	TARGE170	0.000	0.000000
70	240	CONTA174	0.000	0.000000
71	240	TARGE170	0.000	0.000000
72	864	CONTA174	0.109	0.000127
73	864	TARGE170	0.000	0.000000
74	240	CONTA174	0.062	0.000260

75	240	TARGE170	0.000	0.000000
76	864	CONTA174	0.188	0.000217
77	864	TARGE170	0.000	0.000000
78	240	CONTA174	0.000	0.000000
79	240	TARGE170	0.000	0.000000
80	864	CONTA174	0.078	0.000090
81	864	TARGE170	0.000	0.000000
82	240	CONTA174	0.062	0.000260
83	240	TARGE170	0.000	0.000000
84	864	CONTA174	0.250	0.000289
85	864	TARGE170	0.000	0.000000
86	240	CONTA174	0.031	0.000130
87	240	TARGE170	0.000	0.000000
88	864	CONTA174	0.094	0.000109
89	864	TARGE170	0.000	0.000000
90	240	CONTA174	0.047	0.000195
91	240	TARGE170	0.000	0.000000
92	864	CONTA174	0.141	0.000163
93	864	TARGE170	0.000	0.000000
94	240	CONTA174	0.016	0.000065
95	240	TARGE170	0.000	0.000000
96	864	CONTA174	0.172	0.000199
97	864	TARGE170	0.000	0.000000
98	240	CONTA174	0.031	0.000130
99	240	TARGE170	0.000	0.000000
100	864	CONTA174	0.109	0.000127
101	864	TARGE170	0.000	0.000000
102	240	CONTA174	0.031	0.000130
103	240	TARGE170	0.000	0.000000
104	864	CONTA174	0.094	0.000109
105	864	TARGE170	0.000	0.000000
106	240	CONTA174	0.016	0.000065

```
     107       240  TARGE170      0.000   0.000000
     108       864  CONTA174      0.234   0.000271
     109       864  TARGE170      0.000   0.000000
     110       240  CONTA174      0.078   0.000326
     111       240  TARGE170      0.000   0.000000
     112       864  CONTA174      0.172   0.000199
     113       864  TARGE170      0.000   0.000000
     114      1176  CONTA174      0.156   0.000133
     115      1176  TARGE170      0.000   0.000000
     116      1176  CONTA174      0.125   0.000106
     117      1176  TARGE170      0.000   0.000000
     118      1176  CONTA174      0.156   0.000133
     119      1176  TARGE170      0.000   0.000000
     120      1176  CONTA174      0.125   0.000106
     121      1176  TARGE170      0.000   0.000000
     122      1176  CONTA174      0.172   0.000146
     123      1176  TARGE170      0.000   0.000000
     124      1176  CONTA174      0.141   0.000120
     125      1176  TARGE170      0.000   0.000000
     126      1176  CONTA174      0.203   0.000173
     127      1176  TARGE170      0.000   0.000000
     128       244  SURF154       0.000   0.000000
 Time at end of element matrix formulation CP = 13.28125.

 ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.rdb
  FOR POSSIBLE RESUME FROM THIS POINT
    FORCE CONVERGENCE VALUE  =   1474.      CRITERION=   7.371

 *** NOTE ***                            CP =      14.547   TIME= 12:52:48
 The initial memory allocation (-m) has been exceeded.
  Supplemental memory allocations are being used.
```

DISTRIBUTED SPARSE MATRIX DIRECT SOLVER.
Number of equations = 333228, Maximum wavefront = 243

Memory allocated on only this MPI rank (rank 0)

Equation solver memory allocated = 697.820 MB
Equation solver memory required for in-core mode = 1661.395 MB
Equation solver memory required for out-of-core mode = 678.117 MB
Total (solver and non-solver) memory allocated = 2739.995 MB

Total memory summed across all MPI ranks on this machines

Equation solver memory allocated = 1186.716 MB
Equation solver memory required for in-core mode = 3130.663 MB
Equation solver memory required for out-of-core mode = 1151.178 MB
Total (solver and non-solver) memory allocated = 3872.287 MB

*** WARNING *** CP = 17.203 TIME= 12:52:54
The Distributed Sparse Matrix Solver is currently running in the
out-of-core memory mode. This memory mode may provide significantly
worse performance compared to the in-core memory mode, depending on
the amount of available system memory and I/O speed. Please monitor
the solver performance to ensure that the large amount of I/O to the
solver files does not create a bottleneck for performance.
curEqn= 123812 totEqn= 164601 Job CP sec= 22.578
Factor Done= 50% Factor Wall sec= 9.650 rate= 10.2 GFlops
curEqn= 164601 totEqn= 164601 Job CP sec= 26.625
Factor Done= 100% Factor Wall sec= 16.926 rate= 11.6 GFlops
Distributed sparse solver maximum pivot= 129631.949 at node 78275 UY.
Distributed sparse solver minimum pivot= 2463.72188 at node 11546 UY.

Distributed sparse solver minimum pivot in absolute value= 2463.72188

at node 11546 UY.

DISP CONVERGENCE VALUE = 0.1475 CRITERION= 0.7373E-02

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1475

DISP CONVERGENCE VALUE = 0.1475 CRITERION= 0.7373E-02

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1475

FORCE CONVERGENCE VALUE = 8492. CRITERION= 10.12

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6575E-01

DISP CONVERGENCE VALUE = 0.6575E-01 CRITERION= 0.1059E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.6575E-01

FORCE CONVERGENCE VALUE = 0.5421 CRITERION= 10.12 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.6292E-04

DISP CONVERGENCE VALUE = 0.6292E-04 CRITERION= 0.1059E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.6292E-04

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** ELEMENT RESULT CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.016	0.000300
2	52	SOLID186	0.016	0.000300
3	140	SOLID186	0.031	0.000223
4	120	SOLID186	0.016	0.000130
5	432	SOLID186	0.047	0.000109
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.047	0.000109
8	120	SOLID186	0.016	0.000130
9	432	SOLID186	0.094	0.000217
10	120	SOLID186	0.016	0.000130
11	432	SOLID186	0.047	0.000109
12	120	SOLID186	0.000	0.000000
13	432	SOLID186	0.109	0.000253

14	120	SOLID186	0.000	0.000000
15	432	SOLID186	0.047	0.000109
16	120	SOLID186	0.000	0.000000
17	432	SOLID186	0.031	0.000072
18	120	SOLID186	0.062	0.000521
19	432	SOLID186	0.062	0.000145
20	120	SOLID186	0.016	0.000130
21	432	SOLID186	0.109	0.000253
22	120	SOLID186	0.031	0.000260
23	432	SOLID186	0.016	0.000036
24	120	SOLID186	0.000	0.000000
25	432	SOLID186	0.016	0.000036
26	120	SOLID186	0.016	0.000130
27	432	SOLID186	0.078	0.000181
28	120	SOLID186	0.016	0.000130
29	432	SOLID186	0.109	0.000253
30	120	SOLID186	0.016	0.000130
31	432	SOLID186	0.094	0.000217
32	120	SOLID186	0.016	0.000130
33	432	SOLID186	0.094	0.000217
34	120	SOLID186	0.031	0.000260
35	432	SOLID186	0.016	0.000036
36	588	SOLID186	0.094	0.000159
37	588	SOLID186	0.094	0.000159
38	588	SOLID186	0.109	0.000186
39	588	SOLID186	0.078	0.000133
40	588	SOLID186	0.047	0.000080
41	588	SOLID186	0.047	0.000080
42	588	SOLID186	0.078	0.000133
43	588	SOLID186	0.094	0.000159
44	109	CONTA174	0.000	0.000000
46	109	CONTA174	0.016	0.000143

48	290	CONTA174	0.062	0.000216
50	240	CONTA174	0.000	0.000000
52	864	CONTA174	0.047	0.000054
54	240	CONTA174	0.016	0.000065
56	864	CONTA174	0.047	0.000054
58	240	CONTA174	0.000	0.000000
60	864	CONTA174	0.109	0.000127
62	240	CONTA174	0.000	0.000000
64	864	CONTA174	0.031	0.000036
66	240	CONTA174	0.016	0.000065
68	864	CONTA174	0.062	0.000072
70	240	CONTA174	0.000	0.000000
72	864	CONTA174	0.016	0.000018
74	240	CONTA174	0.016	0.000065
76	864	CONTA174	0.047	0.000054
78	240	CONTA174	0.016	0.000065
80	864	CONTA174	0.016	0.000018
82	240	CONTA174	0.016	0.000065
84	864	CONTA174	0.000	0.000000
86	240	CONTA174	0.000	0.000000
88	864	CONTA174	0.031	0.000036
90	240	CONTA174	0.000	0.000000
92	864	CONTA174	0.047	0.000054
94	240	CONTA174	0.000	0.000000
96	864	CONTA174	0.031	0.000036
98	240	CONTA174	0.000	0.000000
100	864	CONTA174	0.016	0.000018
102	240	CONTA174	0.016	0.000065
104	864	CONTA174	0.047	0.000054
106	240	CONTA174	0.000	0.000000
108	864	CONTA174	0.047	0.000054
110	240	CONTA174	0.016	0.000065

112	864	CONTA174	0.031	0.000036
114	1176	CONTA174	0.016	0.000013
116	1176	CONTA174	0.078	0.000066
118	1176	CONTA174	0.047	0.000040
120	1176	CONTA174	0.016	0.000013
122	1176	CONTA174	0.016	0.000013
124	1176	CONTA174	0.047	0.000040
126	1176	CONTA174	0.016	0.000013
128	244	SURF154	0.000	0.000000

*** NODAL LOAD CALCULATION TIMES

TYPE	NUMBER	ENAME	TOTAL CP	AVE CP
1	52	SOLID186	0.000	0.000000
2	52	SOLID186	0.000	0.000000
3	140	SOLID186	0.000	0.000000
4	120	SOLID186	0.000	0.000000
5	432	SOLID186	0.000	0.000000
6	120	SOLID186	0.000	0.000000
7	432	SOLID186	0.000	0.000000
8	120	SOLID186	0.000	0.000000
9	432	SOLID186	0.000	0.000000
10	120	SOLID186	0.000	0.000000
11	432	SOLID186	0.000	0.000000
12	120	SOLID186	0.000	0.000000
13	432	SOLID186	0.000	0.000000
14	120	SOLID186	0.000	0.000000
15	432	SOLID186	0.000	0.000000
16	120	SOLID186	0.000	0.000000
17	432	SOLID186	0.000	0.000000
18	120	SOLID186	0.000	0.000000
19	432	SOLID186	0.016	0.000036

20	120	SOLID186	0.000	0.000000
21	432	SOLID186	0.000	0.000000
22	120	SOLID186	0.000	0.000000
23	432	SOLID186	0.016	0.000036
24	120	SOLID186	0.016	0.000130
25	432	SOLID186	0.000	0.000000
26	120	SOLID186	0.000	0.000000
27	432	SOLID186	0.000	0.000000
28	120	SOLID186	0.000	0.000000
29	432	SOLID186	0.000	0.000000
30	120	SOLID186	0.000	0.000000
31	432	SOLID186	0.000	0.000000
32	120	SOLID186	0.000	0.000000
33	432	SOLID186	0.016	0.000036
34	120	SOLID186	0.000	0.000000
35	432	SOLID186	0.016	0.000036
36	588	SOLID186	0.016	0.000027
37	588	SOLID186	0.016	0.000027
38	588	SOLID186	0.000	0.000000
39	588	SOLID186	0.016	0.000027
40	588	SOLID186	0.000	0.000000
41	588	SOLID186	0.016	0.000027
42	588	SOLID186	0.000	0.000000
43	588	SOLID186	0.000	0.000000
44	109	CONTA174	0.000	0.000000
46	109	CONTA174	0.000	0.000000
48	290	CONTA174	0.000	0.000000
50	240	CONTA174	0.000	0.000000
52	864	CONTA174	0.016	0.000018
54	240	CONTA174	0.000	0.000000
56	864	CONTA174	0.000	0.000000
58	240	CONTA174	0.000	0.000000

60	864	CONTA174	0.000	0.000000
62	240	CONTA174	0.000	0.000000
64	864	CONTA174	0.031	0.000036
66	240	CONTA174	0.000	0.000000
68	864	CONTA174	0.000	0.000000
70	240	CONTA174	0.000	0.000000
72	864	CONTA174	0.000	0.000000
74	240	CONTA174	0.000	0.000000
76	864	CONTA174	0.000	0.000000
78	240	CONTA174	0.000	0.000000
80	864	CONTA174	0.000	0.000000
82	240	CONTA174	0.000	0.000000
84	864	CONTA174	0.031	0.000036
86	240	CONTA174	0.000	0.000000
88	864	CONTA174	0.000	0.000000
90	240	CONTA174	0.000	0.000000
92	864	CONTA174	0.000	0.000000
94	240	CONTA174	0.000	0.000000
96	864	CONTA174	0.000	0.000000
98	240	CONTA174	0.000	0.000000
100	864	CONTA174	0.000	0.000000
102	240	CONTA174	0.000	0.000000
104	864	CONTA174	0.000	0.000000
106	240	CONTA174	0.016	0.000065
108	864	CONTA174	0.000	0.000000
110	240	CONTA174	0.000	0.000000
112	864	CONTA174	0.016	0.000018
114	1176	CONTA174	0.000	0.000000
116	1176	CONTA174	0.016	0.000013
118	1176	CONTA174	0.016	0.000013
120	1176	CONTA174	0.016	0.000013
122	1176	CONTA174	0.016	0.000013

```
     124      1176  CONTA174      0.016   0.000013
     126      1176  CONTA174      0.016   0.000013
     128       244  SURF154       0.000   0.000000
 *** LOAD STEP     1   SUBSTEP     1  COMPLETED.    CUM ITER =      3
 *** TIME =  0.200000        TIME INC =  0.200000
 *** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1743E-02
 *** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED

    FORCE CONVERGENCE VALUE  =   1040.      CRITERION=   19.10
    DISP CONVERGENCE VALUE   =  0.7119E-01  CRITERION=  0.1059E-01
   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.7119E-01
    DISP CONVERGENCE VALUE   =  0.7119E-01  CRITERION=  0.1059E-01
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.7119E-01
    FORCE CONVERGENCE VALUE  =   1.537     CRITERION=   17.38    <<< CONVERGED
   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1772E-03
    DISP CONVERGENCE VALUE   =  0.1761E-03  CRITERION=  0.1059E-01 <<<
CONVERGED
    LINE SEARCH PARAMETER =  0.9940     SCALED MAX DOF INC =  0.1761E-03
    FORCE CONVERGENCE VALUE  =  0.1817     CRITERION=   17.38    <<< CONVERGED
   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
 *** LOAD STEP     1   SUBSTEP     2  COMPLETED.    CUM ITER =      5
 *** TIME =  0.400000        TIME INC =  0.200000
 *** AUTO TIME STEP:  NEXT TIME INC = 0.30000      INCREASED (FACTOR = 1.5000)

    FORCE CONVERGENCE VALUE  =   563.7      CRITERION=   29.12
    DISP CONVERGENCE VALUE   =  0.5784E-01  CRITERION=  0.1512E-01
   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.5784E-01
    DISP CONVERGENCE VALUE   =  0.5784E-01  CRITERION=  0.1512E-01
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.5784E-01
    FORCE CONVERGENCE VALUE  =   18.08     CRITERION=   30.56    <<< CONVERGED
   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.3075E-03
    DISP CONVERGENCE VALUE   =  0.2582E-03  CRITERION=  0.1512E-01 <<<
CONVERGED
```

```
    LINE SEARCH PARAMETER =  0.8398     SCALED MAX DOF INC =  0.2582E-03
    FORCE CONVERGENCE VALUE  =   5.447     CRITERION=   30.56    <<< CONVERGED
   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
*** LOAD STEP     1   SUBSTEP     3  COMPLETED.    CUM ITER =      7
*** TIME =  0.700000         TIME INC =  0.300000
*** AUTO STEP TIME:  NEXT TIME INC = 0.30000      UNCHANGED

    FORCE CONVERGENCE VALUE  =   689.8      CRITERION=   44.10
    DISP CONVERGENCE VALUE   =  0.2318E-01  CRITERION=  0.1564E-01
   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.2318E-01
    DISP CONVERGENCE VALUE   =  0.2318E-01  CRITERION=  0.1564E-01
    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.2318E-01
    FORCE CONVERGENCE VALUE  =   43.30     CRITERION=   44.78    <<< CONVERGED
   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.4239E-03
   DISP  CONVERGENCE  VALUE      =   0.2816E-03    CRITERION=    0.1564E-01  <<<
CONVERGED
    LINE SEARCH PARAMETER =  0.6643     SCALED MAX DOF INC = -0.2816E-03
    FORCE CONVERGENCE VALUE  =   16.09     CRITERION=   44.78    <<< CONVERGED
   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
*** LOAD STEP     1   SUBSTEP     4  COMPLETED.    CUM ITER =      9
*** TIME =   1.00000         TIME INC =  0.300000


*** MAPDL BINARY FILE STATISTICS
 BUFFER SIZE USED= 16384
     154.938 MB WRITTEN ON ELEMENT SAVED DATA FILE: file0.esav
     223.000 MB WRITTEN ON ASSEMBLED MATRIX FILE: file0.full
      51.125 MB WRITTEN ON RESULTS FILE: file0.rst
********** Write FE CONNECTORS *********

WRITE OUT CONSTRAINT EQUATIONS TO FILE= file.ce
************************************************
********** FINISHED SOLVE FOR LS 1 *************
```

```
************************************************
****************** SOLVE FOR LS 2 OF 14 ****************
*** Set Displacements ***

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE        1 TO     101626 STEP         1

     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE      1 SUBSTEPS AS A MINIMUM

TIME=  2.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.


WRITE ALL  ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES
```

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 234.734 TIME= 13:00:52
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 234.750 TIME= 13:00:52
The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   13:00:52 SEP 04, 2024 CP=   234.875

kuca_prelim_2--Static Structural (C5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 2
TIME AT END OF THE LOAD STEP. 2.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
  ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
  ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.2231E+06 CRITERION= 1116.

DISP CONVERGENCE VALUE = 0.1272 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1272

DISP CONVERGENCE VALUE = 0.1272 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1272

FORCE CONVERGENCE VALUE = 402.0 CRITERION= 50.60

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5715E-02

DISP CONVERGENCE VALUE = 0.5707E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9986 SCALED MAX DOF INC = -0.5707E-02

FORCE CONVERGENCE VALUE = 19.29 CRITERION= 50.60 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 2 SUBSTEP 1 COMPLETED. CUM ITER = 11

*** TIME = 1.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.1283E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 0.1047E+05 CRITERION= 48.63

DISP CONVERGENCE VALUE = 0.1054 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1054

DISP CONVERGENCE VALUE = 0.1052 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9979 SCALED MAX DOF INC = 0.1052

FORCE CONVERGENCE VALUE = 583.7 CRITERION= 51.04

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1985E-02

DISP CONVERGENCE VALUE = 0.1967E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9910 SCALED MAX DOF INC = 0.1967E-02

FORCE CONVERGENCE VALUE = 31.67 CRITERION= 51.04 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3388E-03

DISP CONVERGENCE VALUE = 0.3388E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.3388E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 2 SUBSTEP 2 COMPLETED. CUM ITER = 14

*** TIME = 1.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2202. CRITERION= 52.46

DISP CONVERGENCE VALUE = 0.3158E-01 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3158E-01

DISP CONVERGENCE VALUE = 0.3129E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9907 SCALED MAX DOF INC = 0.3129E-01

FORCE CONVERGENCE VALUE = 325.3 CRITERION= 51.57

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1482E-02

DISP CONVERGENCE VALUE = 0.1056E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7127 SCALED MAX DOF INC = 0.1056E-02

FORCE CONVERGENCE VALUE = 112.5 CRITERION= 51.57

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7171E-03

DISP CONVERGENCE VALUE = 0.3690E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5146 SCALED MAX DOF INC = -0.3690E-03

FORCE CONVERGENCE VALUE = 46.26 CRITERION= 51.57 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2065E-03

DISP CONVERGENCE VALUE = 0.2065E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2065E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 2 SUBSTEP 3 COMPLETED. CUM ITER = 18

*** TIME = 1.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 2001. CRITERION= 52.31

DISP CONVERGENCE VALUE = 0.2730E-01 CRITERION= 0.1564E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2730E-01

DISP CONVERGENCE VALUE = 0.2714E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9941 SCALED MAX DOF INC = 0.2714E-01

FORCE CONVERGENCE VALUE = 131.8 CRITERION= 51.96

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1909E-02

DISP CONVERGENCE VALUE = 0.9320E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4883 SCALED MAX DOF INC = 0.9320E-03

FORCE CONVERGENCE VALUE = 34.14 CRITERION= 51.96 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2406E-03

DISP CONVERGENCE VALUE = 0.2406E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2406E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 2 SUBSTEP 4 COMPLETED. CUM ITER = 21

*** TIME = 2.00000 TIME INC = 0.300000

****

********** FINISHED SOLVE FOR LS 2 **********

****

********** SOLVE FOR LS 3 OF 14 **********

*** Set Displacements ***

ALL SELECT FOR ITEM=ELEM COMPONENT=
 IN RANGE   1 TO   101626 STEP   1

    66832 ELEMENTS (OF   66832 DEFINED) SELECTED BY ESEL COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE   5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE   1 SUBSTEPS AS A MINIMUM

TIME= 3.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE   COMMAND *****

*** WARNING ***   CP =   506.734   TIME= 13:10:57
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE ***   CP =   506.766   TIME= 13:10:57
The step data was checked and warning messages were found.
 Please review output or errors file (C:\Docs\Posao\RE-forMS\4.
Godina\ANSYS modeli\Kuce -

preliminarno_ProjectScratch\Scr2455\file0.err) for these warning
messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   13:10:57 SEP 04, 2024 CP=   506.891

kuca_prelim_2--Static Structural (C5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 3
TIME AT END OF THE LOAD STEP. 3.0000
AUTOMATIC TIME STEPPING . . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . . NO
STRESS-STIFFENING . . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS X Y Z
  ACEL 0.0000 9806.6 0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
  ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
DATABASE OUTPUT CONTROLS
  ITEM FREQUENCY COMPONENT

```
 ALL       NONE
 NSOL      ALL
 RSOL      ALL
 EANG      ALL
 ETMP      ALL
 VENG      ALL
 STRS      ALL
 EPEL      ALL
 EPPL      ALL
 CONT      ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


  FORCE CONVERGENCE VALUE  =  0.4461E+06  CRITERION=   2232.
  DISP CONVERGENCE VALUE   =  0.2561      CRITERION=  0.1564E-01
 EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.2561
  DISP CONVERGENCE VALUE   =  0.2561      CRITERION=  0.1564E-01
  LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.2561
  FORCE CONVERGENCE VALUE  =   133.2      CRITERION=   51.02
 EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1761E-02
  DISP  CONVERGENCE  VALUE      =    0.1758E-02    CRITERION=    0.1564E-01  <<<
CONVERGED
  LINE SEARCH PARAMETER =  0.9984     SCALED MAX DOF INC =  0.1758E-02
  FORCE CONVERGENCE VALUE  =   5.083     CRITERION=   51.02    <<< CONVERGED
 >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
*** LOAD STEP     3   SUBSTEP     1  COMPLETED.    CUM ITER =     23
*** TIME =   2.20000         TIME INC =  0.200000
*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.4854E-01
*** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


  FORCE CONVERGENCE VALUE  =  0.1379E+05  CRITERION=   53.03
  DISP CONVERGENCE VALUE   =  0.4982E-01  CRITERION=  0.1564E-01
```

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4982E-01

DISP CONVERGENCE VALUE = 0.4979E-01 CRITERION= 0.1564E-01

LINE SEARCH PARAMETER = 0.9994 SCALED MAX DOF INC = 0.4979E-01

FORCE CONVERGENCE VALUE = 140.0 CRITERION= 51.07

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1365E-02

DISP CONVERGENCE VALUE = 0.1228E-02 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8998 SCALED MAX DOF INC = 0.1228E-02

FORCE CONVERGENCE VALUE = 29.73 CRITERION= 51.07 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2284E-03

DISP CONVERGENCE VALUE = 0.2284E-03 CRITERION= 0.1564E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.2284E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 3 SUBSTEP 2 COMPLETED. CUM ITER = 26

*** TIME = 2.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3145. CRITERION= 52.80

DISP CONVERGENCE VALUE = 0.4080E-01 CRITERION= 0.1913E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.4080E-01

DISP CONVERGENCE VALUE = 0.4022E-01 CRITERION= 0.1913E-01

LINE SEARCH PARAMETER = 0.9857 SCALED MAX DOF INC = -0.4022E-01

FORCE CONVERGENCE VALUE = 508.4 CRITERION= 51.89

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3299E-02

DISP CONVERGENCE VALUE = 0.2973E-02 CRITERION= 0.1913E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9012 SCALED MAX DOF INC = 0.2973E-02

FORCE CONVERGENCE VALUE = 115.6 CRITERION= 51.88

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1667E-02

DISP CONVERGENCE VALUE = 0.6791E-03 CRITERION= 0.1913E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4074 SCALED MAX DOF INC = 0.6791E-03

FORCE CONVERGENCE VALUE = 32.53 CRITERION= 51.88 <<< CONVERGED

```
   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.3025E-03

    DISP  CONVERGENCE  VALUE     =   0.3025E-03   CRITERION=   0.1913E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.3025E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

 *** LOAD STEP     3   SUBSTEP     3  COMPLETED.    CUM ITER =     30

 *** TIME =   2.70000         TIME INC =  0.300000

 *** AUTO STEP TIME:  NEXT TIME INC = 0.30000      UNCHANGED


    FORCE CONVERGENCE VALUE  =   4047.      CRITERION=   53.41

    DISP CONVERGENCE VALUE   =  0.6098E-01  CRITERION=  0.1914E-01

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6098E-01

    DISP CONVERGENCE VALUE   =  0.6078E-01  CRITERION=  0.1914E-01

    LINE SEARCH PARAMETER =  0.9967     SCALED MAX DOF INC =  0.6078E-01

    FORCE CONVERGENCE VALUE  =   202.0      CRITERION=   52.57

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2024E-02

    DISP  CONVERGENCE  VALUE     =   0.1323E-02   CRITERION=   0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.6535     SCALED MAX DOF INC =  0.1323E-02

    FORCE CONVERGENCE VALUE  =   67.85      CRITERION=   52.57

   EQUIL ITER   3 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.6452E-03

    DISP  CONVERGENCE  VALUE     =   0.3870E-03   CRITERION=   0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.5998     SCALED MAX DOF INC =  0.3870E-03

    FORCE CONVERGENCE VALUE  =   27.36      CRITERION=   52.57    <<< CONVERGED

   EQUIL ITER   4 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2082E-03

    DISP  CONVERGENCE  VALUE     =   0.2082E-03   CRITERION=   0.1914E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.2082E-03

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

 *** LOAD STEP     3   SUBSTEP     4  COMPLETED.    CUM ITER =     34

 *** TIME =   3.00000         TIME INC =  0.300000

 ************************************************

 ********** FINISHED SOLVE FOR LS 3 **********
```

```
************************************************
****************** SOLVE FOR LS 4 OF 14 ****************
*** Set Displacements ***

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE        1 TO     101626 STEP         1

     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE      1 SUBSTEPS AS A MINIMUM

TIME=  4.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.


WRITE ALL  ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES
```

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE   COMMAND *****

*** WARNING ***   CP =   811.016   TIME= 13:21:48
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE ***   CP =   811.031   TIME= 13:21:48
The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2   24.2   ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64   13:21:48 SEP 04, 2024 CP=   811.172

kuca_prelim_2--Static Structural (C5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 4
TIME AT END OF THE LOAD STEP. 4.0000
AUTOMATIC TIME STEPPING . . . . . ON
  INITIAL NUMBER OF SUBSTEPS 5
  MAXIMUM NUMBER OF SUBSTEPS 1000
  MINIMUM NUMBER OF SUBSTEPS 1
MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . 1000
NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)
STEP CHANGE BOUNDARY CONDITIONS . . . . . NO
STRESS-STIFFENING . . . . . ON
TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)
CONVERGENCE CONTROLS. . . . . .USE DEFAULTS
INERTIA LOADS   X   Y   Z
  ACEL 0.0000   9806.6   0.0000
COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH
                                ACTIVE MAT. NONLINEARITIES
PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.6693E+06 CRITERION= 3347.

DISP CONVERGENCE VALUE = 0.3888 CRITERION= 0.1944E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3888

DISP CONVERGENCE VALUE = 0.3888 CRITERION= 0.1944E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.3888

FORCE CONVERGENCE VALUE = 49.63 CRITERION= 51.16 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1641E-02

DISP CONVERGENCE VALUE = 0.1641E-02 CRITERION= 0.1945E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1641E-02

FORCE CONVERGENCE VALUE = 0.8061 CRITERION= 51.15 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 4 SUBSTEP 1 COMPLETED. CUM ITER = 36

*** TIME = 3.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.4217E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000 UNCHANGED

FORCE CONVERGENCE VALUE = 7066. CRITERION= 51.28

DISP CONVERGENCE VALUE = 0.2163 CRITERION= 0.1945E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2163

DISP CONVERGENCE VALUE = 0.2119 CRITERION= 0.1945E-01

LINE SEARCH PARAMETER = 0.9797 SCALED MAX DOF INC = 0.2119

FORCE CONVERGENCE VALUE = 2490. CRITERION= 51.56

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.9499E-02

DISP CONVERGENCE VALUE = 0.9466E-02 CRITERION= 0.1945E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9964 SCALED MAX DOF INC = -0.9466E-02

FORCE CONVERGENCE VALUE = 43.47 CRITERION= 51.60 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1751E-02

DISP CONVERGENCE VALUE = 0.1751E-02 CRITERION= 0.1945E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1751E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 4 SUBSTEP 2 COMPLETED. CUM ITER = 39

*** TIME = 3.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 3549. CRITERION= 54.15

DISP CONVERGENCE VALUE = 0.7285E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7285E-01

DISP CONVERGENCE VALUE = 0.7245E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9945 SCALED MAX DOF INC = 0.7245E-01

FORCE CONVERGENCE VALUE = 277.9 CRITERION= 52.83

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4438E-02

DISP CONVERGENCE VALUE = 0.3053E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6879 SCALED MAX DOF INC = 0.3053E-02

FORCE CONVERGENCE VALUE = 91.56 CRITERION= 52.82

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.3524E-02

DISP CONVERGENCE VALUE = 0.1818E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5160 SCALED MAX DOF INC = -0.1818E-02

FORCE CONVERGENCE VALUE = 40.14 CRITERION= 52.82 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1205E-02

DISP CONVERGENCE VALUE = 0.1205E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.1205E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 3 COMPLETED. CUM ITER = 43

*** TIME = 3.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

FORCE CONVERGENCE VALUE = 3016. CRITERION= 54.64

DISP CONVERGENCE VALUE = 0.5626E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5626E-01

DISP CONVERGENCE VALUE = 0.5588E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9932 SCALED MAX DOF INC = 0.5588E-01

FORCE CONVERGENCE VALUE = 194.9 CRITERION= 53.79

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.8494E-02

DISP CONVERGENCE VALUE = 0.4822E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5677 SCALED MAX DOF INC = 0.4822E-02

FORCE CONVERGENCE VALUE = 66.52 CRITERION= 53.79

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1780E-02

DISP CONVERGENCE VALUE = 0.1180E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.6632 SCALED MAX DOF INC = -0.1180E-02

FORCE CONVERGENCE VALUE = 25.65 CRITERION= 53.79 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7424E-03

DISP CONVERGENCE VALUE = 0.7424E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.7424E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP 4 SUBSTEP 4 COMPLETED. CUM ITER = 47

*** TIME = 4.00000 TIME INC = 0.300000

```
************************************************
*************** FINISHED SOLVE FOR LS 4 *************
************************************************
****************** SOLVE FOR LS 5 OF 14 ****************
*** Set Displacements ***

ALL SELECT   FOR ITEM=ELEM COMPONENT=
 IN RANGE        1 TO     101626 STEP         1

     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.

PRINTOUT RESUMED BY /GOP

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE       5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL  DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
  USE   1000 SUBSTEPS AS A MAXIMUM
  USE      1 SUBSTEPS AS A MINIMUM

TIME=  5.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.


WRITE ALL  ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
  FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
  FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
```

FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 1116.500 TIME= 13:32:30
Material number 128 (used by element 101383) should normally have at
least one MP or one TB type command associated with it. Output of
energy by material may not be available.

*** NOTE *** CP = 1116.516 TIME= 13:32:30

The step data was checked and warning messages were found.

Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***

Ansys Mechanical Enterprise Academic Student

01055371 VERSION=WINDOWS x64 13:32:30 SEP 04, 2024 CP= 1116.625

kuca_prelim_2--Static Structural (C5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 5

TIME AT END OF THE LOAD STEP. 5.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH

ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	
EPPL	ALL	
CONT	ALL	

SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr

FORCE CONVERGENCE VALUE = 0.8924E+06 CRITERION= 4462.

DISP CONVERGENCE VALUE = 0.5185 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5185

DISP CONVERGENCE VALUE = 0.5185 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.5185

FORCE CONVERGENCE VALUE = 738.1 CRITERION= 51.59

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.9966E-02

DISP CONVERGENCE VALUE = 0.9937E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9971 SCALED MAX DOF INC = 0.9937E-02

FORCE CONVERGENCE VALUE = 16.64 CRITERION= 51.60 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 5 SUBSTEP 1 COMPLETED. CUM ITER = 49

*** TIME = 4.20000 TIME INC = 0.200000

*** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.3950E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.20000   UNCHANGED

FORCE CONVERGENCE VALUE = 8056.   CRITERION= 50.95

DISP CONVERGENCE VALUE = 0.2293   CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2293

DISP CONVERGENCE VALUE = 0.2277   CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9932   SCALED MAX DOF INC = -0.2277

FORCE CONVERGENCE VALUE = 1169.   CRITERION= 51.59

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1124E-01

DISP CONVERGENCE VALUE = 0.1109E-01 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9865   SCALED MAX DOF INC = 0.1109E-01

FORCE CONVERGENCE VALUE = 71.04   CRITERION= 51.60

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1815E-02

DISP CONVERGENCE VALUE = 0.9953E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5484   SCALED MAX DOF INC = -0.9953E-03

FORCE CONVERGENCE VALUE = 10.46   CRITERION= 51.60   <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1753E-03

DISP CONVERGENCE VALUE = 0.1753E-03 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000   SCALED MAX DOF INC = 0.1753E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 4

*** LOAD STEP   5 SUBSTEP   2 COMPLETED.   CUM ITER =   53

*** TIME = 4.40000   TIME INC = 0.200000

*** AUTO STEP TIME: NEXT TIME INC = 0.20000   UNCHANGED

FORCE CONVERGENCE VALUE = 1190.   CRITERION= 52.39

DISP CONVERGENCE VALUE = 0.5523E-01 CRITERION= 0.2873E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5523E-01

DISP CONVERGENCE VALUE = 0.5498E-01 CRITERION= 0.2873E-01

LINE SEARCH PARAMETER = 0.9955   SCALED MAX DOF INC = -0.5498E-01

FORCE CONVERGENCE VALUE = 136.7   CRITERION= 52.07

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1453E-02

DISP CONVERGENCE VALUE = 0.1250E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8602 SCALED MAX DOF INC = 0.1250E-02

FORCE CONVERGENCE VALUE = 29.20 CRITERION= 52.07 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1054E-02

DISP CONVERGENCE VALUE = 0.1054E-02 CRITERION= 0.2873E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1054E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 5 SUBSTEP 3 COMPLETED. CUM ITER = 56

*** TIME = 4.60000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2264. CRITERION= 53.42

DISP CONVERGENCE VALUE = 0.7217E-01 CRITERION= 0.3832E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.7217E-01

DISP CONVERGENCE VALUE = 0.7133E-01 CRITERION= 0.3832E-01

LINE SEARCH PARAMETER = 0.9883 SCALED MAX DOF INC = 0.7133E-01

FORCE CONVERGENCE VALUE = 267.0 CRITERION= 53.10

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.5360E-02

DISP CONVERGENCE VALUE = 0.4252E-02 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7934 SCALED MAX DOF INC = -0.4252E-02

FORCE CONVERGENCE VALUE = 79.08 CRITERION= 53.09

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5000E-02

DISP CONVERGENCE VALUE = 0.2233E-02 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.4466 SCALED MAX DOF INC = 0.2233E-02

FORCE CONVERGENCE VALUE = 32.69 CRITERION= 53.09 <<< CONVERGED

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8850E-03

DISP CONVERGENCE VALUE = 0.8850E-03 CRITERION= 0.3832E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.8850E-03

```
   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   4

 *** LOAD STEP     5   SUBSTEP     4  COMPLETED.    CUM ITER =     60

 *** TIME =   4.90000         TIME INC =  0.300000

 *** AUTO TIME STEP:  NEXT TIME INC = 0.10000      DECREASED (FACTOR = 0.3333)


    FORCE CONVERGENCE VALUE  =   707.4      CRITERION=   53.51

    DISP  CONVERGENCE  VALUE      =   0.2095E-01    CRITERION=    0.3832E-01  <<<
CONVERGED

   EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2095E-01

    DISP  CONVERGENCE  VALUE      =   0.2087E-01    CRITERION=    0.3832E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =  0.9961     SCALED MAX DOF INC =  0.2087E-01

    FORCE CONVERGENCE VALUE  =   40.50     CRITERION=   53.43    <<< CONVERGED

   EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC= -0.1563E-02

    DISP  CONVERGENCE  VALUE      =   0.1563E-02    CRITERION=    0.3832E-01  <<<
CONVERGED

    LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC = -0.1563E-02

    FORCE CONVERGENCE VALUE  =   19.96     CRITERION=   53.43    <<< CONVERGED

   >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2

 *** LOAD STEP     5   SUBSTEP     5  COMPLETED.    CUM ITER =     62

 *** TIME =   5.00000         TIME INC =  0.100000

 ***************************************************

 ********** FINISHED SOLVE FOR LS 5 *************

 ***************************************************

 ******************* SOLVE FOR LS 6 OF 14 ****************

 *** Set Displacements ***


 ALL SELECT   FOR ITEM=ELEM COMPONENT=

  IN RANGE        1 TO     101626 STEP         1


     66832  ELEMENTS (OF      66832  DEFINED) SELECTED BY  ESEL  COMMAND.


 PRINTOUT RESUMED BY /GOP
```

USE AUTOMATIC TIME STEPPING THIS LOAD STEP

USE 5 SUBSTEPS INITIALLY THIS LOAD STEP FOR ALL DEGREES OF FREEDOM
FOR AUTOMATIC TIME STEPPING:
USE 1000 SUBSTEPS AS A MAXIMUM
USE 1 SUBSTEPS AS A MINIMUM

TIME= 6.0000

ERASE THE CURRENT DATABASE OUTPUT CONTROL TABLE.

WRITE ALL ITEMS TO THE DATABASE WITH A FREQUENCY OF NONE
FOR ALL APPLICABLE ENTITIES

WRITE NSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE RSOL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EANG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE ETMP ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE VENG ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE STRS ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL

FOR ALL APPLICABLE ENTITIES

WRITE EPEL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE EPPL ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

WRITE CONT ITEMS TO THE DATABASE WITH A FREQUENCY OF ALL
FOR ALL APPLICABLE ENTITIES

USE A MAXIMUM OF 1000 EQUILIBRIUM ITERATIONS EACH SUBSTEP

***** MAPDL SOLVE COMMAND *****

*** WARNING *** CP = 1461.453 TIME= 13:44:40
Material number 128 (used by element 101383) should normally have at least one MP or one TB type command associated with it. Output of energy by material may not be available.

*** NOTE *** CP = 1461.484 TIME= 13:44:40
The step data was checked and warning messages were found.
Please review output or errors file (C:\Docs\Posao\RE-forMS\4. Godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455\file0.err) for these warning messages.

*** MAPDL - ENGINEERING ANALYSIS SYSTEM RELEASE 2024 R2 24.2 ***
Ansys Mechanical Enterprise Academic Student
01055371 VERSION=WINDOWS x64 13:44:40 SEP 04, 2024 CP= 1461.594

kuca_prelim_2--Static Structural (C5)

L O A D S T E P O P T I O N S

LOAD STEP NUMBER. 6

TIME AT END OF THE LOAD STEP. 6.0000

AUTOMATIC TIME STEPPING . . . . . ON

INITIAL NUMBER OF SUBSTEPS 5

MAXIMUM NUMBER OF SUBSTEPS 1000

MINIMUM NUMBER OF SUBSTEPS 1

MAXIMUM NUMBER OF EQUILIBRIUM ITERATIONS. . . . 1000

NONLINEAR STABILIZATION . . . . . .ON (CONSTANT)

STEP CHANGE BOUNDARY CONDITIONS . . . . . NO

STRESS-STIFFENING . . . . . ON

TERMINATE ANALYSIS IF NOT CONVERGED . . . . . .YES (EXIT)

CONVERGENCE CONTROLS. . . . . .USE DEFAULTS

INERTIA LOADS X Y Z

ACEL 0.0000 9806.6 0.0000

COPY INTEGRATION POINT VALUES TO NODE . . . . .YES, FOR ELEMENTS WITH ACTIVE MAT. NONLINEARITIES

PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT

DATABASE OUTPUT CONTROLS

ITEM	FREQUENCY	COMPONENT
ALL	NONE	
NSOL	ALL	
RSOL	ALL	
EANG	ALL	
ETMP	ALL	
VENG	ALL	
STRS	ALL	
EPEL	ALL	

```
      EPPL        ALL
      CONT        ALL


 SOLUTION MONITORING INFO IS WRITTEN TO FILE= file.mntr


     FORCE CONVERGENCE VALUE  =  0.1339E+07  CRITERION=   6693.
     DISP CONVERGENCE VALUE   =  0.7802      CRITERION=  0.3901E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.7802
     DISP CONVERGENCE VALUE   =  0.7802      CRITERION=  0.3901E-01
     LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.7802
     FORCE CONVERGENCE VALUE  =   964.4      CRITERION=   51.64
    EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.7250E-02
     DISP CONVERGENCE VALUE      =  0.7250E-02    CRITERION=    0.3901E-01  <<<
CONVERGED
     LINE SEARCH PARAMETER =   1.000     SCALED MAX DOF INC =  0.7250E-02
     FORCE CONVERGENCE VALUE  =   12.24      CRITERION=   51.63    <<< CONVERGED
    >>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION   2
 *** LOAD STEP     6   SUBSTEP     1  COMPLETED.    CUM ITER =     64
 *** TIME =   5.20000         TIME INC =  0.200000
 *** DAMPING FACTOR FOR NONLINEAR STABILIZATION = 0.2277E-02
 *** AUTO STEP TIME:  NEXT TIME INC = 0.20000      UNCHANGED


     FORCE CONVERGENCE VALUE  =   8610.      CRITERION=   52.58
     DISP CONVERGENCE VALUE   =  0.2743      CRITERION=  0.3901E-01
    EQUIL ITER   1 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.2743
     DISP CONVERGENCE VALUE   =  0.2714      CRITERION=  0.3901E-01
     LINE SEARCH PARAMETER =  0.9893     SCALED MAX DOF INC =  0.2714
     FORCE CONVERGENCE VALUE  =   2053.      CRITERION=   52.26
    EQUIL ITER   2 COMPLETED.  NEW TRIANG MATRIX.  MAX DOF INC=  0.1556E-01
     DISP CONVERGENCE VALUE      =  0.1554E-01    CRITERION=    0.3901E-01  <<<
CONVERGED
     LINE SEARCH PARAMETER =  0.9985     SCALED MAX DOF INC =  0.1554E-01
```

FORCE CONVERGENCE VALUE = 23.78 CRITERION= 52.25 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.6723E-03

DISP CONVERGENCE VALUE = 0.6723E-03 CRITERION= 0.3901E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.6723E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 2 COMPLETED. CUM ITER = 67

*** TIME = 5.40000 TIME INC = 0.200000

*** AUTO TIME STEP: NEXT TIME INC = 0.30000 INCREASED (FACTOR = 1.5000)

FORCE CONVERGENCE VALUE = 2908. CRITERION= 55.49

DISP CONVERGENCE VALUE = 0.1315 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1315

DISP CONVERGENCE VALUE = 0.1300 CRITERION= 0.5753E-01

LINE SEARCH PARAMETER = 0.9890 SCALED MAX DOF INC = 0.1300

FORCE CONVERGENCE VALUE = 694.1 CRITERION= 54.21

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1008E-01

DISP CONVERGENCE VALUE = 0.7914E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.7848 SCALED MAX DOF INC = 0.7914E-02

FORCE CONVERGENCE VALUE = 169.8 CRITERION= 54.20

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.8136E-02

DISP CONVERGENCE VALUE = 0.4099E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5038 SCALED MAX DOF INC = -0.4099E-02

FORCE CONVERGENCE VALUE = 74.75 CRITERION= 54.20

EQUIL ITER 4 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2769E-02

DISP CONVERGENCE VALUE = 0.1509E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.5448 SCALED MAX DOF INC = 0.1509E-02

FORCE CONVERGENCE VALUE = 34.17 CRITERION= 54.20 <<< CONVERGED

EQUIL ITER 5 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.1900E-02

DISP CONVERGENCE VALUE = 0.1900E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.1900E-02

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 5

*** LOAD STEP 6 SUBSTEP 3 COMPLETED. CUM ITER = 72

*** TIME = 5.70000 TIME INC = 0.300000

*** AUTO STEP TIME: NEXT TIME INC = 0.30000 UNCHANGED

*** WARNING *** CP = 1684.469 TIME= 13:52:36

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 4 NOT COMPLETED. CUM ITER = 73

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10500

FORCE CONVERGENCE VALUE = 0.7028E+06 CRITERION= 3514.

DISP CONVERGENCE VALUE = 0.4020 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4020

DISP CONVERGENCE VALUE = 0.4020 CRITERION= 0.5753E-01

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4020

FORCE CONVERGENCE VALUE = 780.9 CRITERION= 55.09

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2273E-01

DISP CONVERGENCE VALUE = 0.2273E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9998 SCALED MAX DOF INC = 0.2273E-01

FORCE CONVERGENCE VALUE = 77.07 CRITERION= 54.88

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1831E-02

DISP CONVERGENCE VALUE = 0.1573E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8591 SCALED MAX DOF INC = 0.1573E-02

FORCE CONVERGENCE VALUE = 13.61 CRITERION= 54.88 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 4 COMPLETED. CUM ITER = 75

*** TIME = 5.80500 TIME INC = 0.105000

*** AUTO STEP TIME: NEXT TIME INC = 0.10500 UNCHANGED

FORCE CONVERGENCE VALUE = 725.6 CRITERION= 55.61

DISP CONVERGENCE VALUE = 0.2347E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2347E-01

DISP CONVERGENCE VALUE = 0.2340E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9973 SCALED MAX DOF INC = -0.2340E-01

FORCE CONVERGENCE VALUE = 108.0 CRITERION= 55.48

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.2764E-02

DISP CONVERGENCE VALUE = 0.2299E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.8317 SCALED MAX DOF INC = 0.2299E-02

FORCE CONVERGENCE VALUE = 20.17 CRITERION= 55.48 <<< CONVERGED

EQUIL ITER 3 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.7808E-03

DISP CONVERGENCE VALUE = 0.7808E-03 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = -0.7808E-03

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 3

*** LOAD STEP 6 SUBSTEP 5 COMPLETED. CUM ITER = 78

*** TIME = 5.91000 TIME INC = 0.105000

*** AUTO TIME STEP: NEXT TIME INC = 0.90000E-01 DECREASED (FACTOR = 0.8571)

*** WARNING *** CP = 1812.328 TIME= 13:57:14

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 6 NOT COMPLETED. CUM ITER = 79

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.31500E-01

FORCE CONVERGENCE VALUE = 0.2109E+06 CRITERION= 1056.

DISP CONVERGENCE VALUE = 0.1203 CRITERION= 0.5753E-01

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1203

*** WARNING *** CP = 1827.125 TIME= 13:57:53

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 6 NOT COMPLETED. CUM ITER = 80

*** BEGIN BISECTION NUMBER 2 NEW TIME INCREMENT= 0.11025E-01

FORCE CONVERGENCE VALUE = 0.7386E+05 CRITERION= 373.0

DISP CONVERGENCE VALUE = 0.4208E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.4208E-01

DISP CONVERGENCE VALUE = 0.4208E-01 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.4208E-01

FORCE CONVERGENCE VALUE = 18.57 CRITERION= 55.54 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 6 SUBSTEP 6 COMPLETED. CUM ITER = 80

*** TIME = 5.92102 TIME INC = 0.110250E-01

*** AUTO STEP TIME: NEXT TIME INC = 0.11025E-01 UNCHANGED

*** WARNING *** CP = 1854.172 TIME= 13:58:54

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 7 NOT COMPLETED. CUM ITER = 81

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.38588E-02

FORCE CONVERGENCE VALUE = 0.2596E+05 CRITERION= 140.4

DISP CONVERGENCE VALUE = 0.1478E-01 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.1478E-01

*** WARNING *** CP = 1870.953 TIME= 13:59:33

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 7 NOT COMPLETED. CUM ITER = 82

*** BEGIN BISECTION NUMBER 2 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 7081. CRITERION= 64.59

DISP CONVERGENCE VALUE = 0.3971E-02 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3971E-02

DISP CONVERGENCE VALUE = 0.3971E-02 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.3971E-02

FORCE CONVERGENCE VALUE = 0.3756 CRITERION= 55.54 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 1

*** LOAD STEP 6 SUBSTEP 7 COMPLETED. CUM ITER = 82

*** TIME = 5.92202 TIME INC = 0.100000E-02

*** AUTO STEP TIME: NEXT TIME INC = 0.10000E-02 UNCHANGED

FORCE CONVERGENCE VALUE = 17.26 CRITERION= 55.54

DISP CONVERGENCE VALUE = 0.2640E-03 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= -0.2640E-03

DISP CONVERGENCE VALUE = 0.2640E-03 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 0.9999 SCALED MAX DOF INC = -0.2640E-03

FORCE CONVERGENCE VALUE = 0.3493E-01 CRITERION= 55.55 <<< CONVERGED

EQUIL ITER 2 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.5525E-06

DISP CONVERGENCE VALUE = 0.5525E-06 CRITERION= 0.5753E-01 <<< CONVERGED

LINE SEARCH PARAMETER = 1.000 SCALED MAX DOF INC = 0.5525E-06

FORCE CONVERGENCE VALUE = 0.6772E-04 CRITERION= 55.55 <<< CONVERGED

>>> SOLUTION CONVERGED AFTER EQUILIBRIUM ITERATION 2

*** LOAD STEP 6 SUBSTEP 8 COMPLETED. CUM ITER = 84

*** TIME = 5.92302 TIME INC = 0.100000E-02

*** AUTO TIME STEP: NEXT TIME INC = 0.15000E-02 INCREASED (FACTOR = 1.5000)

*** WARNING *** CP = 1946.453 TIME= 14:02:12

The material solution failed for element 3987 with material 17.

*** LOAD STEP 6 SUBSTEP 9 NOT COMPLETED. CUM ITER = 85

*** BEGIN BISECTION NUMBER 1 NEW TIME INCREMENT= 0.10000E-02

FORCE CONVERGENCE VALUE = 7080. CRITERION= 64.59

DISP CONVERGENCE VALUE = 0.3815E-02 CRITERION= 0.5753E-01 <<< CONVERGED

EQUIL ITER 1 COMPLETED. NEW TRIANG MATRIX. MAX DOF INC= 0.3815E-02

*** WARNING *** CP = 1963.578 TIME= 14:02:52

The material solution failed for element 3987 with material 17.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 46

Max. Penetration of -4.569254998E-13 has been detected between contact element 48845 and target element 48955.

For total 52 contact elements, there are 52 elements are in contact.

There are 52 elements are in sticking.

Potential overconstraint is detected.

Max. Pinball distance 3.71446753.

One of the contact searching regions contains at least 6 target elements.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 47

*** NOTE *** CP = 1966.203 TIME= 14:02:58

Contact pair is inactive.

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 52

Max. Penetration of -1.724871412E-02 has been detected between contact element 51008 and target element 50144.

Max. Geometrical gap of 3.721754904E-02 has been detected between contact element 51000 and target element 50136.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 3.28043163 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 53
Max. Penetration of -1.724871412E-02 has been detected between contact element 51008 and target element 50144.

Max. Geometrical gap of 3.721754904E-02 has been detected between contact element 51000 and target element 50136.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 3.28043163 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 56
Max. Penetration of -1.805058269E-02 has been detected between contact element 52784 and target element 53648.

Max. Geometrical gap of 3.096216863E-02 has been detected between contact element 53207 and target element 52343.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.12311437 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 57

Max. Penetration of -1.805058269E-02 has been detected between contact element 52784 and target element 53648.

Max. Geometrical gap of 3.096216863E-02 has been detected between contact element 53207 and target element 52343.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.12311437 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 58

Max. Penetration of -2.901575166E-02 has been detected between contact element 54182 and target element 54422.

For total 240 contact elements, there are 120 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 6 target elements.

Contact pair force norm 0.84493205 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 60

Max. Penetration of -1.881715411E-02 has been detected between contact element 54992 and target element 55856.

Max. Geometrical gap of 2.134835178E-02 has been detected between contact element 55415 and target element 54551.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 2.23126706 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 61
Max. Penetration of -1.881715411E-02 has been detected between contact element 54992 and target element 55856.

Max. Geometrical gap of 2.134835178E-02 has been detected between contact element 55415 and target element 54551.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 2.23126706 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 62
Max. Penetration of -3.469125322E-02 has been detected between contact element 56390 and target element 56630.
For total 240 contact elements, there are 120 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 6 target elements.
Contact pair force norm 0.844579082 and criterion 5.55459845.
****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 64

Max. Penetration of -1.942384275E-02 has been detected between contact element 57632 and target element 56768.

Max. Geometrical gap of 2.736432495E-02 has been detected between contact element 57699 and target element 56835.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 2.29982445 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 65

Max. Penetration of -1.942384275E-02 has been detected between contact element 57632 and target element 56768.

Max. Geometrical gap of 2.736432495E-02 has been detected between contact element 57699 and target element 56835.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 2.29982445 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 68

Max. Penetration of -2.238137464E-02 has been detected between contact element 59466 and target element 60330.

Max. Geometrical gap of 3.612117127E-02 has been detected between

contact element 59907 and target element 59043.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.94940516 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 69
Max. Penetration of -2.238137464E-02 has been detected between contact
element 59466 and target element 60330.

Max. Geometrical gap of 3.612117127E-02 has been detected between
contact element 59907 and target element 59043.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.94940516 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 72
Max. Penetration of -2.801879438E-02 has been detected between contact
element 61935 and target element 62799.

Max. Geometrical gap of 4.823542615E-02 has been detected between
contact element 62247 and target element 61383.
For total 864 contact elements, there are 432 elements are in contact.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.24029217 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 77

Max. Penetration of -2.925880487E-02 has been detected between contact element 64575 and target element 63711.

Max. Geometrical gap of 4.396593877E-02 has been detected between contact element 64451 and target element 63587.

For total 864 contact elements, there are 432 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.789687707 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 81

Max. Penetration of -2.390824041E-02 has been detected between contact element 66744 and target element 65880.

Max. Geometrical gap of 3.841945396E-02 has been detected between contact element 66655 and target element 65791.

For total 864 contact elements, there are 432 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.18084422 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 84

Max. Penetration of -1.992866334E-02 has been detected between contact element 68722 and target element 67858.

Max. Geometrical gap of 2.912309672E-02 has been detected between contact element 68863 and target element 67999.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.13694237 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 85
Max. Penetration of -1.992866334E-02 has been detected between contact element 68722 and target element 67858.

Max. Geometrical gap of 2.912309672E-02 has been detected between contact element 68863 and target element 67999.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target elements.
Contact pair force norm 1.13694237 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 88
Max. Penetration of -1.864559584E-02 has been detected between contact element 70881 and target element 70017.

Max. Geometrical gap of 1.984831531E-02 has been detected between contact element 71067 and target element 70203.
Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.10908826 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 89
Max. Penetration of -1.864559584E-02 has been detected between contact
element 70881 and target element 70017.

Max. Geometrical gap of 1.984831531E-02 has been detected between
contact element 71067 and target element 70203.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.10908826 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 92
Max. Penetration of -1.742232109E-02 has been detected between contact
element 73090 and target element 72226.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.08747393 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 93
Max. Penetration of -1.742232109E-02 has been detected between contact
element 73090 and target element 72226.

Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.08747393 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 96
Max. Penetration of -1.738834622E-02 has been detected between contact
element 75199 and target element 76063.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.16679051 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 97
Max. Penetration of -1.738834622E-02 has been detected between contact
element 75199 and target element 76063.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target
elements.
Contact pair force norm 1.16679051 and criterion 5.55459845.
****

****
 SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 100
Max. Penetration of -1.754825858E-02 has been detected between contact
element 77407 and target element 78271.
Max. Pinball distance 12.5.
One of the contact searching regions contains at least 8 target

elements.

Contact pair force norm 1.14638848 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 101

Max. Penetration of -1.754825858E-02 has been detected between contact element 77407 and target element 78271.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.14638848 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 103

Max. Penetration of -2.823445518E-02 has been detected between contact element 78587 and target element 78347.

For total 240 contact elements, there are 120 elements are in contact.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 6 target elements.

Contact pair force norm 0.588356455 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 104

Max. Penetration of -1.768034743E-02 has been detected between contact element 79615 and target element 80479.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.03036594 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 105

Max. Penetration of -1.768034743E-02 has been detected between contact element 79615 and target element 80479.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 1.03036594 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 108

Max. Penetration of -1.778488666E-02 has been detected between contact element 81823 and target element 82687.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.908039466 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 109

Max. Penetration of -1.778488666E-02 has been detected between contact element 81823 and target element 82687.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 0.908039466 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 112

Max. Penetration of -1.785914455E-02 has been detected between contact element 84031 and target element 84615.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 32.3579132 and criterion 5.55459845.

****

****

SUMMARY FOR CONTACT PAIR IDENTIFIED BY REAL CONSTANT SET 113

Max. Penetration of -1.785914455E-02 has been detected between contact element 84031 and target element 84615.

Max. Pinball distance 12.5.

One of the contact searching regions contains at least 8 target elements.

Contact pair force norm 32.3579132 and criterion 5.55459845.

****

*** WARNING *** CP = 1966.203 TIME= 14:02:58

The unconverged solution (identified as time 6 substep 999999) is output for analysis debug purposes. Results should not be used for any other purpose.

R E S T A R T I N F O R M A T I O N

REASON FOR TERMINATION. . . . . .ERROR IN ELEMENT FORMULATION

FILES NEEDED FOR RESTARTING file0.Rnnn

file.ldhi

file.rdb

TIME OF LAST SOLUTION 5.9230

TIME AT START OF THE LOAD STEP 5.0000

TIME AT END OF THE LOAD STEP 6.0000

ALL CURRENT MAPDL DATA WRITTEN TO FILE NAME= file.db

FOR POSSIBLE RESUME FROM THIS POINT

NUMBER OF WARNING MESSAGES ENCOUNTERED= 24

NUMBER OF ERROR MESSAGES ENCOUNTERED= 0

***** PROBLEM TERMINATED BY INDICATED ERROR(S) OR BY END OF INPUT DATA *****

*** WARNING *** CP = 1968.188 TIME= 14:03:10

During this session the elapsed time exceeds the CPU time by 116%.

This often indicates either a lack of physical memory (RAM) required

to efficiently handle this simulation or a particularly slow hard

drive configuration. This simulation can be expected to run faster on

identical hardware if additional RAM or a faster hard drive

configuration is made available. For more details, please see the

Mechanical APDL Performance Guide which is part of the Ansys Help

system.

+---------- M A P D L S T A T I S T I C S ----------+

Release: 2024 R2 Build: 24.2 Update: UP20240513 Platform: WINDOWS x64

Date Run: 09/04/2024 Time: 14:03 Process ID: 9248

Operating System: Windows 11 (Build: 22631)

Processor Model: 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz

Compiler: Intel(R) Fortran Compiler Classic Version 2021.9 (Build: 20230302)

Intel(R) C/C++ Compiler Classic Version 2021.9 (Build: 20230302)

Intel(R) oneAPI Math Kernel Library Version 2023.1-Product Build 20230303

Number of machines requested : 1

Total number of cores available : 8

Number of physical cores available : 4

Number of processes requested : 2

Number of threads per process requested : 1

Total number of cores requested : 2 (Distributed Memory Parallel)

MPI Type: INTELMPI

MPI Version: Intel(R) MPI Library 2021.11 for Windows* OS

GPU Acceleration: Not Requested

Job Name: file0

Input File: dummy.dat

Core	Machine Name	Working Directory
0	DESKTOP-0L1F7R6	C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455
1	DESKTOP-0L1F7R6	C:\Docs\Posao\RE-forMS\4. godina\ANSYS modeli\Kuce - preliminarno_ProjectScratch\Scr2455

Latency time from master to core 1 = 2.017 microseconds

Communication speed from master to core 1 = 2416.16 MB/sec

Total CPU time for main thread : 1965.7 seconds
Total CPU time summed for all threads : 1968.2 seconds

Elapsed time spent obtaining a license : 0.5 seconds
Elapsed time spent pre-processing model (/PREP7) : 0.6 seconds
Elapsed time spent solution - preprocessing : 8.4 seconds
Elapsed time spent computing solution : 4226.5 seconds
Elapsed time spent solution - postprocessing : 3.7 seconds
Elapsed time spent post-processing model (/POST1) : 0.0 seconds

Equation solver used : Sparse (symmetric)
Equation solver computational rate : 31.0 Gflops
Equation solver effective I/O rate : 723.8 GB/sec

Sum of disk space used on all processes : 4423.3 MB

Sum of memory used on all processes : 4136.0 MB
Sum of memory allocated on all processes : 7881.0 MB
Physical memory available : 8 GB
Total amount of I/O written to disk : 119.7 GB
Total amount of I/O read from disk : 570.8 GB

+---------- E N D M A P D L S T A T I S T I C S ----------+

--
| |
| RUN COMPLETED |

```
|                                                                            |
|----------------------------------------------------------------------------|
|                                                                            |
| Ansys MAPDL 2024 R2        Build 24.2        UP20240513    WINDOWS x64   |
|                                                                            |
|----------------------------------------------------------------------------|
|                                                                            |
| Database Requested(-db)     1024 MB     Scratch Memory Requested   1024 MB |
| Max Database Used(Master)    126 MB     Max Scratch Used(Master)   2196 MB |
| Max Database Used(Workers)     1 MB     Max Scratch Used(Workers)  1813 MB |
| Sum Database Used(All)       127 MB     Sum Scratch Used(All)      4009 MB |
|                                                                            |
|----------------------------------------------------------------------------|
|                                                                            |
|       CP Time      (sec) =       1968.188       Time  =  14:03:10         |
|       Elapsed Time (sec) =       4251.000       Date  =  09/04/2024       |
|                                                                            |
*----------------------------------------------------------------------------*
```

All