Solver Output

```
ANSYS Mechanical


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



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         *****  ANSYS COMMAND LINE ARGUMENTS  *****
 BATCH MODE REQUESTED (-b)    = NOLIST
 INPUT FILE COPY MODE (-c)    = COPY
   2 PARALLEL CPUS REQUESTED
 MEMORY REQUESTED (MB)        = 96
 START-UP FILE MODE           = NOREAD
 STOP FILE MODE               = NOREAD
 DATABASE SIZE REQUESTED (MB) = 32

00000000          VERSION=WINDOWS x64     RELEASE= 12.1     UP20091102
CURRENT JOBNAME=file  17:34:11  AUG 28, 2012 CP=      0.421


PARAMETER _DS_PROGRESS =     999.0000000

/INPUT FILE= ds.dat  LINE=       0



DO NOT WRITE ELEMENT RESULTS INTO DATABASE

*GET  _WALLSTRT  FROM  ACTI  ITEM=TIME WALL  VALUE=  17.5697222

TITLE=
Suction_pipe_28.08.2012--Modal (B5)

--- Data in consistent NMM units.

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

*****TRACK MONITOR LEVEL= -1
     TRACK PRINT LEVEL  =  0
     TRACK SUMMARY LEVEL=  0
1

***** ANSYS - ENGINEERING ANALYSIS SYSTEM  RELEASE 12.1     *****
ANSYS Mechanical
```

```
00000000          VERSION=WINDOWS x64   17:34:11  AUG 28, 2012 CP=      0.437

Suction_pipe_28.08.2012--Modal (B5)


         ***** ANSYS ANALYSIS DEFINITION (PREP7) *****
********** Nodes for the whole assembly **********
********** Elements for Body 1 "Surface Body" **********
********** Elements for Body 2 "Surface Body" **********
********** Send User Defined Coordinate System(s) **********
********** Set Reference Temperature **********
********** Send Materials **********
********** Send Sheet Properties **********
********** Create Contact "Contact Region" **********
           Real Contact Set For Above Contact Is 4   3
********** Fixed Supports **********


***** ROUTINE COMPLETED *****  CP =         0.515


--- Number of total nodes = 6027
--- Number of contact elements = 416
--- Number of spring elements = 0
--- Number of solid elements = 5976
--- Number of total elements = 6392

*GET  _WALLBSOL  FROM  ACTI  ITEM=TIME WALL  VALUE=  17.5697222

*****  ANSYS SOLUTION ROUTINE  *****


PERFORM A MODAL ANALYSIS
 THIS WILL BE A NEW ANALYSIS


USE SYM. BLOCK LANCZOS MODE E TRACTION METHOD
 E TRACT   10 MODES
 NORMALIZE THE MODE SHAPES TO THE MASS MATRI

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

PRINTOUT RESUMED BY /GOP


E PAND ALL E TRACTED MODES
 DO NOT CALCULATE ELEMENT RESULTS

*GET  ANSINTER_  FROM  ACTI  ITEM=INT        VALUE=  0.00000000

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

*ENDIF

*****  ANSYS SOLVE    COMMAND  *****

*** WARNING ***                         CP =       0.515   TIME= 17:34:11
Element shape chec ing is currently inactive.  Issue SHPP,ON or
SHPP,WARN to reactivate, if desired.

*** NOTE ***                            CP =       0.546   TIME= 17:34:11
The model data was chec ed and warning messages were found.
 Please review output or errors file ( D: FEA_2012-13 OPTYMA-
MIZ015 FEA _ProjectScratch ScrC758 file.err ) for these warning
messages.

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

ELEMENT TYPE    1 IS SHELL181. IT IS ASSOCIATED WITH ELASTOPLASTIC
MATERIALS ONLY. KEYOPT(8)=2 IS SUGGESTED AND KEYOPT(3)=2 IS SUGGESTED FOR
HIGHER ACCURACY OF MEMBRANE STRESSES  OTHERWISE, KEYOPT(3)=0 IS SUGGESTED.
KEYOPT(8) HAS BEEN RESET BUT KEYOPT(3) CAN NOT BE RESET HERE. PLEASE RESET
IT MANUALLY IF NECESSARY.
 KEYOPT(1-12)=    0    0    2    0    0    0    0    2    0    0    0    0

ELEMENT TYPE    1 HAS KEYOPT(3)=2. FOR THE SPECIFIED ANALYSIS TYPE, LUMPED MASS
MATRI  OPTION (LUMPM, ON) IS SUGGESTED.

ELEMENT TYPE    2 IS SHELL181. IT IS ASSOCIATED WITH ELASTOPLASTIC
MATERIALS ONLY. KEYOPT(8)=2 IS SUGGESTED AND KEYOPT(3)=2 IS SUGGESTED FOR
HIGHER ACCURACY OF MEMBRANE STRESSES  OTHERWISE, KEYOPT(3)=0 IS SUGGESTED.
KEYOPT(8) HAS BEEN RESET BUT KEYOPT(3) CAN NOT BE RESET HERE. PLEASE RESET
IT MANUALLY IF NECESSARY.
 KEYOPT(1-12)=    0    0    2    0    0    0    0    2    0    0    0    0

ELEMENT TYPE    2 HAS KEYOPT(3)=2. FOR THE SPECIFIED ANALYSIS TYPE, LUMPED MASS
MATRI  OPTION (LUMPM, ON) IS SUGGESTED.


1

***** ANSYS - ENGINEERING ANALYSIS SYSTEM  RELEASE 12.1     *****
ANSYS Mechanical
00000000          VERSION=WINDOWS x64   17:34:11  AUG 28, 2012 CP=      0.577

Suction_pipe_28.08.2012--Modal (B5)


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

   PROBLEM DIMENSIONALITY. . . . . . . . . . . . .3-D
   DEGREES OF FREEDOM. . . . . U    UY   UZ   ROT  ROTY ROTZ
```

```
  ANALYSIS TYPE . . . . . .MODAL
     E TRACTION METHOD. . . . . .BLOCK LANCZOS
  NUMBER OF MODES TO E TRACT. . . . . .    10
  GLOBALLY ASSEMBLED MATRI  . . . . . .SYMMETRIC
  NUMBER OF MODES TO E PAND . . . . . .ALL
  ELEMENT RESULTS CALCULATION . . . . . .OFF

*** WARNING ***                         CP =       0.608   TIME= 17:34:11
Material number 4 (used by element 5977 ) 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 =       0.608   TIME= 17:34:11
The step data was chec ed and warning messages were found.
 Please review output or errors file ( D: FEA_2012-13 OPTYMA-
MIZ015 FEA _ProjectScratch ScrC758 file.err ) for these warning
messages.

*** NOTE ***                            CP =       0.608   TIME= 17:34:11
The conditions for direct assembly have been met.  No .emat or .erot
files will be produced.

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

  LOAD STEP NUMBER. . . . . .     1
  PRINT OUTPUT CONTROLS . . . . . .NO PRINTOUT
  DATABASE OUTPUT CONTROLS
     ITEM     FREQUENCY   COMPONENT
      ALL       NONE
     NSOL        ALL


*** NOTE ***                            CP =       0.733   TIME= 17:34:11
Symmetric Deformable- deformable contact pair identified by real
constant set 3 and contact element type 3 has been set up.  The
companion pair has real constant set ID 4.  Both pairs should have the
same behavior.
For asymmetric contact analysis, you may deactivate the current pair
and  eep its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Contact stiffness factor FKN                 10.000
The resulting contact stiffness             0.59278E 06
Default penetration tolerance factor FTOLN   0.10000
The resulting penetration tolerance          0.36000
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT          1.0000
Default Max. friction stress TAUMA           0.10000E 21
Average contact surface length                2.9468
Average contact pair depth                    3.6000
User defined pinball region PINB             0.97924
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE ***                            CP =       0.733   TIME= 17:34:11
Min.  Initial gap 0.566595164 was detected between contact element 6180
and target element 6353.
The gap is closed due to initial adjustment.

Max.  Closed gap 0.664059952 has been detected between contact element
6092 and target element 6248.

*** WARNING ***                         CP =       0.733   TIME= 17:34:11
The closed gap/penetration may be too large.  Increase pinball if it is
a true closed gap/penetration.  Decrease pinball if it is a false one.
****************************************


*** NOTE ***                            CP =       0.733   TIME= 17:34:11
Symmetric Deformable- deformable contact pair identified by real
constant set 4 and contact element type 3 has been set up.  The
companion pair has real constant set ID 3.  Both pairs should have the
same behavior.
For asymmetric contact analysis, you may  eep the current pair and
deactivate its companion pair.
Contact algorithm: Penalty method
Contact detection at: Gauss integration point
Contact stiffness factor FKN                 10.000
The resulting contact stiffness             0.59278E 06
Default penetration tolerance factor FTOLN   0.10000
The resulting penetration tolerance          0.38800
Default opening contact stiffness OPSF will be used.
Default tangent stiffness factor FKT          1.0000
Default Max. friction stress TAUMA           0.10000E 21
Average contact surface length                2.8237
Average contact pair depth                    3.8800
User defined pinball region PINB             0.97924
Initial penetration/gap is excluded.
Bonded contact (always) is defined.

*** NOTE ***                            CP =       0.733   TIME= 17:34:11
Min.  Initial gap 0.531614275 was detected between contact element 6207
and target element 5988.
The gap is closed due to initial adjustment.

Max.  Closed gap 0.646968253 has been detected between contact element
6231 and target element 6017.

*** WARNING ***                         CP =       0.733   TIME= 17:34:11
The closed gap/penetration may be too large.  Increase pinball if it is
a true closed gap/penetration.  Decrease pinball if it is a false one.
****************************************



          **** CENTER OF MASS, MASS, AND MASS MOMENTS OF INERTIA ****

 CALCULATIONS ASSUME ELEMENT MASS AT ELEMENT CENTROID

 TOTAL MASS =  0.42886E-03
```

```
                          MOM. OF INERTIA         MOM. OF INERTIA
 CENTER OF MASS            ABOUT ORIGIN        ABOUT CENTER OF MASS

  C =  -8.0314          I   =    14.28          I   =    6.633
 YC =   126.83          IYY =    3.594          IYY =    2.814
 ZC =   41.890          IZZ =    11.22          IZZ =    4.297
                        I Y =   0.4759          I Y =   0.3903E-01
                        IYZ =   -2.321          IYZ =  -0.4217E-01
                        IZ  =  -0.3636E-01      IZ  =  -0.1806


  *** MASS SUMMARY BY ELEMENT TYPE ***

 TYPE      MASS
    1  0.521739E-04
    2  0.376685E-03

Range of element maximum matrix coefficients in global coordinates
Maximum = 825945.175 at element 6228.
Minimum = 45279.0232 at element 1252.

   *** ELEMENT MATRI  FORMULATION TIMES
 TYPE  NUMBER   ENAME      TOTAL CP  AVE CP

    1     774  SHELL181      0.125   0.000161
    2    5202  SHELL181      0.546   0.000105
    3     208  CONTA174      0.016   0.000075
    4     208  TARGE170      0.000   0.000000
Time at end of element matrix formulation CP = 1.5132097.

 BLOCK LANCZOS CALCULATION OF UP TO   10 EIGENVECTORS.
 NUMBER OF EQUATIONS              =       32946
 MA IMUM WAVEFRONT                =         126
 MA IMUM MODES STORED             =          10
 MINIMUM EIGENVALUE               = 0.00000E 00
 MA IMUM EIGENVALUE               = 0.10000E 09


 *** NOTE ***                           CP =       1.654   TIME= 17:34:12
 The initial memory allocation (-m) has been exceeded.
  Supplemental memory allocations are being used.
  Memory allocated for solver =               92.393 MB
  Memory re uired for in-core =               77.477 MB
  Optimal memory re uired for out-of-core =   41.941 MB
  Minimum memory re uired for out-of-core =   32.633 MB

 *** NOTE ***                           CP =       1.810   TIME= 17:34:12
 The Bloc  Lanczos solver is currently running in the in-core memory
 mode.  This memory mode uses the most amount of memory in order to
 avoid using the hard drive as much as possible, which most often
 results in the fastest solution time.  This mode is recommended if
 enough physical memory is present to accommodate all of the solver
 data.

  LANCZOS CYCLE NUMBER =   1

     new shift:  8.4724D 03     modes still needed:       10

  FREQUENCIES AT CURRENT LANCZOS CYCLE
     1  0.18269791E 04     2  0.16925433E 04     3  0.16741231E 04
     4  0.16343635E 04     5  0.10633885E 04     6  0.93045236E 03
     7  0.79484812E 03     8  0.58976161E 03     9  0.37365736E 03
    10  0.24948864E 03    11  0.22670871E 03    12  0.13926136E 03
    13  0.98479065E 02

     number of steps      :      7
     eigenvalues found    :     13
     total no. eigenvalues:     13

  LANCZOS CYCLE NUMBER =   2

     new shift:  1.0805D 08     modes still needed:        0
1

 ***** ANSYS - ENGINEERING ANALYSIS SYSTEM  RELEASE 12.1     *****
 ANSYS Mechanical
 00000000          VERSION=WINDOWS x64   17:34:13  AUG 28, 2012 CP=      3.900

 Suction_pipe_28.08.2012--Modal (B5)


 *** FREQUENCIES FROM BLOCK LANCZOS ITERATION ***

  MODE    FREQUENCY (HERTZ)


    1     98.47906502492
    2     139.2613589560
    3     226.7087055536
    4     249.4886383987
    5     373.6573631023
    6     589.7616080792
    7     794.8481190824
    8     930.4523567253
    9     1063.388505478
   10     1634.363532720
1

 ***** ANSYS - ENGINEERING ANALYSIS SYSTEM  RELEASE 12.1     *****
 ANSYS Mechanical
 00000000          VERSION=WINDOWS x64   17:34:13  AUG 28, 2012 CP=      4.056

 Suction_pipe_28.08.2012--Modal (B5)



          ***** PARTICIPATION FACTOR CALCULATION *****     DIRECTION
                                                                                CUMULATIVE     RATIO EFF.MASS
  MODE   FREQUENCY       PERIOD      PARTIC.FACTOR     RATIO    EFFECTIVE MASS   MASS FRACTION   TO TOTAL MASS
```

1	98.4791	0.10154E-01	0.14176E-01	1.000000	0.200967E-03	0.654381	0.468608
2	139.261	0.71807E-02	0.33742E-02	0.238014	0.113849E-04	0.691452	0.265469E-01
3	226.709	0.44109E-02	-0.18414E-02	0.129893	0.339078E-05	0.702493	0.790650E-02
4	249.489	0.40082E-02	0.10944E-02	0.077197	0.119764E-05	0.706392	0.279262E-02
5	373.657	0.26762E-02	0.80148E-02	0.565368	0.642372E-04	0.915559	0.149786
6	589.762	0.16956E-02	0.36237E-02	0.255618	0.131313E-04	0.958316	0.306192E-01
7	794.848	0.12581E-02	-0.18892E-03	0.013327	0.356918E-07	0.958433	0.832250E-04
8	930.452	0.10747E-02	0.88839E-03	0.062668	0.789242E-06	0.961003	0.184033E-02
9	1063.39	0.94039E-03	0.27263E-02	0.192315	0.743276E-05	0.985205	0.173315E-01
10	1634.36	0.61186E-03	-0.21316E-02	0.150364	0.454374E-05	1.00000	0.105950E-01
sum					0.307110E-03		0.716110

***** PARTICIPATION FACTOR CALCULATION ***** Y DIRECTION

MODE	FREQUENCY	PERIOD	PARTIC.FACTOR	RATIO	EFFECTIVE MASS	CUMULATIVE MASS FRACTION	RATIO EFF.MASS TO TOTAL MASS
1	98.4791	0.10154E-01	0.15552E-03	0.013683	0.241851E-07	0.722022E-04	0.563939E-04
2	139.261	0.71807E-02	-0.96211E-02	0.846499	0.925650E-04	0.276417	0.215840
3	226.709	0.44109E-02	-0.68406E-02	0.601861	0.467936E-04	0.416115	0.109112
4	249.489	0.40082E-02	0.11366E-01	1.000000	0.129180E-03	0.801769	0.301217
5	373.657	0.26762E-02	-0.27460E-02	0.241599	0.754026E-05	0.824279	0.175821E-01
6	589.762	0.16956E-02	0.64689E-02	0.569162	0.418472E-04	0.949210	0.975778E-01
7	794.848	0.12581E-02	0.32792E-02	0.288520	0.107534E-04	0.981314	0.250745E-01
8	930.452	0.10747E-02	0.24558E-02	0.216069	0.603086E-05	0.999318	0.140626E-01
9	1063.39	0.94039E-03	-0.47648E-03	0.041923	0.227035E-06	0.999996	0.529393E-03
10	1634.36	0.61186E-03	-0.36500E-04	0.003211	0.133227E-08	1.00000	0.310654E-05
sum					0.334963E-03		0.781055

***** PARTICIPATION FACTOR CALCULATION ***** Z DIRECTION

MODE	FREQUENCY	PERIOD	PARTIC.FACTOR	RATIO	EFFECTIVE MASS	CUMULATIVE MASS FRACTION	RATIO EFF.MASS TO TOTAL MASS
1	98.4791	0.10154E-01	-0.30691E-02	0.285234	0.941967E-05	0.369772E-01	0.219645E-01
2	139.261	0.71807E-02	0.10760E-01	1.000000	0.115780E-03	0.491477	0.269973
3	226.709	0.44109E-02	-0.36161E-02	0.336065	0.130762E-04	0.542808	0.304906E-01
4	249.489	0.40082E-02	0.86759E-02	0.806305	0.752720E-04	0.838291	0.175517
5	373.657	0.26762E-02	0.11494E-02	0.106825	0.132123E-05	0.843477	0.308081E-02
6	589.762	0.16956E-02	-0.28579E-02	0.265598	0.816739E-05	0.875539	0.190445E-01
7	794.848	0.12581E-02	0.39753E-03	0.036945	0.158031E-06	0.876159	0.368492E-03
8	930.452	0.10747E-02	0.38750E-02	0.360123	0.150153E-04	0.935102	0.350123E-01
9	1063.39	0.94039E-03	0.38252E-02	0.355498	0.146322E-04	0.992541	0.341188E-01
10	1634.36	0.61186E-03	0.13784E-02	0.128105	0.190005E-05	1.00000	0.443047E-02
sum					0.254742E-03		0.594000

***** PARTICIPATION FACTOR CALCULATION *****ROT DIRECTION

MODE	FREQUENCY	PERIOD	PARTIC.FACTOR	RATIO	EFFECTIVE MASS	CUMULATIVE MASS FRACTION
1	98.4791	0.10154E-01	-0.80788	0.238191	0.652673	0.492294E-01
2	139.261	0.71807E-02	3.3917	1.000000	11.5039	0.916941
3	226.709	0.44109E-02	-0.51548	0.151979	0.265715	0.936983
4	249.489	0.40082E-02	0.71070	0.209537	0.505089	0.975081
5	373.657	0.26762E-02	-0.10176	0.030003	0.103556E-01	0.975862
6	589.762	0.16956E-02	0.16790	0.049501	0.281888E-01	0.977988
7	794.848	0.12581E-02	-0.34723	0.102376	0.120570	0.987082
8	930.452	0.10747E-02	0.19833	0.058473	0.393331E-01	0.990049
9	1063.39	0.94039E-03	0.36293	0.107003	0.131715	0.999984
10	1634.36	0.61186E-03	0.14611E-01	0.004308	0.213475E-03	1.00000
sum					13.2578	

***** PARTICIPATION FACTOR CALCULATION *****ROTY DIRECTION

MODE	FREQUENCY	PERIOD	PARTIC.FACTOR	RATIO	EFFECTIVE MASS	CUMULATIVE MASS FRACTION
1	98.4791	0.10154E-01	1.3589	1.000000	1.84665	0.601224
2	139.261	0.71807E-02	0.22759	0.167476	0.517955E-01	0.618088
3	226.709	0.44109E-02	-1.0119	0.744630	1.02392	0.951451
4	249.489	0.40082E-02	-0.31640	0.232835	0.100111	0.984045
5	373.657	0.26762E-02	0.15235	0.112115	0.232120E-01	0.991602
6	589.762	0.16956E-02	-0.83385E-01	0.061361	0.695307E-02	0.993866
7	794.848	0.12581E-02	0.82437E-02	0.006066	0.679593E-04	0.993888
8	930.452	0.10747E-02	-0.88295E-01	0.064975	0.779607E-02	0.996426
9	1063.39	0.94039E-03	0.93402E-01	0.068733	0.872387E-02	0.999267
10	1634.36	0.61186E-03	0.47462E-01	0.034926	0.225263E-02	1.00000
sum					3.07148	

***** PARTICIPATION FACTOR CALCULATION *****ROTZ DIRECTION

MODE	FREQUENCY	PERIOD	PARTIC.FACTOR	RATIO	EFFECTIVE MASS	CUMULATIVE MASS FRACTION
1	98.4791	0.10154E-01	-2.6623	1.000000	7.08791	0.727693
2	139.261	0.71807E-02	-0.66569	0.250041	0.443141	0.773189
3	226.709	0.44109E-02	-0.90067	0.338303	0.811204	0.856473
4	249.489	0.40082E-02	-0.78481	0.294784	0.615923	0.919708
5	373.657	0.26762E-02	-0.39573	0.148642	0.156604	0.935786
6	589.762	0.16956E-02	-0.61953	0.232702	0.383812	0.975190
7	794.848	0.12581E-02	0.11973	0.044974	0.143364E-01	0.976662
8	930.452	0.10747E-02	-0.42336	0.159020	0.179235	0.995064
9	1063.39	0.94039E-03	-0.23111E-01	0.008681	0.534096E-03	0.995119
10	1634.36	0.61186E-03	0.21805	0.081903	0.475462E-01	1.00000

```
 ------------------------------------------------------------------------------------------
   sum                                                                  9.74024
 ------------------------------------------------------------------------------------------


 *** ANSYS BINARY FILE STATISTICS
  BUFFER SIZE USED= 16384
        2.625 MB WRITTEN ON ELEMENT SAVED DATA FILE: file.esav
       16.875 MB WRITTEN ON ASSEMBLED MATRI  FILE: file.full
        3.688 MB WRITTEN ON MODAL MATRI  FILE: file.mode
        5.250 MB WRITTEN ON RESULTS FILE: file.rst

 FINISH SOLUTION PROCESSING


 ***** ROUTINE COMPLETED *****  CP =         4.056



 *GET  _WALLASOL  FROM  ACTI  ITEM=TIME WALL  VALUE=  17.5705556
1

 ***** ANSYS - ENGINEERING ANALYSIS SYSTEM  RELEASE 12.1     *****
 ANSYS Mechanical
 00000000          VERSION=WINDOWS x64   17:34:14  AUG 28, 2012 CP=      4.072

 Suction_pipe_28.08.2012--Modal (B5)


          ***** ANSYS RESULTS INTERPRETATION (POST1) *****

 *** NOTE ***                            CP =       4.072   TIME= 17:34:14
 Reading results into the database (SET command) will update the current
 displacement and force boundary conditions in the database with the
 values from the results file for that load set.  Note that any
 subse uent solutions will use these values unless action is ta en to
 either SAVE the current values or not overwrite them (/E IT,NOSAVE).

 Set Output of  ML File to:
     PARM,     ,     ,     ,     ,     ,     ,     ,     ,     ,     ,     ,
          ,     ,     ,     ,     ,     ,     ,

 DATABASE WRITTEN ON FILE
parm.xml


 E IT THE ANSYS POST1 DATABASE PROCESSOR


 ***** ROUTINE COMPLETED *****  CP =         4.072



 PRINTOUT RESUMED BY /GOP

 *GET  _WALLDONE  FROM  ACTI  ITEM=TIME WALL  VALUE=  17.5705556

 PARAMETER _PREPTIME =     0.000000000

 PARAMETER _SOLVTIME =     3.000000000

 PARAMETER _POSTTIME =     0.000000000

 PARAMETER _TOTALTIM =     3.000000000

 E IT ANSYS WITHOUT SAVING DATABASE


 NUMBER OF WARNING MESSAGES ENCOUNTERED=          4
 NUMBER OF ERROR   MESSAGES ENCOUNTERED=          0
  ***************************************************
  CPU TIME SPENT FOR CONTACT DATABASE          0.000
                     CONTACT SEARCH            0.000
                     CONTACT ELEMENTS          0.000
                     OTHER ELEMENTS            0.780
                     CE SWAPING                0.000
                     EQUATION SOLVER           3.292
                     TOTAL SYSTEM              4.072
  ***************************************************


 ---------------------- A N S Y S   S T A T I S T I C S ------------------------

Release: 12.1       UP20091102   Version: WINDOWS x64
Date Run: 08/28/2012   Time: 17:34
Windows Process ID:         4044

Number of cores:   2 (Shared Memory Parallel)

Job Name: file
Wor ing Directory: D: FEA_2012-13 OPTYMA- MIZ015 FEA _ProjectScratch ScrC758

Elapsed time spent pre-processing model (/PREP7)  :      0.0 seconds
Elapsed time spent solution - preprocessing       :      0.1 seconds
Elapsed time spent computing solution             :      2.3 seconds
Elapsed time spent solution - postprocessing      :      0.0 seconds
Elapsed time spent post-processing model (/POST1) :      0.0 seconds

 ------------------ E N D   A N S Y S   S T A T I S T I C S -------------------


 *------------------------------------------------------------------------------*
 |                                                                              |
 |                           ANSYS RUN COMPLETED                                |
 |                                                                              |
 |------------------------------------------------------------------------------|
 |                                                                              |
 |            Release 12.1           UP20091102         WINDOWS x64             |
 |                                                                              |
 |------------------------------------------------------------------------------|
 |                                                                              |
```

```
|   Maximum Scratch Memory Used       =    27317732 Words      104.209 MB   |
|                                                                           |
|---------------------------------------------------------------------------|
|                                                                           |
|        CP Time      (sec) =          4.072       Time  =  17:34:14        |
|        Elapsed Time (sec) =          7.000       Date  =  08/28/2012      |
|                                                                           |
*---------------------------------------------------------------------------*
```