

Column1						

GEOMETRY	GEOMETRY					
******	*****	**********				
Nodal Coord	linates:					
(Node No)	X - Y - Z)					
NODES =						
1.00000	0.00000	0.00000				
2.00000	0.00000	25.56000				
3.00000	0.00000	27.00000				
4.00000	0.00000	41.04000				
5.00000	0.00000	54.00000				
6.00000	104.50000	25.56000				
7.00000	104.50000	41.04000				

Boundary Conditions: 1 = Restrained, 0 = Free								
(Node No Tx - Ty - Rz)								
			•					
DOLL	VIDC .							
BOOI	NDS =							
1 (0 1 0							
	1 1 1							
	1 1 1							
, .								
Elem	ent Informa	ation:						
(Ele N	No iNode	- jNode - Me	mber Type -	E - A - I)				
ELES	=							
	1.00000	1.00000	2.00000	0.00000	29000.00000		999999.00000	
	2.00000	2.00000	3.00000	0.00000	29000.00000		999999.00000	
	3.00000	3.00000	4.00000	0.00000	29000.00000		999999.00000	
	1.00000	4.00000	5.00000	0.00000	29000.00000		999999.00000	
	5.00000	4.00000	7.00000	1.00000	29000.00000	2.00000	2.85000	
	5.00000 7.00000	4.00000	6.00000	1.00000	29000.00000 29000.00000	2.00000	2.85000	
4	7.00000	2.00000	7.00000	1.00000	29000.00000	2.00000	2.85000	
Load	Informatio	n:						
(Nod	e No Fx -	Fy - Mz)						
LOAD)S =							
1	0 0 1	1000						
	plotFile =//1. OUTPUT/Design4Stiffness.png							
-		OUTPUT/De	sign4Stiffnes	s.png				
ans =								
10	450 1140	950 -35.700	90 700					
-10	.430 114.5	33.700	05.700					
****	*****	******	*******	*****				

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ANALYSIS
************
kff =
 Columns 1 through 9:
   2.0840e+07 -2.6633e+08 -2.0840e+07 0.0000e+00 -2.6633e+08 0.0000e+00 0.0000e+00 0.0000e+00 0.
  -2.6633e+08 4.5383e+09 2.6633e+08 0.0000e+00 2.2692e+09 0.0000e+00 0.0000e+00 0.0000e+00 0.0
  -2.0840e+07 2.6633e+08 1.1657e+11 7.9554e+01 -8.3646e+10 -1.1654e+11 0.0000e+00 -8.3912e+10 0.0000e+00
   0.0000e+00 0.0000e+00 7.9554e+01 2.1271e+08 0.0000e+00 0.0000e+00 -2.0137e+08 0.0000e+00 0.0
  -2.6633e+08 2.2692e+09 -8.3646e+10 0.0000e+00 8.5094e+10 8.3912e+10 0.0000e+00 4.0278e+10 0.0
   0.0000e+00 0.0000e+00 -1.1654e+11 0.0000e+00 8.3912e+10 1.1667e+11 0.0000e+00 8.3029e+10 -1...
   0.0000e+00 0.0000e+00 0.0000e+00 -2.0137e+08 0.0000e+00 0.0000e+00 2.2202e+08 0.0000e+00 0.0
   0.0000e+00 0.0000e+00 -8.3912e+10 0.0000e+00 4.0278e+10 8.3029e+10 0.0000e+00 8.8818e+10 8.8
   0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 -1.2574e+08 0.0000e+00 8.8270e+08 2.8
   0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 -2.0653e+07 0.0000e+00 -7.5
   0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 -8.8270e+08 0.0000e+00 4.1311e+09 -1.
   0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 -1.5
   0.0000e+00 0.0000e+000
   0.0000e+00 \quad 0.0
 Columns 10 through 14:
   0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00 0.0000e+00
   0.0000e+00 -8.8270e+08 0.0000e+00 0.0000e+00 0.0000e+00
  -2.0653e+07  0.0000e+00  0.0000e+00  0.0000e+00  0.0000e+00
   0.0000e+00 4.1311e+09 0.0000e+00 0.0000e+00 0.0000e+00
  -7.9554e+01 -1.5325e+08 -1.5987e+08 0.0000e+00 -1.0360e+09
   4.3028e+07 0.0000e+00 0.0000e+00 -2.2374e+07 0.0000e+00
   0.0000e+00 1.7213e+10 1.0360e+09 0.0000e+00 4.4753e+09
   0.0000e+00 1.0360e+09 1.5987e+08 0.0000e+00 1.0360e+09
  -2.2374e+07 0.0000e+00 0.0000e+00 2.2374e+07 0.0000e+00
   0.0000e+00 4.4753e+09 1.0360e+09 0.0000e+00 8.9506e+09
Number of dof: 14
Number of loads: 1
LOADS =
                   0
                               0 1000
deg = 1
deg = 2
```

P =
0
1000
0
0
0
0
0
0
0
0
0
0
0
0
uf =
0.4464406257
0.4164496357
0.0115891742 0.1202416072
-0.0000012579
0.0115882928
0.1035545001
-0.0000012813
0.0115882455
-0.0591424113
-0.0000015091
0.0115880259
-0.2093232272
-0.0000015091
0.0115880259

Post Process

Nodal Displacements:
(Node No Tx - Ty - Rz)
NodalDisp =
1.00000 0.41645 0.00000 0.01159
2.00000 0.12024 -0.00000 0.01159

3.00000	.10355 -0.00	0000 0.011	159					
3.00000 0.10355 -0.00000 0.01159 4.00000 -0.05914 -0.00000 0.01159								
5.00000 -0.20932 -0.00000 0.01159								
6.00000 0.00000 0.00000								
	.00000 0.00							
Global Memb	per Forces:							
(Element No.	- iFx - iFy - i	Mz - jFx - jFv	v - iMz)					
	·		, , ,					
GlobalForces	=							
1.00000	0.00000	14.27060	1000.00000	-0.00000	-14.27060	-1000.00000		
2.00000	-64.59948	4.70497	999.99999	64.59948	-4.70497	-906.97675		
3.00000	-64.59948	4.70497	906.97674	64.59948	-4.70497	0.00000		
4.00000	-0.00000	0.00000	-0.00000	0.00000	0.00000 -	0.00000		
5.00000	-32.82545	-0.00000	0.00000	32.82545	0.00000	-0.00003		
6.00000	-31.77403	4.70497	0.00000	31.77403	-4.70497	-0.19258		
7.00000	64.59948	9.56563	0.00000	-64.59948	-9.56563	-0.39150		
Local Member Forces:								
Local Membe	er Forces:							
Local Member (Element No.		Mz - jFx - jFy	y - jMz)					
		Mz - jFx - jF <u>y</u> 	y - jMz)					
(Element No.	iFx - iFy - i 	Mz - jFx - jFy 	y - jMz)					
	iFx - iFy - i 	Mz - jFx - jFy 	y - jMz)					
(Element No.	iFx - iFy - i 	Mz - jFx - jF <u>y</u> 	y - jMz)					
(Element No LocalForces = 1.00000	- iFx - iFy - i	-0.00000	1000.00000			-1000.00000		
(Element No. 	14.27060 4.70497	-0.00000 64.59948	1000.00000	-4.70497	-64.59948	-906.97675		
(Element No. 	14.27060 4.70497 4.70497	-0.00000 64.59948 64.59948	1000.00000 999.9999 906.97674	-4.70497 -4.70497	-64.59948 -64.59948	-906.97675 0.00000		
(Element No	14.27060 4.70497 4.70497 0.00000	-0.00000 64.59948 64.59948 0.00000	1000.00000 999.99999 906.97674 -0.00000	-4.70497 -4.70497 0.00000	-64.59948 -64.59948 -0.00000 -	-906.97675 0.00000 0.00000		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545	-0.00000 64.59948 64.59948 0.00000 -0.00000	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 32.82545	-64.59948 -64.59948 -0.00000 -	-906.97675 0.00000 0.00000 -0.00003		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049	-0.00000 64.59948 64.59948 0.00000 -0.00000	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545	-0.00000 64.59948 64.59948 0.00000 -0.00000	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 32.82545	-64.59948 -64.59948 -0.00000 -	-906.97675 0.00000 0.00000 -0.00003		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049	-0.00000 64.59948 64.59948 0.00000 -0.00000	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049	-0.00000 64.59948 64.59948 0.00000 -0.00000	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		
(Element No	14.27060 4.70497 4.70497 0.00000 -32.82545 -32.12049 65.30386	-0.00000 64.59948 64.59948 0.00000 -0.00000 -0.00182 -0.00371	1000.00000 999.99999 906.97674 -0.00000 0.00000	-4.70497 -4.70497 0.00000 - 32.82545 32.12049	-64.59948 -64.59948 -0.00000 - 0.00000 0.00182	-906.97675 0.00000 0.00000 -0.00003 -0.19258		

3.00000	0.00000	0.00000	0.00000
4.00000	0.00000	0.00000	0.00000
5.00000	0.00000	0.00000	0.00000
6.00000	31.77403	-4.70497	-0.19258
7.00000	31.77403	-9.56563	-0.39153
sumFx = 0	0.000004297	75	
sumFy =	5.3291e-14		
sumMz =	-0.58412		

0000e+00

000e+00

0000e+00

000e+00

0000e+00

2574e+08

0000e+00

3270e+08

3561e+08

9554e+01

JJJ 1C . U.

5325e+08

5987e+08

)000e+00

0360e+09