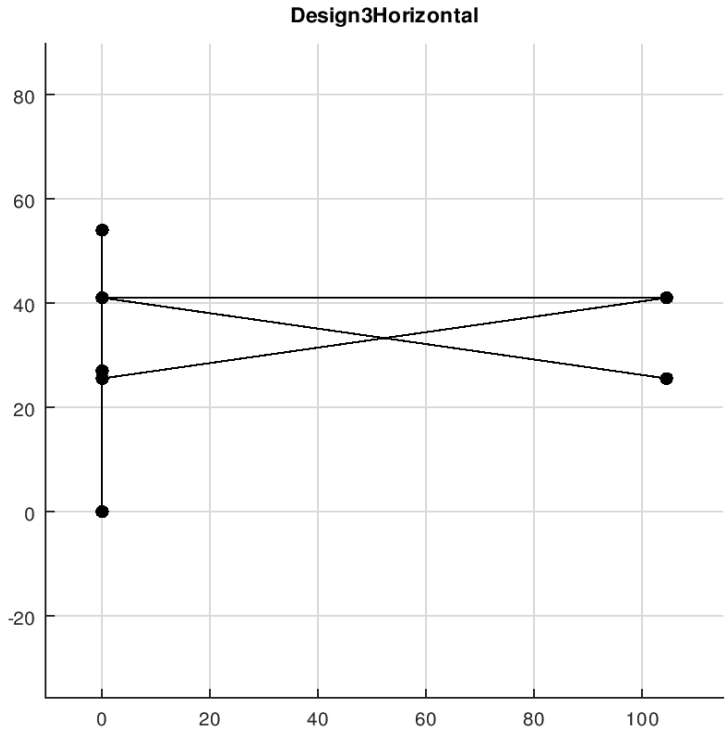

Column1
****
GEOMETRY
****

Nodal Coordinates:
(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)

BOUNDS =

1	0	1	0
6	1	1	1
7	1	1	1

Element Information:

(Ele No. - iNode - jNode - Member Type - E - A - I)

ELES =

1.00000	1.00000	2.00000	0.00000	29000.00000	9999.00000	999999.00000
2.00000	2.00000	3.00000	0.00000	29000.00000	9999.00000	999999.00000
3.00000	3.00000	4.00000	0.00000	29000.00000	9999.00000	999999.00000
4.00000	4.00000	5.00000	0.00000	29000.00000	9999.00000	999999.00000
5.00000	4.00000	7.00000	0.00000	29000.00000	2.00000	2.85000
6.00000	4.00000	6.00000	0.00000	29000.00000	2.00000	2.85000
7.00000	2.00000	7.00000	0.00000	29000.00000	2.00000	2.85000

Load Information:

(Node No. - Fx - Fy - Mz)

LOADS =

3.00000	16.50000	0.00000	0.00000

---

plotFile = ../../1. OUTPUT/Design3Horizontal.png

ans =

-10.450	114.950	-35.700	89.700

****

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.
-2.0840e+07	2.6633e+08	1.1657e+11	7.9462e+01	-8.3646e+10	-1.1654e+11	0.0000e+00	-8.3912e+10	0.
0.0000e+00	0.0000e+00	7.9462e+01	2.1271e+08	4.3956e+01	0.0000e+00	-2.0137e+08	0.0000e+00	0.
-2.6633e+08	2.2692e+09	-8.3646e+10	4.3956e+01	8.5094e+10	8.3912e+10	0.0000e+00	4.0278e+10	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.
0.0000e+00	0.0000e+00	-8.3912e+10	0.0000e+00	4.0278e+10	8.3029e+10	0.0000e+00	8.8818e+10	8.
0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	-1.2574e+08	0.0000e+00	8.8270e+08	2.
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.
0.0000e+00	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.
0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.
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.

Columns 10 through 14:

0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00
0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00
0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00
0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00	0.0000e+00
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
-7.9462e+01	-1.5325e+08	-1.5987e+08	0.0000e+00	-1.0360e+09
4.3028e+07	8.9367e+01	0.0000e+00	-2.2374e+07	0.0000e+00
8.9367e+01	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 =

3.00000	16.50000	0.00000	0.00000

deg = 6

deg = 7

deg = 8

P =

0.00000
0.00000
0.00000
0.00000
0.00000
16.50000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000

uf =

0.06559896394
0.00154366200
0.02614296315
-0.00000018552
0.00154366200
0.02392008946
-0.00000018531
0.00154366274
0.00224701932
-0.00000018335
0.00154366640
-0.01775889724
-0.00000018335
0.00154366640

****

Post Process

****

Nodal Displacements:

(Node No. - Tx - Ty - Rz)

NodalDisp =

1.00000 0.06560 0.00000 0.00154

2.00000	0.02614	-0.00000	0.00154
3.00000	0.02392	-0.00000	0.00154
4.00000	0.00225	-0.00000	0.00154
5.00000	-0.01776	-0.00000	0.00154
6.00000	0.00000	0.00000	0.00000
7.00000	0.00000	0.00000	0.00000

Global Member Forces:

(Element No. - iFx - iFy - iMz - jFx - jFy - jMz)

GlobalForces =

1.00000	-0.00000	2.10462	0.00000	0.00000	-2.10462	0.00000
2.00000	-14.03555	-0.04060	-4.66063	14.03555	0.04060	24.87182
3.00000	2.46445	-0.04060	-24.87182	-2.46445	0.04060	-9.72910
4.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000
5.00000	1.24715	0.07010	4.88359	-1.24715	-0.07010	2.44179
6.00000	1.21730	-0.11070	4.84551	-1.21730	0.11070	2.43006
7.00000	14.03555	2.14523	4.66063	-14.03555	-2.14523	2.24520

Local Member Forces:

(Element No. - iFx - iFy - iMz - jFx - jFy - jMz)

LocalForces =

1.00000	2.10462	0.00000	0.00000	-2.10462	-0.00000	0.00000
2.00000	-0.04060	14.03555	-4.66063	0.04060	-14.03555	24.87182
3.00000	-0.04060	-2.46445	-24.87182	0.04060	2.46445	-9.72910
4.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000
5.00000	1.24715	0.07010	4.88359	-1.24715	-0.07010	2.44179
6.00000	1.22038	0.06887	4.84551	-1.22038	-0.06887	2.43006
7.00000	14.19839	0.06537	4.66063	-14.19839	-0.06537	2.24520

Nodal Support Reactions:

(Node No. - Fx - Fy - Mz)

Support =

1.00000	0.00000	2.10462	0.00000

2.00000	0.00000	0.00000	0.00000
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	-1.21730	0.11070	2.43006
7.00000	-15.28270	-2.21533	4.68699

sumFx = -16.500

sumFy = 1.3323e-15

sumMz = 7.1171

0000e+00
0000e+00
0000e+00
0000e+00
0000e+00
2574e+08
0000e+00
3270e+08
3561e+08
9462e+01
5325e+08
5987e+08
0000e+00
0360e+09