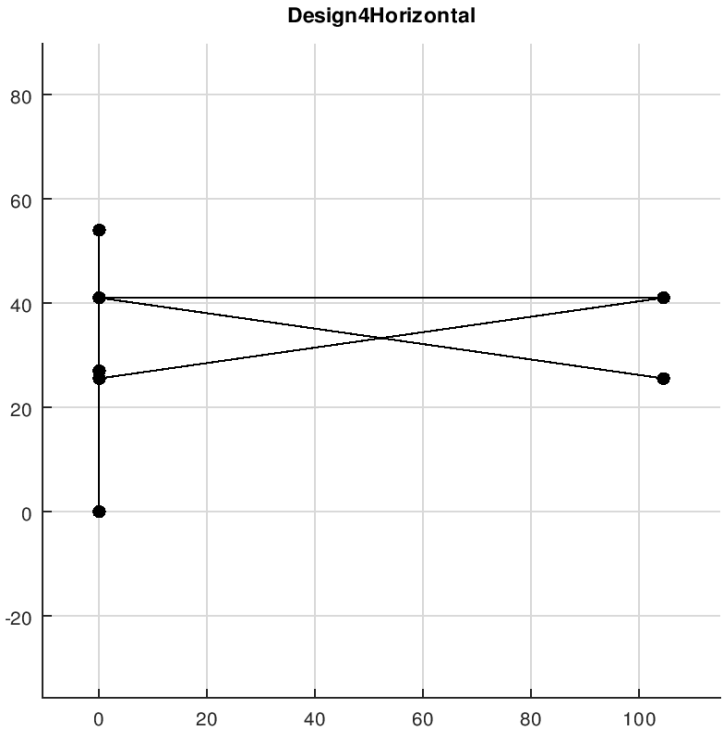

Column1
****
GEOMETRY
****

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	18.90000	0.00000	0.00000

---

plotFile = ../../1. OUTPUT/Design4Horizontal.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	18.90000	0.00000	0.00000

deg = 6

deg = 7

deg = 8

P =

0.00000
0.00000
0.00000
0.00000
0.00000
18.90000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000

uf =

0.07514063142
0.00176819466
0.02994557597
-0.00000021250
0.00176819466
0.02739937520
-0.00000021227
0.00176819550
0.00257385849
-0.00000021002
0.00176819970
-0.02034200957
-0.00000021002
0.00176819970

****

Post Process

****

Nodal Displacements:

(Node No. - Tx - Ty - Rz)

NodalDisp =

1.00000 0.07514 0.00000 0.00177

2.00000	0.02995	-0.00000	0.00177
3.00000	0.02740	-0.00000	0.00177
4.00000	0.00257	-0.00000	0.00177
5.00000	-0.02034	-0.00000	0.00177
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	2.41075	0.00000	0.00000	-2.41075	0.00000
2.00000	-16.07708	-0.04651	-5.33854	16.07708	0.04651	28.48954
3.00000	2.82292	-0.04651	-28.48954	-2.82292	0.04651	-11.14424
4.00000	0.00000	0.00000	-0.00000	0.00000	-0.00000	0.00000
5.00000	1.42855	0.08030	5.59393	-1.42855	-0.08030	2.79696
6.00000	1.39437	-0.12680	5.55031	-1.39437	0.12680	2.78353
7.00000	16.07708	2.45726	5.33854	-16.07708	-2.45726	2.57177

Local Member Forces:

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

LocalForces =

1.00000	2.41075	0.00000	0.00000	-2.41075	-0.00000	0.00000
2.00000	-0.04651	16.07708	-5.33854	0.04651	-16.07708	28.48954
3.00000	-0.04651	-2.82292	-28.48954	0.04651	2.82292	-11.14424
4.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000
5.00000	1.42855	0.08030	5.59393	-1.42855	-0.08030	2.79696
6.00000	1.39790	0.07889	5.55031	-1.39790	-0.07889	2.78353
7.00000	16.26361	0.07488	5.33854	-16.26361	-0.07488	2.57177

Nodal Support Reactions:

(Node No. - Fx - Fy - Mz)

Support =

1.00000	0.00000	2.41075	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	-1.39437	0.12680	2.78353
7.00000	-17.50563	-2.53755	5.36873

sumFx = -18.900

sumFy = 4.4409e-16

sumMz = 8.1523

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