Analysis1Horizontal

Analysis1Horizontal
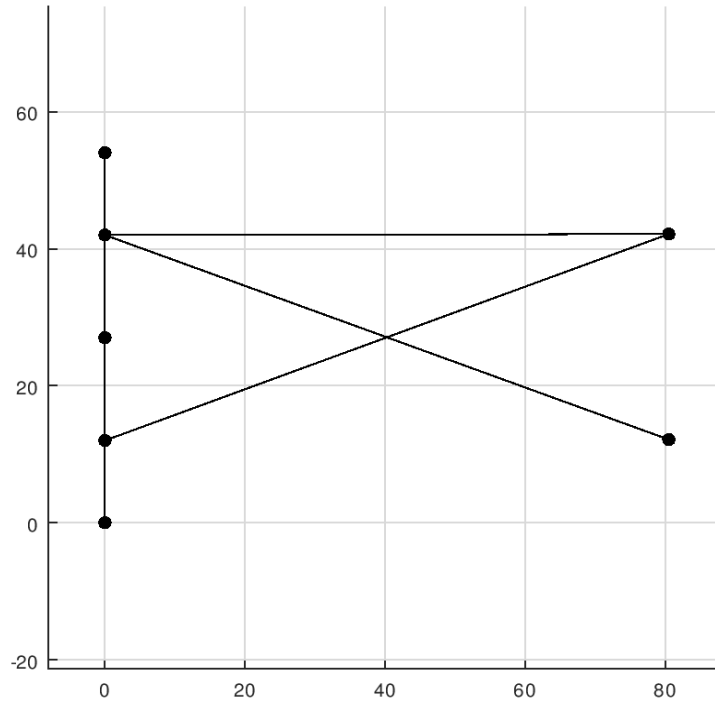
Column1
****
GEOMETRY
****

Nodal Coordinates:
(Node No. - X - Y - Z)

NODES =
1.00000   0.00000   0.00000
2.00000   0.00000   12.00000
3.00000   0.00000   27.00000
4.00000   0.00000   42.00000
5.00000   0.00000   54.00000
6.00000   80.50000   12.14000
7.00000   80.50000   42.14000

Boundary Conditions: 1 = Restrained, 0 = Free

(Node No. - Tx - Ty - Rz)

BOUNDS =

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

Element Information:

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

ELES =

```
    1    1    2    0  29000   9999  999999
    2    2    3    0  29000   9999  999999
    3    3    4    0  29000   9999  999999
    4    4    5    0  29000   9999  999999
    5    4    7    0  29000      5     50
    6    4    6    0  29000      5     50
    7    2    7    0  29000      5     50
```

Load Information:

(Node No. - Fx - Fy - Mz)

LOADS =

```
 3  8  0  0
```

----

plotFile = ../../1. OUTPUT/Analysis1Horizontal.png

ans =

```
  -8.0500  88.5500  -21.3000   75.3000
```

****

ANALYSIS

****

kff =

Columns 1 through 5:

9666657000.00000	1208332125.00000	0.00000	4833328500.00000	0.00000
1208332125.00000	304501178.35278	544.93718	434999152.13019	-103111008.00000
0.00000	544.93718	43495881.42670	1102.72130	0.00000
4833328500.00000	434999152.13019	1102.72130	17400050075.30717	773332560.00000
0.00000	-103111008.00000	0.00000	773332560.00000	206222016.00000
0.00000	0.00000	-19331400.00000	0.00000	0.00000
0.00000	-773332560.00000	0.00000	3866662800.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-103111008.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-773332560.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000

Columns 6 through 10:

0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	-773332560.00000	0.00000	0.00000	0.00000
-19331400.00000	0.00000	0.00000	0.00000	0.00000
0.00000	3866662800.00000	0.00000	0.00000	0.00000
0.00000	0.00000	-103111008.00000	0.00000	-773332560.00000
38662800.00000	0.00000	0.00000	-19331400.00000	0.00000
0.00000	15466651200.00000	773332560.00000	0.00000	3866662800.00000
0.00000	773332560.00000	304502984.60387	-538.62633	-434999156.90154
-19331400.00000	0.00000	-538.62633	43495911.78478	2449.02769
0.00000	3866662800.00000	-434999156.90154	2449.02769	17400122201.72976
0.00000	0.00000	-201388687.50000	0.00000	1208332125.00000
0.00000	0.00000	0.00000	-24164250.00000	0.00000
0.00000	0.00000	-1208332125.00000	0.00000	4833328500.00000

Columns 11 through 13:

0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
0.00000	0.00000	0.00000
-201388687.50000	0.00000	-1208332125.00000

0.00000	-24164250.00000	0.00000
1208332125.00000	0.00000	4833328500.00000
201388687.50000	0.00000	1208332125.00000
0.00000	24164250.00000	0.00000
1208332125.00000	0.00000	9666657000.00000

Number of dof: 13
Number of loads: 1
LOADS =

  3 8 0 0

deg = 5
deg = 6
deg = 7
P =

 0
 0
 0
 0
 8
 0
 0
 0
 0
 0
 0
 0
 0

uf =

 -0.000034872557
  0.000418445211
  0.000000028307
 -0.000034866188
  0.000941266341
  0.000000073498
 -0.000034839158
  0.001463650968
  0.000000118688
 -0.000034818333
  0.001881470958
  0.000000118688
 -0.000034818333

```
************************************
Post Process
************************************


----------------------------------------
Nodal Displacements:
(Node No. - Tx - Ty - Rz)
----------------------------------------


NodalDisp =

  1.00000   0.00000   0.00000  -0.00003
  2.00000   0.00042   0.00000  -0.00003
  3.00000   0.00094   0.00000  -0.00003
  4.00000   0.00146   0.00000  -0.00003
  5.00000   0.00188   0.00000  -0.00003
  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 =

  1.0000e+00  -2.5653e+00  -6.8402e-01  -3.4925e-10   2.5653e+00   6.8402e-01   3.0783e+01
  2.0000e+00  -3.2002e+00  -8.7360e-01  -2.8258e+01   3.2002e+00   8.7360e-01   7.6260e+01
  3.0000e+00   4.7998e+00  -8.7360e-01  -7.6260e+01  -4.7998e+00   8.7360e-01   4.2631e+00
  4.0000e+00  -4.3656e-11  -8.8818e-16   4.0745e-10   4.3656e-11   8.8818e-16  -1.1642e-10
  5.0000e+00   2.6365e+00  -4.2241e-02  -2.5119e+00  -2.6365e+00   4.2241e-02  -1.2576e+00
  6.0000e+00   2.1634e+00  -8.3136e-01  -1.7512e+00  -2.1634e+00   8.3136e-01  -5.7516e-01
  7.0000e+00   6.3490e-01   1.8959e-01  -2.5253e+00  -6.3490e-01  -1.8959e-01  -1.3490e+00


----------------------------------------
----------------------------------------
Local Member Forces:
(Element No. - iFx - iFy - iMz - jFx - jFy - jMz)
----------------------------------------


LocalForces =

  1.0000e+00  -6.8402e-01   2.5653e+00  -3.4925e-10   6.8402e-01  -2.5653e+00   3.0783e+01
  2.0000e+00  -8.7360e-01   3.2002e+00  -2.8258e+01   8.7360e-01  -3.2002e+00   7.6260e+01
  3.0000e+00  -8.7360e-01  -4.7998e+00  -7.6260e+01   8.7360e-01   4.7998e+00   4.2631e+00
  4.0000e+00  -8.8818e-16   4.3656e-11   4.0745e-10   8.8818e-16  -4.3656e-11  -1.1642e-10
```

5.0000e+00	2.6364e+00	-4.6826e-02	-2.5119e+00	-2.6364e+00	4.6826e-02	-1.2576e+00
6.0000e+00	2.3175e+00	-2.7095e-02	-1.7512e+00	-2.3175e+00	2.7095e-02	-5.7516e-01
7.0000e+00	6.6107e-01	-4.5073e-02	-2.5253e+00	-6.6107e-01	4.5073e-02	-1.3490e+00

Nodal Support Reactions:
(Node No. - Fx - Fy - Mz)

Support =

1.00000	-2.56527	-0.68402	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	-2.16337	0.83136	-0.57516
7.00000	-3.27136	-0.14734	-2.60662

sumFx = -8.0000
sumFy =   8.6042e-16
sumMz = -3.1818