

Action:

Object:

Method:

Select Result Cases

LC_3_Static, A1:Static Subcase;-MS
LC_1_Down, A1:Static Subcase;-MS
LC_2_Downx2, A1:Static Subcase;-
LC_4_Staticx2, A1:Static Subcase;-
LC_5_Downx3, A1:Static Subcase;-
LC_6_Staticx3, A1:Static Subcase;-

Select Report Result

Bar Forces, Rotational
Bar Forces, Translational
Bar Stresses, Axial
Bar Stresses, Bending

Select Quantities

Subcase ID
Layer ID
X Location
Y Location

Action:

Object:

Method:

Target Entity:

Select Elements
Elm 1:1563 1804:2044

Addtl. Display Control:

Action:

Object:

Method:

File Name
Trans.txt

Report Type:

Action:

Object:

Method:

Coordinate Transformation:

Scale Factor

Filter Values:

Averaging Definition:
Domain:
Method:

Extrapolation :

☐ Use PCL Expression

Save Report As:

Action: Create
Object: Report
Method: Overwrite File



Select Result Cases

LC_3_Static, A1:Static Subcase;-MS
LC_1_Down, A1:Static Subcase;-MS
LC_2_Downx2, A1:Static Subcase;-
LC_4_Staticx2, A1:Static Subcase;-
LC_5_Downx3, A1:Static Subcase;-
LC_6_Staticx3, A1:Static Subcase;-

Select Report Result

Bar Forces, Rotational
Bar Forces, Translational
Bar Stresses, Axial
Bar Stresses, Bending

Select Quantities

X Component
Y Component
Z Component
CID

Apply Reset

Action: Create
Object: Report
Method: Overwrite File



Target Entity:

Elements

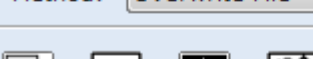
Select Elements
Elm 1:1563 1804:2044

Addtl. Display Control:

Element Nodes

Apply Reset

Action: Create
Object: Report
Method: Overwrite File



File Name
Rot.txt

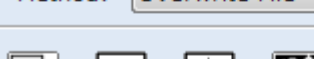
Format...

Sorting Options...

Report Type: Full

Apply Reset

Action: Create
Object: Report
Method: Overwrite File



Coordinate Transformation:

Element IJK

Scale Factor 1.0

Filter Values: None

Averaging Definition:

Domain: All Entities

Method: Derive/Average

Extrapolation : Shape Fn.

☐ Use PCL Expression

Define PCL Expression...

Existing Reports...

Save Report As:

Apply Reset

Translation and Rotation Force Results to .txt

Normally what happens

Trans.txt

-Entity ID--Subcase ID--X	Component---Y	Component---Z	Component-----Property Name-----
1 1 15.876003	-47.232388	-1.258218	2x2x01875t_Z
2 1 15.876003	-47.095112	-1.258218	2x2x01875t_Z
3 1 15.876003	-46.957840	-1.258218	2x2x01875t_Z
4 1 15.876003	-46.820564	-1.258218	2x2x01875t_Z
5 1 15.876003	-46.683292	-1.258218	2x2x01875t_Z
6 1 15.876003	-46.546017	-1.258218	2x2x01875t_Z
7 1 15.876003	-46.408745	-1.258218	2x2x01875t_Z
8 1 15.877235	-7.384209	-0.038212	2x2x01875t_Z
9 1 15.877235	-7.246935	-0.038212	2x2x01875t_Z
10 1 15.877235	-7.109662	-0.038212	2x2x01875t_Z
11 1 15.877235	-6.972388	-0.038212	2x2x01875t_Z
12 1 15.877235	-6.835114	-0.038212	2x2x01875t_Z
13 1 15.877235	-6.697840	-0.038212	2x2x01875t_Z
14 1 15.877235	-6.560566	-0.038212	2x2x01875t_Z
15 1 15.877235	-6.423293	-0.038212	2x2x01875t_Z
16 1 15.877235	-6.286019	-0.038212	2x2x01875t_Z
17 1 15.877235	-6.148745	-0.038212	2x2x01875t_Z
18 1 15.877235	-6.011472	-0.038212	2x2x01875t_Z
19 1 15.877235	-5.874198	-0.038212	2x2x01875t_Z
20 1 15.877235	-5.736924	-0.038212	2x2x01875t_Z
21 1 15.877235	-5.599650	-0.038212	2x2x01875t_Z
22 1 15.877235	-5.462377	-0.038212	2x2x01875t_Z
23 1 15.877235	-5.325103	-0.038212	2x2x01875t_Z
24 1 15.877235	-5.187829	-0.038212	2x2x01875t_Z
25 1 15.877235	-5.050555	-0.038212	2x2x01875t_Z
26 1 15.877235	-4.913281	-0.038212	2x2x01875t_Z
27 1 15.877235	-4.776008	-0.038212	2x2x01875t_Z
28 1 15.877235	-4.638734	-0.038212	2x2x01875t_Z
29 1 15.877235	-4.501460	-0.038212	2x2x01875t_Z
30 1 15.877235	-4.364186	-0.038212	2x2x01875t_Z
31 1 15.877235	-4.226912	-0.038212	2x2x01875t_Z
32 1 15.877235	-4.089639	-0.038212	2x2x01875t_Z
33 1 15.877235	-3.952365	-0.038212	2x2x01875t_Z
34 1 15.877235	-3.815091	-0.038212	2x2x01875t_Z
35 1 15.877235	-3.677818	-0.038212	2x2x01875t_Z
36 1 15.877235	-3.540544	-0.038212	2x2x01875t_Z
37 1 15.877235	-3.403270	-0.038212	2x2x01875t_Z
38 1 15.877235	-3.265996	-0.038212	2x2x01875t_Z
39 1 15.877235	-3.128722	-0.038212	2x2x01875t_Z
40 1 15.877235	-2.991449	-0.038212	2x2x01875t_Z
41 1 15.877235	-2.854175	-0.038212	2x2x01875t_Z
42 1 15.877235	-2.716902	-0.038212	2x2x01875t_Z
43 1 15.877235	-2.579629	-0.038212	2x2x01875t_Z
44 1 15.877235	-2.442355	-0.038212	2x2x01875t_Z

Rot.txt

-Entity ID--Subcase ID--X	Component---Y	Component---Z	Component-----Property Name-----
1 1 393.599823	7.677155	45.149235	2x2x01875t_Z
2 1 393.599823	7.362601	56.940170	2x2x01875t_Z
3 1 393.599823	7.048047	68.696793	2x2x01875t_Z
4 1 393.599823	6.733492	80.419090	2x2x01875t_Z
5 1 393.599823	6.418938	92.107071	2x2x01875t_Z
6 1 393.599823	6.104383	103.760735	2x2x01875t_Z
7 1 393.599823	5.789828	115.380081	2x2x01875t_Z
8 1 2.328577	5.561733	123.104919	2x2x01875t_Z
9 1 2.328577	5.552180	124.933807	2x2x01875t_Z
10 1 2.328577	5.542627	126.728386	2x2x01875t_Z
11 1 2.328577	5.533075	128.488647	2x2x01875t_Z
12 1 2.328577	5.523522	130.214569	2x2x01875t_Z
13 1 2.328577	5.513969	131.906189	2x2x01875t_Z
14 1 2.328577	5.504416	133.563507	2x2x01875t_Z
15 1 2.328577	5.494863	135.186493	2x2x01875t_Z
16 1 2.328577	5.485310	136.775146	2x2x01875t_Z
17 1 2.328577	5.475758	138.329498	2x2x01875t_Z
18 1 2.328577	5.466205	139.849518	2x2x01875t_Z
19 1 2.328577	5.456652	141.335236	2x2x01875t_Z
20 1 2.328577	5.447099	142.786621	2x2x01875t_Z
21 1 2.328577	5.437546	144.203690	2x2x01875t_Z
22 1 2.328577	5.427993	145.586441	2x2x01875t_Z
23 1 2.328577	5.418440	146.934875	2x2x01875t_Z
24 1 2.328577	5.408887	148.248993	2x2x01875t_Z
25 1 2.328577	5.399334	149.528793	2x2x01875t_Z
26 1 2.328577	5.389781	150.774261	2x2x01875t_Z
27 1 2.328577	5.380229	151.985428	2x2x01875t_Z
28 1 2.328577	5.370676	153.162262	2x2x01875t_Z
29 1 2.328577	5.361123	154.304794	2x2x01875t_Z
30 1 2.328577	5.351570	155.412994	2x2x01875t_Z
31 1 2.328577	5.342017	156.486893	2x2x01875t_Z
32 1 2.328577	5.332464	157.526459	2x2x01875t_Z
33 1 2.328577	5.322911	158.531708	2x2x01875t_Z
34 1 2.328577	5.313358	159.502655	2x2x01875t_Z
35 1 2.328577	5.303805	160.439270	2x2x01875t_Z
36 1 2.328577	5.294252	161.341553	2x2x01875t_Z

Using PCL

Using PCL I can make the same reports except with more columns in the `res_display_report_create` by adding more `sa_attributes` with "reportVColumn:#,heading name,XX,%F12.6%"

Except that the XX,YY,ZZ do not keep their values after I `res_data_load_dbresult` and `res_data_load_dbresult` for the rotation forces and then all column turn into rotational forces shown below

Should be trans forces

Rot Forces

-Entry	ID--Subcase	ID--X	Component---Y	Component---Z	Component---X	Component---Y	Component---Z	Component-----Property	Name-----
1		1	393.599823	7.677155	45.149235	393.599823	7.677155	45.149235	2x2x01875t_Z
2		1	393.599823	7.362601	56.940170	393.599823	7.362601	56.940170	2x2x01875t_Z
3		1	393.599823	7.048047	68.696793	393.599823	7.048047	68.696793	2x2x01875t_Z
4		1	393.599823	6.733492	80.419090	393.599823	6.733492	80.419090	2x2x01875t_Z
5		1	393.599823	6.418938	92.107071	393.599823	6.418938	92.107071	2x2x01875t_Z
6		1	393.599823	6.104383	103.760735	393.599823	6.104383	103.760735	2x2x01875t_Z
7		1	393.599823	5.789828	115.380081	393.599823	5.789828	115.380081	2x2x01875t_Z
8		1	2.328577	5.561733	123.104919	2.328577	5.561733	123.104919	2x2x01875t_Z
9		1	2.328577	5.552180	124.933807	2.328577	5.552180	124.933807	2x2x01875t_Z
10		1	2.328577	5.542627	126.728386	2.328577	5.542627	126.728386	2x2x01875t_Z
11		1	2.328577	5.533075	128.488647	2.328577	5.533075	128.488647	2x2x01875t_Z
12		1	2.328577	5.523522	130.214569	2.328577	5.523522	130.214569	2x2x01875t_Z
13		1	2.328577	5.513969	131.906189	2.328577	5.513969	131.906189	2x2x01875t_Z
14		1	2.328577	5.504416	133.563507	2.328577	5.504416	133.563507	2x2x01875t_Z
15		1	2.328577	5.494863	135.186493	2.328577	5.494863	135.186493	2x2x01875t_Z
16		1	2.328577	5.485310	136.775146	2.328577	5.485310	136.775146	2x2x01875t_Z
17		1	2.328577	5.475758	138.329498	2.328577	5.475758	138.329498	2x2x01875t_Z
18		1	2.328577	5.466205	139.849518	2.328577	5.466205	139.849518	2x2x01875t_Z
19		1	2.328577	5.456652	141.335236	2.328577	5.456652	141.335236	2x2x01875t_Z
20		1	2.328577	5.447099	142.786621	2.328577	5.447099	142.786621	2x2x01875t_Z
21		1	2.328577	5.437546	144.203690	2.328577	5.437546	144.203690	2x2x01875t_Z
22		1	2.328577	5.427993	145.586441	2.328577	5.427993	145.586441	2x2x01875t_Z
23		1	2.328577	5.418440	146.934875	2.328577	5.418440	146.934875	2x2x01875t_Z
24		1	2.328577	5.408887	148.248993	2.328577	5.408887	148.248993	2x2x01875t_Z
25		1	2.328577	5.399334	149.528793	2.328577	5.399334	149.528793	2x2x01875t_Z
26		1	2.328577	5.389781	150.774261	2.328577	5.389781	150.774261	2x2x01875t_Z
27		1	2.328577	5.380229	151.985428	2.328577	5.380229	151.985428	2x2x01875t_Z
28		1	2.328577	5.370676	153.162262	2.328577	5.370676	153.162262	2x2x01875t_Z
29		1	2.328577	5.361123	154.304794	2.328577	5.361123	154.304794	2x2x01875t_Z
30		1	2.328577	5.351570	155.412994	2.328577	5.351570	155.412994	2x2x01875t_Z
31		1	2.328577	5.342017	156.486893	2.328577	5.342017	156.486893	2x2x01875t_Z
32		1	2.328577	5.332464	157.526459	2.328577	5.332464	157.526459	2x2x01875t_Z

PCL code layout:

```
res_data_load_dbresults(translation)
Res_data_load_dbresult(all translation)
Res_display_report_create(trans info)
    Sa_attributes(11)=("reportVcolumn:3,X component,XX,%F12.6%")
    Sa_attributes(12)=("reportVcolumn:4,Y component,YY,%F12.6%")
    Sa_attributes(13)=("reportVcolumn:5,Z component,ZZ,%F12.6%")
res_display_report_write(only trans.txt)
```

```
res_data_load_dbresults(rotation)
Res_data_load_dbresult(all rotation)
Res_display_report_create(Rot info)
    skipped Sa_attributes 11,12,&13
    Sa_attributes(14)=("reportVcolumn:3,X component,XX,%F12.6%")
    Sa_attributes(15)=("reportVcolumn:4,Y component,YY,%F12.6%")
    Sa_attributes(16)=("reportVcolumn:5,Z component,ZZ,%F12.6%")
res_display_report_write(both trans and Rot.txt)
```