



USER MANUAL

PLPak Version 1.01

**STRUCTURAL ANALYSIS SOFTWARE USING BOUNDARY
ELEMENTS METHOD**

PLPAK basic tutorials

Tutorial 19 – PLPost exporting result files

CONTACT DETAILS:

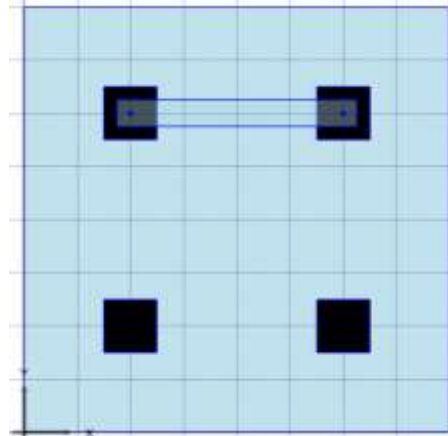
www.be4e.com

support@be4e.com

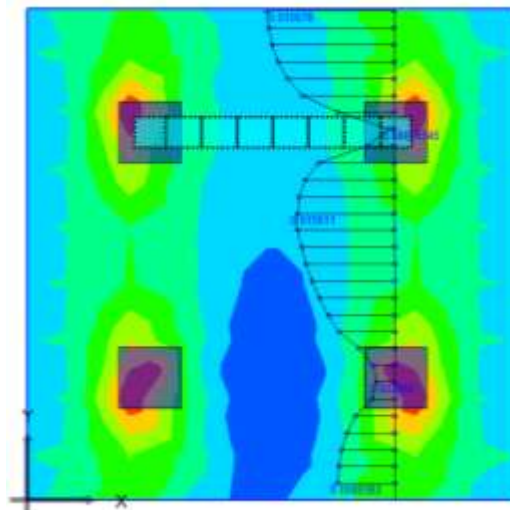
Tutorial 19

The objective of this tutorial is to export the PLPost results to .tsv format files.

I – In PLGen draw a square slab and the four columns with one beam between one pair of columns.



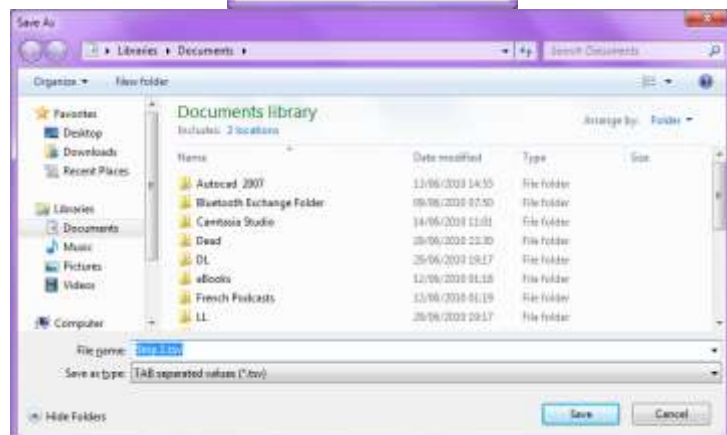
II - Open the model in the PLPost. Draw a strip, and in the Results Manager enable the main contour then solve them both. The screen appears as shown.



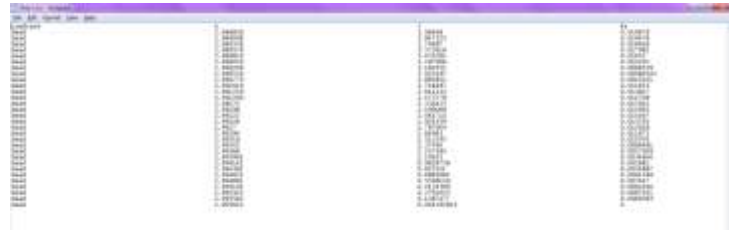
III - A dialogue box appears asking which load case should it export the data for; in this case there is only one load case. Move it to the right column and then click Export.



IV - A dialogue box appears prompting for the file name and location. The format is saved under the .tsv format (tab separated values). Click on Save.



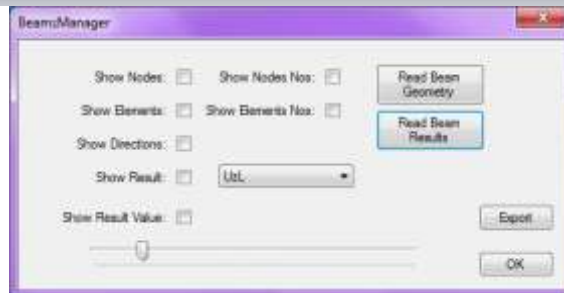
V - Go to the folder in which it was saved. The .tsv format can be opened in both Microsoft Excel and Notepad. Open the file in Notepad. The file contains the X and Y coordinates of the strip, then the rotation at each point, deflection, moment about X and Y, then shear about X and Y.



VI - Export, going through the same process, the Main Contour. Open the file in Excel. This feature applies for the strip, the quadrilateral contour, rectangular contour and the column.

Loadcase	X	Y	Rx	Ry	Ux	Uy	Mxx	Myy	Mxy	Qx	Qy
2	Dead	0.366667	0.366667	-0.0423	-0.041111	-0.04726	0.39837	-0.26072	0.39256	1.4458	1.4542
3	Dead	0.366667	0.833333	-0.05078	-0.01976	-0.03169	0.32111	-0.14587	1.2781	3.4013	0.6236
4	Dead	0.366667	1.3	-0.04798	0.008811	-0.03612	0.35162	0.26338	0.64623	2.2997	-2.2867
5	Dead	0.366667	1.766667	-0.04095	0.006788	-0.03382	0.30994	0.099215	-0.39567	0.66711	-1.1869
6	Dead	0.366667	2.233333	-0.04203	-0.00632	-0.03941	0.30276	-0.16375	-0.4063	0.66912	1.1942
7	Dead	0.366667	2.7	-0.05098	-0.00607	-0.03178	0.34099	-0.31863	0.01692	2.2856	2.2252
8	Dead	0.366667	3.166667	-0.05544	0.020398	-0.03404	0.30661	0.096935	1.217	3.335	-0.71579
9	Dead	0.366667	3.633333	-0.04866	0.040508	-0.04964	0.35325	0.2167	0.35209	1.3263	-1.4096
10	Dead	0.833333	0.366667	-0.03077	-0.04939	-0.03119	1.2772	-0.13265	0.39635	0.56232	3.3775
11	Dead	0.833333	0.833333	-0.03437	-0.0238	-0.00994	2.7003	-0.0688	2.8717	8.3005	8.2091
12	Dead	0.833333	1.3	-0.024	0.039418	-0.01093	1.7751	0.1239	0.80929	2.283	-7.5719
13	Dead	0.833333	1.766667	-0.022	0.011251	-0.02941	8.8062	-0.00699	-0.60663	0.023184	-1.8008
14	Dead	0.833333	2.233333	-0.02371	-0.01123	-0.02041	0.75865	-0.09059	-0.59308	0.004352	1.6706
15	Dead	0.833333	2.7	-0.0276	-0.0188	-0.01115	1.6898	-0.13879	0.82117	1.4859	7.9575
16	Dead	0.833333	3.166667	-0.02922	0.022175	-0.01014	2.7403	-0.18491	2.3953	7.0527	-9.5452
17	Dead	0.833333	3.633333	-0.02948	0.046014	-0.03021	1.2256	0.026499	0.30013	0.51675	-1.117
18	Dead	1.3	0.366667	0.007663	-0.04601	-0.03914	0.61672	0.28496	0.33596	-2.2481	2.3485
19	Dead	1.3	0.833333	0.019659	-0.02291	-0.01072	0.7936	0.15443	1.7223	-7.4161	2.2235
20	Dead	1.3	1.3	0.011958	0.011828	-0.00971	0.63536	-0.53686	0.59685	-3.6227	-3.5486
21	Dead	1.3	1.766667	-0.00035	0.006751	-0.01582	0.39591	-0.23376	-0.34985	-1.0699	-1.2471
22	Dead	1.3	2.233333	-0.00375	-0.01174	-0.01459	0.38902	0.018157	-0.5031	-0.83137	1.3785
23	Dead	1.3	2.7	0.009647	-0.01434	-0.00876	0.44043	0.24874	0.04134	-2.0628	2.6411
24	Dead	1.3	3.166667	0.002952	0.01883	-0.0046	0.50118	-0.07217	1.5976	-3.9749	-0.18823
25	Dead	1.3	3.633333	-0.00479	0.042799	-0.023	0.62428	-0.21011	0.37522	-1.4707	-2.0998
26	Dead	1.766667	0.366667	0.00751	-0.03814	-0.03425	-0.39833	0.12996	0.30027	-1.1333	0.66838
27	Dead	1.766667	0.833333	0.01175	-0.01972	-0.02006	-0.59974	0.040108	0.77601	-1.7534	0.013137
28	Dead	1.766667	1.3	0.008523	0.000432	-0.01625	-0.49476	-0.17287	0.31846	-1.2885	-1.0701
29	Dead	1.766667	1.766667	0.003216	0.000204	-0.01746	-0.25921	-0.12334	-0.41628	-0.57017	-0.44487
30	Dead	1.766667	2.233333	0.001185	-0.01164	0.01471	-0.12205	-0.00744	-0.38811	-0.38762	1.0857
31	Dead	1.766667	2.7	0.001887	-0.01098	-0.00802	-0.00639	0.052908	0.53164	-0.45728	2.5716
32	Dead	1.766667	3.166667	0.002532	0.01612	-0.03856	0.038721	-0.0184	1.2067	-0.45301	-7.1217

VII - Beams can also be exported, go back to the PLPost and click on beams to open the beams manager. Click on read beam results. Then click on export to export the beams data.



VIII - Open the file in either Excel or Notepad. The first column is the load case, then from node, then local bending rotation, local torsion rotation, local deflection rotation, local bending moment, local torsion moment and then shear, and then to node with the same set of results as well.