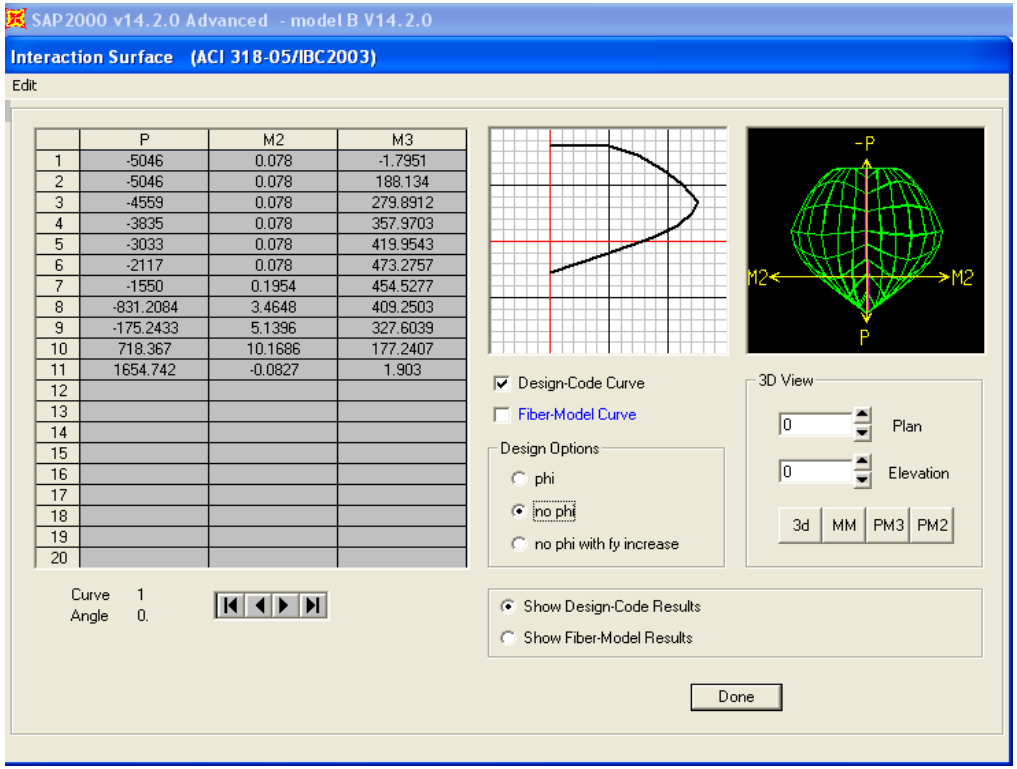
Compare hinge response curve with hinge backbone curve when the point on the interaction surface changes.

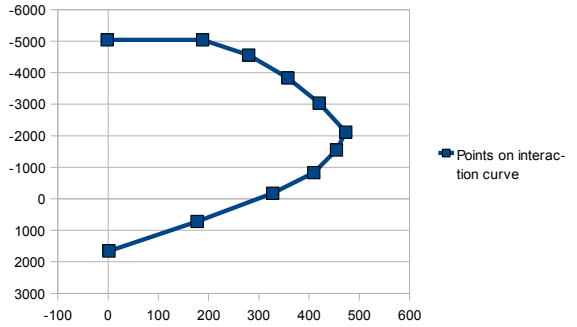
Interaction curve for the cross-section calculated by the section designer:



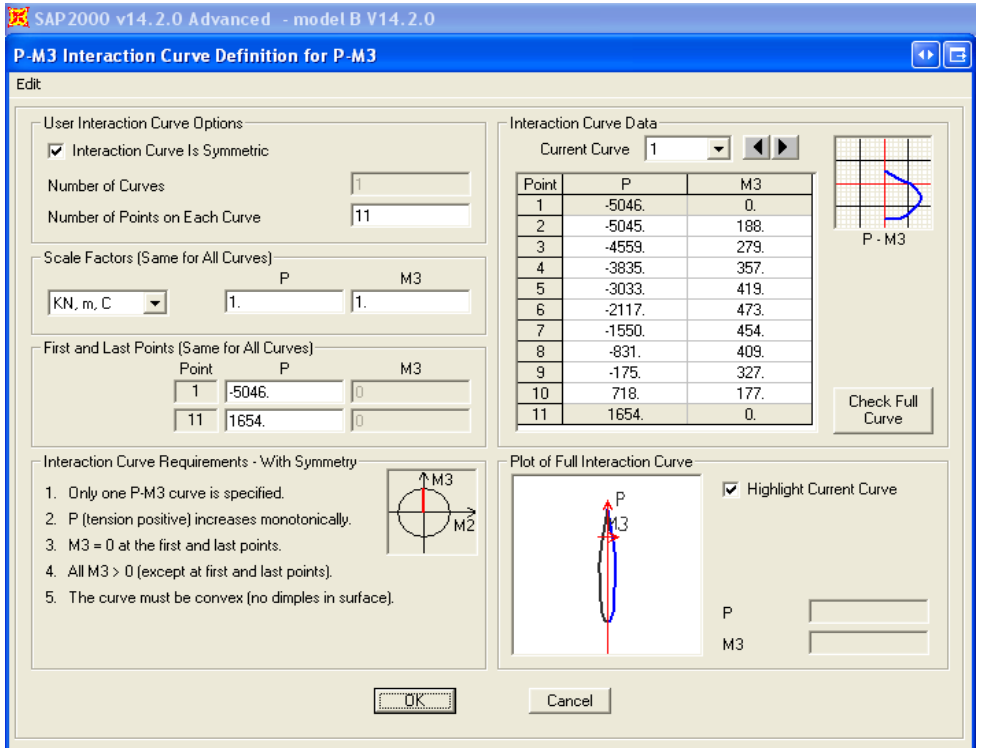
	P	M2	M3
1	-5046	0.078	-1.7951
2	-5046	0.078	188.134
3	-4559	0.078	279.8912
4	-3835	0.078	357.9703
5	-3033	0.078	419.9543
6	-2117	0.078	473.2757
7	-1550	0.1954	454.5277
8	-831.2084	3.4648	409.2503
9	-175.2433	5.1396	327.6039
10	718.367	10.1686	177.2407
11	1654.742	-0.0827	1.903
12			
13			
14			
15			
16			
17			
18			
19			
20			

Points on interaction curve

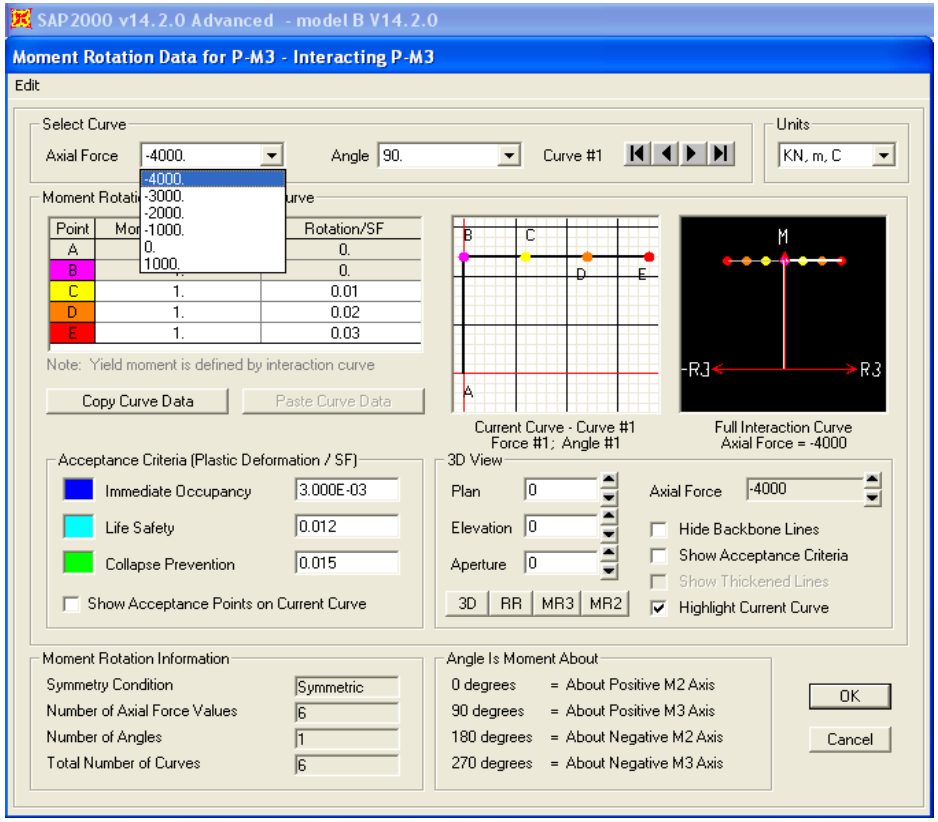
	P	M3
1	-5046	-1.8
2	-5046	188.13
3	**-4559**	**279.89**
4	-3835	357.97
5	-3033	419.95
6	**-2117**	**473.28**
7	-1550	454.53
8	-831.21	409.25
9	-175.24	327.6
10	718.37	177.24
11	1654.74	1.9



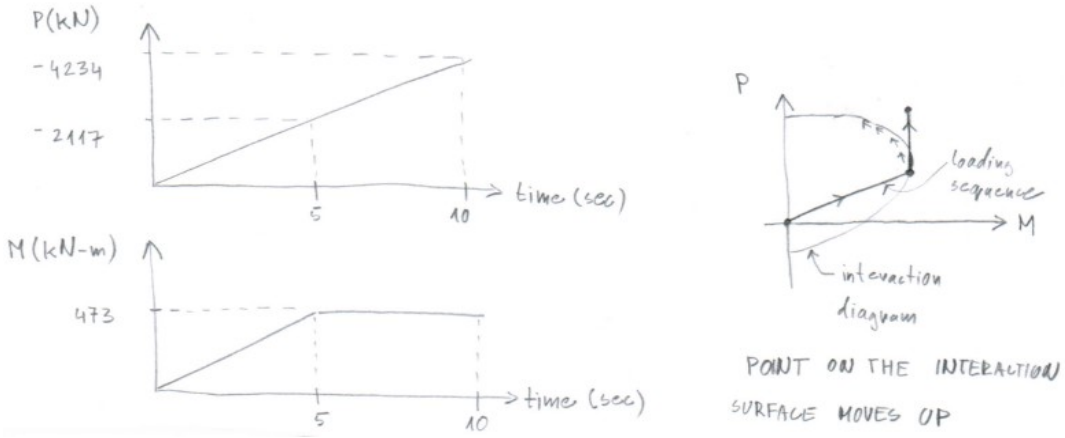
Interaction curve specified in the hinge definition is based on the above interaction curve calculated by section designer:

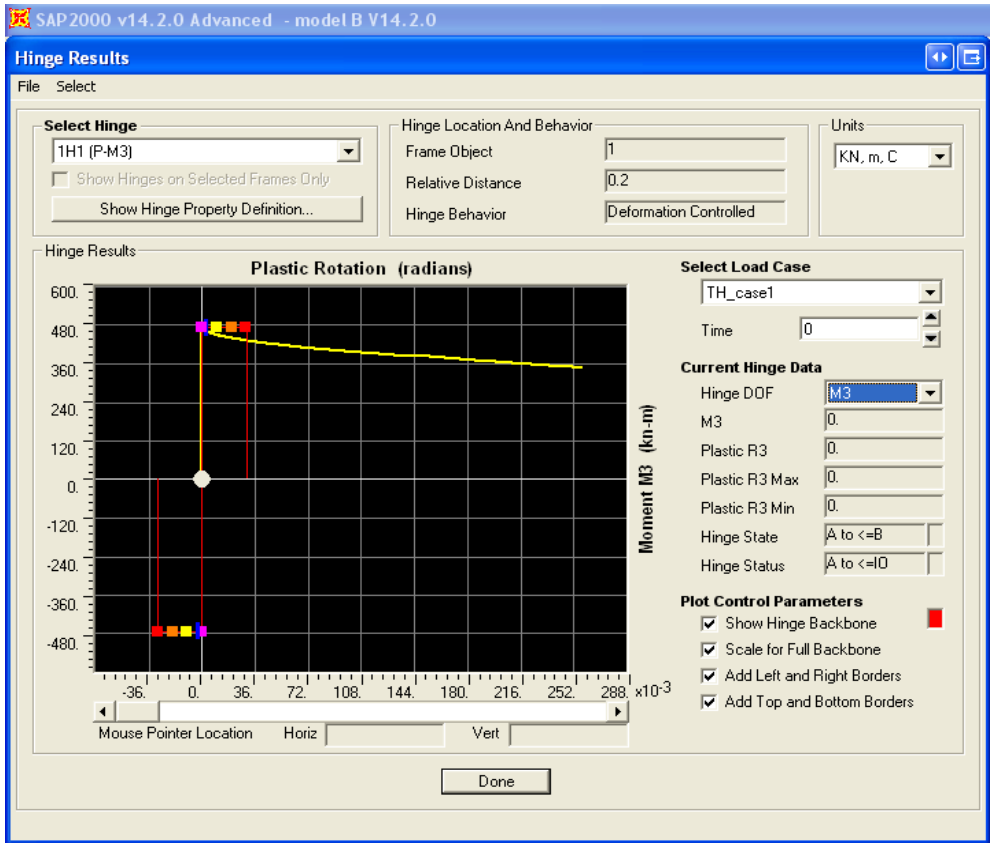


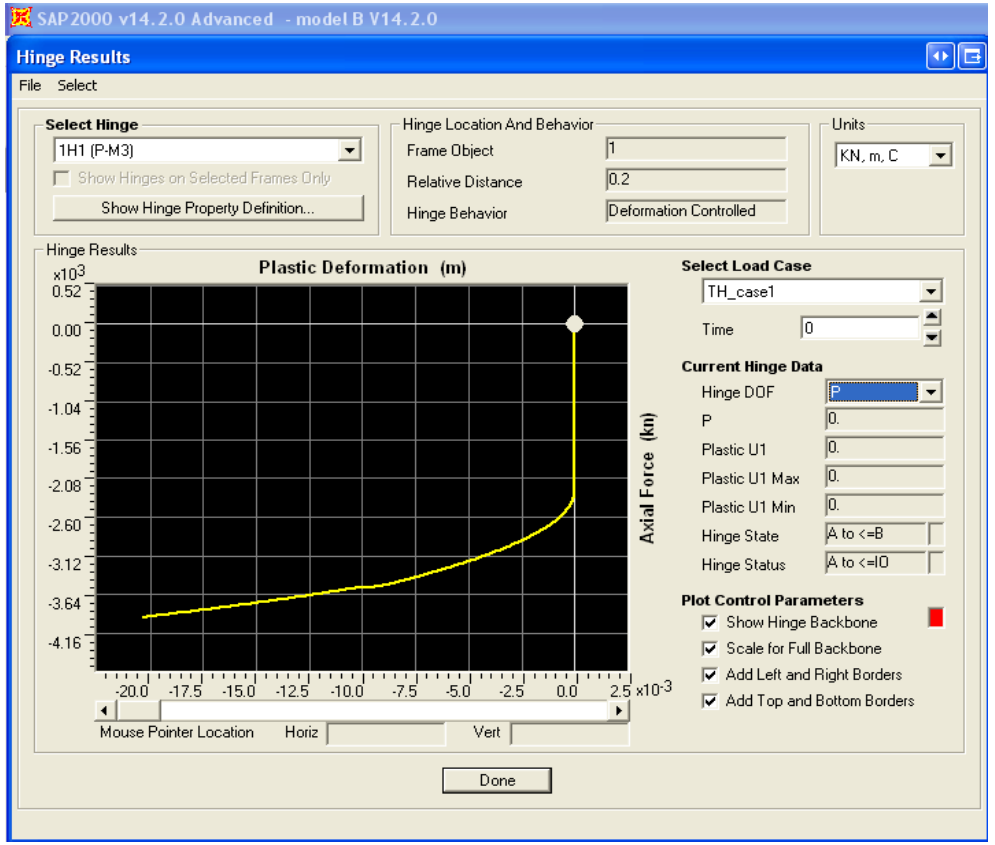
Definition of hinge moment rotation curve (the curve is the same for all levels of axial force):



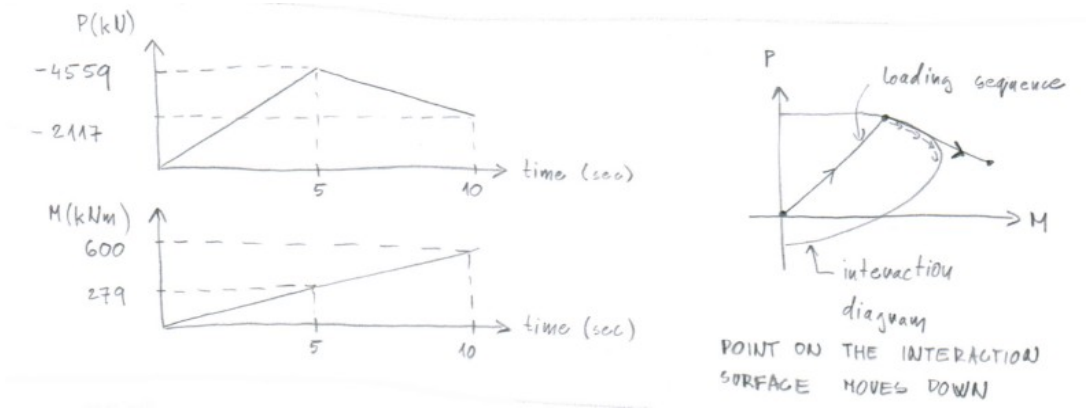
Loading sequence and response for case 1

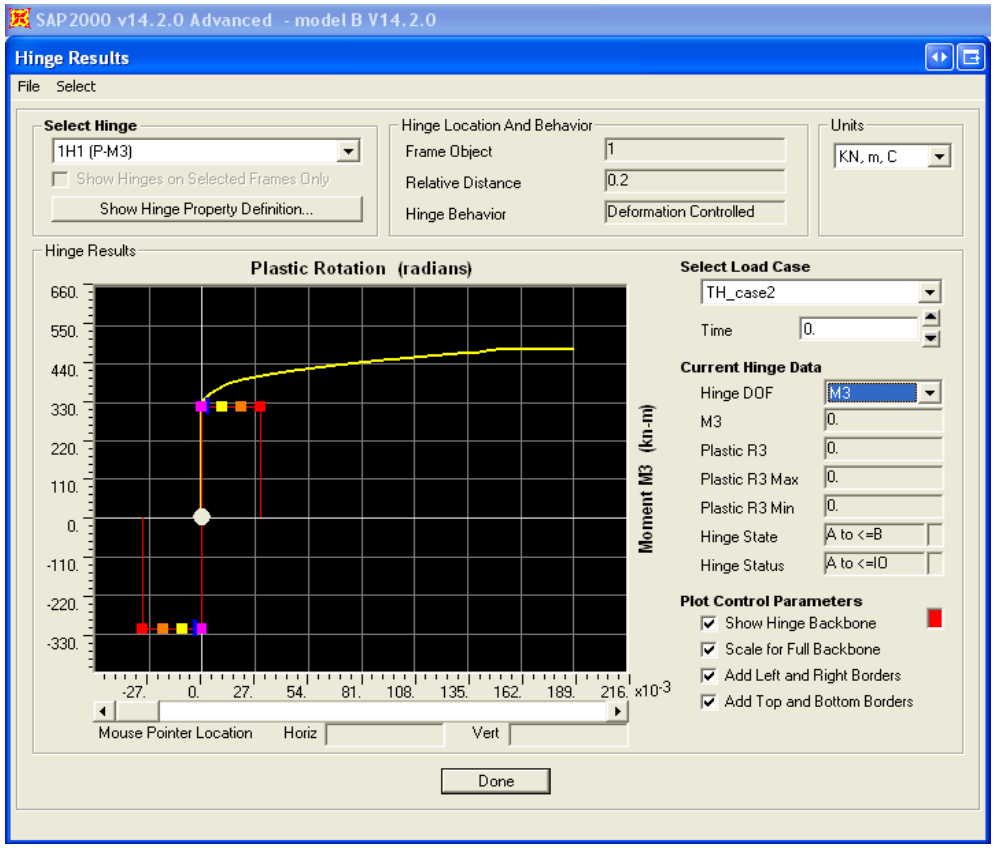


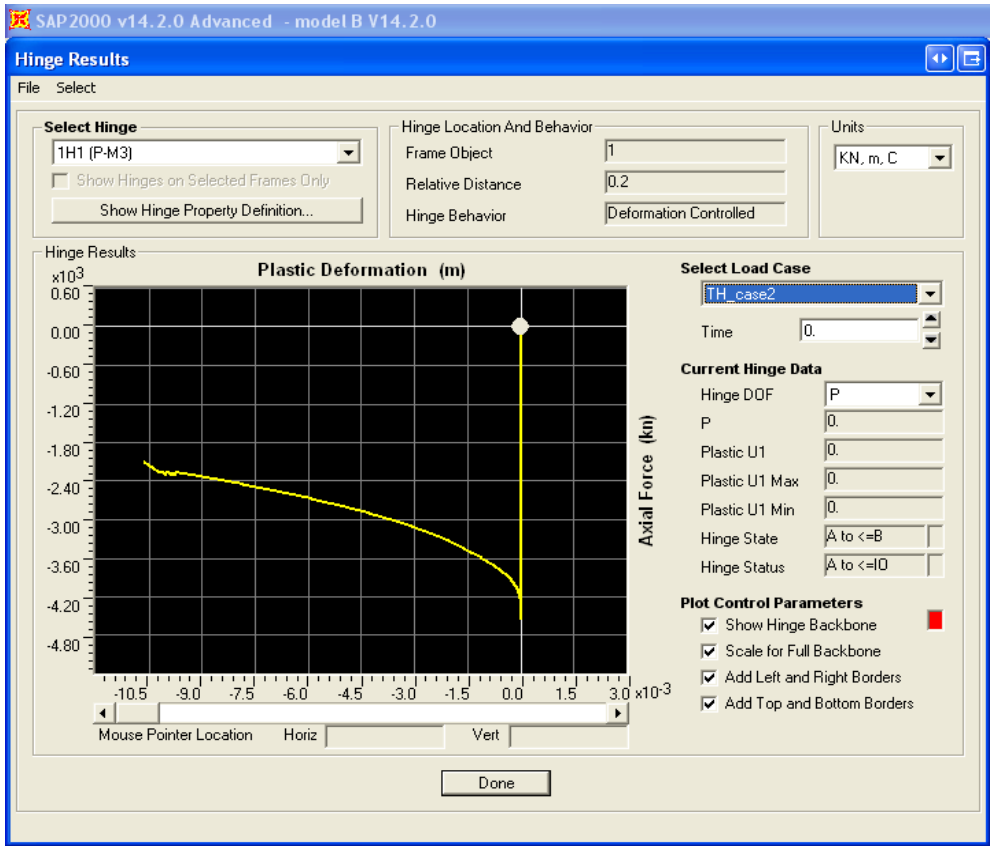
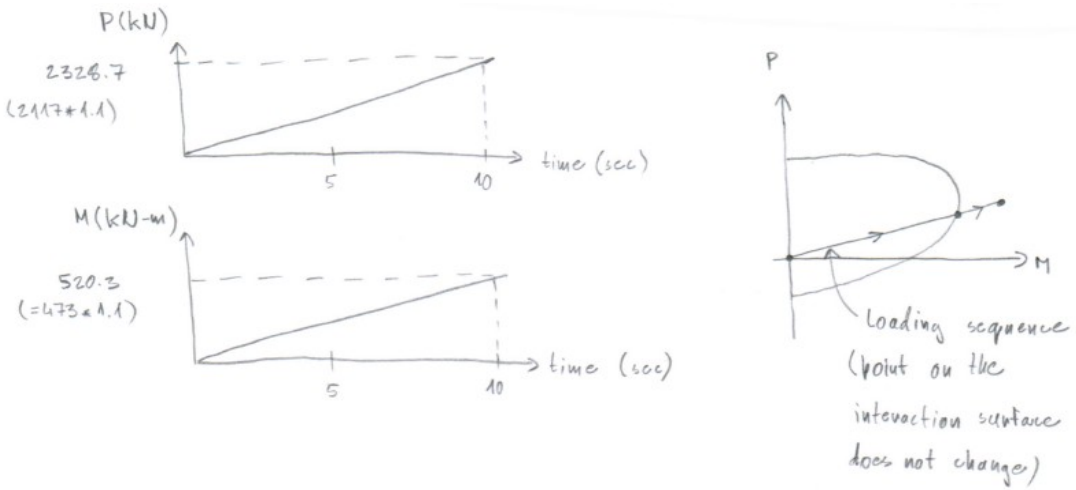
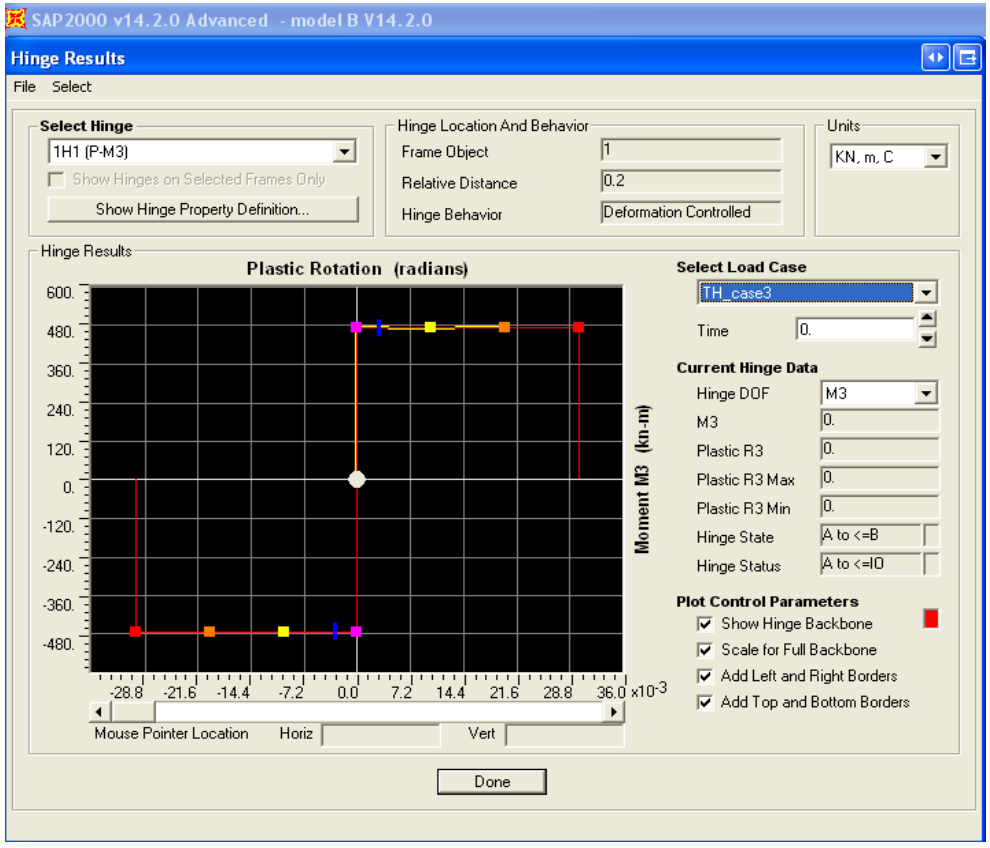
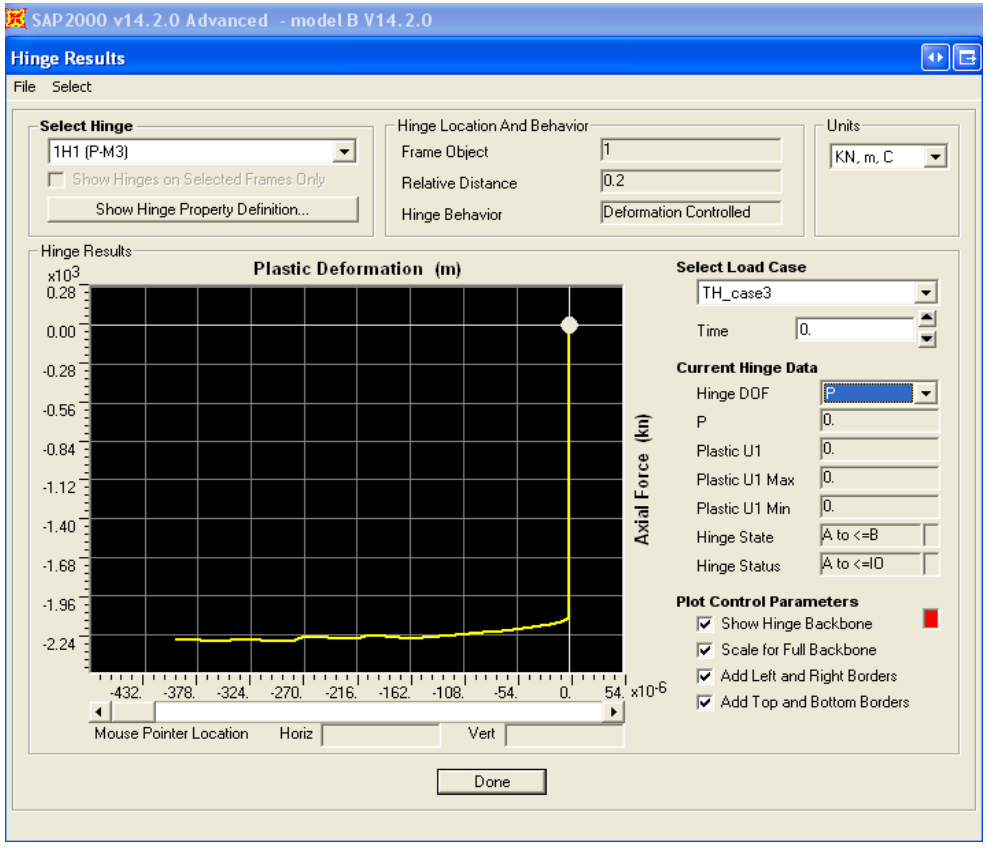




Loading sequence and response for case 2







Loading sequence and response for case 3