

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 1

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
*** Segment A begin *** Line # 79319860							
A00	T1	-5.800	4.100	6.000	0.000	0.000	0.000
A01 N	T1	-5.800	4.100	6.000	0.000	0.000	0.000
A01 F	T1	-6.186	4.424	6.443	0.042	0.004	0.008
A04 N	T1	-6.322	23.644	22.569	0.505	0.016	0.019
A04 F	T1	-6.325	25.182	21.982	0.567	0.021	0.018
A07 N	T1	-5.920	33.590	3.370	0.648	0.056	0.013
A07 F	T1	-6.024	35.360	2.593	0.633	0.063	0.008
A10 N	T1	-6.967	43.794	5.586	0.609	0.077	-0.001
A10 F	T1	-7.143	45.490	4.893	0.594	0.085	-0.006
A13 N	T1	-7.308	48.190	-0.692	0.560	0.101	-0.011
A13 F	T1	-7.835	48.813	-1.962	0.528	0.100	-0.020
A16 N	T1	-13.488	49.168	-3.493	0.358	0.033	-0.026
A16 F	T1	-13.905	49.648	-3.178	0.332	-0.012	-0.034
A18	T1	-13.994	52.975	-0.516	0.271	-0.092	-0.030
A19	T1	-13.924	53.529	0.000	0.271	-0.092	-0.030
A20	T1	-13.408	53.745	-0.070	0.271	-0.092	-0.030
A22 N	T1	-8.261	55.540	-1.852	0.145	-0.193	-0.042
A22 F	T1	-7.497	55.870	-1.716	0.118	-0.214	-0.038
A25 N	T1	-3.183	57.260	2.292	0.037	-0.259	-0.050
A25 F	T1	-2.287	57.335	2.326	0.012	-0.277	-0.048
A28 N	T1	2.104	57.545	-0.956	-0.063	-0.284	-0.063
A28 F	T1	3.032	57.440	-0.959	-0.083	-0.277	-0.062
A30	T1	22.536	34.000	22.114	-0.320	-0.063	-0.185
A32 N	T1	23.174	28.000	26.152	-0.334	-0.006	-0.206
A32 F	T1	22.820	26.988	26.585	-0.338	0.019	-0.212

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 2

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
A35 N	T1	21.677	25.456	26.750	-0.341	0.032	-0.216
A35 F	T1	21.634	24.269	26.246	-0.346	0.045	-0.220
A38 N	T1	23.738	21.126	23.389	-0.336	0.069	-0.228
A38 F	T1	24.518	20.810	23.134	-0.319	0.085	-0.232
A41 N	T1	26.602	22.463	24.856	-0.286	0.121	-0.237
A41 F	T1	26.660	22.273	25.513	-0.270	0.155	-0.245
A44 N	T1	22.503	17.289	30.012	-0.216	0.253	-0.266
A44 F	T1	22.129	16.762	30.133	-0.205	0.274	-0.264
A47 N	T1	16.761	7.568	27.933	-0.070	0.391	-0.302
A47 F	T1	16.200	6.836	27.359	-0.049	0.402	-0.296
A49	T1	3.127	-10.194	5.786	0.420	0.213	-0.264
A51 N	T1	1.743	-11.820	4.622	0.478	0.155	-0.254
A51 F	T1	0.765	-11.878	3.306	0.509	0.097	-0.237
A54 N	T1	-0.478	-10.696	0.486	0.541	0.025	-0.227
A54 F	T1	-0.908	-9.358	-0.308	0.582	-0.032	-0.202
A56	T1	-0.929	-8.177	-0.193	0.591	-0.052	-0.199
A57	T1	-0.918	-7.074	-0.090	0.600	-0.068	-0.195
A58	T1	-0.894	-6.074	0.000	0.600	-0.068	-0.195
A59	T1	-0.444	-6.200	1.389	0.600	-0.068	-0.195
A60 N	T1	0.229	-6.382	3.494	0.613	-0.106	-0.184
A60 F	T1	0.226	-6.604	4.577	0.652	-0.164	-0.166
A61 N	T1	-1.544	-7.420	6.459	0.688	-0.225	-0.137
A61 F	T1	-1.952	-7.210	5.885	0.699	-0.250	-0.096
A62 N	T1	-2.329	-6.253	2.807	0.719	-0.278	-0.078
A62 F	T1	-2.124	-5.891	1.438	0.762	-0.321	-0.041
A63	T1	-1.435	-5.780	0.406	0.785	-0.340	-0.030

*** Segment A end *** Line # 79319860

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 3

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
*** Segment B begin *** Line # 79319860							
A49	T1	3.127	-10.194	5.786	0.420	0.213	-0.264
B02 N	T1	-1.559	-6.761	1.873	-0.005	0.051	-0.273
B02 F	T1	-1.693	-6.615	1.716	-0.018	0.044	-0.268
B05 N	T1	-1.594	-6.527	1.115	-0.045	0.030	-0.255
B05 F	T1	-1.738	-6.680	0.929	-0.056	0.025	-0.251
B08 N	T1	-3.848	-9.127	0.722	-0.151	0.033	-0.278
B08 F	T1	-3.985	-9.220	0.530	-0.162	0.039	-0.291
B11 N	T1	-3.792	-8.579	-0.293	-0.179	0.065	-0.335
B11 F	T1	-3.575	-8.187	-0.405	-0.180	0.075	-0.347
B14 N	T1	-0.028	-2.337	1.151	-0.214	0.079	-0.330
B14 F	T1	0.193	-1.931	1.043	-0.217	0.071	-0.315
B17 N	T1	0.628	0.203	-1.319	-0.159	0.019	-0.160
B17 F	T1	0.754	0.153	-1.597	-0.145	0.017	-0.145
B20 N	T1	1.023	-0.285	-1.863	-0.123	0.012	-0.125
B20 F	T1	0.948	-0.539	-1.960	-0.111	0.011	-0.114
B23 N	T1	0.490	-0.758	-1.982	-0.085	0.010	-0.098
B23 F	T1	0.254	-0.664	-1.931	-0.073	0.010	-0.091
B26 N	T1	0.194	-0.514	-1.884	-0.066	0.011	-0.087
B26 F	T1	0.120	-0.392	-1.673	-0.053	0.014	-0.079
B29 N	T1	0.031	-0.571	-0.177	-0.009	0.009	-0.022
B29 F	T1	0.013	-0.412	-0.006	-0.006	0.006	-0.013
B31	T1	0.000	0.000	0.000	0.000	0.000	0.000

*** Segment B end *** Line # 79319860

*** Segment C begin *** Line # 79319860

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 4

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
A56	T1	-0.929	-8.177	-0.193	0.591	-0.052	-0.199
C01	T1	-0.660	-7.929	-0.263	0.596	-0.062	-0.207
*** Segment C end *** Line # 79319860							
*** Segment D begin *** Line # 79319860							
D00	T1	0.772	-1.806	5.593	0.742	-0.385	-0.086
D01	T1	0.940	-1.947	6.530	0.744	-0.384	-0.083
*** Segment D end *** Line # 79319860							
*** Segment E begin *** Line # 79319860							
E00	T1	-1.171	-2.647	10.244	0.686	-0.386	-0.056
D01	T1	0.940	-1.947	6.530	0.744	-0.384	-0.083
E02 N	T1	1.230	-1.838	6.026	0.754	-0.382	-0.082
E02 F	T1	1.296	-1.717	4.469	0.787	-0.382	-0.068
E03	T1	0.928	-1.700	2.599	0.801	-0.378	-0.063
E04	T1	0.724	-1.696	1.484	0.821	-0.370	-0.054
E05	T1	0.466	-1.696	0.000	0.822	-0.370	-0.053
E06	T1	-0.133	-3.181	0.000	0.822	-0.370	-0.053
E07	T1	-0.585	-4.299	-0.003	0.804	-0.357	-0.036
E08	T1	-1.166	-5.745	-0.014	0.794	-0.348	-0.026
E09 N	T1	-2.666	-9.419	-0.048	0.790	-0.349	0.012
E09 F	T1	-3.048	-10.475	0.740	0.779	-0.357	0.044
E10	T1	-3.148	-10.975	2.509	0.779	-0.357	0.044
E11 N	T1	-3.233	-11.367	3.894	0.776	-0.354	0.051
E11 F	T1	-3.782	-12.672	4.621	0.756	-0.351	0.067
E12	T1	-7.413	-20.793	2.198	0.717	-0.297	0.106
E13 N	T1	-7.416	-20.799	2.197	0.717	-0.297	0.106
E13 F	T1	-7.482	-21.871	1.578	0.694	-0.220	0.112

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 5

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
E14 N	T1	8.820	-23.356	1.604	0.222	0.126	-0.257
E14 F	T1	8.912	-23.004	1.641	0.211	0.134	-0.314
E15 N	T1	8.594	-21.491	1.460	0.191	0.134	-0.360
E15 F	T1	8.315	-21.137	1.343	0.172	0.140	-0.412
E16 N	T1	-7.350	-14.170	-2.403	0.082	0.157	-0.486
E16 F	T1	-7.707	-13.782	-2.416	0.077	0.159	-0.456
E17 N	T1	-9.389	-8.096	-1.620	0.067	0.156	-0.348
E17 F	T1	-9.311	-7.707	-1.500	0.068	0.154	-0.302
E18 N	T1	0.317	-1.259	3.165	0.061	0.026	-0.058
E18 F	T1	0.604	-1.268	2.884	0.061	-0.020	-0.052
E19 N	T1	0.209	-1.889	0.390	0.044	-0.037	-0.039
E19 F	T1	0.124	-1.644	0.063	0.018	-0.023	-0.027
E20	T1	0.000	0.000	0.000	0.000	0.000	0.000
*** Segment E end *** Line # 79319860							
*** Segment F begin *** Line #							
E08	T1	-1.166	-5.745	-0.014	0.794	-0.348	-0.026
A63	T1	-1.435	-5.780	0.406	0.785	-0.340	-0.030
*** Segment F end *** Line #							
*** Segment G begin *** Line #							
G00	T1	0.000	0.000	0.000	0.000	0.000	0.000
G01	T1	0.000	0.269	0.000	0.000	0.000	0.000
G02 N	T1	0.001	0.915	0.000	0.001	0.004	0.001
G02 F	T1	0.009	1.167	-0.262	0.008	0.007	0.001
G03 N	T1	0.317	1.642	-5.152	-0.102	0.017	0.005
G03 F	T1	0.342	2.011	-5.276	-0.136	0.017	0.005
G04 N	T1	0.013	12.499	-0.003	0.129	0.009	-0.037

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 6

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
G04 F	T1	-0.018	12.536	-0.423	0.196	0.008	-0.042
G05	T1	0.013	11.539	-1.329	0.287	0.007	-0.053
G06 N	T1	0.013	11.536	-1.331	0.287	0.007	-0.053
G06 F	T1	0.043	11.369	-1.459	0.307	0.006	-0.054
G07 N	T1	0.448	10.414	-2.131	0.384	0.001	-0.074
G07 F	T1	0.474	10.194	-2.259	0.402	-0.001	-0.076
G08	T1	0.474	10.190	-2.262	0.402	-0.001	-0.076
G09 N	T1	-1.366	-10.916	-10.068	0.659	-0.112	-0.226
G09 F	T1	-1.760	-11.952	-10.186	0.648	-0.123	-0.233
G10 N	T1	-2.298	-12.527	-9.878	0.634	-0.128	-0.237
G10 F	T1	-2.405	-12.073	-9.470	0.623	-0.129	-0.240
G11 N	T1	-1.309	-6.819	-7.585	0.613	-0.127	-0.243
G11 F	T1	-1.286	-6.409	-7.361	0.616	-0.126	-0.243
G12	T1	-1.286	-6.406	-7.359	0.616	-0.126	-0.243
G13 N	T1	-1.354	-6.138	-7.111	0.619	-0.125	-0.243
G13 F	T1	-1.164	-5.928	-6.235	0.625	-0.121	-0.240
G14 N	T1	0.625	-6.277	-1.640	0.626	-0.103	-0.234
G14 F	T1	0.661	-6.608	-0.754	0.618	-0.096	-0.230
C01	T1	-0.660	-7.929	-0.263	0.596	-0.062	-0.207
*** Segment G end *** Line #							
*** Segment H begin *** Line #							
D00	T1	0.772	-1.806	5.593	0.742	-0.385	-0.086
H01 N	T1	0.209	-1.347	2.568	0.732	-0.387	-0.092
H01 F	T1	-0.572	-1.313	1.831	0.704	-0.400	-0.109
H02 N	T1	-0.572	-1.313	1.831	0.704	-0.400	-0.109
H02 F	T1	-1.420	-1.302	1.199	0.668	-0.423	-0.137

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 7

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
H03 N	T1	-1.686	-1.132	0.267	0.660	-0.428	-0.141
H03 F	T1	-2.877	-2.042	-1.354	0.608	-0.449	-0.165
H04 N	T1	-9.158	-9.901	-4.334	0.570	-0.479	-0.221
H04 F	T1	-9.714	-10.615	-5.825	0.573	-0.491	-0.239
H05 N	T1	-6.830	-7.476	-12.120	0.598	-0.455	-0.227
H05 F	T1	-5.493	-5.766	-12.567	0.598	-0.391	-0.197
H06	T1	-3.062	-1.819	-11.108	0.590	-0.344	-0.154
H07 N	T1	-3.058	-1.813	-11.106	0.590	-0.344	-0.154
H07 F	T1	-2.709	-1.042	-10.586	0.581	-0.313	-0.144
H08	T1	-2.709	-1.038	-10.581	0.581	-0.313	-0.144
H09 N	T1	-2.458	0.363	-8.924	0.557	-0.287	-0.120
H09 F	T1	-2.178	1.107	-8.430	0.537	-0.267	-0.116
H10	T1	-2.175	1.113	-8.428	0.537	-0.267	-0.116
H11 N	T1	2.696	10.665	-3.624	0.300	-0.184	-0.033
H11 F	T1	3.096	10.758	-2.761	0.158	-0.159	-0.010
H12 N	T1	1.861	1.113	-3.627	-0.085	0.011	0.065
H12 F	T1	1.253	0.783	-3.770	-0.052	0.020	0.069
H13 N	T1	0.852	0.908	-3.809	-0.039	0.022	0.067
H13 F	T1	0.337	1.006	-3.396	-0.005	0.024	0.064
H14 N	T1	0.070	1.186	-0.479	0.017	0.015	0.025
H14 F	T1	0.014	0.747	0.000	0.002	0.005	0.008
H15	T1	0.001	0.169	0.000	0.000	0.001	0.002
H16	T1	0.000	0.000	0.000	0.000	0.000	0.000

*** Segment H end *** Line #

*** Segment I begin *** Line #

I00	T1	-0.138	4.797	-2.460	0.635	-0.194	0.002
-----	----	--------	-------	--------	-------	--------	-------

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 8

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
I01	T1	-0.141	4.510	-1.632	0.635	-0.194	0.002
*** Segment I end *** Line #							
*** Segment J begin *** Line #							
E00	T1	-1.171	-2.647	10.244	0.686	-0.386	-0.056
J01 N	T1	-2.801	-2.901	13.048	0.641	-0.369	-0.008
J01 F	T1	-3.041	-2.584	12.691	0.622	-0.357	0.066
J02 N	T1	-0.742	2.599	-1.391	0.602	-0.242	0.070
J02 F	T1	-0.390	3.713	-1.910	0.631	-0.200	0.016
I01	T1	-0.141	4.510	-1.632	0.635	-0.194	0.002
J04 N	T1	0.109	5.345	-1.344	0.641	-0.187	-0.012
J04 F	T1	0.035	6.166	-0.856	0.654	-0.123	-0.048
J05	T1	-2.842	5.041	0.000	0.742	0.000	-0.112
J06	T1	-6.092	3.394	0.000	0.742	0.000	-0.112
J07 N	T1	-8.207	2.567	2.242	0.807	-0.305	-0.054
J07 F	T1	-8.494	2.241	3.624	0.752	-0.178	0.027
J08 N	T1	-8.776	1.093	7.240	0.580	0.010	0.085
J08 F	T1	-8.654	0.586	7.799	0.241	0.000	0.206
J09	T1	-7.723	-0.397	7.837	-0.150	-0.024	0.257
*** Segment J end *** Line #							
*** Segment K begin *** Line #							
K00	T1	2.000	0.000	14.800	0.000	0.000	0.000
K01	T1	2.209	-0.008	15.050	-0.017	-0.197	0.005
K02	T1	2.666	-0.050	15.378	-0.041	-0.230	0.011
*** Segment K end *** Line #							
*** Segment L begin *** Line #							
L00	T1	3.632	-0.097	14.370	-0.041	-0.230	0.011

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 9

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
L01	T1	3.435	-0.087	14.575	-0.041	-0.230	0.011
K02	T1	2.666	-0.050	15.378	-0.041	-0.230	0.011
L03	T1	-2.739	-0.248	15.372	-0.165	0.285	-0.055
L04	T1	-3.308	-0.423	14.575	-0.214	0.320	-0.073
L05	T1	-3.693	-0.557	14.003	-0.235	0.328	-0.075
L06 N	T1	-3.693	-0.557	14.003	-0.235	0.328	-0.075
L06 F	T1	-5.158	-1.516	13.695	-0.307	0.320	-0.097
L07 N	T1	-9.662	-6.009	16.905	-0.271	0.296	-0.057
L07 F	T1	-10.233	-6.245	17.468	-0.153	0.271	-0.042
L08 N	T1	-13.039	-5.015	20.554	-0.047	0.246	-0.012
L08 F	T1	-13.219	-4.622	20.748	0.011	0.231	0.017
L09	T1	-13.037	-3.036	20.631	0.003	0.213	0.033
L10 N	T1	-12.763	-1.448	20.581	0.011	0.232	0.041
L10 F	T1	-12.490	-1.050	20.377	0.024	0.242	0.053
L11 N	T1	-9.467	0.811	17.908	0.036	0.265	0.050
L11 F	T1	-8.925	0.908	17.465	0.042	0.271	0.049
L12 N	T1	-4.937	0.279	14.246	0.041	0.270	0.037
L12 F	T1	-3.658	0.108	14.337	0.027	0.245	0.022
L13	T1	-3.646	0.107	14.350	0.027	0.245	0.022
L14	T1	-3.273	0.072	14.762	0.024	0.242	0.020
L15	T1	-2.704	0.028	15.377	0.019	0.235	0.014
L16	T1	2.688	0.004	15.377	0.004	-0.225	-0.004
L17	T1	3.457	0.018	14.592	0.004	-0.225	-0.004
L18	T1	3.653	0.021	14.392	0.004	-0.225	-0.004

*** Segment L end *** Line #

*** Segment M begin *** Line #

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 10

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
L03	T1	-2.739	-0.248	15.372	-0.165	0.285	-0.055
M01	T1	-2.223	-0.054	15.048	-0.080	0.221	-0.024
M02	T1	-2.000	0.000	14.800	0.000	0.000	0.000
*** Segment M end *** Line #							
*** Segment N begin *** Line #							
L09	T1	-13.037	-3.036	20.631	0.003	0.213	0.033
N01	T1	-13.474	-3.048	21.091	-0.010	0.204	0.036
N02 N	T1	-17.146	-2.344	27.258	0.174	0.041	0.067
N02 F	T1	-16.826	-0.860	26.608	0.623	-0.077	0.128
N03 N	T1	-12.743	4.884	8.520	0.602	-0.341	0.198
N03 F	T1	-11.536	4.777	6.446	0.338	-0.303	0.286
N04 N	T1	-10.309	3.162	4.715	0.178	-0.305	0.286
N04 F	T1	-9.125	2.427	4.594	-0.112	-0.169	0.363
N05	T1	-7.338	-0.863	7.758	-0.312	-0.084	0.277
N06 N	T1	-4.709	-13.906	14.921	-0.330	-0.087	0.126
N06 F	T1	-4.200	-13.860	15.776	0.032	-0.082	0.081
N07	T1	-3.630	-11.969	14.977	0.147	-0.094	0.053
N08	T1	-3.481	-11.354	14.567	0.147	-0.094	0.053
*** Segment N end *** Line #							
*** Segment O begin *** Line #							
L15	T1	-2.704	0.028	15.377	0.019	0.235	0.014
O01	T1	-2.224	0.006	15.050	0.009	0.208	0.006
O02	T1	-2.000	0.000	14.800	0.000	0.000	0.000
*** Segment O end *** Line #							
*** Segment P begin *** Line #							
N05	T1	-7.338	-0.863	7.758	-0.312	-0.084	0.277

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 11

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
J09	T1	-7.723	-0.397	7.837	-0.150	-0.024	0.257
*** Segment P end *** Line #							
*** Segment Q begin *** Line #							
L16	T1	2.688	0.004	15.377	0.004	-0.225	-0.004
Q01	T1	2.220	0.001	15.050	0.001	-0.203	-0.002
Q02	T1	2.000	0.000	14.800	0.000	0.000	0.000
*** Segment Q end *** Line #							
*** Segment R begin *** Line #							
R00	T1	0.000	0.000	0.000	0.000	0.000	0.000
R01	T1	0.000	-0.238	0.000	0.000	0.000	0.000
R02	T1	-0.018	-0.621	0.047	0.049	-0.013	0.021
R03 N	T1	-0.018	-0.621	0.047	0.049	-0.013	0.021
R03 F	T1	-0.290	-0.982	0.303	0.185	-0.063	0.085
R04	T1	-0.691	-1.151	0.636	0.200	-0.063	0.089
R05 N	T1	-1.095	-1.318	0.989	0.213	-0.063	0.089
R05 F	T1	-1.408	-1.664	1.541	0.311	-0.096	0.061
R06	T1	-1.516	-2.068	2.122	0.320	-0.096	0.057
R07	T1	-1.618	-2.471	2.718	0.328	-0.096	0.054
R08	T1	-1.680	-2.721	3.090	0.328	-0.096	0.054
R09	T1	-1.760	-3.044	3.571	0.328	-0.096	0.054
R10	T1	-1.821	-3.294	3.944	0.328	-0.096	0.054
R11	T1	-1.914	-3.677	4.522	0.332	-0.096	0.052
R12	T1	-2.047	-4.254	5.401	0.335	-0.096	0.049
R13	T1	-2.223	-5.079	6.663	0.335	-0.097	0.045
R14	T1	-2.499	-6.425	8.706	0.334	-0.097	0.045
R15	T1	-3.308	-10.549	13.929	0.196	-0.098	0.045

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 12

D I S P L A C E M E N T S

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
R16	T1	-3.391	-10.951	14.270	0.174	-0.098	0.046
N08	T1	-3.481	-11.354	14.567	0.147	-0.094	0.053
*** Segment R end *** Line #							
*** Segment S begin *** Line #							
R04	T1	-0.691	-1.151	0.636	0.200	-0.063	0.089
S01	T1	-0.789	-1.461	0.294	0.200	-0.063	0.089
S02	T1	-0.873	-1.725	0.002	0.200	-0.063	0.089
*** Segment S end *** Line #							
*** Segment T begin *** Line #							
R06	T1	-1.516	-2.068	2.122	0.320	-0.096	0.057
T01	T1	-1.692	-2.654	1.718	0.320	-0.096	0.057
*** Segment T end *** Line #							
*** Segment U begin *** Line #							
R11	T1	-1.914	-3.677	4.522	0.332	-0.096	0.052
U01	T1	-2.078	-4.265	4.109	0.297	-0.080	0.075
U02 N	T1	-2.626	-7.120	1.171	0.163	-0.018	0.240
U02 F	T1	-2.774	-7.085	1.020	0.158	-0.016	0.255
U03 N	T1	-4.607	-5.009	0.824	0.146	-0.016	0.291
U03 F	T1	-4.554	-4.651	0.699	0.145	-0.017	0.289
U04 N	T1	-0.088	-0.712	-1.786	0.129	-0.033	0.182
U04 F	T1	0.205	-0.673	-1.906	0.127	-0.033	0.160
U05 N	T1	0.550	-0.911	-1.959	0.123	-0.034	0.145
U05 F	T1	0.740	-0.923	-1.821	0.122	-0.035	0.131
U06 N	T1	0.967	-0.162	-0.197	0.075	-0.022	0.056
U06 F	T1	0.817	-0.078	-0.021	0.054	-0.013	0.039
U07	T1	0.181	-0.004	0.000	0.012	-0.001	0.010

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 13

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
U08	T1	0.000	0.000	0.000	0.000	0.000	0.000
*** Segment U end *** Line #							
*** Segment V begin *** Line #							
R12	T1	-2.047	-4.254	5.401	0.335	-0.096	0.049
V01	T1	-2.484	-4.273	5.507	0.335	-0.096	0.049
*** Segment V end *** Line #							
*** Segment W begin *** Line #							
R16	T1	-3.391	-10.951	14.270	0.174	-0.098	0.046
W01	T1	-2.987	-11.029	14.086	0.179	-0.101	0.040
*** Segment W end *** Line #							
*** Segment X begin *** Line #							
X00	T1	0.000	0.000	0.000	0.000	0.000	0.000
X01	T1	0.000	-0.238	0.000	0.000	0.000	0.000
X02	T1	0.000	-0.623	0.030	0.033	-0.009	0.001
X03 N	T1	0.000	-0.624	0.030	0.033	-0.009	0.001
X03 F	T1	0.287	-1.132	0.234	0.125	0.019	0.003
X04	T1	0.580	-1.307	0.358	0.135	0.015	0.003
X05	T1	0.927	-1.513	0.508	0.146	0.011	0.002
X06 N	T1	1.276	-1.719	0.662	0.158	0.006	0.002
X06 F	T1	1.580	-2.220	1.107	0.227	0.019	-0.012
X07	T1	1.603	-2.625	1.532	0.235	0.014	-0.013
X08	T1	1.628	-3.029	1.970	0.242	0.008	-0.014
X09	T1	1.644	-3.279	2.245	0.242	0.008	-0.014
X10	T1	1.665	-3.602	2.600	0.242	0.008	-0.014
X11	T1	1.681	-3.852	2.875	0.242	0.008	-0.014
X12	T1	1.699	-4.141	3.195	0.246	0.004	-0.015

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 14

DISPLACEMENTS

Point name	Load combination	TRANSLATIONS (mm)			ROTATIONS (deg)		
		X	Y	Z	X	Y	Z
X13	T1	1.733	-4.628	3.747	0.253	-0.003	-0.015
X14	T1	1.793	-5.455	4.714	0.262	-0.014	-0.016
X15	T1	1.893	-6.801	6.312	0.262	-0.015	-0.016
X16 N	T1	2.187	-10.757	11.044	0.256	-0.069	-0.015
X16 F	T1	1.631	-11.359	11.900	0.237	-0.095	0.001
W01	T1	-2.987	-11.029	14.086	0.179	-0.101	0.040
*** Segment X end *** Line #							
*** Segment Y begin *** Line #							
X05	T1	0.927	-1.513	0.508	0.146	0.011	0.002
Y01	T1	0.944	-1.741	0.166	0.146	0.011	0.002
Y02	T1	0.958	-1.935	-0.126	0.146	0.011	0.002
*** Segment Y end *** Line #							
*** Segment Z begin *** Line #							
X07	T1	1.603	-2.625	1.532	0.235	0.014	-0.013
Z01	T1	1.628	-3.056	1.129	0.235	0.014	-0.013
*** Segment Z end *** Line #							
*** Segment AA begin *** Line #							
X12	T1	1.699	-4.141	3.195	0.246	0.004	-0.015
AA01	T1	1.699	-4.572	2.783	0.215	-0.004	-0.034
AA02N	T1	1.434	-6.419	-0.158	0.089	-0.024	-0.174
AA02F	T1	1.553	-6.370	-0.333	0.082	-0.021	-0.187
AA03N	T1	3.326	-4.784	-0.781	0.062	-0.012	-0.217
AA03F	T1	3.325	-4.469	-0.863	0.060	-0.010	-0.216
AA04N	T1	-0.074	-0.437	-1.888	0.059	0.010	-0.133
AA04F	T1	-0.332	-0.364	-1.941	0.062	0.012	-0.117
AA05N	T1	-0.677	-0.538	-1.962	0.064	0.014	-0.106

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 16

S U P P O R T F O R C E S									
(Force - N , Moment - Nm , Tran. - mm , Rot. - deg)									
Point/	Connect/	Load	L O C A L			G L O B A L			
Supp. ID	Type	Combination	Dirn	Force	Deform	Dirn	Force	Deform	
A19		T1	up	8	0.000	X		-13.924	
A19 1	V - Stop					Y		53.529	
Stiff	:RIGID					Z	8	0.000	
A58		T1	up	45	0.000	X		-0.894	
A58 1	V - Stop					Y		-6.074	
Stiff	:RIGID					Z	45	0.000	
E05		T1	up	2897	0.000	X		0.466	
E05 1	V - Stop					Y		-1.696	
Stiff	:RIGID					Z	2897	0.000	
E06		T1	down	2945	0.000	X		-0.133	
E06 1	V - Stop					Y		-3.181	
Stiff	:RIGID					Z	-2945	0.000	
J05		T1	down	646	0.000	X		-2.842	
J05 1	V - Stop					Y		5.041	
Stiff	:RIGID					Z	-646	0.000	
J06		T1	up	1600	0.000	X		-6.092	
J06 1	V - Stop					Y		3.394	
Stiff	:RIGID					Z	1600	0.000	
U07		T1	down	11	0.000	X		0.181	
U07 1	V - Stop					Y		-0.004	
Stiff	:RIGID					Z	-11	0.000	
AA07		T1	down	8	0.000	X		-0.181	
AA07 1	V - Stop					Y		-0.003	
Stiff	:RIGID					Z	-8	0.000	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 17

R E S T R A I N T R E A C T I O N S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
A00	Anchor T1	2	-2	-27	28	33	0	1	33
A19	V - Stop T1	[ID: A19 0	1] 0	Mark: Undefined 8	Undefined 8	0	Tag#: Undefined 0	Undefined 0	0
A58	V - Stop T1	[ID: A58 0	1] 0	Mark: Undefined 45	Undefined 45	0	Tag#: Undefined 0	Undefined 0	0
B31	Anchor T1	1	-4	-3	5	-1	0	-1	2
E05	V - Stop T1	[ID: E05 0	1] 0	Mark: Undefined 2897	Undefined 2897	0	Tag#: Undefined 0	Undefined 0	0
E06	V - Stop T1	[ID: E06 0	1] 0	Mark: Undefined -2945	Undefined 2945	0	Tag#: Undefined 0	Undefined 0	0
E20	Anchor T1	56	20	-11	60	12	-14	-33	38
G00	Anchor T1	1	-8	11	14	-1	1	0	2
H16	Anchor T1	5	-48	53	72	-2	6	15	16
J05	V - Stop T1	[ID: J05 0	1] 0	Mark: Undefined -646	Undefined 646	0	Tag#: Undefined 0	Undefined 0	0
J06	V - Stop T1	[ID: J06 0	1] 0	Mark: Undefined 1600	Undefined 1600	0	Tag#: Undefined 0	Undefined 0	0
K00	Anchor T1	11737	120	231	11739	-81	-1390	18	1392
M02	Anchor T1	-11747	-1051	-1606	11903	-444	1513	-94	1580
O02	Anchor T1	-12755	106	-57	12756	49	1476	23	1477
Q02	Anchor T1	12646	-34	41	12646	7	-1447	-6	1447
R00	Anchor T1	41	987	295	1031	379	-71	141	410
U07	V - Stop T1	[ID: U07 0	1] 0	Mark: Undefined -11	Undefined 11	0	Tag#: Undefined 0	Undefined 0	0

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 18

R E S T R A I N T R E A C T I O N S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
U08	Anchor T1	-1	-2	11	12	1	0	2	2
X00	Anchor T1	14	-81	112	139	241	-50	2	246
AA07	V - Stop T1	[ID: AA07 1] Mark: Undefined				Tag#: Undefined			
		0	0	-8	8	0	0	0	0
AA08	Anchor T1	1	-2	8	8	1	0	-1	1

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 19

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
*** Segment A begin *** Line # 79319860									
A00	T1	-2	2	27	28	-33	0	-1	33
A01 N	T1	-2	2	27	28	-33	0	-1	33
A01 F	T1	-2	2	27	28	-32	3	-1	32
A04 N	T1	-2	2	27	28	-42	-5	-1	42
A04 F	T1	-2	2	27	28	-39	-5	0	40
A07 N	T1	-2	2	27	28	8	-5	3	10
A07 F	T1	-2	2	27	28	11	-5	3	13
A10 N	T1	-2	2	27	28	9	-7	3	12
A10 F	T1	-2	2	27	28	12	-7	3	14
A13 N	T1	-2	2	27	28	27	-7	4	29
A13 F	T1	-2	2	27	28	31	-4	4	31
A16 N	T1	-2	2	27	28	30	35	0	46
A16 F	T1	-2	2	27	28	30	38	0	48
A18	T1	-2	2	27	28	28	41	0	50
A19 -	T1	-2	2	27	28	28	42	0	51
A19 +	T1	-2	2	19	19	28	42	0	51
A20	T1	-2	2	19	19	28	40	0	49
A22 N	T1	-2	2	19	19	27	17	3	33
A22 F	T1	-2	2	19	19	27	15	3	31
A25 N	T1	-2	2	19	19	25	14	3	28
A25 F	T1	-2	2	19	19	24	12	3	27
A28 N	T1	-2	2	19	19	21	-5	5	22
A28 F	T1	-2	2	19	19	21	-7	5	22
A30	T1	-2	2	19	19	6	-17	5	19
A32 N	T1	-2	2	19	19	3	-19	5	20

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 20

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
A32 F	T1	-2	2	19	19	3	-18	5	18
A35 N	T1	-2	2	19	19	3	-12	4	13
A35 F	T1	-2	2	19	19	0	-10	4	11
A38 N	T1	-2	2	19	19	-11	-10	3	16
A38 F	T1	-2	2	19	19	-13	-13	3	19
A41 N	T1	-2	2	19	19	-14	-25	4	29
A41 F	T1	-2	2	19	19	-14	-27	5	31
A44 N	T1	-2	2	19	19	-17	-29	5	34
A44 F	T1	-2	2	19	19	-18	-29	5	34
A47 N	T1	-2	2	19	19	-35	-16	1	38
A47 F	T1	-2	2	19	19	-35	-14	1	38
A49 -	T1	-2	2	19	19	-35	51	-7	63
A49 +	T1	-3	6	22	23	-41	50	-8	65
A51 N	T1	-3	6	22	23	-41	58	-10	72
A51 F	T1	-3	6	22	23	-39	60	-11	72
A54 N	T1	-3	6	22	23	-32	60	-10	69
A54 F	T1	-3	6	22	23	-30	60	-9	68
A56 -	T1	-3	6	22	23	-30	60	-9	67
A56 +	T1	-4	14	11	18	-28	53	-14	61
A57	T1	-4	14	11	18	-29	52	-14	61
A58 -	T1	-4	14	11	18	-30	52	-14	62
A58 +	T1	-4	14	-34	37	-30	52	-14	62
A59	T1	-4	14	-34	37	-26	52	-15	60
A60 N	T1	-4	14	-34	37	-21	52	-15	58
A60 F	T1	-4	14	-34	37	-18	49	-17	55
A61 N	T1	-4	14	-34	37	-19	32	-24	44

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 21

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
A61 F	T1	-4	14	-34	37	-22	29	-25	44
A62 N	T1	-4	14	-34	37	-30	29	-24	48
A62 F	T1	-4	14	-34	37	-33	32	-22	51
A63	T1	-4	14	-34	37	-33	38	-20	54
*** Segment A end *** Line # 79319860									
*** Segment B begin *** Line # 79319860									
A49	T1	1	-4	-3	5	6	1	1	6
B02 N	T1	1	-4	-3	5	2	1	-1	3
B02 F	T1	1	-4	-3	5	2	1	-1	2
B05 N	T1	1	-4	-3	5	2	1	-1	2
B05 F	T1	1	-4	-3	5	1	1	0	2
B08 N	T1	1	-4	-3	5	1	-1	1	2
B08 F	T1	1	-4	-3	5	1	-1	2	2
B11 N	T1	1	-4	-3	5	0	-1	2	2
B11 F	T1	1	-4	-3	5	0	-1	1	2
B14 N	T1	1	-4	-3	5	0	1	-2	2
B14 F	T1	1	-4	-3	5	0	1	-2	2
B17 N	T1	1	-4	-3	5	-2	0	-2	3
B17 F	T1	1	-4	-3	5	-2	0	-2	3
B20 N	T1	1	-4	-3	5	-2	0	-2	3
B20 F	T1	1	-4	-3	5	-2	0	-2	2
B23 N	T1	1	-4	-3	5	-2	0	-1	2
B23 F	T1	1	-4	-3	5	-2	0	-1	2
B26 N	T1	1	-4	-3	5	-2	0	-1	2
B26 F	T1	1	-4	-3	5	-2	0	-1	2
B29 N	T1	1	-4	-3	5	0	0	-1	1

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 22

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
B29 F	T1	1	-4	-3	5	0	0	-1	1
B31	T1	1	-4	-3	5	-1	0	-1	2
*** Segment B end *** Line # 79319860									
*** Segment C begin *** Line # 79319860									
A56	T1	1	-8	11	14	-2	7	5	9
C01	T1	1	-8	11	14	-2	6	4	8
*** Segment C end *** Line # 79319860									
*** Segment D begin *** Line # 79319860									
D00	T1	-5	48	-53	72	-10	-3	-10	14
D01	T1	-5	48	-53	72	-7	-3	-11	13
*** Segment D end *** Line # 79319860									
*** Segment E begin *** Line # 79319860									
E00	T1	65	-42	30	83	-27	7	28	40
D01 -	T1	65	-42	30	83	-27	-9	5	29
D01 +	T1	60	6	-24	64	-34	-12	-6	36
E02 N	T1	60	6	-24	64	-34	-10	-5	35
E02 F	T1	60	6	-24	64	-35	-9	-9	38
E03	T1	60	6	-24	64	-38	-11	-16	43
E04	T1	60	6	-24	64	-40	-13	-21	47
E05 -	T1	60	6	-24	64	-42	-14	-27	52
E05 +	T1	60	6	-2921	2922	-42	-14	-27	52
E06 -	T1	60	6	-2921	2922	34	-20	-25	47
E06 +	T1	60	6	24	64	34	-20	-25	47
E07	T1	60	6	24	64	34	-24	-24	48
E08 -	T1	60	6	24	64	34	-30	-22	51
E08 +	T1	56	20	-11	60	2	10	-41	42

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 23

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
E09 N	T1	56	20	-11	60	7	-3	-37	38
E09 F	T1	56	20	-11	60	9	-7	-33	35
E10	T1	56	20	-11	60	11	-7	-26	29
E11 N	T1	56	20	-11	60	12	-7	-20	24
E11 F	T1	56	20	-11	60	14	-11	-16	24
E12	T1	56	20	-11	60	27	-46	-16	56
E13 N	T1	56	20	-11	60	27	-46	-16	56
E13 F	T1	56	20	-11	60	28	-49	-14	59
E14 N	T1	56	20	-11	60	28	-5	72	78
E14 F	T1	56	20	-11	60	28	-4	72	78
E15 N	T1	56	20	-11	60	27	-3	67	72
E15 F	T1	56	20	-11	60	26	-2	64	69
E16 N	T1	56	20	-11	60	7	-2	-37	38
E16 F	T1	56	20	-11	60	6	-2	-39	40
E17 N	T1	56	20	-11	60	1	3	-58	58
E17 F	T1	56	20	-11	60	1	4	-58	58
E18 N	T1	56	20	-11	60	1	30	-7	31
E18 F	T1	56	20	-11	60	2	27	-5	27
E19 N	T1	56	20	-11	60	16	-9	-5	19
E19 F	T1	56	20	-11	60	16	-14	-9	23
E20	T1	56	20	-11	60	12	-14	-33	38

*** Segment E end *** Line # 79319860

*** Segment F begin *** Line #

E08	T1	4	-14	34	37	33	-40	19	55
A63	T1	4	-14	34	37	33	-38	20	54

*** Segment F end *** Line #

*** Segment G begin *** Line #

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 24

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
G00	T1	-1	8	-11	14	1	-1	0	2
G01	- T1	-1	8	-11	14	1	-1	0	1
G01	+ T1	-1	8	-11	14	1	-1	0	1
G02	N T1	-1	8	-11	14	-1	-1	0	2
G02	F T1	-1	8	-11	14	-2	-1	0	2
G03	N T1	-1	8	-11	14	9	0	0	9
G03	F T1	-1	8	-11	14	9	0	0	9
G04	N T1	-1	8	-11	14	-18	0	1	18
G04	F T1	-1	8	-11	14	-18	0	2	18
G05	T1	-1	8	-11	14	-16	0	2	16
G06	N T1	-1	8	-11	14	-16	0	2	16
G06	F T1	-1	8	-11	14	-16	0	2	16
G07	N T1	-1	8	-11	14	-14	2	2	15
G07	F T1	-1	8	-11	14	-14	2	2	14
G08	T1	-1	8	-11	14	-14	2	2	14
G09	N T1	-1	8	-11	14	3	3	2	5
G09	F T1	-1	8	-11	14	3	2	2	5
G10	N T1	-1	8	-11	14	3	1	1	4
G10	F T1	-1	8	-11	14	3	0	0	3
G11	N T1	-1	8	-11	14	-1	0	0	1
G11	F T1	-1	8	-11	14	-2	-1	0	2
G12	T1	-1	8	-11	14	-2	-1	0	2
G13	N T1	-1	8	-11	14	-2	-1	0	2
G13	F T1	-1	8	-11	14	-2	-2	-1	2
G14	N T1	-1	8	-11	14	2	-2	-1	2
G14	F T1	-1	8	-11	14	2	-2	-1	4

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 25

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
C01	T1	-1	8	-11	14	2	-6	-4	8
*** Segment G end *** Line #									
*** Segment H begin *** Line #									
D00	T1	5	-48	53	72	10	3	10	14
H01 N	T1	5	-48	53	72	20	3	9	22
H01 F	T1	5	-48	53	72	26	9	14	31
H02 N	T1	5	-48	53	72	26	9	14	31
H02 F	T1	5	-48	53	72	31	15	20	40
H03 N	T1	5	-48	53	72	35	15	19	43
H03 F	T1	5	-48	53	72	35	15	19	42
H04 N	T1	5	-48	53	72	-3	11	19	22
H04 F	T1	5	-48	53	72	-9	4	13	16
H05 N	T1	5	-48	53	72	-9	-36	-23	44
H05 F	T1	5	-48	53	72	-3	-42	-29	51
H06	T1	5	-48	53	72	16	-40	-29	52
H07 N	T1	5	-48	53	72	16	-40	-29	52
H07 F	T1	5	-48	53	72	20	-38	-28	51
H08	T1	5	-48	53	72	20	-38	-28	51
H09 N	T1	5	-48	53	72	29	-27	-19	44
H09 F	T1	5	-48	53	72	33	-25	-17	45
H10	T1	5	-48	53	72	33	-25	-17	45
H11 N	T1	5	-48	53	72	93	-19	-17	97
H11 F	T1	5	-48	53	72	93	-18	-17	96
H12 N	T1	5	-48	53	72	-28	-17	-4	33
H12 F	T1	5	-48	53	72	-34	-11	2	36
H13 N	T1	5	-48	53	72	-34	-5	7	35

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 26

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
H13 F	T1	5	-48	53	72	-28	2	13	31
H14 N	T1	5	-48	53	72	9	6	13	17
H14 F	T1	5	-48	53	72	8	6	14	17
H15 -	T1	5	-48	53	72	0	6	14	16
H15 +	T1	5	-48	53	72	0	6	14	16
H16	T1	5	-48	53	72	-2	6	15	16
*** Segment H end *** Line #									
*** Segment I begin *** Line #									
I00	T1	0	0	0	0	0	0	0	0
I01	T1	0	0	0	0	0	0	0	0
*** Segment I end *** Line #									
*** Segment J begin *** Line #									
E00	T1	-65	42	-30	83	27	-7	-28	40
J01 N	T1	-65	42	-30	83	27	-20	-46	57
J01 F	T1	-65	42	-30	83	25	-22	-45	56
J02 N	T1	-65	42	-30	83	-15	-22	42	50
J02 F	T1	-65	42	-30	83	-21	-27	47	58
I01 -	T1	-65	42	-30	83	-24	-31	47	61
I01 +	T1	-65	42	-30	83	-24	-31	47	61
J04 N	T1	-65	42	-30	83	-27	-36	47	65
J04 F	T1	-65	42	-30	83	-30	-43	44	69
J05 -	T1	-65	42	-30	83	-30	-66	12	73
J05 +	T1	-65	42	616	621	-30	-66	12	73
J06 -	T1	-65	42	616	621	-30	455	-23	456
J06 +	T1	-65	42	-984	987	-30	455	-23	456
J07 N	T1	-65	42	-984	987	-30	-86	-47	103

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 27

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
J07 F	T1	-65	42	-984	987	45	-161	-55	176
J08 N	T1	-65	42	-984	987	338	-161	-74	382
J08 F	T1	-65	42	-984	987	413	-86	-76	429
J09	T1	-65	42	-984	987	413	152	-66	445
*** Segment J end *** Line #									
*** Segment K begin *** Line #									
K00	T1	-11737	-120	-231	11739	81	1390	-18	1392
K01	T1	-11737	-120	-231	11739	89	626	-18	633
K02	T1	-11737	-120	-231	11739	99	-371	-18	384
*** Segment K end *** Line #									
*** Segment L begin *** Line #									
L00	T1	0	0	0	0	0	0	0	0
L01	T1	0	0	0	0	0	0	0	0
K02 -	T1	0	0	0	0	0	0	0	0
K02 +	T1	-11737	-120	-231	11739	99	-371	-18	384
L03 -	T1	-11737	-120	-231	11739	99	-706	156	730
L03 +	T1	11	931	1375	1661	385	-457	249	648
L04	T1	11	931	1375	1661	385	-253	112	475
L05	T1	11	931	1375	1661	385	-116	19	403
L06 N	T1	11	931	1375	1661	385	-116	19	403
L06 F	T1	11	931	1375	1661	244	95	-123	289
L07 N	T1	11	931	1375	1661	-535	104	-123	559
L07 F	T1	11	931	1375	1661	-574	105	-123	596
L08 N	T1	11	931	1375	1661	-324	111	-129	366
L08 F	T1	11	931	1375	1661	-217	112	-131	277
L09 -	T1	11	931	1375	1661	351	112	-135	392

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 28

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
L09 + T1		-109	72	-16	131	-59	-118	-85	157
L10 N T1		-109	72	-16	131	-66	-118	-40	141
L10 F T1		-109	72	-16	131	-64	-114	-28	134
L11 N T1		-109	72	-16	131	-33	-52	33	70
L11 F T1		-109	72	-16	131	-26	-41	38	61
L12 N T1		-109	72	-16	131	34	50	38	72
L12 F T1		-109	72	-16	131	45	69	49	96
L13 T1		-109	72	-16	131	45	69	49	96
L14 T1		-109	72	-16	131	45	71	56	101
L15 - T1		-109	72	-16	131	45	73	66	108
L15 + T1		12646	-34	41	12646	12	510	43	512
L16 - T1		12646	-34	41	12646	12	450	-6	450
L16 + T1		0	0	0	0	0	0	0	0
L17 T1		0	0	0	0	0	0	0	0
L18 T1		0	0	0	0	0	0	0	0
*** Segment L end *** Line #									
*** Segment M begin *** Line #									
L03 T1		-11747	-1051	-1606	11903	-286	-249	-94	391
M01 T1		-11747	-1051	-1606	11903	-375	749	-94	843
M02 T1		-11747	-1051	-1606	11903	-444	1513	-94	1580
*** Segment M end *** Line #									
*** Segment N begin *** Line #									
L09 T1		119	859	1391	1639	410	230	-50	473
N01 T1		119	859	1391	1639	307	244	-50	396
N02 N T1		119	859	1391	1639	-1074	436	-50	1161
N02 F T1		119	859	1391	1639	-993	455	-68	1095

REBIS
AutoPIPE 6.20 RESULT PAGE 29

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
N03 N	T1	119	859	1391	1639	1087	455	-247	1204
N03 F	T1	119	859	1391	1639	1299	243	-135	1328
N04 N	T1	119	859	1391	1639	1299	-201	139	1322
N04 F	T1	119	859	1391	1639	1168	-394	270	1262
N05 -	T1	119	859	1391	1639	460	-295	270	609
N05 +	T1	55	901	407	991	873	-45	209	899
N06 N	T1	55	901	407	991	-808	57	209	836
N06 F	T1	55	901	407	991	-883	66	200	908
N07	T1	55	901	407	991	-682	66	173	707
N08	T1	55	901	407	991	-617	66	164	642
*** Segment N end *** Line #									
*** Segment O begin *** Line #									
L15	T1	-12755	106	-57	12756	33	-437	23	439
O01	T1	-12755	106	-57	12756	42	647	23	649
O02	T1	-12755	106	-57	12756	49	1476	23	1477
*** Segment O end *** Line #									
*** Segment P begin *** Line #									
N05	T1	65	-42	984	987	-413	-250	61	487
J09	T1	65	-42	984	987	-413	-152	66	445
*** Segment P end *** Line #									
*** Segment Q begin *** Line #									
L16	T1	12646	-34	41	12646	12	450	-6	450
Q01	T1	12646	-34	41	12646	9	-624	-6	624
Q02	T1	12646	-34	41	12646	7	-1447	-6	1447
*** Segment Q end *** Line #									
*** Segment R begin *** Line #									

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 30

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
R00	T1	-41	-987	-295	1031	-379	71	-141	410
R01 -	T1	-41	-987	-295	1031	-360	71	-144	394
R01 +	T1	-41	-987	-295	1031	-360	71	-144	394
R02	T1	-41	-987	-295	1031	-331	71	-148	369
R03 N	T1	-41	-987	-295	1031	-331	71	-148	369
R03 F	T1	-41	-987	-295	1031	-299	58	-108	323
R04 -	T1	-41	-987	-295	1031	-277	36	-38	282
R04 +	T1	-41	-987	-295	1031	-277	36	-38	282
R05 N	T1	-41	-987	-295	1031	-255	14	32	258
R05 F	T1	-41	-987	-295	1031	-224	1	72	235
R06 -	T1	-41	-987	-295	1031	-193	1	67	204
R06 +	T1	-41	-987	-295	1031	-193	1	67	204
R07 -	T1	-41	-987	-295	1031	-162	1	63	173
R07 +	T1	-41	-987	-295	1031	-162	1	63	173
R08	T1	-41	-987	-295	1031	-142	1	60	155
R09	T1	-41	-987	-295	1031	-118	1	57	131
R10 -	T1	-41	-987	-295	1031	-99	1	54	112
R10 +	T1	-41	-987	-295	1031	-99	1	54	112
R11 -	T1	-41	-987	-295	1031	-69	1	50	85
R11 +	T1	-40	-984	-295	1028	-71	2	51	88
R12 -	T1	-40	-984	-295	1028	-27	2	45	53
R12 +	T1	-40	-984	-295	1028	-27	2	45	53
R13	T1	-40	-984	-295	1028	37	2	37	52
R14	T1	-40	-984	-295	1028	140	2	22	142
R15	T1	-40	-984	-295	1028	457	2	-21	458
R16 -	T1	-40	-984	-295	1028	488	2	-25	489

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 31

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
R16	+ T1	-55	-901	-407	991	575	-66	-159	600
N08	T1	-55	-901	-407	991	617	-66	-164	642
*** Segment R end *** Line #									
*** Segment S begin *** Line #									
R04	T1	0	0	0	0	0	0	0	0
S01	T1	0	0	0	0	0	0	0	0
S02	T1	0	0	0	0	0	0	0	0
*** Segment S end *** Line #									
*** Segment T begin *** Line #									
R06	T1	0	0	0	0	0	0	0	0
T01	T1	0	0	0	0	0	0	0	0
*** Segment T end *** Line #									
*** Segment U begin *** Line #									
R11	T1	-1	-2	0	3	2	-1	-1	3
U01	T1	-1	-2	0	3	2	-1	-1	3
U02 N	T1	-1	-2	0	3	0	0	-1	1
U02 F	T1	-1	-2	0	3	0	0	-1	1
U03 N	T1	-1	-2	0	3	0	0	0	0
U03 F	T1	-1	-2	0	3	0	0	0	0
U04 N	T1	-1	-2	0	3	0	0	1	1
U04 F	T1	-1	-2	0	3	0	0	1	1
U05 N	T1	-1	-2	0	3	0	0	1	1
U05 F	T1	-1	-2	0	3	0	0	1	1
U06 N	T1	-1	-2	0	3	1	0	1	2
U06 F	T1	-1	-2	0	3	1	0	1	2
U07 -	T1	-1	-2	0	3	1	0	1	2

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 32

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
U07	+ T1	-1	-2	11	12	1	0	1	2
U08	T1	-1	-2	11	12	1	0	2	2
*** Segment U end *** Line #									
*** Segment V begin *** Line #									
R12	T1	0	0	0	0	0	0	0	0
V01	T1	0	0	0	0	0	0	0	0
*** Segment V end *** Line #									
*** Segment W begin *** Line #									
R16	T1	15	-83	112	140	-86	68	134	173
W01	T1	15	-83	112	140	-86	56	125	162
*** Segment W end *** Line #									
*** Segment X begin *** Line #									
X00	T1	-14	81	-112	139	-241	50	-2	246
X01	- T1	-14	81	-112	139	-234	50	-3	239
X01	+ T1	-14	81	-112	139	-234	50	-3	239
X02	T1	-14	81	-112	139	-223	50	-5	228
X03	N T1	-14	81	-112	139	-223	50	-5	228
X03	F T1	-14	81	-112	139	-208	58	0	216
X04	T1	-14	81	-112	139	-203	67	5	214
X05	- T1	-14	81	-112	139	-197	77	12	212
X05	+ T1	-14	81	-112	139	-197	77	12	212
X06	N T1	-14	81	-112	139	-191	87	19	211
X06	F T1	-14	81	-112	139	-177	96	23	202
X07	- T1	-14	81	-112	139	-165	96	21	192
X07	+ T1	-14	81	-112	139	-165	96	21	192
X08	- T1	-14	81	-112	139	-153	96	20	182

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 33

G L O B A L F O R C E S & M O M E N T S

Point name	Load combination	FORCES (N)				MOMENTS (Nm)			
		X	Y	Z	Result	X	Y	Z	Result
X08	+ T1	-14	81	-112	139	-153	96	20	182
X09	T1	-14	81	-112	139	-146	96	19	175
X10	T1	-14	81	-112	139	-136	96	18	168
X11	- T1	-14	81	-112	139	-129	96	17	162
X11	+ T1	-14	81	-112	139	-129	96	17	162
X12	- T1	-14	81	-112	139	-121	96	16	155
X12	+ T1	-15	83	-112	140	-123	95	15	156
X13	- T1	-15	83	-112	140	-109	95	13	145
X13	+ T1	-15	83	-112	140	-109	95	13	145
X14	T1	-15	83	-112	140	-85	95	10	128
X15	T1	-15	83	-112	140	-46	95	5	105
X16 N	T1	-15	83	-112	140	69	95	-11	118
X16 F	T1	-15	83	-112	140	86	78	-25	119
W01	T1	-15	83	-112	140	86	-56	-125	162
*** Segment X end *** Line #									
*** Segment Y begin *** Line #									
X05	T1	0	0	0	0	0	0	0	0
Y01	T1	0	0	0	0	0	0	0	0
Y02	T1	0	0	0	0	0	0	0	0
*** Segment Y end *** Line #									
*** Segment Z begin *** Line #									
X07	T1	0	0	0	0	0	0	0	0
Z01	T1	0	0	0	0	0	0	0	0
*** Segment Z end *** Line #									
*** Segment AA begin *** Line #									
X12	T1	1	-2	0	2	2	1	1	2

REBIS
AutoPIPE 6.20 RESULT PAGE 34

Point name	Load combination	FORCES (N)			MOMENTS (Nm)				
		X	Y	Z	Result	X	Y	Z	Result
AA01	T1	1	-2	0	2	2	0	1	2
AA02N	T1	1	-2	0	2	0	0	1	1
AA02F	T1	1	-2	0	2	0	0	1	1
AA03N	T1	1	-2	0	2	0	0	0	0
AA03F	T1	1	-2	0	2	0	0	0	0
AA04N	T1	1	-2	0	2	0	0	-1	1
AA04F	T1	1	-2	0	2	0	0	-1	1
AA05N	T1	1	-2	0	2	0	0	-1	1
AA05F	T1	1	-2	0	2	0	0	-1	1
AA06N	T1	1	-2	0	2	1	0	-1	1
AA06F	T1	1	-2	0	2	1	0	-1	1
AA07 -	T1	1	-2	0	2	1	0	-1	1
AA07 +	T1	1	-2	8	8	1	0	-1	1
AA08	T1	1	-2	8	8	1	0	-1	1
*** Segment AA end		*** Line #							
*** Segment AB begin		*** Line #							
X13	T1	0	0	0	0	0	0	0	0
AB01	T1	0	0	0	0	0	0	0	0
*** Segment AB end		*** Line #							

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 35

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
*** Segment A begin *** Line # 79319860									
A00	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	19	1	27	1.00 1.00	(17) DISP	4	147	
A01 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	19	1	27	1.00 1.00	(17) DISP	4	147	
A01 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	19	1	27	1.27 1.06	(17) DISP	4	147	
A01 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	16	27	1	1.27 1.06	(17) DISP	4	147	
A01 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	3	32	1	1.00 1.00	(17) DISP	3	147	
A04 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	5	42	1	1.00 1.00	(17) DISP	5	147	
A04 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	42	5	1	1.27 1.06	(17) DISP	6	147	
A04 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	39	0	5	1.27 1.06	(17) DISP	5	147	
A04 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	39	0	5	1.00 1.00	(17) DISP	4	147	
A07 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	8	3	5	1.00 1.00	(17) DISP	1	147	
A07 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	8	3	5	1.27 1.06	(17) DISP	1	147	
A07 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	11	5	3	1.27 1.06	(17) DISP	2	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 36

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
A07 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	5	11	3	1.00 1.00	(17) DISP	1	147	
A10 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	7	9	3	1.00 1.00	(17) DISP	1	147	
A10 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	9	7	3	1.27 1.06	(17) DISP	2	147	
A10 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	12	4	7	1.27 1.06	(17) DISP	2	147	
A10 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	12	4	7	1.00 1.00	(17) DISP	2	147	
A13 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	27	5	7	1.00 1.00	(17) DISP	3	147	
A13 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	7	27	7	1.27 1.06	(17) DISP	3	147	
A13 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	7	3	30	1.27 1.06	(17) DISP	3	147	
A13 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	4	7	30	1.00 1.00	(17) DISP	3	147	
A16 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	35	3	30	1.00 1.00	(17) DISP	5	147	
A16 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	35	3	30	1.27 1.06	(17) DISP	6	147	
A16 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	38	29	8	1.27 1.06	(17) DISP	6	147	
A16 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	38	29	8	1.00 1.00	(17) DISP	5	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 37

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point name	Load combination	In-Pl. Moment	Out-Pl. Moment	Torsion Moment	S.I.F In	S.I.F Out	Eq. Load no. type	Code Stress	Code Allow.
A18	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	41	27	8	1.00	1.00	(17) DISP	5	147
A20	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	40	7	27	1.00	1.00	(17) DISP	5	147
A22 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	17	4	27	1.00	1.00	(17) DISP	4	147
A22 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	17	4	27	1.27	1.06	(17) DISP	4	147
A22 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	15	27	3	1.27	1.06	(17) DISP	4	147
A22 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	15	27	3	1.00	1.00	(17) DISP	3	147
A25 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	14	25	3	1.00	1.00	(17) DISP	3	147
A25 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	17	22	3	1.27	1.06	(17) DISP	4	147
A25 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	15	3	22	1.27	1.06	(17) DISP	3	147
A25 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	15	3	22	1.00	1.00	(17) DISP	3	147
A28 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1	1	22	1.00	1.00	(17) DISP	2	147
A28 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	1	1	22	1.27	1.06	(17) DISP	2	147
A28 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.27	1.06	(18) SUST	0	71
	Cold to T1	3	21	5	1.27	1.06	(17) DISP	3	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 38

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
A28 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	7	21	5	1.00 1.00	(17) DISP	2	147	
A30	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	17	6	5	1.00 1.00	(17) DISP	2	147	
A32 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	19	3	5	1.00 1.00	(17) DISP	2	147	
A32 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	19	3	5	1.27 1.06	(17) DISP	3	147	
A32 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	18	6	1	1.27 1.06	(17) DISP	3	147	
A32 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	18	6	1	1.00 1.00	(17) DISP	2	147	
A35 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	12	5	1	1.00 1.00	(17) DISP	1	147	
A35 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	2	13	1	1.27 1.06	(17) DISP	2	147	
A35 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	1	0	11	1.27 1.06	(17) DISP	1	147	
A35 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	1	11	1.00 1.00	(17) DISP	1	147	
A38 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	11	0	11	1.00 1.00	(17) DISP	2	147	
A38 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	3	11	11	1.27 1.06	(17) DISP	2	147	
A38 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	3	14	12	1.27 1.06	(17) DISP	2	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 39

ASME B31.3b (2001) CODE COMPLIANCE										
			(Moments in Nm)			(Stress in N/mm2)				
Point name	Load combination	In-Pl. Moment	Out-Pl. Moment	Torsion Moment	S.I.F		Eq. Load no.	Load type	Code Stress	Code Allow.
					In	Out				
A38 F+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	13	6	12	1.00	1.00	(17)	DISP	2	147
A41 N-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	25	8	12	1.00	1.00	(17)	DISP	3	147
A41 N+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	25	8	12	1.27	1.06	(17)	DISP	4	147
A41 F-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	27	14	5	1.27	1.06	(17)	DISP	4	147
A41 F+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	27	14	5	1.00	1.00	(17)	DISP	3	147
A44 N-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	29	17	5	1.00	1.00	(17)	DISP	4	147
A44 N+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	8	32	5	1.27	1.06	(17)	DISP	4	147
A44 F-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	8	20	26	1.27	1.06	(17)	DISP	4	147
A44 F+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	8	20	26	1.00	1.00	(17)	DISP	4	147
A47 N-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	13	24	26	1.00	1.00	(17)	DISP	4	147
A47 N+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	12	25	26	1.27	1.06	(17)	DISP	4	147
A47 F-	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.27	1.06	(18)	SUST	0	71
	Cold to T1	11	9	35	1.27	1.06	(17)	DISP	4	147
A47 F+	Max P						(3a)	HOOP	0	71
	Max P	0	0		1.00	1.00	(18)	SUST	0	71
	Cold to T1	14	1	35	1.00	1.00	(17)	DISP	4	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 40

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
A49	- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	2	52	35	1.44 1.58	(17) DISP	10	147	
A49	+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	1	50	41	1.44 1.58	(17) DISP	10	147	
A51	N- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	58	10	41	1.00 1.00	(17) DISP	8	147	
A51	N+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	10	58	41	1.27 1.06	(17) DISP	8	147	
A51	F- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	11	39	60	1.27 1.06	(17) DISP	8	147	
A51	F+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	39	11	60	1.00 1.00	(17) DISP	8	147	
A54	N- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	32	10	60	1.00 1.00	(17) DISP	8	147	
A54	N+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	32	10	60	1.27 1.06	(17) DISP	8	147	
A54	F- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.27 1.06	(18) SUST	0	71	
	Cold to T1	30	60	6	1.27 1.06	(17) DISP	8	147	
A54	F+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	30	60	6	1.00 1.00	(17) DISP	7	147	
A56	- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	60	30	6	1.44 1.58	(17) DISP	11	147	
A56	+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	55	28	0	1.44 1.58	(17) DISP	10	147	
A57	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	29	54	0	1.00 1.00	(17) DISP	7	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 41

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Allow.	
A59	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	26	1	54	1.00	1.00	(17) DISP	7	147
A60 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	21	1	54	1.00	1.00	(17) DISP	6	147
A60 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.72	1.43		(18) SUST	0	71
	Cold to T1	3	20	54	1.72	1.43	(17) DISP	7	147
A60 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.72	1.43		(18) SUST	0	71
	Cold to T1	5	52	17	1.72	1.43	(17) DISP	8	147
A60 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	49	18	17	1.00	1.00	(17) DISP	6	147
A61 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	32	25	17	1.00	1.00	(17) DISP	5	147
A61 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	25	32	17	1.75	1.45	(17) DISP	7	147
A61 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	26	19	29	1.75	1.45	(17) DISP	7	147
A61 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	22	25	29	1.00	1.00	(17) DISP	5	147
A62 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	30	24	29	1.00	1.00	(17) DISP	5	147
A62 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	24	30	29	1.75	1.45	(17) DISP	7	147
A62 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	22	32	33	1.75	1.45	(17) DISP	8	147
A62 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	32	22	33	1.00	1.00	(17) DISP	6	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 42

ASME B31.3b (2001) CODE COMPLIANCE										
			(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.	
A63	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	38	20	33	1.00	1.00	(17) DISP	6	147	
*** Segment A end *** Line # 79319860										
*** Segment B begin *** Line # 79319860										
A49	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.44	1.58	(18) SUST	0	71	
	Cold to T1	1	6	1	1.44	1.58	(17) DISP	10	147	
B02 N-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	0	1	1.00	1.00	(17) DISP	3	147	
B02 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	0	1	1.00	1.00	(17) DISP	3	147	
B02 F-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	1	1	1.00	1.00	(17) DISP	3	147	
B02 F+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	2	1	1.00	1.00	(17) DISP	3	147	
B05 N-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	2	1	1.00	1.00	(17) DISP	2	147	
B05 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	2	1	1.00	1.00	(17) DISP	2	147	
B05 F-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	0	1	1.00	1.00	(17) DISP	2	147	
B05 F+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	0	1	1.00	1.00	(17) DISP	2	147	
B08 N-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	1	1	1.00	1.00	(17) DISP	3	147	
B08 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	1	1	1	1.00	1.00	(17) DISP	3	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 43

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
B08 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	1	2	1.00 1.00	(17) DISP	3	147	
B08 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	1	2	1.00 1.00	(17) DISP	3	147	
B11 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	0	2	1.00 1.00	(17) DISP	3	147	
B11 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	0	2	1.00 1.00	(17) DISP	3	147	
B11 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	1	0	1.00 1.00	(17) DISP	3	147	
B11 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	1	0	1.00 1.00	(17) DISP	3	147	
B14 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	2	0	1.00 1.00	(17) DISP	3	147	
B14 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	2	0	1.00 1.00	(17) DISP	3	147	
B14 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	0	2	1.00 1.00	(17) DISP	3	147	
B14 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	0	2	1.00 1.00	(17) DISP	3	147	
B17 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	2	2	1.00 1.00	(17) DISP	4	147	
B17 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	2	0	2	1.00 1.00	(17) DISP	4	147	
B17 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	2	2	0	1.00 1.00	(17) DISP	4	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 44

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point name	Load combination	In-Pl. Moment	Out-Pl. Moment	Torsion Moment	S.I.F In	S.I.F Out	Eq. Load no. type	Code Stress	Code Allow.
B17 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	2	0	1.00	1.00	(17) DISP	4	147
B20 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	2	0	1.00	1.00	(17) DISP	3	147
B20 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	2	0	1.00	1.00	(17) DISP	3	147
B20 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	0	2	1.00	1.00	(17) DISP	3	147
B20 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	2	2	1.00	1.00	(17) DISP	3	147
B23 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	1	2	1.00	1.00	(17) DISP	3	147
B23 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1	0	2	1.00	1.00	(17) DISP	3	147
B23 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1	2	0	1.00	1.00	(17) DISP	3	147
B23 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	0	1.00	1.00	(17) DISP	3	147
B26 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	0	1.00	1.00	(17) DISP	3	147
B26 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	0	1.00	1.00	(17) DISP	3	147
B26 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	0	1	1.00	1.00	(17) DISP	3	147
B26 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	2	1	1.00	1.00	(17) DISP	3	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 45

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
B29 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	0	1	1.00 1.00	(17) DISP	2	147	
B29 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	0	1	1.00 1.00	(17) DISP	2	147	
B29 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	1	0	1.00 1.00	(17) DISP	2	147	
B29 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	0	1	0	1.00 1.00	(17) DISP	2	147	
B31	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1	1	0	1.00 1.00	(17) DISP	2	147	
*** Segment B end *** Line # 79319860									
*** Segment C begin *** Line # 79319860									
A56	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	5	7	2	1.44 1.58	(17) DISP	5	147	
C01	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	6	4	2	1.00 1.00	(17) DISP	4	147	
*** Segment C end *** Line # 79319860									
*** Segment D begin *** Line # 79319860									
D00	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	10	11	1	1.00 1.00	(17) DISP	2	147	
D01	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	11	7	1	1.44 1.58	(17) DISP	2	147	
*** Segment D end *** Line # 79319860									
*** Segment E begin *** Line # 79319860									
E00	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	7	28	27	1.00 1.00	(17) DISP	4	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 46

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
D01	- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	4	10	27	1.44 1.58	(17) DISP	3	147	
D01	+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	7	11	34	1.44 1.58	(17) DISP	4	147	
E02	N- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	10	5	34	1.00 1.00	(17) DISP	4	147	
E02	N+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.75 1.45	(18) SUST	0	71	
	Cold to T1	8	8	34	1.75 1.45	(17) DISP	4	147	
E02	F- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.75 1.45	(18) SUST	0	71	
	Cold to T1	11	35	7	1.75 1.45	(17) DISP	6	147	
E02	F+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	35	11	7	1.00 1.00	(17) DISP	4	147	
E03	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	38	19	7	1.00 1.00	(17) DISP	5	147	
E04	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	40	23	7	1.00 1.00	(17) DISP	19	147	
E06	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	34	13	29	1.00 1.00	(17) DISP	20	147	
E07	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	34	17	29	1.00 1.00	(17) DISP	5	147	
E08	- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	23	34	29	1.44 1.58	(17) DISP	8	147	
E08	+ Max P					(3a) HOOP	0	71	
	Max P	0	0		1.44 1.58	(18) SUST	0	71	
	Cold to T1	21	2	37	1.44 1.58	(17) DISP	5	147	
E09	N- Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	7	6	37	1.00 1.00	(17) DISP	4	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 47

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
E09 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.74 1.45	(18) SUST	0	71	
	Cold to T1	7	6	37	1.74 1.45	(17) DISP	4	147	
E09 F	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.74 1.45	(18) SUST	0	71	
	Cold to T1	9	33	7	1.74 1.45	(17) DISP	6	147	
E10	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	11	26	7	1.00 1.00	(17) DISP	3	147	
E11 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	12	20	7	1.00 1.00	(17) DISP	3	147	
E11 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.74 1.45	(18) SUST	0	71	
	Cold to T1	12	20	7	1.74 1.45	(17) DISP	4	147	
E11 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.74 1.45	(18) SUST	0	71	
	Cold to T1	14	11	16	1.74 1.45	(17) DISP	4	147	
E11 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	11	14	16	1.00 1.00	(17) DISP	3	147	
E12 -	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	46	27	16	1.00 1.00	(17) DISP	6	147	
E12 +	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	46	27	16	1.00 1.00	(17) DISP	6	147	
E13 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	46	27	16	1.00 1.00	(17) DISP	6	147	
E13 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.75 1.45	(18) SUST	0	71	
	Cold to T1	46	27	16	1.75 1.45	(17) DISP	10	147	
E13 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.75 1.45	(18) SUST	0	71	
	Cold to T1	49	14	28	1.75 1.45	(17) DISP	10	147	
E13 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	49	14	28	1.00 1.00	(17) DISP	6	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 48

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
E14 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	5	72	28	1.00	1.00	(17) DISP	9	147
E14 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	72	5	28	1.74	1.45	(17) DISP	14	147
E14 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	72	23	17	1.74	1.45	(17) DISP	14	147
E14 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	23	72	17	1.00	1.00	(17) DISP	8	147
E15 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	21	67	17	1.00	1.00	(17) DISP	8	147
E15 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	67	21	17	1.74	1.45	(17) DISP	13	147
E15 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	64	26	2	1.74	1.45	(17) DISP	13	147
E15 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	26	64	2	1.00	1.00	(17) DISP	8	147
E16 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	7	37	2	1.00	1.00	(17) DISP	4	147
E16 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	37	7	2	1.74	1.45	(17) DISP	7	147
E16 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	39	6	3	1.74	1.45	(17) DISP	8	147
E16 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	6	39	3	1.00	1.00	(17) DISP	4	147
E17 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	58	3	1.00	1.00	(17) DISP	6	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 49

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Allow.	
E17 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45		(18) SUST	0	71
	Cold to T1	58	2	3	1.74	1.45	(17) DISP	11	147
E17 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45		(18) SUST	0	71
	Cold to T1	58	4	1	1.74	1.45	(17) DISP	11	147
E17 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	4	58	1	1.00	1.00	(17) DISP	6	147
E18 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	30	7	1	1.00	1.00	(17) DISP	3	147
E18 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45		(18) SUST	0	71
	Cold to T1	30	7	1	1.74	1.45	(17) DISP	6	147
E18 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45		(18) SUST	0	71
	Cold to T1	27	2	5	1.74	1.45	(17) DISP	5	147
E18 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	27	2	5	1.00	1.00	(17) DISP	3	147
E19 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	9	16	5	1.00	1.00	(17) DISP	2	147
E19 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	16	9	5	1.75	1.45	(17) DISP	3	147
E19 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.75	1.45		(18) SUST	0	71
	Cold to T1	16	9	14	1.75	1.45	(17) DISP	4	147
E19 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	16	9	14	1.00	1.00	(17) DISP	3	147
E20	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	12	33	14	1.00	1.00	(17) DISP	4	147

*** Segment E end *** Line # 79319860

*** Segment F begin *** Line #

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 50

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Allow.	
E08	Max P						(3a) HOOP	0	71
	Max P	0	0	1.44	1.58		(18) SUST	0	71
	Cold to T1	44	8	33	1.44	1.58	(17) DISP	8	147
A63	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	38	20	33	1.00	1.00	(17) DISP	6	147
*** Segment F end *** Line #									
*** Segment G begin *** Line #									
G01	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	0	1	1.00	1.00	(17) DISP	0	147
G02 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	0	1	1.00	1.00	(17) DISP	1	147
G02 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	0	1	1.00	1.00	(17) DISP	1	147
G02 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	2	1	0	1.00	1.00	(17) DISP	1	147
G02 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	2	0	1.00	1.00	(17) DISP	1	147
G03 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	0	9	0	1.00	1.00	(17) DISP	4	147
G03 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	9	0	0	1.00	1.00	(17) DISP	4	147
G03 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	9	0	0	1.00	1.00	(17) DISP	4	147
G03 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	9	0	0	1.00	1.00	(17) DISP	4	147
G04 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	18	2	0	1.00	1.00	(17) DISP	8	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 51

ASME B31.3b (2001) CODE COMPLIANCE										
		(Moments in Nm)						(Stress in N/mm2)		
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.	
G04 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	18	2	0	1.00	1.00	(17) DISP	8	147	
G04 F-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	18	0	2	1.00	1.00	(17) DISP	8	147	
G04 F+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	18	2	1.00	1.00	(17) DISP	8	147	
G05	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	16	2	1.00	1.00	(17) DISP	7	147	
G06 N-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	16	2	1.00	1.00	(17) DISP	7	147	
G06 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	16	1	1.00	1.00	(17) DISP	7	147	
G06 F-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	13	8	1.00	1.00	(17) DISP	7	147	
G06 F+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	0	13	9	1.00	1.00	(17) DISP	7	147	
G07 N-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	11	9	1.00	1.00	(17) DISP	7	147	
G07 N+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	12	8	1.00	1.00	(17) DISP	7	147	
G07 F-	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	14	2	1.00	1.00	(17) DISP	7	147	
G07 F+	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	14	2	1.00	1.00	(17) DISP	7	147	
G08	Max P						(3a) HOOP	0	71	
	Max P	0	0		1.00	1.00	(18) SUST	0	71	
	Cold to T1	2	14	2	1.00	1.00	(17) DISP	7	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 52

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Allow.	
G09 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	3	3	2	1.00	1.00	(17) DISP	2	147
G09 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	3	3	2	1.00	1.00	(17) DISP	2	147
G09 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	2	2	3	1.00	1.00	(17) DISP	2	147
G09 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	2	2	3	1.00	1.00	(17) DISP	2	147
G10 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	1	3	1.00	1.00	(17) DISP	2	147
G10 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	1	3	1.00	1.00	(17) DISP	2	147
G10 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	0	3	0	1.00	1.00	(17) DISP	1	147
G10 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	0	3	0	1.00	1.00	(17) DISP	1	147
G11 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	1	147
G11 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	1	147
G11 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	1	1	1.00	1.00	(17) DISP	1	147
G11 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	1	1	1.00	1.00	(17) DISP	1	147
G12	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	1	1	1	1.00	1.00	(17) DISP	1	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 53

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)						(Stress in N/mm2)	
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
G13 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1	2	1	1.00	1.00	(17) DISP	1	147
G13 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	1	1.00	1.00	(17) DISP	1	147
G13 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	1	1.00	1.00	(17) DISP	1	147
G13 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	1	1.00	1.00	(17) DISP	1	147
G14 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	1	1.00	1.00	(17) DISP	1	147
G14 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1	2	1	1.00	1.00	(17) DISP	1	147
G14 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	2	2	1.00	1.00	(17) DISP	2	147
G14 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	1	2	1.00	1.00	(17) DISP	2	147
C01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	6	4	2	1.00	1.00	(17) DISP	4	147
*** Segment G end *** Line #									
*** Segment H begin *** Line #									
D00	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	10	11	1	1.00	1.00	(17) DISP	2	147
H01 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	20	9	1	1.00	1.00	(17) DISP	2	147
H01 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	9	20	1	1.28	1.06	(17) DISP	3	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 54

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
H01 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	15	7	26	1.28 1.06	(17) DISP	4	147	
H01 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	9	14	26	1.00 1.00	(17) DISP	3	147	
H02 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	9	14	26	1.00 1.00	(17) DISP	3	147	
H02 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	15	7	26	1.28 1.06	(17) DISP	4	147	
H02 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	22	31	12	1.28 1.06	(17) DISP	5	147	
H02 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	31	22	12	1.00 1.00	(17) DISP	4	147	
H03 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	35	21	12	1.00 1.00	(17) DISP	5	147	
H03 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	35	21	12	1.28 1.06	(17) DISP	6	147	
H03 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	35	15	19	1.28 1.06	(17) DISP	6	147	
H03 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	15	35	19	1.00 1.00	(17) DISP	5	147	
H04 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	11	3	19	1.00 1.00	(17) DISP	2	147	
H04 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	11	3	19	1.28 1.06	(17) DISP	3	147	
H04 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.28 1.06	(18) SUST	0	71	
	Cold to T1	4	13	9	1.28 1.06	(17) DISP	2	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 55

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Allow.	
H04 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	4	13	9	1.00	1.00	(17) DISP	2	147
H05 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	36	23	9	1.00	1.00	(17) DISP	5	147
H05 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.28	1.06		(18) SUST	0	71
	Cold to T1	36	23	9	1.28	1.06	(17) DISP	6	147
H05 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.28	1.06		(18) SUST	0	71
	Cold to T1	42	3	29	1.28	1.06	(17) DISP	7	147
H05 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	42	3	29	1.00	1.00	(17) DISP	6	147
H06	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	40	16	29	1.00	1.00	(17) DISP	6	147
H07 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	40	16	29	1.00	1.00	(17) DISP	6	147
H07 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.28	1.06		(18) SUST	0	71
	Cold to T1	40	16	29	1.28	1.06	(17) DISP	7	147
H07 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.28	1.06		(18) SUST	0	71
	Cold to T1	38	5	34	1.28	1.06	(17) DISP	6	147
H07 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	38	6	33	1.00	1.00	(17) DISP	6	147
H08	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	38	6	33	1.00	1.00	(17) DISP	6	147
H09 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00		(18) SUST	0	71
	Cold to T1	27	7	33	1.00	1.00	(17) DISP	5	147
H09 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.28	1.06		(18) SUST	0	71
	Cold to T1	27	8	33	1.28	1.06	(17) DISP	5	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 56

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
H09 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	25	33	17	1.28	1.06	(17) DISP	5	147
H09 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	25	33	17	1.00	1.00	(17) DISP	5	147
H10	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	25	33	17	1.00	1.00	(17) DISP	5	147
H11 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	19	93	17	1.00	1.00	(17) DISP	11	147
H11 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	93	19	17	1.28	1.06	(17) DISP	13	147
H11 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	93	18	17	1.28	1.06	(17) DISP	13	147
H11 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	93	18	17	1.00	1.00	(17) DISP	11	147
H12 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	28	6	17	1.00	1.00	(17) DISP	4	147
H12 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	6	28	17	1.28	1.06	(17) DISP	4	147
H12 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	1	11	34	1.28	1.06	(17) DISP	4	147
H12 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	11	2	34	1.00	1.00	(17) DISP	4	147
H13 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	5	7	34	1.00	1.00	(17) DISP	4	147
H13 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	5	7	34	1.28	1.06	(17) DISP	4	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 57

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Stress	Code Allow.
H13 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	2	28	13	1.28	1.06	(17) DISP	4	147
H13 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	28	13	1.00	1.00	(17) DISP	3	147
H14 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	6	9	13	1.00	1.00	(17) DISP	2	147
H14 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	9	6	13	1.28	1.06	(17) DISP	2	147
H14 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.28	1.06	(18) SUST	0	71
	Cold to T1	8	14	6	1.28	1.06	(17) DISP	2	147
H14 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	8	14	6	1.00	1.00	(17) DISP	2	147
H15	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	14	6	1.00	1.00	(17) DISP	2	147
H16	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	2	15	6	1.00	1.00	(17) DISP	2	147
*** Segment H end *** Line #									
*** Segment I begin *** Line #									
*** Segment I end *** Line #									
*** Segment J begin *** Line #									
E00	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	7	28	27	1.00	1.00	(17) DISP	4	147
J01 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	20	46	27	1.00	1.00	(17) DISP	6	147
J01 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	46	20	27	1.74	1.45	(17) DISP	10	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 58

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Allow.	
J01 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45	(18) SUST		0	71
	Cold to T1	45	25	22	1.74	1.45	(17) DISP	10	147
J01 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	25	45	22	1.00	1.00	(17) DISP	6	147
J02 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	15	42	22	1.00	1.00	(17) DISP	5	147
J02 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45	(18) SUST		0	71
	Cold to T1	15	42	22	1.74	1.45	(17) DISP	8	147
J02 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45	(18) SUST		0	71
	Cold to T1	21	27	47	1.74	1.45	(17) DISP	8	147
J02 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	27	21	47	1.00	1.00	(17) DISP	6	147
I01 -	Max P						(3a) HOOP	0	71
	Max P	0	0	1.44	1.58	(18) SUST		0	71
	Cold to T1	24	31	47	1.44	1.58	(17) DISP	8	147
I01 +	Max P						(3a) HOOP	0	71
	Max P	0	0	1.44	1.58	(18) SUST		0	71
	Cold to T1	24	31	47	1.44	1.58	(17) DISP	8	147
J04 N-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	36	27	47	1.00	1.00	(17) DISP	7	147
J04 N+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45	(18) SUST		0	71
	Cold to T1	36	27	47	1.74	1.45	(17) DISP	10	147
J04 F-	Max P						(3a) HOOP	0	71
	Max P	0	0	1.74	1.45	(18) SUST		0	71
	Cold to T1	43	44	30	1.74	1.45	(17) DISP	11	147
J04 F+	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	43	44	30	1.00	1.00	(17) DISP	8	147
J05	Max P						(3a) HOOP	0	71
	Max P	0	0	1.00	1.00	(18) SUST		0	71
	Cold to T1	66	12	30	1.00	1.00	(17) DISP	8	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 59

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Allow.	
J06	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	455	23	30	1.00	1.00	(17) DISP	50	147
J07 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	86	47	30	1.00	1.00	(17) DISP	11	147
J07 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	47	86	30	1.74	1.45	(17) DISP	17	147
J07 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	55	45	161	1.74	1.45	(17) DISP	22	147
J07 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	45	55	161	1.00	1.00	(17) DISP	19	147
J08 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	338	74	161	1.00	1.00	(17) DISP	42	147
J08 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	74	338	161	1.74	1.45	(17) DISP	58	147
J08 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.74	1.45	(18) SUST	0	71
	Cold to T1	76	86	413	1.74	1.45	(17) DISP	49	147
J08 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	86	76	413	1.00	1.00	(17) DISP	47	147
J09	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	152	66	413	1.00	1.00	(17) DISP	49	147
*** Segment J end *** Line #									
*** Segment K begin *** Line #									
K00	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1390	81	18	1.00	1.00	(17) DISP	152	147**
	with Sus. load margin						(17)	152	218
K01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	626	89	18	1.00	1.00	(17) DISP	69	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 60

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
K02	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	371	99	18	1.48	1.63	(17) DISP	42	147
*** Segment K end *** Line #									
*** Segment L begin *** Line #									
L01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	147
K02 -	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	0	0	0	1.48	1.63	(17) DISP	0	147
K02 +	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	371	18	99	1.48	1.63	(17) DISP	20	147
L03 -	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	706	156	99	1.48	1.63	(17) DISP	38	147
L03 +	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	457	249	385	1.48	1.63	(17) DISP	31	147
L04	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	253	112	385	1.00	1.00	(17) DISP	17	147
L05	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	116	19	385	1.00	1.00	(17) DISP	8	147
L06 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	116	19	385	1.00	1.00	(17) DISP	8	147
L06 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	116	19	385	2.09	1.74	(17) DISP	9	147
L06 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	95	244	123	2.09	1.74	(17) DISP	10	147
L06 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	95	244	123	1.00	1.00	(17) DISP	6	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 61

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
L07 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	104	535	123	1.00	1.00	(17) DISP	11	147
L07 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	535	104	123	2.09	1.74	(17) DISP	23	147
L07 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	574	161	13	2.09	1.74	(17) DISP	25	147
L07 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	574	161	13	1.00	1.00	(17) DISP	12	147
L08 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	324	170	13	1.00	1.00	(17) DISP	7	147
L08 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	324	170	13	2.09	1.74	(17) DISP	15	147
L08 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	217	131	112	2.09	1.74	(17) DISP	11	147
L08 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	217	131	112	1.00	1.00	(17) DISP	6	147
L09 -	Max P						(3a) HOOP	0	71
	Max P	0	0		1.71	1.95	(18) SUST	0	71
	Cold to T1	351	135	112	1.71	1.95	(17) DISP	14	147
L09 +	Max P						(3a) HOOP	0	71
	Max P	0	0		1.71	1.95	(18) SUST	0	71
	Cold to T1	59	85	118	1.71	1.95	(17) DISP	5	147
L10 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	66	40	118	1.00	1.00	(17) DISP	3	147
L10 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	66	40	118	2.09	1.74	(17) DISP	4	147
L10 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	64	100	60	2.09	1.74	(17) DISP	5	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 62

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
L10 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	64	100	60	1.00	1.00	(17) DISP	3	147
L11 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	33	14	60	1.00	1.00	(17) DISP	1	147
L11 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	33	14	60	2.09	1.74	(17) DISP	2	147
L11 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	26	41	38	2.09	1.74	(17) DISP	2	147
L11 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	41	26	38	1.00	1.00	(17) DISP	1	147
L12 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	50	34	38	1.00	1.00	(17) DISP	1	147
L12 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	50	34	38	2.09	1.74	(17) DISP	3	147
L12 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	69	49	45	2.09	1.74	(17) DISP	4	147
L12 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	69	49	45	1.00	1.00	(17) DISP	2	147
L13	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	69	49	45	1.00	1.00	(17) DISP	2	147
L14	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	71	56	45	1.00	1.00	(17) DISP	4	147
L15 -	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	73	66	45	1.48	1.63	(17) DISP	6	147
L15 +	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	510	43	12	1.48	1.63	(17) DISP	27	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 63

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)		Torsion Moment	S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment		In	Out	Eq. Load no. type		
L16 -	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	450	6	12	1.48	1.63	(17) DISP	23	147
L16 +	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	0	0	0	1.48	1.63	(17) DISP	0	147
L17	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	147
*** Segment L end *** Line #									
*** Segment M begin *** Line #									
L03	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	249	286	94	1.48	1.63	(17) DISP	44	147
M01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	749	375	94	1.00	1.00	(17) DISP	92	147
M02	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1513	444	94	1.00	1.00	(17) DISP	173	147**
with Sus. load margin								173	218
*** Segment M end *** Line #									
*** Segment N begin *** Line #									
L09	Max P						(3a) HOOP	0	71
	Max P	0	0		1.71	1.95	(18) SUST	0	71
	Cold to T1	410	230	50	1.71	1.95	(17) DISP	17	147
N01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	244	307	50	1.00	1.00	(17) DISP	8	147
N02 N-	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	436	1074	50	1.00	1.00	(17) DISP	24	147
N02 N+	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	1074	436	50	2.09	1.74	(17) DISP	49	147
N02 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	993	68	455	2.09	1.74	(17) DISP	44	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 64

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
N02 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	993	68	455	1.00 1.00	(17) DISP	22	147	
N03 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	1087	247	455	1.00 1.00	(17) DISP	25	147	
N03 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		2.09 1.74	(18) SUST	0	71	
	Cold to T1	247	1087	455	2.09 1.74	(17) DISP	41	147	
N03 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		2.09 1.74	(18) SUST	0	71	
	Cold to T1	135	243	1299	2.09 1.74	(17) DISP	29	147	
N03 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	243	135	1299	1.00 1.00	(17) DISP	27	147	
N04 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	201	139	1299	1.00 1.00	(17) DISP	27	147	
N04 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		2.09 1.74	(18) SUST	0	71	
	Cold to T1	201	139	1299	2.09 1.74	(17) DISP	28	147	
N04 F-	Max P					(3a) HOOP	0	71	
	Max P	0	0		2.09 1.74	(18) SUST	0	71	
	Cold to T1	394	1168	270	2.09 1.74	(17) DISP	45	147	
N04 F+	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	394	1168	270	1.00 1.00	(17) DISP	26	147	
N05 -	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.71 1.95	(18) SUST	0	71	
	Cold to T1	295	460	270	1.71 1.95	(17) DISP	22	147	
N05 +	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.71 1.95	(18) SUST	0	71	
	Cold to T1	45	873	209	1.71 1.95	(17) DISP	35	147	
N06 N-	Max P					(3a) HOOP	0	71	
	Max P	0	0		1.00 1.00	(18) SUST	0	71	
	Cold to T1	57	808	209	1.00 1.00	(17) DISP	17	147	
N06 N+	Max P					(3a) HOOP	0	71	
	Max P	0	0		2.09 1.74	(18) SUST	0	71	
	Cold to T1	808	57	209	2.09 1.74	(17) DISP	35	147	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 65

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point name	Load combination	In-Pl. Moment	Out-Pl. Moment	Torsion Moment	S.I.F In	S.I.F Out	Eq. Load no. type	Code Stress	Code Allow.
N06 F-	Max P						(3a) HOOP	0	71
	Max P	0	0		2.09	1.74	(18) SUST	0	71
	Cold to T1	883	200	66	2.09	1.74	(17) DISP	39	147
N06 F+	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	883	200	66	1.00	1.00	(17) DISP	19	147
N07	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	682	173	66	1.00	1.00	(17) DISP	14	147
*** Segment N end *** Line #									
*** Segment O begin *** Line #									
L15	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	437	33	23	1.48	1.63	(17) DISP	47	147
O01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	647	42	23	1.00	1.00	(17) DISP	71	147
O02	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1476	49	23	1.00	1.00	(17) DISP	161	147**
	with Sus. load margin						(17)	161	218
*** Segment O end *** Line #									
*** Segment P begin *** Line #									
N05	Max P						(3a) HOOP	0	71
	Max P	0	0		1.71	1.95	(18) SUST	0	71
	Cold to T1	250	61	413	1.71	1.95	(17) DISP	56	147
J09	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	152	66	413	1.00	1.00	(17) DISP	49	147
*** Segment P end *** Line #									
*** Segment Q begin *** Line #									
L16	Max P						(3a) HOOP	0	71
	Max P	0	0		1.48	1.63	(18) SUST	0	71
	Cold to T1	450	12	6	1.48	1.63	(17) DISP	48	147
Q01	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	624	9	6	1.00	1.00	(17) DISP	68	147

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 66

ASME B31.3b (2001) CODE COMPLIANCE									
(Moments in Nm) (Stress in N/mm2)									
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
Q02	Max P						(3a) HOOP	0	71
	Max P	0	0		1.00	1.00	(18) SUST	0	71
	Cold to T1	1447	7	6	1.00	1.00	(17) DISP	158	147**
	with Sus. load margin						(17)	158	218
*** Segment Q end *** Line #									
*** Segment R begin *** Line #									
R01	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	360	144	71	1.00	1.00	(17) DISP	97	165
R02	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	331	148	71	1.00	1.00	(17) DISP	11	165
R03 N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	331	148	71	1.00	1.00	(17) DISP	11	165
R03 N+	Max P						(3a) HOOP	0	103
	Max P	0	0		2.84	2.36	(18) SUST	0	103
	Cold to T1	148	331	71	2.84	2.36	(17) DISP	27	165
R03 F-	Max P						(3a) HOOP	0	103
	Max P	0	0		2.84	2.36	(18) SUST	0	103
	Cold to T1	108	253	170	2.84	2.36	(17) DISP	21	165
R03 F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	253	108	170	1.00	1.00	(17) DISP	10	165
R04 -	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	222	38	170	2.21	2.62	(17) DISP	16	165
R04 +	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	222	38	170	2.21	2.62	(17) DISP	16	165
R05 N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	191	32	170	1.00	1.00	(17) DISP	8	165
R05 N+	Max P						(3a) HOOP	0	103
	Max P	0	0		2.85	2.37	(18) SUST	0	103
	Cold to T1	32	191	170	2.85	2.37	(17) DISP	15	165
R05 F-	Max P						(3a) HOOP	0	103
	Max P	0	0		2.85	2.37	(18) SUST	0	103
	Cold to T1	72	224	1	2.85	2.37	(17) DISP	17	165

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 67

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)					(Stress in N/mm2)		
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
R05	F+ Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	224	72	1	1.00	1.00	(17) DISP	7	165
R06	- Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	193	67	1	2.21	2.62	(17) DISP	14	165
R06	+ Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	193	67	1	2.21	2.62	(17) DISP	14	165
R07	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	162	63	1	1.00	1.00	(17) DISP	5	165
R10	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	99	54	1	1.00	1.00	(17) DISP	3	165
R11	- Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	69	50	1	2.21	2.62	(17) DISP	6	165
R11	+ Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	71	51	2	2.21	2.62	(17) DISP	6	165
R12	- Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	49	19	2	2.21	2.62	(17) DISP	4	165
R12	+ Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	49	19	2	2.21	2.62	(17) DISP	4	165
R13	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	37	37	2	1.00	1.00	(17) DISP	2	165
R14	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	140	22	2	1.00	1.00	(17) DISP	4	165
R15	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	457	21	2	1.00	1.00	(17) DISP	14	165
R16	- Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	25	488	2	2.21	2.62	(17) DISP	38	165

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 68

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point name	Load combination	In-Pl. Moment	Out-Pl. Moment	Torsion Moment	S.I.F		Eq. Load no.	Load type	Code Stress Allow.
R16	+ Max P						(3a)	HOOP	0 103
	Max P	0	0		2.21	2.62	(18)	SUST	0 103
	Cold to T1	159	575	66	2.21	2.62	(17)	DISP	46 165
N08	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	617	164	66	1.00	1.00	(17)	DISP	19 165
*** Segment R end *** Line #									
*** Segment S begin *** Line #									
R04	Max P						(3a)	HOOP	0 103
	Max P	0	0		2.21	2.62	(18)	SUST	0 103
	Cold to T1	0	0	0	2.21	2.62	(17)	DISP	0 165
S01	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0 165
S02	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0 165
*** Segment S end *** Line #									
*** Segment T begin *** Line #									
R06	Max P						(3a)	HOOP	0 103
	Max P	0	0		2.21	2.62	(18)	SUST	0 103
	Cold to T1	0	0	0	2.21	2.62	(17)	DISP	0 165
T01	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0 165
*** Segment T end *** Line #									
*** Segment U begin *** Line #									
R11	Max P						(3a)	HOOP	0 103
	Max P	0	0		2.21	2.62	(18)	SUST	0 103
	Cold to T1	2	1	1	2.21	2.62	(17)	DISP	6 165
U01	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	1	2	1	1.00	1.00	(17)	DISP	5 165
U02 N-	Max P						(3a)	HOOP	0 103
	Max P	0	0		1.00	1.00	(18)	SUST	0 103
	Cold to T1	0	0	1	1.00	1.00	(17)	DISP	2 165

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 69

ASME B31.3b (2001) CODE COMPLIANCE										
		(Moments in Nm)						(Stress in N/mm2)		
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.	
U02 N+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	1	1.00	1.00	(17) DISP	2	165	
U02 F-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	
U02 F+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	
U03 N-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165	
U03 N+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165	
U03 F-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165	
U03 F+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165	
U04 N-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	
U04 N+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	1	0	0	1.00	1.00	(17) DISP	2	165	
U04 F-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	1	0	0	1.00	1.00	(17) DISP	2	165	
U04 F+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	
U05 N-	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	
U05 N+	Max P						(3a) HOOP	0	103	
	Max P	0	0		1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 70

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)						(Stress in N/mm2)	
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
U05 F-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	1	1.00	1.00	(17) DISP	2	165
U05 F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	1	1.00	1.00	(17) DISP	2	165
U06 N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
U06 N+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
U06 F-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
U06 F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
U07	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	4	165
U08	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	2	1	1.00	1.00	(17) DISP	4	165
*** Segment U end *** Line #									
*** Segment V begin *** Line #									
R12	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	0	0	0	2.21	2.62	(17) DISP	0	165
V01	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165
*** Segment V end *** Line #									
*** Segment W begin *** Line #									
R16	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	134	68	86	2.21	2.62	(17) DISP	11	165

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 71

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type	Code Stress	Code Allow.
W01	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	56	125	86	1.00	1.00	(17) DISP	5	165
*** Segment W end *** Line #									
*** Segment X begin *** Line #									
X01	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	234	3	50	1.00	1.00	(17) DISP	59	165
X02	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	223	5	50	1.00	1.00	(17) DISP	7	165
X03 N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	223	5	50	1.00	1.00	(17) DISP	7	165
X03 N+	Max P						(3a) HOOP	0	103
	Max P	0	0		2.84	2.37	(18) SUST	0	103
	Cold to T1	5	223	50	2.84	2.37	(17) DISP	16	165
X03 F-	Max P						(3a) HOOP	0	103
	Max P	0	0		2.84	2.37	(18) SUST	0	103
	Cold to T1	0	54	209	2.84	2.37	(17) DISP	7	165
X03 F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	54	0	209	1.00	1.00	(17) DISP	6	165
X04	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	44	5	209	1.00	1.00	(17) DISP	6	165
X05 -	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	32	12	209	2.21	2.62	(17) DISP	7	165
X05 +	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	32	12	209	2.21	2.62	(17) DISP	7	165
X06 N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	20	19	209	1.00	1.00	(17) DISP	6	165
X06 N+	Max P						(3a) HOOP	0	103
	Max P	0	0		2.84	2.37	(18) SUST	0	103
	Cold to T1	19	20	209	2.84	2.37	(17) DISP	7	165

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 72

ASME B31.3b (2001) CODE COMPLIANCE									
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. Load no. type		
X06 F-	Max P						(3a) HOOP	0	103
	Max P	0	0	2.84	2.37		(18) SUST	0	103
	Cold to T1	23	177	96	2.84	2.37	(17) DISP	13	165
X06 F+	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	177	23	96	1.00	1.00	(17) DISP	6	165
X07 -	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	165	21	96	2.21	2.62	(17) DISP	11	165
X07 +	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	165	21	96	2.21	2.62	(17) DISP	11	165
X08	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	153	20	96	1.00	1.00	(17) DISP	5	165
X11	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	129	17	96	1.00	1.00	(17) DISP	5	165
X12 -	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	121	16	96	2.21	2.62	(17) DISP	9	165
X12 +	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	123	15	95	2.21	2.62	(17) DISP	9	165
X13 -	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	7	109	95	2.21	2.62	(17) DISP	9	165
X13 +	Max P						(3a) HOOP	0	103
	Max P	0	0	2.21	2.62		(18) SUST	0	103
	Cold to T1	7	109	95	2.21	2.62	(17) DISP	9	165
X14	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	85	10	95	1.00	1.00	(17) DISP	4	165
X15	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	46	5	95	1.00	1.00	(17) DISP	3	165
X16 N-	Max P						(3a) HOOP	0	103
	Max P	0	0	1.00	1.00		(18) SUST	0	103
	Cold to T1	69	11	95	1.00	1.00	(17) DISP	4	165

REBIS
AutoPIPE 6.20 RESULT PAGE 73

ASME B31.3b (2001) CODE COMPLIANCE										
Point name	Load combination	(Moments in Nm)			S.I.F		(Stress in N/mm2)		Code Stress	Code Allow.
		In-Pl. Moment	Out-Pl. Moment	Torsion Moment	In	Out	Eq. no.	Load type		
X16 N+	Max P						(3a)	HOOP	0	103
	Max P	0	0		2.84	2.36	(18)	SUST	0	103
	Cold to T1	11	69	95	2.84	2.36	(17)	DISP	6	165
X16 F-	Max P						(3a)	HOOP	0	103
	Max P	0	0		2.84	2.36	(18)	SUST	0	103
	Cold to T1	25	78	86	2.84	2.36	(17)	DISP	6	165
X16 F+	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	78	25	86	1.00	1.00	(17)	DISP	4	165
W01	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	56	125	86	1.00	1.00	(17)	DISP	5	165
*** Segment X end *** Line #										
*** Segment Y begin *** Line #										
X05	Max P						(3a)	HOOP	0	103
	Max P	0	0		2.21	2.62	(18)	SUST	0	103
	Cold to T1	0	0	0	2.21	2.62	(17)	DISP	0	165
Y01 -	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0	165
Y01 +	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0	165
Y02	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0	165
*** Segment Y end *** Line #										
*** Segment Z begin *** Line #										
X07	Max P						(3a)	HOOP	0	103
	Max P	0	0		2.21	2.62	(18)	SUST	0	103
	Cold to T1	0	0	0	2.21	2.62	(17)	DISP	0	165
Z01	Max P						(3a)	HOOP	0	103
	Max P	0	0		1.00	1.00	(18)	SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17)	DISP	0	165
*** Segment Z end *** Line #										
*** Segment AA begin *** Line #										

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 74

ASME B31.3b (2001) CODE COMPLIANCE									
			(Moments in Nm)			(Stress in N/mm2)			
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F	Eq. Load	Code	Code	
name	combination	Moment	Moment	Moment	In Out	no. type	Stress	Allow.	
X12	Max P					(3a) HOOP	0	103	
	Max P	0	0	2.21	2.62	(18) SUST	0	103	
	Cold to T1	2	1	1	2.21 2.62	(17) DISP	5	165	
AA01	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	2	1	1.00 1.00	(17) DISP	4	165	
AA02N-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	1	1.00 1.00	(17) DISP	2	165	
AA02N+	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	1	1.00 1.00	(17) DISP	2	165	
AA02F-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00 1.00	(17) DISP	2	165	
AA02F+	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00 1.00	(17) DISP	2	165	
AA03N-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00 1.00	(17) DISP	0	165	
AA03N+	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00 1.00	(17) DISP	0	165	
AA03F-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00 1.00	(17) DISP	0	165	
AA03F+	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	0	0	1.00 1.00	(17) DISP	0	165	
AA04N-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	0	1	0	1.00 1.00	(17) DISP	2	165	
AA04N+	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	1	0	0	1.00 1.00	(17) DISP	2	165	
AA04F-	Max P					(3a) HOOP	0	103	
	Max P	0	0	1.00	1.00	(18) SUST	0	103	
	Cold to T1	1	0	0	1.00 1.00	(17) DISP	2	165	

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 75

ASME B31.3b (2001) CODE COMPLIANCE									
		(Moments in Nm)			(Stress in N/mm2)				
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
AA04F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	2	165
AA05N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	1	165
AA05N+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	0	1.00	1.00	(17) DISP	1	165
AA05F-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	1	1.00	1.00	(17) DISP	1	165
AA05F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	1	1.00	1.00	(17) DISP	1	165
AA06N-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	2	165
AA06N+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	2	165
AA06F-	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	2	165
AA06F+	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	2	165
AA07	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
AA08	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	1	1	1.00	1.00	(17) DISP	3	165
*** Segment AA end *** Line #									
*** Segment AB begin *** Line #									
X13	Max P						(3a) HOOP	0	103
	Max P	0	0		2.21	2.62	(18) SUST	0	103
	Cold to T1	0	0	0	2.21	2.62	(17) DISP	0	165

79319860_komplett

08/09/2005 ASU KOSICE

10:36 AM

REBIS

AutoPIPE 6.20 RESULT PAGE 76

		ASME B31.3b (2001) CODE COMPLIANCE							
		(Moments in Nm)					(Stress in N/mm2)		
Point	Load	In-Pl.	Out-Pl.	Torsion	S.I.F		Eq. Load	Code	Code
name	combination	Moment	Moment	Moment	In	Out	no. type	Stress	Allow.
AB01	Max P						(3a) HOOP	0	103
	Max P	0	0		1.00	1.00	(18) SUST	0	103
	Cold to T1	0	0	0	1.00	1.00	(17) DISP	0	165

*** Segment AB end *** Line #

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 77

S Y S T E M S U M M A R Y

Maximum displacements (mm)

Maximum X :	26.660	Point : A41 F	Load Comb.: T1
Maximum Y :	57.545	Point : A28 N	Load Comb.: T1
Maximum Z :	30.133	Point : A44 F	Load Comb.: T1
Max. total:	57.591	Point : A28 N	Load Comb.: T1

Maximum rotations (deg)

Maximum X :	0.822	Point : E06	Load Comb.: T1
Maximum Y :	-0.491	Point : H04 F	Load Comb.: T1
Maximum Z :	-0.486	Point : E16 N	Load Comb.: T1
Max. total:	0.903	Point : E05	Load Comb.: T1

Maximum restraint forces (N)

Maximum X :	-12755	Point : O02	Load Comb.: T1
Maximum Y :	-1051	Point : M02	Load Comb.: T1
Maximum Z :	-2945	Point : E06	Load Comb.: T1
Max. total:	12756	Point : O02	Load Comb.: T1

Maximum restraint moments (Nm)

Maximum X :	-444	Point : M02	Load Comb.: T1
Maximum Y :	1513	Point : M02	Load Comb.: T1
Maximum Z :	141	Point : R00	Load Comb.: T1
Max. total:	1580	Point : M02	Load Comb.: T1

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 78

S Y S T E M S U M M A R Y

Maximum pipe forces (N)

Maximum X :	-12755	Point : L15	Load Comb.: T1
Maximum Y :	-1051	Point : L03	Load Comb.: T1
Maximum Z :	-2921	Point : E05	Load Comb.: T1
Max. total:	12756	Point : L15	Load Comb.: T1

Maximum pipe moments (Nm)

Maximum X :	1299	Point : N03 F	Load Comb.: T1
Maximum Y :	1513	Point : M02	Load Comb.: T1
Maximum Z :	270	Point : N04 F	Load Comb.: T1
Max. total:	1580	Point : M02	Load Comb.: T1

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 79

S Y S T E M S U M M A R Y

Maximum displacement stress

Point	:	M02
Stress	N/mm2	: 173
Allowable	N/mm2	: 218
Ratio	:	0.79
Load combination	:	Cold to T1

79319860_komplett
08/09/2005 ASU KOSICE
10:36 AM

REBIS
AutoPIPE 6.20 RESULT PAGE 80

S Y S T E M S U M M A R Y

Maximum displacement stress ratio

Point	:	M02
Stress	N/mm2	: 173
Allowable	N/mm2	: 218
Ratio	:	0.79
Load combination	:	Cold to T1

* * * The system satisfies ASME B31.3 code requirements * * *
* * * for the selected options * * *