ULS STRESS DESIGN CHECK - TP OUTSIDE													
Can	Elevation	OD	nom WT	Moment	Stress	$f_{yk}$	$\gamma_m$	UR	Stress buckl	UR buckl	$\sigma_{Ed}$	max WT	Steel
[-]	[m LAT]	[m]	[mm]	[MNm]	[MPa]	[MPa]	[-]	[-]	[MPa]	[-]	[MPa]	[mm]	[-]
TP1	21.008	6.000	80	266.39	122.59	325	1.10	0.415	289.47	0.483	122.59	132	S355NL/ML
TP2	21.008	6.000	80	266.39	122.59	325	1.10	0.415	289.47	0.483	122.59	132	S355NL/ML
TP2	19.200	6.000	80	273.16	125.70	325	1.10	0.425	289.57	0.494	125.70	129	S355NL/ML
TP3	19.200	6.000	80	273.16	125.70	325	1.10	0.425	289.57	0.494	125.70	129	S355NL/ML
TP3	15.300	6.000	80	287.79	132.43	325	1.10	0.448	289.76	0.517	132.43	123	S355NL/ML
TP4	15.300	6.000	85	287.79	124.96	315	1.10	0.436	283.83	0.497	124.96	127	S355NL/ML
TP4	12.000	6.000	85	300.21	130.35	315	1.10	0.455	283.98	0.516	130.35	122	S355NL/ML
TP5	12.000	6.000	92	300.21	120.86	315	1.10	0.422	286.36	0.475	120.86	130	S355NL/ML
TP5	9.100	6.000	92	311.32	125.33	315	1.10	0.438	286.36	0.490	125.33	126	S355NL/ML
TP6	9.100	6.000	100	311.32	125.33	315	1.10	0.438	286.36	0.490	125.33	126	S355NL/ML
TP6	6.500	6.000	100	321.28	129.34	315	1.10	0.452	286.36	0.504	129.34	123	S355NL/ML
TP7	6.500	6.000	100	321.28	129.34	315	1.10	0.452	286.36	0.504	129.34	123	S355NL/ML
TP7	3.900	6.000	100	331.73	121.97	315	1.10	0.426	285.21	0.478	121.97	129	S355NL/ML
TP8	3.900	6.272	95	331.73	128.67	315	1.10	0.449	283.43	0.508	128.67	123	S355NL/ML
TP8	1.300	6.272	95	342.48	121.81	315	1.10	0.425	282.01	0.484	121.81	129	S355NL/ML
TP9	1.300	6.544	90	342.48	128.95	315	1.10	0.450	280.00	0.516	128.95	123	S355NL/ML
TP9	-1.600	6.544	90	356.24	122.28	315	1.10	0.427	278.38	0.492	122.28	177	S355NL/ML
TP10	-1.600	6.848	80	356.24	138.65	325	1.10	0.469	280.97	0.553	138.65	171	S355NL/ML
TP10	-4.400	6.848	80	370.62	132.48	325	1.10	0.448	279.21	0.532	132.48	174	S355NL/ML
TP11	-4.400	7.141	80	370.62	132.48	325	1.10	0.448	279.21	0.532	132.48	174	S355NL/ML

ULS STRESS DESIGN CHECK - MP OUTSIDE													
Can	Elevation	OD	nom WT	Moment	Stress	$f_{yk}$	$\gamma_m$	UR	Stress buckl	UR buckl	$\sigma_{Ed}$	max WT	Steel
[-]	[m LAT]	[m]	[mm]	[MNm]	[MPa]	[MPa]	[-]	[-]	[MPa]	[-]	[MPa]	[mm]	[-]
MP1	-1.000	6.000	80	353.16	151.33	325	1.10	0.512	286.25	0.588	151.33	165	S355NL/ML
MP2	-1.000	6.366	77	353.16	149.44	325	1.10	0.506	286.74	0.580	149.44	166	S355NL/ML
MP2	-4.500	6.366	77	371.13	140.11	325	1.10	0.474	284.58	0.548	140.11	171	S355NL/ML
MP3	-4.500	6.733	75	371.13	143.71	325	1.10	0.486	283.55	0.565	143.71	169	S355NL/ML
MP3	-8.000	6.733	75	390.07	135.64	325	1.10	0.459	281.41	0.537	135.64	173	S355NL/ML
MP4	-8.000	7.099	75	390.07	135.64	325	1.10	0.459	281.41	0.537	135.64	173	S355NL/ML
MP4	-11.300	7.099	75	410.24	129.51	325	1.10	0.438	279.44	0.516	129.51	176	S355NL/ML
MP5	-11.300	7.445	75	410.24	129.51	325	1.10	0.438	279.44	0.516	129.51	176	S355NL/ML
MP5	-14.100	7.445	75	430.24	125.59	325	1.10	0.425	277.80	0.503	125.59	177	S355NL/ML
MP6	-14.100	7.738	77	430.24	122.42	325	1.10	0.414	278.94	0.489	122.42	179	S355NL/ML
MP6	-16.600	7.738	77	448.30	119.23	325	1.10	0.404	277.52	0.478	119.23	180	S355NL/ML
MP7	-16.600	8.000	77	448.30	119.23	325	1.10	0.404	277.52	0.478	119.23	180	S355NL/ML
MP7	-20.300	8.000	77	487.41	129.63	325	1.10	0.439	277.80	0.515	129.63	175	S355NL/ML
MP8	-20.300	8.000	82	487.41	121.95	315	1.10	0.426	273.05	0.493	121.95	177	S355NL/ML
MP8	-23.800	8.000	82	538.70	134.78	315	1.10	0.471	273.34	0.539	134.78	171	S355NL/ML
MP9	-23.800	8.000	82	538.70	134.78	315	1.10	0.471	273.34	0.539	134.78	171	S355NL/ML
MP9	-27.300	8.000	82	589.98	147.62	315	1.10	0.515	273.59	0.586	147.62	165	S355NL/ML
MP10	-27.300	8.000	85	589.98	142.57	315	1.10	0.498	275.00	0.563	142.57	168	S355NL/ML
MP10	-30.700	8.000	85	642.25	155.20	315	1.10	0.542	275.21	0.608	155.20	160	S355NL/ML
MP11	-30.700	8.000	85	642.25	155.20	315	1.10	0.542	275.21	0.608	155.20	160	S355NL/ML
MP11	-34.100	8.000	85	703.95	170.11	315	1.10	0.594	275.41	0.662	170.11	150	S355NL/ML
MP12	-34.100	8.000	95	703.95	152.77	360	1.10	0.467	279.54	0.585	152.77	159	S420NL/ML
MP12	-37.100	8.000	95	760.64	165.08	360	1.10	0.504	279.70	0.629	165.08	152	S420NL/ML
MP13	-37.100	8.000	90	760.64	173.92	315	1.10	0.607	277.74	0.668	173.92	147	S355NL/ML
MP13	-40.300	8.000	90	822.28	188.01	315	1.10	0.657	277.89	0.718	188.01	138	S355NL/ML
MP14	-40.300	8.000	90	822.28	188.01	315	1.10	0.657	277.89	0.718	188.01	138	S355NL/ML
MP14	-43.500	8.000	90	882.46	201.77	315	1.10	0.705	278.02	0.767	201.77	129	S355NL/ML
MP15	-43.500	8.000	90	882.46	201.77	315	1.10	0.705	278.02	0.767	201.77	129	S355NL/ML
MP15	-46.700	8.000	90	927.76	212.13	315	1.10	0.741	278.11	0.804	212.13	122	S355NL/ML
MP16	-46.700	8.000	87	927.76	219.20	315	1.10	0.765	276.84	0.835	219.20	120	S355NL/ML
MP16	-50.000	8.000	87	937.77	221.56	315	1.10	0.774	276.86	0.843	221.56	120	S355NL/ML
MP17	-50.000	8.000	82	937.77	234.63	315	1.10	0.819	274.57	0.900	234.63	120	S355NL/ML
MP17	-53.500	8.000	82	841.48	210.54	315	1.10	0.735	274.37	0.813	210.54	123	S355NL/ML
MP18	-53.500	8.000	75	841.48	229.59	325	1.10	0.777	278.03	0.875	229.59	120	S355NL/ML
MP18	-57.300	8.000	75	652.09	177.91	325	1.10	0.602	277.46	0.691	177.91	148	S355NL/ML
MP19	-57.300	8.000	70	652.09	190.26	325	1.10	0.644	274.31	0.747	190.26	140	S355NL/ML
MP19	-61.400	8.000	70	375.43	109.54	325	1.10	0.371	272.54	0.456	109.54	184	S355NL/ML
MP20	-61.400	8.000	67	375.43	114.32	325	1.10	0.387	270.43	0.480	114.32	182	S355NL/ML
MP20	-64.500	8.000	67	147.87	45.02	325	1.10	0.152	265.19	0.228	45.02	200	S355NL/ML
MP21	-64.500	8.000	67	147.87	45.02	325	1.10	0.152	265.19	0.228	45.02	200	S355NL/ML
MP21	-67.000	8.000	67	47.77	14.55	325	1.10	0.049	254.96	0.117	14.55	200	S355NL/ML
MP22	-67.000	8.000	90	47.77	10.92	315	1.10	0.038	261.84	0.086	10.92	200	S355NL/ML

