

ANEXOS

ÍNDICE

ANEXO A - PERDAS INSTANTÂNEAS DO PRÉ-ESFORÇO	A-1
ANEXO B - PERDAS DIFERIDAS DO PRÉ-ESFORÇO	B-19
ANEXO C - VALOR DOS ESFORÇOS CARACTERÍSTICOS LONGITUDINAIS	C-35
C.1 MOMENTO FLETOR.....	C-35
C.1.1 Momento fletor devido ao: PP (início de exploração e a longo prazo); RCP; SC; VDT	C-35
C.1.2 Momento fletor devido ao pré-esforço [PE] (início de exploração e longo prazo)	C-51
C.2 ESFORÇO TRANSVERSO	C-67
ANEXO D - ESTADO LIMITE DE DESCOMPRESSÃO	D-83
D.1 INÍCIO DE EXPLORAÇÃO	D-83
D.2 LONGO PRAZO	D-99
ANEXO E - ESTADO LIMITE DE LARGURA DE FENDAS	E-115
E.1 INÍCIO DE EXPLORAÇÃO	E-115
E.2 LONGO PRAZO	E-131
ANEXO F - ESTADO LIMITE DE DEFORMAÇÃO	F-147
ANEXO G - ESTADO LIMITE DE FLEXÃO DO TABULEIRO	G-149
ANEXO H - ESTADO LIMITE DE ESFORÇO TRANSVERSO DO TABULEIRO	H-151
ANEXO I - ESFORÇOS CARACTERÍSTICOS NA BASE DOS PILARES	I-153
ANEXO J - EFEITOS DE SEGUNDA ORDEM NOS PILARES	J-155
J.1 AÇÃO VARIÁVEL BASE: SISMO.....	J-155
J.1.1 Direção X.....	J-155
J.1.2 Direção Y.....	J-156
J.2 AÇÃO VARIÁVEL BASE: SOBRECARGA.....	J-157
ANEXO K - ESFORÇOS DE CÁLCULO NA BASE DOS PILARES	K-159
K.1 AÇÃO VARIÁVEL BASE: SISMO.....	K-159
K.2 AÇÃO VARIÁVEL BASE: SOBRECARGA.....	K-159
ANEXO L - ESFORÇOS CARACTERÍSTICOS NOS ENCONTROS	L-161
ANEXO M - ESTADO LIMITE DE DERRUBAMENTO DOS ENCONTROS (EQU)	M-163
M.1 ENCONTRO E1	M-163
M.2 ENCONTRO E2	M-164
ANEXO N - ESTADO LIMITE DE DESLIZAMENTO DOS ENCONTROS (GEO E STR)	N-167
N.1 ENCONTRO E1	N-167
N.1.1 Abordagem de cálculo 1 (GEO e STR): Combinação 1	N-167
N.1.2 Abordagem de cálculo 1 (GEO e STR): Combinação 2	N-169
N.2 ENCONTRO E2	N-170
N.2.1 Abordagem de cálculo 1 (GEO e STR): Combinação 1	N-170

N.2.2	Abordagem de cálculo 1 (GEO e STR): Combinação 2.....	N-172
ANEXO O	- ESTADO LIMITE DE ROTURA DO TERRENO DE FUNDAÇÃO DOS ENCONTROS (GEO E STR) ...	O-175
O.1	ENCONTRO E1.....	O-175
O.2	ENCONTRO E2.....	O-175
ANEXO P	- ESFORÇOS PARA O DIMENSIONAMENTO ESTRUTURAL DOS GIGANTES E SAPATAS DOS ENCONTROS	P-179
P.1	ENCONTRO E1.....	P-179
P.1.1	<i>Esforços devido aos impulsos e às forças horizontais longitudinais.....</i>	<i>P-179</i>
ANEXO Q	- DESLOCAMENTO LONGITUDINAL DEVIDO AOS EFEITOS DIFERIDOS DE FLUÊNCIA E RETRAÇÃO DO BETÃO	Q-183
Q.1	CENTRO DE RIGIDEZ DO VIADUTO	Q-183
Q.2	VARIAÇÃO DE TEMPERATURA EQUIVALENTE	Q-184
Q.3	DESLOCAMENTO DEVIDO AOS EFEITOS DIFERIDOS DE FLUÊNCIA E RETRAÇÃO DO BETÃO.....	Q-184
ANEXO R	- DIAGRAMAS DE MOMENTOS FLETORES PARA A VERIFICAÇÃO ESTRUTURAL DAS SAPATAS	R-185
R.1	DIAGRAMA DE MOMENTO FLETOR DA SAPATA S1	R-185
R.2	DIAGRAMA DE MOMENTO FLETOR DA SAPATA S5	R-185
R.3	DIAGRAMA DE MOMENTO FLETOR DA SAPATA S6	R-185
ANEXO S	- ESPECTROS DE RESPOSTA DO RSA	S-187
S.1	AÇÃO TIPO 1 – TERRENO TIPO II	S-187
S.2	AÇÃO TIPO 2 – TERRENO TIPO II	S-187
S.3	VALORES DOS ESPECTROS DE RESPOSTA DO RSA	S-188
ANEXO T	- COEFICIENTE DE FLUÊNCIA	T-189
T.1	COEFICIENTE DE FLUÊNCIA DOS PILARES	T-189

ANEXO A - PERDAS INSTANTÂNEAS DO PRÉ-ESFORÇO

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
0,000	0,000	1062,110	1062,110	17206,180	-0,280	0,602	1061,508	17196,429
0,450	-0,108	1064,790	1064,790	17249,590	-0,281	0,603	1064,186	17239,814
0,900	-0,211	1067,476	1067,476	17293,109	-0,281	0,605	1066,871	17283,309
1,350	-0,312	1070,169	1070,169	17336,739	-0,282	0,606	1069,563	17326,914
1,800	-0,408	1072,869	1072,869	17380,478	-0,283	0,608	1072,261	17370,628
2,250	-0,501	1075,576	1075,576	17424,328	-0,283	0,610	1074,966	17414,453
2,700	-0,590	1078,289	1078,289	17468,288	-0,284	0,611	1077,678	17458,389
3,150	-0,676	1081,010	1081,010	17512,360	-0,285	0,613	1080,397	17502,435
3,600	-0,758	1083,737	1083,737	17556,542	-0,286	0,614	1083,123	17546,592
4,050	-0,836	1086,471	1086,471	17600,836	-0,286	0,616	1085,856	17590,861
4,500	-0,911	1089,212	1089,212	17645,242	-0,287	0,617	1088,595	17635,242
5,000	-0,990	1092,266	1092,266	17694,713	-0,288	0,619	1091,647	17684,685
5,500	-1,064	1095,329	1095,329	17744,322	-0,289	0,621	1094,708	17734,266
6,000	-1,134	1098,399	1098,399	17794,071	-0,289	0,622	1097,777	17783,987
6,500	-1,199	1101,479	1101,479	17843,960	-0,290	0,624	1100,855	17833,847
7,000	-1,260	1104,567	1104,567	17893,988	-0,291	0,626	1103,941	17883,847
7,500	-1,316	1107,664	1107,664	17944,156	-0,292	0,628	1107,036	17933,987
8,000	-1,368	1110,769	1110,769	17994,465	-0,293	0,629	1110,140	17984,268
8,500	-1,415	1113,884	1113,884	18044,916	-0,294	0,631	1113,252	18034,689
9,000	-1,458	1117,007	1117,007	18095,507	-0,294	0,633	1116,374	18085,252
9,500	-1,496	1120,138	1120,138	18146,241	-0,295	0,635	1119,504	18135,957
10,000	-1,530	1123,279	1123,279	18197,116	-0,296	0,637	1122,642	18186,804
10,500	-1,559	1126,428	1126,428	18248,135	-0,297	0,638	1125,790	18237,793
11,000	-1,584	1129,586	1129,586	18299,296	-0,298	0,640	1128,946	18288,925
11,500	-1,604	1132,753	1132,753	18350,601	-0,298	0,642	1132,111	18340,201
12,000	-1,620	1135,929	1135,929	18402,049	-0,299	0,644	1135,285	18391,621
12,500	-1,631	1139,114	1139,114	18453,642	-0,300	0,646	1138,468	18443,184
13,000	-1,638	1142,307	1142,307	18505,380	-0,301	0,647	1141,660	18494,892
13,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
14,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
14,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
15,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517
15,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
16,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
16,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
17,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
17,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
18,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
18,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
19,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
19,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
20,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368
20,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
21,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
21,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
22,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
22,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
23,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482
23,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
24,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
24,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
25,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
25,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
26,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
26,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
27,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
27,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
28,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473
28,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
29,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
29,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
30,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
30,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
31,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445
31,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
31,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
32,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
32,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
33,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
33,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633
34,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
34,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
35,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
35,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
36,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
36,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
36,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
37,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
37,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
38,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592
38,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
39,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
39,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
40,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
40,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
41,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452
41,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
42,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
42,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
43,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
43,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
44,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
44,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
45,000	-0,596	1091,518	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
45,500	-0,672	1083,355	1089,179	17644,697	-0,287	0,617	1088,562	17634,698
46,000	-0,745	1085,682	1085,682	17588,042	-0,286	0,615	1085,066	17578,074
46,500	-0,815	1088,014	1088,014	17625,821	-0,287	0,617	1087,397	17615,832
47,000	-0,882	1090,351	1090,351	17663,681	-0,287	0,618	1089,733	17653,670
47,500	-0,947	1092,693	1092,693	17701,622	-0,288	0,619	1092,073	17691,590
48,000	-1,008	1095,040	1095,040	17739,645	-0,289	0,621	1094,419	17729,591
48,500	-1,067	1097,392	1097,392	17777,749	-0,289	0,622	1096,770	17767,674
49,000	-1,123	1099,749	1099,749	17815,936	-0,290	0,623	1099,126	17805,839
49,500	-1,176	1102,111	1102,111	17854,204	-0,290	0,625	1101,487	17844,086
50,000	-1,226	1104,479	1104,479	17892,554	-0,291	0,626	1103,853	17882,414
50,500	-1,273	1106,851	1106,851	17930,987	-0,292	0,627	1106,224	17920,825
51,000	-1,318	1109,229	1109,229	17969,503	-0,292	0,629	1108,600	17959,319
51,500	-1,359	1111,611	1111,611	18008,101	-0,293	0,630	1110,981	17997,895
52,000	-1,398	1113,999	1113,999	18046,782	-0,294	0,631	1113,368	18036,555
52,500	-1,434	1116,392	1116,392	18085,546	-0,294	0,633	1115,759	18075,297
53,000	-1,467	1118,790	1118,790	18124,394	-0,295	0,634	1118,156	18114,122
53,500	-1,497	1121,193	1121,193	18163,324	-0,295	0,635	1120,557	18153,031
54,000	-1,524	1123,601	1123,601	18202,339	-0,296	0,637	1122,964	18192,023

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
54,500	-1,548	1126,015	1126,015	18241,437	-0,297	0,638	1125,377	18231,100
55,000	-1,570	1128,433	1128,433	18280,620	-0,297	0,640	1127,794	18270,260
55,500	-1,588	1130,857	1130,857	18319,886	-0,298	0,641	1130,216	18309,504
56,000	-1,604	1133,286	1133,286	18359,237	-0,299	0,642	1132,644	18348,832
56,500	-1,617	1135,721	1135,721	18398,672	-0,299	0,644	1135,077	18388,245
57,000	-1,627	1138,160	1138,160	18438,192	-0,300	0,645	1137,515	18427,743
57,500	-1,634	1140,605	1140,605	18477,797	-0,301	0,646	1139,958	18467,325
58,000	-1,639	1143,055	1143,055	18517,487	-0,301	0,648	1142,407	18506,993
58,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
59,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
59,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
60,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517
60,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
61,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
61,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
62,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416
62,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
63,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
63,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
64,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
64,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
65,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368
65,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
66,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
66,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
67,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
67,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
68,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482
68,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
69,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
69,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
70,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
70,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
71,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
71,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
72,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
72,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
73,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
73,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
74,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
74,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
75,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
75,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
76,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445
76,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
76,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
77,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
77,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
78,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
78,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633
79,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
79,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
80,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
80,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631
81,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
81,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
81,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
82,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
82,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
83,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592
83,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
84,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
84,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
85,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
85,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
86,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452
86,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
87,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
87,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
88,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
88,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
89,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
89,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
90,000	-0,596	1395,000	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
90,500	-0,672	1083,355	1083,355	17550,344	-0,285	0,614	1082,741	17540,398
91,000	-0,745	1085,682	1085,682	17588,042	-0,286	0,615	1085,066	17578,074

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
91,500	-0,815	1088,014	1088,014	17625,821	-0,287	0,617	1087,397	17615,832
92,000	-0,882	1090,351	1090,351	17663,681	-0,287	0,618	1089,733	17653,670
92,500	-0,947	1092,693	1092,693	17701,622	-0,288	0,619	1092,073	17691,590
93,000	-1,008	1095,040	1095,040	17739,645	-0,289	0,621	1094,419	17729,591
93,500	-1,067	1097,392	1097,392	17777,749	-0,289	0,622	1096,770	17767,674
94,000	-1,123	1099,749	1099,749	17815,936	-0,290	0,623	1099,126	17805,839
94,500	-1,176	1102,111	1102,111	17854,204	-0,290	0,625	1101,487	17844,086
95,000	-1,226	1104,479	1104,479	17892,554	-0,291	0,626	1103,853	17882,414
95,500	-1,273	1106,851	1106,851	17930,987	-0,292	0,627	1106,224	17920,825
96,000	-1,318	1109,229	1109,229	17969,503	-0,292	0,629	1108,600	17959,319
96,500	-1,359	1111,611	1111,611	18008,101	-0,293	0,630	1110,981	17997,895
97,000	-1,398	1113,999	1113,999	18046,782	-0,294	0,631	1113,368	18036,555
97,500	-1,434	1116,392	1116,392	18085,546	-0,294	0,633	1115,759	18075,297
98,000	-1,467	1118,790	1118,790	18124,394	-0,295	0,634	1118,156	18114,122
98,500	-1,497	1121,193	1121,193	18163,324	-0,295	0,635	1120,557	18153,031
99,000	-1,524	1123,601	1123,601	18202,339	-0,296	0,637	1122,964	18192,023
99,500	-1,548	1126,015	1126,015	18241,437	-0,297	0,638	1125,377	18231,100
100,000	-1,570	1128,433	1128,433	18280,620	-0,297	0,640	1127,794	18270,260
100,500	-1,588	1130,857	1130,857	18319,886	-0,298	0,641	1130,216	18309,504
101,000	-1,604	1133,286	1133,286	18359,237	-0,299	0,642	1132,644	18348,832
101,500	-1,617	1135,721	1135,721	18398,672	-0,299	0,644	1135,077	18388,245
102,000	-1,627	1138,160	1138,160	18438,192	-0,300	0,645	1137,515	18427,743
102,500	-1,634	1140,605	1140,605	18477,797	-0,301	0,646	1139,958	18467,325
103,000	-1,639	1143,055	1143,055	18517,487	-0,301	0,648	1142,407	18506,993
103,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
104,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
104,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
105,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517
105,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
106,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
106,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
107,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416
107,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
108,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
108,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
109,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
109,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
110,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
110,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
111,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
111,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
112,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
112,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
113,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482
113,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
114,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
114,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
115,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
115,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
116,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
116,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
117,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
117,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
118,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473
118,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
119,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
119,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
120,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
120,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
121,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445
121,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
121,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
122,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
122,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
123,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
123,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633
124,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
124,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
125,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
125,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631
126,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
126,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
126,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
127,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
127,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
128,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
128,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
129,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
129,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
130,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
130,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
131,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452
131,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
132,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
132,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
133,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
133,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
134,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
134,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
135,000	-0,596	1395,000	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
135,500	-0,672	1083,355	1083,355	17550,344	-0,285	0,614	1082,741	17540,398
136,000	-0,745	1085,682	1085,682	17588,042	-0,286	0,615	1085,066	17578,074
136,500	-0,815	1088,014	1088,014	17625,821	-0,287	0,617	1087,397	17615,832
137,000	-0,882	1090,351	1090,351	17663,681	-0,287	0,618	1089,733	17653,670
137,500	-0,947	1092,693	1092,693	17701,622	-0,288	0,619	1092,073	17691,590
138,000	-1,008	1095,040	1095,040	17739,645	-0,289	0,621	1094,419	17729,591
138,500	-1,067	1097,392	1097,392	17777,749	-0,289	0,622	1096,770	17767,674
139,000	-1,123	1099,749	1099,749	17815,936	-0,290	0,623	1099,126	17805,839
139,500	-1,176	1102,111	1102,111	17854,204	-0,290	0,625	1101,487	17844,086
140,000	-1,226	1104,479	1104,479	17892,554	-0,291	0,626	1103,853	17882,414
140,500	-1,273	1106,851	1106,851	17930,987	-0,292	0,627	1106,224	17920,825
141,000	-1,318	1109,229	1109,229	17969,503	-0,292	0,629	1108,600	17959,319
141,500	-1,359	1111,611	1111,611	18008,101	-0,293	0,630	1110,981	17997,895
142,000	-1,398	1113,999	1113,999	18046,782	-0,294	0,631	1113,368	18036,555
142,500	-1,434	1116,392	1116,392	18085,546	-0,294	0,633	1115,759	18075,297
143,000	-1,467	1118,790	1118,790	18124,394	-0,295	0,634	1118,156	18114,122
143,500	-1,497	1121,193	1121,193	18163,324	-0,295	0,635	1120,557	18153,031
144,000	-1,524	1123,601	1123,601	18202,339	-0,296	0,637	1122,964	18192,023
144,500	-1,548	1126,015	1126,015	18241,437	-0,297	0,638	1125,377	18231,100
145,000	-1,570	1128,433	1128,433	18280,620	-0,297	0,640	1127,794	18270,260
145,500	-1,588	1130,857	1130,857	18319,886	-0,298	0,641	1130,216	18309,504
146,000	-1,604	1133,286	1133,286	18359,237	-0,299	0,642	1132,644	18348,832
146,500	-1,617	1135,721	1135,721	18398,672	-0,299	0,644	1135,077	18388,245
147,000	-1,627	1138,160	1138,160	18438,192	-0,300	0,645	1137,515	18427,743

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
147,500	-1,634	1140,605	1140,605	18477,797	-0,301	0,646	1139,958	18467,325
148,000	-1,639	1143,055	1143,055	18517,487	-0,301	0,648	1142,407	18506,993
148,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
149,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
149,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
150,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517
150,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
151,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
151,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
152,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416
152,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
153,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
153,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
154,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
154,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
155,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368
155,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
156,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
156,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
157,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
157,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
158,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482
158,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
159,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
159,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
160,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
160,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
161,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
161,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
162,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
162,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
163,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473
163,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
164,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
164,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
165,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
165,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
166,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
166,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
166,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
167,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
167,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
168,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
168,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633
169,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
169,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
170,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
170,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631
171,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
171,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
171,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
172,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
172,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
173,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592
173,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
174,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
174,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
175,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
175,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
176,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452
176,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
177,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
177,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
178,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
178,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
179,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
179,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
180,000	-0,596	1395,000	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
180,500	-0,672	1083,355	1083,355	17550,344	-0,285	0,614	1082,741	17540,398
181,000	-0,745	1085,682	1085,682	17588,042	-0,286	0,615	1085,066	17578,074
181,500	-0,815	1088,014	1088,014	17625,821	-0,287	0,617	1087,397	17615,832
182,000	-0,882	1090,351	1090,351	17663,681	-0,287	0,618	1089,733	17653,670
182,500	-0,947	1092,693	1092,693	17701,622	-0,288	0,619	1092,073	17691,590
183,000	-1,008	1095,040	1095,040	17739,645	-0,289	0,621	1094,419	17729,591
183,500	-1,067	1097,392	1097,392	17777,749	-0,289	0,622	1096,770	17767,674
184,000	-1,123	1099,749	1099,749	17815,936	-0,290	0,623	1099,126	17805,839

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
184,500	-1,176	1102,111	1102,111	17854,204	-0,290	0,625	1101,487	17844,086
185,000	-1,226	1104,479	1104,479	17892,554	-0,291	0,626	1103,853	17882,414
185,500	-1,273	1106,851	1106,851	17930,987	-0,292	0,627	1106,224	17920,825
186,000	-1,318	1109,229	1109,229	17969,503	-0,292	0,629	1108,600	17959,319
186,500	-1,359	1111,611	1111,611	18008,101	-0,293	0,630	1110,981	17997,895
187,000	-1,398	1113,999	1113,999	18046,782	-0,294	0,631	1113,368	18036,555
187,500	-1,434	1116,392	1116,392	18085,546	-0,294	0,633	1115,759	18075,297
188,000	-1,467	1118,790	1118,790	18124,394	-0,295	0,634	1118,156	18114,122
188,500	-1,497	1121,193	1121,193	18163,324	-0,295	0,635	1120,557	18153,031
189,000	-1,524	1123,601	1123,601	18202,339	-0,296	0,637	1122,964	18192,023
189,500	-1,548	1126,015	1126,015	18241,437	-0,297	0,638	1125,377	18231,100
190,000	-1,570	1128,433	1128,433	18280,620	-0,297	0,640	1127,794	18270,260
190,500	-1,588	1130,857	1130,857	18319,886	-0,298	0,641	1130,216	18309,504
191,000	-1,604	1133,286	1133,286	18359,237	-0,299	0,642	1132,644	18348,832
191,500	-1,617	1135,721	1135,721	18398,672	-0,299	0,644	1135,077	18388,245
192,000	-1,627	1138,160	1138,160	18438,192	-0,300	0,645	1137,515	18427,743
192,500	-1,634	1140,605	1140,605	18477,797	-0,301	0,646	1139,958	18467,325
193,000	-1,639	1143,055	1143,055	18517,487	-0,301	0,648	1142,407	18506,993
193,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
194,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
194,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
195,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517
195,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
196,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
196,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
197,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416
197,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
198,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
198,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
199,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
199,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
200,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368
200,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
201,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
201,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
202,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
202,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
203,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
203,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
204,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
204,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
205,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
205,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
206,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
206,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
207,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
207,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
208,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473
208,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
209,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
209,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
210,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
210,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
211,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445
211,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
211,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
212,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
212,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
213,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
213,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633
214,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
214,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
215,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
215,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631
216,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
216,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
216,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
217,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
217,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
218,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592
218,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
219,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
219,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
220,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
220,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
221,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
221,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
222,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
222,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
223,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
223,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
224,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
224,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
225,000	-0,596	1395,000	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
225,500	-0,672	1083,355	1083,355	17550,344	-0,285	0,614	1082,741	17540,398
226,000	-0,745	1085,682	1085,682	17588,042	-0,286	0,615	1085,066	17578,074
226,500	-0,815	1088,014	1088,014	17625,821	-0,287	0,617	1087,397	17615,832
227,000	-0,882	1090,351	1090,351	17663,681	-0,287	0,618	1089,733	17653,670
227,500	-0,947	1092,693	1092,693	17701,622	-0,288	0,619	1092,073	17691,590
228,000	-1,008	1095,040	1095,040	17739,645	-0,289	0,621	1094,419	17729,591
228,500	-1,067	1097,392	1097,392	17777,749	-0,289	0,622	1096,770	17767,674
229,000	-1,123	1099,749	1099,749	17815,936	-0,290	0,623	1099,126	17805,839
229,500	-1,176	1102,111	1102,111	17854,204	-0,290	0,625	1101,487	17844,086
230,000	-1,226	1104,479	1104,479	17892,554	-0,291	0,626	1103,853	17882,414
230,500	-1,273	1106,851	1106,851	17930,987	-0,292	0,627	1106,224	17920,825
231,000	-1,318	1109,229	1109,229	17969,503	-0,292	0,629	1108,600	17959,319
231,500	-1,359	1111,611	1111,611	18008,101	-0,293	0,630	1110,981	17997,895
232,000	-1,398	1113,999	1113,999	18046,782	-0,294	0,631	1113,368	18036,555
232,500	-1,434	1116,392	1116,392	18085,546	-0,294	0,633	1115,759	18075,297
233,000	-1,467	1118,790	1118,790	18124,394	-0,295	0,634	1118,156	18114,122
233,500	-1,497	1121,193	1121,193	18163,324	-0,295	0,635	1120,557	18153,031
234,000	-1,524	1123,601	1123,601	18202,339	-0,296	0,637	1122,964	18192,023
234,500	-1,548	1126,015	1126,015	18241,437	-0,297	0,638	1125,377	18231,100
235,000	-1,570	1128,433	1128,433	18280,620	-0,297	0,640	1127,794	18270,260
235,500	-1,588	1130,857	1130,857	18319,886	-0,298	0,641	1130,216	18309,504
236,000	-1,604	1133,286	1133,286	18359,237	-0,299	0,642	1132,644	18348,832
236,500	-1,617	1135,721	1135,721	18398,672	-0,299	0,644	1135,077	18388,245
237,000	-1,627	1138,160	1138,160	18438,192	-0,300	0,645	1137,515	18427,743
237,500	-1,634	1140,605	1140,605	18477,797	-0,301	0,646	1139,958	18467,325
238,000	-1,639	1143,055	1143,055	18517,487	-0,301	0,648	1142,407	18506,993
238,500	-1,640	1145,510	1145,510	18557,262	-0,302	0,649	1144,861	18546,746
239,000	-1,639	1147,971	1147,971	18597,123	-0,302	0,651	1147,320	18586,584
239,500	-1,634	1150,436	1150,436	18637,069	-0,303	0,652	1149,784	18626,507
240,000	-1,627	1152,907	1152,907	18677,101	-0,304	0,653	1152,254	18666,517

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
240,500	-1,617	1155,384	1155,384	18717,220	-0,304	0,655	1154,729	18706,612
241,000	-1,604	1157,866	1157,866	18757,424	-0,305	0,656	1157,209	18746,794
241,500	-1,588	1160,353	1160,353	18797,714	-0,306	0,658	1159,695	18787,061
242,000	-1,570	1162,845	1162,845	18838,092	-0,306	0,659	1162,186	18827,416
242,500	-1,548	1165,343	1165,343	18878,555	-0,307	0,660	1164,683	18867,857
243,000	-1,524	1167,846	1167,846	18919,106	-0,308	0,662	1167,184	18908,384
243,500	-1,497	1170,355	1170,355	18959,744	-0,308	0,663	1169,691	18948,999
244,000	-1,467	1172,868	1172,868	19000,469	-0,309	0,665	1172,204	18989,701
244,500	-1,434	1175,388	1175,388	19041,282	-0,310	0,666	1174,722	19030,491
245,000	-1,398	1177,912	1177,912	19082,182	-0,310	0,668	1177,245	19071,368
245,500	-1,359	1180,443	1180,443	19123,171	-0,311	0,669	1179,774	19112,333
246,000	-1,318	1182,978	1182,978	19164,247	-0,312	0,670	1182,308	19153,386
246,500	-1,273	1185,519	1185,519	19205,411	-0,312	0,672	1184,847	19194,527
247,000	-1,226	1188,066	1188,066	19246,664	-0,313	0,673	1187,392	19235,757
247,500	-1,176	1190,618	1190,618	19288,006	-0,314	0,675	1189,943	19277,075
248,000	-1,123	1193,175	1193,175	19329,436	-0,314	0,676	1192,499	19318,482
248,500	-1,067	1195,738	1195,738	19370,955	-0,315	0,678	1195,060	19359,977
249,000	-1,008	1198,306	1198,306	19412,564	-0,316	0,679	1197,627	19401,562
249,500	-0,947	1200,880	1200,880	19454,262	-0,316	0,681	1200,200	19443,236
250,000	-0,882	1203,460	1203,460	19496,049	-0,317	0,682	1202,778	19485,000
250,500	-0,815	1206,045	1206,045	19537,926	-0,318	0,683	1205,361	19526,854
251,000	-0,745	1208,635	1208,635	19579,893	-0,318	0,685	1207,950	19568,797
251,500	-0,672	1211,232	1211,232	19621,951	-0,319	0,686	1210,545	19610,830
252,000	-0,596	1213,833	1213,833	19664,098	-0,320	0,688	1213,145	19652,954
252,500	-0,517	1216,441	1216,441	19706,336	-0,321	0,689	1215,751	19695,168
253,000	-0,436	1219,053	1219,053	19748,665	-0,321	0,691	1218,363	19737,473
253,500	-0,351	1221,672	1221,672	19791,085	-0,322	0,692	1220,980	19779,869
254,000	-0,264	1224,296	1224,296	19833,596	-0,323	0,694	1223,602	19822,356
254,500	-0,174	1226,926	1226,926	19876,198	-0,323	0,695	1226,230	19864,934
255,000	-0,080	1229,561	1229,561	19918,892	-0,324	0,697	1228,864	19907,603
255,500	0,016	1232,202	1232,202	19961,677	-0,325	0,698	1231,504	19950,365
256,000	0,114	1234,849	1233,504	19982,769	-0,325	0,699	1232,805	19971,445
256,500	0,216	1237,501	1230,860	19939,939	-0,324	0,698	1230,163	19928,638
256,950	0,304	1243,735	1228,222	19897,200	-0,324	0,696	1227,526	19885,924
257,400	0,383	1250,000	1225,853	19858,813	-0,323	0,695	1225,158	19847,559
257,850	0,453	1256,296	1219,709	19759,284	-0,321	0,691	1219,018	19748,086
258,300	0,513	1262,624	1213,596	19660,254	-0,320	0,688	1212,908	19649,112
258,750	0,564	1268,984	1207,514	19561,719	-0,318	0,684	1206,829	19550,633

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
259,200	0,606	1275,376	1201,462	19463,679	-0,317	0,681	1200,781	19452,649
259,650	0,638	1281,800	1195,440	19366,130	-0,315	0,677	1194,763	19355,155
260,100	0,661	1288,257	1189,449	19269,070	-0,313	0,674	1188,775	19258,150
260,550	0,675	1294,746	1183,487	19172,497	-0,312	0,671	1182,817	19161,631
261,000	0,680	1301,268	1177,556	19076,407	-0,310	0,667	1176,889	19065,596
261,450	0,675	1307,822	1171,654	18980,799	-0,309	0,664	1170,990	18970,042
261,900	0,661	1314,410	1165,782	18885,670	-0,307	0,661	1165,121	18874,968
262,350	0,638	1321,031	1159,939	18791,018	-0,306	0,657	1159,282	18780,369
262,800	0,606	1327,685	1154,126	18696,841	-0,304	0,654	1153,472	18686,245
263,250	0,564	1334,372	1148,342	18603,135	-0,303	0,651	1147,691	18592,592
263,700	0,513	1341,094	1142,586	18509,899	-0,301	0,648	1141,939	18499,409
264,150	0,453	1347,849	1136,860	18417,130	-0,300	0,644	1136,216	18406,693
264,600	0,383	1354,638	1131,162	18324,827	-0,298	0,641	1130,521	18314,442
265,050	0,304	1361,462	1125,493	18232,986	-0,297	0,638	1124,855	18222,653
265,500	0,216	1368,319	1119,852	18141,605	-0,295	0,635	1119,217	18131,323
266,000	0,114	1371,259	1114,240	18050,682	-0,294	0,631	1113,608	18040,452
266,500	0,016	1374,204	1108,036	17950,191	-0,292	0,628	1107,409	17940,018
267,000	-0,080	1377,156	1105,662	17911,717	-0,291	0,627	1105,035	17901,566
267,500	-0,174	1380,114	1103,292	17873,325	-0,291	0,625	1102,666	17863,196
268,000	-0,264	1383,078	1100,927	17835,016	-0,290	0,624	1100,303	17824,908
268,500	-0,351	1386,049	1098,567	17796,789	-0,289	0,623	1097,945	17786,703
269,000	-0,436	1389,026	1096,213	17758,643	-0,289	0,621	1095,591	17748,579
269,500	-0,517	1392,010	1093,863	17720,580	-0,288	0,620	1093,243	17710,537
270,000	-0,596	1395,000	1091,518	17682,598	-0,288	0,619	1090,900	17672,577
270,500	-0,672	1392,010	1253,860	20312,530	-0,330	0,711	1253,149	20301,019
271,000	-0,745	1389,026	1256,553	20356,161	-0,331	0,712	1255,841	20344,625
271,500	-0,815	1386,049	1259,252	20399,886	-0,332	0,714	1258,539	20388,325
272,000	-0,882	1383,078	1261,957	20443,704	-0,333	0,715	1261,242	20432,119
272,500	-0,947	1380,114	1264,668	20487,617	-0,333	0,717	1263,951	20476,006
273,000	-1,008	1377,156	1267,384	20531,624	-0,334	0,718	1266,666	20519,989
273,500	-1,067	1374,204	1270,107	20575,726	-0,335	0,720	1269,387	20564,065
274,000	-1,123	1371,259	1272,835	20619,922	-0,335	0,721	1272,113	20608,236
274,500	-1,176	1368,319	1275,569	20664,213	-0,336	0,723	1274,846	20652,502
275,000	-1,226	1365,387	1278,309	20708,600	-0,337	0,724	1277,584	20696,864
275,500	-1,273	1362,460	1281,054	20753,081	-0,338	0,726	1280,328	20741,320
276,000	-1,318	1359,540	1283,806	20797,659	-0,338	0,728	1283,079	20785,872
276,500	-1,359	1356,626	1286,564	20842,332	-0,339	0,729	1285,835	20830,520
277,000	-1,398	1353,718	1289,327	20887,101	-0,340	0,731	1288,597	20875,263

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta\sigma_{p0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
277,500	-1,434	1350,817	1292,097	20931,966	-0,340	0,732	1291,364	20920,103
278,000	-1,467	1347,921	1294,872	20976,927	-0,341	0,734	1294,138	20965,039
278,500	-1,497	1345,032	1297,653	21021,985	-0,342	0,735	1296,918	21010,072
279,000	-1,524	1342,149	1300,441	21067,140	-0,343	0,737	1299,704	21055,201
279,500	-1,548	1339,272	1303,234	21112,392	-0,343	0,739	1302,496	21100,427
280,000	-1,570	1336,402	1306,033	21157,741	-0,344	0,740	1305,293	21145,751
280,500	-1,588	1333,537	1308,839	21203,188	-0,345	0,742	1308,097	21191,171
281,000	-1,604	1330,679	1311,650	21248,732	-0,346	0,743	1310,907	21236,690
281,500	-1,617	1327,827	1314,468	21294,374	-0,346	0,745	1313,723	21282,306
282,000	-1,627	1324,981	1317,291	21340,113	-0,347	0,747	1316,544	21328,020
282,500	-1,634	1322,141	1320,120	21385,952	-0,348	0,748	1319,372	21373,832
283,000	-1,639	1319,307	1319,307	21372,777	-0,348	0,748	1318,560	21360,664
283,500	-1,640	1316,479	1316,479	21326,967	-0,347	0,746	1315,733	21314,881
284,000	-1,638	1312,799	1312,799	21267,341	-0,346	0,744	1312,055	21255,288
284,500	-1,631	1309,128	1309,128	21207,881	-0,345	0,742	1308,387	21195,862
285,000	-1,620	1305,468	1305,468	21148,588	-0,344	0,740	1304,729	21136,603
285,500	-1,604	1301,819	1301,819	21089,461	-0,343	0,738	1301,081	21077,509
286,000	-1,584	1298,179	1298,179	21030,499	-0,342	0,736	1297,443	21018,580
286,500	-1,559	1294,549	1294,549	20971,701	-0,341	0,734	1293,816	20959,816
287,000	-1,530	1290,930	1290,930	20913,068	-0,340	0,732	1290,199	20901,217
287,500	-1,496	1287,321	1287,321	20854,599	-0,339	0,730	1286,591	20842,781
288,000	-1,458	1283,722	1283,722	20796,294	-0,338	0,728	1282,994	20784,508
288,500	-1,415	1280,133	1280,133	20738,151	-0,337	0,725	1279,407	20726,399
289,000	-1,368	1276,554	1276,554	20680,171	-0,336	0,723	1275,830	20668,452
289,500	-1,316	1272,985	1272,985	20622,354	-0,335	0,721	1272,263	20610,667
290,000	-1,260	1269,426	1269,426	20564,697	-0,334	0,719	1268,706	20553,043
290,500	-1,199	1265,877	1265,877	20507,202	-0,334	0,717	1265,159	20495,581
291,000	-1,134	1262,338	1262,338	20449,868	-0,333	0,715	1261,622	20438,279
291,500	-1,064	1258,808	1258,808	20392,694	-0,332	0,713	1258,095	20381,137
292,000	-0,990	1255,289	1255,289	20335,680	-0,331	0,711	1254,578	20324,156
292,500	-0,911	1251,779	1251,779	20278,825	-0,330	0,709	1251,070	20267,333
292,950	-0,836	1248,629	1248,629	20227,792	-0,329	0,708	1247,922	20216,329
293,400	-0,758	1245,487	1245,487	20176,887	-0,328	0,706	1244,781	20165,453
293,850	-0,676	1242,353	1242,353	20126,111	-0,327	0,704	1241,648	20114,705
294,300	-0,590	1239,226	1239,226	20075,462	-0,327	0,702	1238,524	20064,084
294,750	-0,501	1236,107	1236,107	20024,940	-0,326	0,701	1235,407	20013,591
295,200	-0,408	1232,997	1232,997	19974,546	-0,325	0,699	1232,298	19963,226
295,650	-0,312	1229,894	1229,894	19924,278	-0,324	0,697	1229,197	19912,987

x [m]	e [m]	$\sigma_{p0,a}$ [MPa]	$\sigma_{p0,a+rc}$ [MPa]	$P_{0,a+rc}$ [kN]	$\sigma_{c,a+rc}$ [MPa]	$\Delta_{\sigma P0,c}$ [MPa]	σ_{p0} [MPa]	P_0 [kN]
296,100	-0,211	1226,799	1226,799	19874,137	-0,323	0,695	1226,103	19862,874
296,550	-0,108	1223,711	1223,711	19824,122	-0,322	0,694	1223,018	19812,887
297,000	0,000	1220,632	1220,632	19774,233	-0,322	0,692	1219,940	19763,027

ANEXO B - PERDAS DIFERIDAS DO PRÉ-ESFORÇO

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma_{pt,s}}$ [MPa]	$\Delta_{\sigma_{pt,c}}$ [MPa]	$\Delta_{\sigma_{pt,r}}$ [MPa]	$\Delta_{\sigma_{pt,s+c+r}}$ [MPa]	$\sigma_{p=\infty}$ [MPa]	P_{∞} [kN]
0,000	0,000	-2,783	0,568	59,280	15,488	18,059	85,500	970,590	15723,565
0,450	-0,108	-2,790	0,569	59,280	15,527	18,235	85,618	973,137	15764,818
0,900	-0,211	-2,797	0,571	59,280	15,566	18,412	85,637	975,789	15807,783
1,350	-0,312	-2,804	0,572	59,280	15,606	18,592	85,568	978,536	15852,283
1,800	-0,408	-2,811	0,574	59,280	15,645	18,773	85,422	981,367	15898,138
2,250	-0,501	-2,818	0,575	59,280	15,684	18,957	85,210	984,270	15945,171
2,700	-0,590	-2,825	0,576	59,280	15,792	19,143	84,936	987,243	15993,335
3,150	-0,676	-2,832	0,578	59,280	15,832	19,331	84,617	990,267	16042,318
3,600	-0,758	-2,839	0,579	59,280	15,872	19,521	84,263	993,333	16091,992
4,050	-0,836	-2,847	0,581	59,280	15,912	19,714	83,882	996,433	16142,207
4,500	-0,911	-2,854	0,582	59,280	15,952	19,909	83,483	999,557	16192,826
5,000	-0,990	-2,862	0,584	59,280	16,032	20,128	82,994	1003,082	16249,927
5,500	-1,064	-2,870	0,586	59,280	16,077	20,350	82,532	1006,590	16306,750
6,000	-1,134	-2,878	0,587	59,280	16,122	20,575	82,075	1010,100	16363,613
6,500	-1,199	-2,886	0,589	59,280	16,167	20,802	81,633	1013,604	16420,388
7,000	-1,260	-2,894	0,590	59,280	16,212	21,033	81,211	1017,096	16476,962
7,500	-1,316	-2,902	0,592	59,280	16,258	21,267	80,816	1020,570	16533,238
8,000	-1,368	-2,910	0,594	59,280	16,303	21,504	80,454	1024,020	16589,130
8,500	-1,415	-2,918	0,595	59,280	16,349	21,744	80,129	1027,442	16644,562
9,000	-1,458	-2,927	0,597	59,280	16,395	21,988	79,845	1030,831	16699,469
9,500	-1,496	-2,935	0,599	59,280	16,441	22,234	79,605	1034,185	16753,797
10,000	-1,530	-2,943	0,600	59,280	16,487	22,484	79,413	1037,500	16807,498
10,500	-1,559	-2,951	0,602	59,280	16,533	22,737	79,271	1040,773	16860,529
11,000	-1,584	-2,960	0,604	59,280	16,579	22,994	79,181	1044,003	16912,857
11,500	-1,604	-2,968	0,606	59,280	16,626	23,254	79,145	1047,188	16964,451
12,000	-1,620	-2,976	0,607	59,280	16,673	23,518	79,165	1050,326	17015,287
12,500	-1,631	-2,985	0,609	59,280	16,719	23,785	79,242	1053,416	17065,344
13,000	-1,638	-2,993	0,611	59,280	16,766	24,056	79,377	1056,457	17114,605
13,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
14,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
14,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
15,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
15,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105
16,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
16,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
17,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
17,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
18,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
18,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
19,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
19,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
20,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
20,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
21,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548
21,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
22,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
22,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733
23,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
23,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
24,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
24,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
25,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
25,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
26,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
26,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
27,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
27,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
28,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449
28,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
29,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
29,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666
30,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
30,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
31,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
31,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
31,950	0,304	-3,218	0,657	59,280	17,988	32,526	98,426	1122,836	18189,935
32,400	0,383	-3,212	0,655	59,280	17,953	32,259	97,898	1121,008	18160,328
32,850	0,453	-3,196	0,652	59,280	17,863	31,576	96,984	1115,813	18076,170
33,300	0,513	-3,180	0,649	59,280	17,774	30,909	96,088	1110,630	17992,207
33,750	0,564	-3,164	0,646	59,280	17,685	30,259	95,228	1105,442	17908,162
34,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
34,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804
35,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
35,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
36,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma pt,s}$ [MPa]	$\Delta_{\sigma pt,c}$ [MPa]	$\Delta_{\sigma pt,r}$ [MPa]	$\Delta_{\sigma pt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
36,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
36,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
37,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
37,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
38,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
38,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
39,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
39,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970
40,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
40,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
41,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146
41,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
42,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
42,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
43,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
43,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
44,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
44,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
45,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
45,500	-0,672	-2,854	0,582	59,280	15,986	19,906	85,169	997,837	16164,964
46,000	-0,745	-2,845	0,580	59,280	15,935	19,658	84,461	995,068	16120,103
46,500	-0,815	-2,851	0,582	59,280	15,969	19,823	84,118	997,730	16163,225
47,000	-0,882	-2,857	0,583	59,280	16,004	19,990	83,759	1000,413	16206,689
47,500	-0,947	-2,863	0,584	59,280	16,038	20,158	83,389	1003,111	16250,403
48,000	-1,008	-2,869	0,585	59,280	16,072	20,329	83,014	1005,820	16294,280
48,500	-1,067	-2,875	0,587	59,280	16,107	20,501	82,639	1008,534	16338,244
49,000	-1,123	-2,881	0,588	59,280	16,142	20,674	82,268	1011,248	16382,223
49,500	-1,176	-2,888	0,589	59,280	16,176	20,849	81,906	1013,960	16426,151
50,000	-1,226	-2,894	0,590	59,280	16,211	21,027	81,555	1016,665	16469,970
50,500	-1,273	-2,900	0,592	59,280	16,246	21,206	81,219	1019,360	16513,626
51,000	-1,318	-2,906	0,593	59,280	16,281	21,386	80,901	1022,041	16557,072
51,500	-1,359	-2,912	0,594	59,280	16,316	21,569	80,604	1024,708	16600,264
52,000	-1,398	-2,919	0,596	59,280	16,351	21,753	80,330	1027,356	16643,165
52,500	-1,434	-2,925	0,597	59,280	16,386	21,940	80,081	1029,984	16685,740
53,000	-1,467	-2,931	0,598	59,280	16,421	22,128	79,859	1032,590	16727,959
53,500	-1,497	-2,938	0,599	59,280	16,456	22,318	79,666	1035,173	16769,795
54,000	-1,524	-2,944	0,601	59,280	16,492	22,510	79,504	1037,730	16811,225
54,500	-1,548	-2,950	0,602	59,280	16,527	22,704	79,372	1040,261	16852,227
55,000	-1,570	-2,957	0,603	59,280	16,563	22,900	79,274	1042,764	16892,782

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
55,500	-1,588	-2,963	0,605	59,280	16,598	23,098	79,209	1045,239	16932,875
56,000	-1,604	-2,969	0,606	59,280	16,634	23,298	79,179	1047,685	16972,492
56,500	-1,617	-2,976	0,607	59,280	16,670	23,500	79,184	1050,100	17011,620
57,000	-1,627	-2,982	0,608	59,280	16,705	23,705	79,225	1052,485	17050,249
57,500	-1,634	-2,988	0,610	59,280	16,741	23,911	79,303	1054,838	17088,370
58,000	-1,639	-2,995	0,611	59,280	16,777	24,119	79,418	1057,159	17125,974
58,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
59,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
59,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
60,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
60,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105
61,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
61,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
62,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835
62,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
63,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
63,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
64,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
64,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
65,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
65,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
66,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548
66,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
67,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
67,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733
68,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
68,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
69,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
69,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
70,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
70,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
71,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
71,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
72,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
72,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
73,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449
73,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
74,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
74,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma pt,s}$ [MPa]	$\Delta_{\sigma pt,c}$ [MPa]	$\Delta_{\sigma pt,r}$ [MPa]	$\Delta_{\sigma pt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
75,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
75,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
76,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
76,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
76,950	0,304	-3,218	0,657	59,280	17,910	32,526	98,352	1122,909	18191,132
77,400	0,383	-3,212	0,655	59,280	17,876	32,259	97,824	1121,081	18161,519
77,850	0,453	-3,196	0,652	59,280	17,786	31,576	96,911	1115,886	18077,352
78,300	0,513	-3,180	0,649	59,280	17,697	30,909	96,016	1110,702	17993,378
78,750	0,564	-3,164	0,646	59,280	17,608	30,259	95,156	1105,514	17909,324
79,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
79,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804
80,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
80,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
81,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497
81,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
81,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
82,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
82,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
83,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
83,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
84,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
84,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970
85,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
85,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
86,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146
86,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
87,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
87,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
88,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
88,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
89,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
89,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
90,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
90,500	-0,672	-2,838	0,579	59,280	15,901	19,495	84,782	992,433	16077,422
91,000	-0,745	-2,845	0,580	59,280	15,935	19,658	84,461	995,068	16120,103
91,500	-0,815	-2,851	0,582	59,280	15,969	19,823	84,118	997,730	16163,225
92,000	-0,882	-2,857	0,583	59,280	16,004	19,990	83,759	1000,413	16206,689
92,500	-0,947	-2,863	0,584	59,280	16,038	20,158	83,389	1003,111	16250,403
93,000	-1,008	-2,869	0,585	59,280	16,072	20,329	83,014	1005,820	16294,280

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{opt,s}$ [MPa]	$\Delta_{opt,c}$ [MPa]	$\Delta_{opt,r}$ [MPa]	$\Delta_{opt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
93,500	-1,067	-2,875	0,587	59,280	16,107	20,501	82,639	1008,534	16338,244
94,000	-1,123	-2,881	0,588	59,280	16,142	20,674	82,268	1011,248	16382,223
94,500	-1,176	-2,888	0,589	59,280	16,176	20,849	81,906	1013,960	16426,151
95,000	-1,226	-2,894	0,590	59,280	16,211	21,027	81,555	1016,665	16469,970
95,500	-1,273	-2,900	0,592	59,280	16,246	21,206	81,219	1019,360	16513,626
96,000	-1,318	-2,906	0,593	59,280	16,281	21,386	80,901	1022,041	16557,072
96,500	-1,359	-2,912	0,594	59,280	16,316	21,569	80,604	1024,708	16600,264
97,000	-1,398	-2,919	0,596	59,280	16,351	21,753	80,330	1027,356	16643,165
97,500	-1,434	-2,925	0,597	59,280	16,386	21,940	80,081	1029,984	16685,740
98,000	-1,467	-2,931	0,598	59,280	16,421	22,128	79,859	1032,590	16727,959
98,500	-1,497	-2,938	0,599	59,280	16,456	22,318	79,666	1035,173	16769,795
99,000	-1,524	-2,944	0,601	59,280	16,492	22,510	79,504	1037,730	16811,225
99,500	-1,548	-2,950	0,602	59,280	16,527	22,704	79,372	1040,261	16852,227
100,000	-1,570	-2,957	0,603	59,280	16,563	22,900	79,274	1042,764	16892,782
100,500	-1,588	-2,963	0,605	59,280	16,598	23,098	79,209	1045,239	16932,875
101,000	-1,604	-2,969	0,606	59,280	16,634	23,298	79,179	1047,685	16972,492
101,500	-1,617	-2,976	0,607	59,280	16,670	23,500	79,184	1050,100	17011,620
102,000	-1,627	-2,982	0,608	59,280	16,705	23,705	79,225	1052,485	17050,249
102,500	-1,634	-2,988	0,610	59,280	16,741	23,911	79,303	1054,838	17088,370
103,000	-1,639	-2,995	0,611	59,280	16,777	24,119	79,418	1057,159	17125,974
103,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
104,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
104,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
105,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
105,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105
106,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
106,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
107,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835
107,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
108,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
108,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
109,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
109,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
110,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
110,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
111,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548
111,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
112,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
112,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma_{pt,s}}$ [MPa]	$\Delta_{\sigma_{pt,c}}$ [MPa]	$\Delta_{\sigma_{pt,r}}$ [MPa]	$\Delta_{\sigma_{pt,s+c+r}}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
113,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
113,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
114,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
114,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
115,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
115,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
116,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
116,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
117,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
117,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
118,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449
118,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
119,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
119,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666
120,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
120,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
121,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
121,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
121,950	0,304	-3,218	0,657	59,280	17,910	32,526	98,352	1122,909	18191,132
122,400	0,383	-3,212	0,655	59,280	17,876	32,259	97,824	1121,081	18161,519
122,850	0,453	-3,196	0,652	59,280	17,786	31,576	96,911	1115,886	18077,352
123,300	0,513	-3,180	0,649	59,280	17,697	30,909	96,016	1110,702	17993,378
123,750	0,564	-3,164	0,646	59,280	17,608	30,259	95,156	1105,514	17909,324
124,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
124,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804
125,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
125,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
126,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497
126,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
126,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
127,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
127,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
128,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
128,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
129,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
129,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970
130,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
130,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
131,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
131,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
132,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
132,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
133,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
133,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
134,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
134,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
135,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
135,500	-0,672	-2,838	0,579	59,280	15,901	19,495	84,782	992,433	16077,422
136,000	-0,745	-2,845	0,580	59,280	15,935	19,658	84,461	995,068	16120,103
136,500	-0,815	-2,851	0,582	59,280	15,969	19,823	84,118	997,730	16163,225
137,000	-0,882	-2,857	0,583	59,280	16,004	19,990	83,759	1000,413	16206,689
137,500	-0,947	-2,863	0,584	59,280	16,038	20,158	83,389	1003,111	16250,403
138,000	-1,008	-2,869	0,585	59,280	16,072	20,329	83,014	1005,820	16294,280
138,500	-1,067	-2,875	0,587	59,280	16,107	20,501	82,639	1008,534	16338,244
139,000	-1,123	-2,881	0,588	59,280	16,142	20,674	82,268	1011,248	16382,223
139,500	-1,176	-2,888	0,589	59,280	16,176	20,849	81,906	1013,960	16426,151
140,000	-1,226	-2,894	0,590	59,280	16,211	21,027	81,555	1016,665	16469,970
140,500	-1,273	-2,900	0,592	59,280	16,246	21,206	81,219	1019,360	16513,626
141,000	-1,318	-2,906	0,593	59,280	16,281	21,386	80,901	1022,041	16557,072
141,500	-1,359	-2,912	0,594	59,280	16,316	21,569	80,604	1024,708	16600,264
142,000	-1,398	-2,919	0,596	59,280	16,351	21,753	80,330	1027,356	16643,165
142,500	-1,434	-2,925	0,597	59,280	16,386	21,940	80,081	1029,984	16685,740
143,000	-1,467	-2,931	0,598	59,280	16,421	22,128	79,859	1032,590	16727,959
143,500	-1,497	-2,938	0,599	59,280	16,456	22,318	79,666	1035,173	16769,795
144,000	-1,524	-2,944	0,601	59,280	16,492	22,510	79,504	1037,730	16811,225
144,500	-1,548	-2,950	0,602	59,280	16,527	22,704	79,372	1040,261	16852,227
145,000	-1,570	-2,957	0,603	59,280	16,563	22,900	79,274	1042,764	16892,782
145,500	-1,588	-2,963	0,605	59,280	16,598	23,098	79,209	1045,239	16932,875
146,000	-1,604	-2,969	0,606	59,280	16,634	23,298	79,179	1047,685	16972,492
146,500	-1,617	-2,976	0,607	59,280	16,670	23,500	79,184	1050,100	17011,620
147,000	-1,627	-2,982	0,608	59,280	16,705	23,705	79,225	1052,485	17050,249
147,500	-1,634	-2,988	0,610	59,280	16,741	23,911	79,303	1054,838	17088,370
148,000	-1,639	-2,995	0,611	59,280	16,777	24,119	79,418	1057,159	17125,974
148,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
149,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
149,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
150,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
150,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma pt,s}$ [MPa]	$\Delta_{\sigma pt,c}$ [MPa]	$\Delta_{\sigma pt,r}$ [MPa]	$\Delta_{\sigma pt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
151,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
151,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
152,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835
152,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
153,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
153,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
154,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
154,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
155,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
155,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
156,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548
156,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
157,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
157,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733
158,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
158,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
159,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
159,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
160,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
160,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
161,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
161,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
162,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
162,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
163,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449
163,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
164,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
164,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666
165,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
165,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
166,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
166,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
166,950	0,304	-3,218	0,657	59,280	17,910	32,526	98,352	1122,909	18191,132
167,400	0,383	-3,212	0,655	59,280	17,876	32,259	97,824	1121,081	18161,519
167,850	0,453	-3,196	0,652	59,280	17,786	31,576	96,911	1115,886	18077,352
168,300	0,513	-3,180	0,649	59,280	17,697	30,909	96,016	1110,702	17993,378
168,750	0,564	-3,164	0,646	59,280	17,608	30,259	95,156	1105,514	17909,324
169,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
169,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
170,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
170,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
171,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497
171,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
171,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
172,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
172,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
173,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
173,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
174,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
174,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970
175,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
175,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
176,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146
176,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
177,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
177,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
178,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
178,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
179,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
179,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
180,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
180,500	-0,672	-2,838	0,579	59,280	15,901	19,495	84,782	992,433	16077,422
181,000	-0,745	-2,845	0,580	59,280	15,935	19,658	84,461	995,068	16120,103
181,500	-0,815	-2,851	0,582	59,280	15,969	19,823	84,118	997,730	16163,225
182,000	-0,882	-2,857	0,583	59,280	16,004	19,990	83,759	1000,413	16206,689
182,500	-0,947	-2,863	0,584	59,280	16,038	20,158	83,389	1003,111	16250,403
183,000	-1,008	-2,869	0,585	59,280	16,072	20,329	83,014	1005,820	16294,280
183,500	-1,067	-2,875	0,587	59,280	16,107	20,501	82,639	1008,534	16338,244
184,000	-1,123	-2,881	0,588	59,280	16,142	20,674	82,268	1011,248	16382,223
184,500	-1,176	-2,888	0,589	59,280	16,176	20,849	81,906	1013,960	16426,151
185,000	-1,226	-2,894	0,590	59,280	16,211	21,027	81,555	1016,665	16469,970
185,500	-1,273	-2,900	0,592	59,280	16,246	21,206	81,219	1019,360	16513,626
186,000	-1,318	-2,906	0,593	59,280	16,281	21,386	80,901	1022,041	16557,072
186,500	-1,359	-2,912	0,594	59,280	16,316	21,569	80,604	1024,708	16600,264
187,000	-1,398	-2,919	0,596	59,280	16,351	21,753	80,330	1027,356	16643,165
187,500	-1,434	-2,925	0,597	59,280	16,386	21,940	80,081	1029,984	16685,740
188,000	-1,467	-2,931	0,598	59,280	16,421	22,128	79,859	1032,590	16727,959
188,500	-1,497	-2,938	0,599	59,280	16,456	22,318	79,666	1035,173	16769,795

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma_{pt,s}}$ [MPa]	$\Delta_{\sigma_{pt,c}}$ [MPa]	$\Delta_{\sigma_{pt,r}}$ [MPa]	$\Delta_{\sigma_{pt,s+c+r}}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
189,000	-1,524	-2,944	0,601	59,280	16,492	22,510	79,504	1037,730	16811,225
189,500	-1,548	-2,950	0,602	59,280	16,527	22,704	79,372	1040,261	16852,227
190,000	-1,570	-2,957	0,603	59,280	16,563	22,900	79,274	1042,764	16892,782
190,500	-1,588	-2,963	0,605	59,280	16,598	23,098	79,209	1045,239	16932,875
191,000	-1,604	-2,969	0,606	59,280	16,634	23,298	79,179	1047,685	16972,492
191,500	-1,617	-2,976	0,607	59,280	16,670	23,500	79,184	1050,100	17011,620
192,000	-1,627	-2,982	0,608	59,280	16,705	23,705	79,225	1052,485	17050,249
192,500	-1,634	-2,988	0,610	59,280	16,741	23,911	79,303	1054,838	17088,370
193,000	-1,639	-2,995	0,611	59,280	16,777	24,119	79,418	1057,159	17125,974
193,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
194,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
194,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
195,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
195,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105
196,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
196,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
197,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835
197,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
198,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
198,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
199,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
199,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
200,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
200,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
201,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548
201,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
202,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
202,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733
203,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
203,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
204,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
204,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
205,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
205,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
206,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
206,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
207,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
207,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
208,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
208,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
209,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
209,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666
210,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
210,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
211,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
211,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
211,950	0,304	-3,218	0,657	59,280	17,910	32,526	98,352	1122,909	18191,132
212,400	0,383	-3,212	0,655	59,280	17,876	32,259	97,824	1121,081	18161,519
212,850	0,453	-3,196	0,652	59,280	17,786	31,576	96,911	1115,886	18077,352
213,300	0,513	-3,180	0,649	59,280	17,697	30,909	96,016	1110,702	17993,378
213,750	0,564	-3,164	0,646	59,280	17,608	30,259	95,156	1105,514	17909,324
214,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
214,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804
215,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
215,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
216,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497
216,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
216,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
217,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
217,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
218,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
218,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
219,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
219,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970
220,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
220,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
221,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146
221,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
222,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
222,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
223,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
223,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
224,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
224,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
225,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
225,500	-0,672	-2,838	0,579	59,280	15,901	19,495	84,782	992,433	16077,422
226,000	-0,745	-2,845	0,580	59,280	15,935	19,658	84,461	995,068	16120,103
226,500	-0,815	-2,851	0,582	59,280	15,969	19,823	84,118	997,730	16163,225

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma pt,s}$ [MPa]	$\Delta_{\sigma pt,c}$ [MPa]	$\Delta_{\sigma pt,r}$ [MPa]	$\Delta_{\sigma pt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
227,000	-0,882	-2,857	0,583	59,280	16,004	19,990	83,759	1000,413	16206,689
227,500	-0,947	-2,863	0,584	59,280	16,038	20,158	83,389	1003,111	16250,403
228,000	-1,008	-2,869	0,585	59,280	16,072	20,329	83,014	1005,820	16294,280
228,500	-1,067	-2,875	0,587	59,280	16,107	20,501	82,639	1008,534	16338,244
229,000	-1,123	-2,881	0,588	59,280	16,142	20,674	82,268	1011,248	16382,223
229,500	-1,176	-2,888	0,589	59,280	16,176	20,849	81,906	1013,960	16426,151
230,000	-1,226	-2,894	0,590	59,280	16,211	21,027	81,555	1016,665	16469,970
230,500	-1,273	-2,900	0,592	59,280	16,246	21,206	81,219	1019,360	16513,626
231,000	-1,318	-2,906	0,593	59,280	16,281	21,386	80,901	1022,041	16557,072
231,500	-1,359	-2,912	0,594	59,280	16,316	21,569	80,604	1024,708	16600,264
232,000	-1,398	-2,919	0,596	59,280	16,351	21,753	80,330	1027,356	16643,165
232,500	-1,434	-2,925	0,597	59,280	16,386	21,940	80,081	1029,984	16685,740
233,000	-1,467	-2,931	0,598	59,280	16,421	22,128	79,859	1032,590	16727,959
233,500	-1,497	-2,938	0,599	59,280	16,456	22,318	79,666	1035,173	16769,795
234,000	-1,524	-2,944	0,601	59,280	16,492	22,510	79,504	1037,730	16811,225
234,500	-1,548	-2,950	0,602	59,280	16,527	22,704	79,372	1040,261	16852,227
235,000	-1,570	-2,957	0,603	59,280	16,563	22,900	79,274	1042,764	16892,782
235,500	-1,588	-2,963	0,605	59,280	16,598	23,098	79,209	1045,239	16932,875
236,000	-1,604	-2,969	0,606	59,280	16,634	23,298	79,179	1047,685	16972,492
236,500	-1,617	-2,976	0,607	59,280	16,670	23,500	79,184	1050,100	17011,620
237,000	-1,627	-2,982	0,608	59,280	16,705	23,705	79,225	1052,485	17050,249
237,500	-1,634	-2,988	0,610	59,280	16,741	23,911	79,303	1054,838	17088,370
238,000	-1,639	-2,995	0,611	59,280	16,777	24,119	79,418	1057,159	17125,974
238,500	-1,640	-3,001	0,612	59,280	16,813	24,330	79,570	1059,448	17163,058
239,000	-1,639	-3,008	0,614	59,280	16,849	24,543	79,760	1061,705	17199,615
239,500	-1,634	-3,014	0,615	59,280	16,886	24,758	79,988	1063,929	17235,643
240,000	-1,627	-3,021	0,616	59,280	16,922	24,975	80,254	1066,120	17271,139
240,500	-1,617	-3,027	0,618	59,280	16,958	25,195	80,558	1068,278	17306,105
241,000	-1,604	-3,034	0,619	59,280	16,995	25,416	80,900	1070,404	17340,540
241,500	-1,588	-3,040	0,620	59,280	17,031	25,641	81,280	1072,497	17374,448
242,000	-1,570	-3,047	0,622	59,280	17,068	25,867	81,697	1074,558	17407,835
242,500	-1,548	-3,053	0,623	59,280	17,104	26,096	82,152	1076,587	17440,707
243,000	-1,524	-3,060	0,624	59,280	17,141	26,327	82,643	1078,585	17473,073
243,500	-1,497	-3,066	0,626	59,280	17,178	26,561	83,170	1080,552	17504,945
244,000	-1,467	-3,073	0,627	59,280	17,215	26,797	83,732	1082,490	17536,339
244,500	-1,434	-3,080	0,628	59,280	17,252	27,036	84,327	1084,400	17567,272
245,000	-1,398	-3,086	0,630	59,280	17,289	27,277	84,955	1086,282	17597,767
245,500	-1,359	-3,093	0,631	59,280	17,326	27,520	85,614	1088,139	17627,849
246,000	-1,318	-3,099	0,632	59,280	17,363	27,767	86,302	1089,972	17657,548

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma t,s}$ [MPa]	$\Delta_{\sigma t,c}$ [MPa]	$\Delta_{\sigma t,r}$ [MPa]	$\Delta_{\sigma t,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
246,500	-1,273	-3,106	0,634	59,280	17,400	28,016	87,017	1091,784	17686,900
247,000	-1,226	-3,113	0,635	59,280	17,438	28,267	87,756	1093,577	17715,946
247,500	-1,176	-3,120	0,636	59,280	17,475	28,521	88,516	1095,354	17744,733
248,000	-1,123	-3,126	0,638	59,280	17,513	28,778	89,295	1097,118	17773,314
248,500	-1,067	-3,133	0,639	59,280	17,550	29,038	90,088	1098,874	17801,752
249,000	-1,008	-3,140	0,641	59,280	17,588	29,300	90,891	1100,624	17830,113
249,500	-0,947	-3,146	0,642	59,280	17,626	29,565	91,700	1102,375	17858,477
250,000	-0,882	-3,153	0,643	59,280	17,664	29,834	92,508	1104,131	17886,928
250,500	-0,815	-3,160	0,645	59,280	17,702	30,104	93,311	1105,899	17915,561
251,000	-0,745	-3,167	0,646	59,280	17,740	30,378	94,102	1107,684	17944,481
251,500	-0,672	-3,174	0,648	59,280	17,778	30,655	94,873	1109,494	17973,801
252,000	-0,596	-3,180	0,649	59,280	17,816	30,935	95,618	1111,336	18003,646
252,500	-0,517	-3,187	0,650	59,280	17,854	31,218	96,328	1113,219	18034,148
253,000	-0,436	-3,194	0,652	59,280	17,893	31,504	96,994	1115,151	18065,449
253,500	-0,351	-3,201	0,653	59,280	17,931	31,792	97,607	1117,142	18097,697
254,000	-0,264	-3,208	0,654	59,280	17,970	32,085	98,157	1119,201	18131,049
254,500	-0,174	-3,215	0,656	59,280	18,008	32,380	98,635	1121,337	18165,666
255,000	-0,080	-3,222	0,657	59,280	18,047	32,678	99,031	1123,563	18201,713
255,500	0,016	-3,228	0,659	59,280	18,086	32,980	99,333	1125,886	18239,354
256,000	0,114	-3,232	0,659	59,280	18,105	33,130	99,395	1127,119	18259,323
256,500	0,216	-3,225	0,658	59,280	18,066	32,826	98,941	1124,944	18224,094
256,950	0,304	-3,218	0,657	59,280	17,910	32,526	98,352	1122,909	18191,132
257,400	0,383	-3,212	0,655	59,280	17,876	32,259	97,824	1121,081	18161,519
257,850	0,453	-3,196	0,652	59,280	17,786	31,576	96,911	1115,886	18077,352
258,300	0,513	-3,180	0,649	59,280	17,697	30,909	96,016	1110,702	17993,378
258,750	0,564	-3,164	0,646	59,280	17,608	30,259	95,156	1105,514	17909,324
259,200	0,606	-3,148	0,642	59,280	17,520	29,626	94,427	1100,226	17823,660
259,650	0,638	-3,132	0,639	59,280	17,432	29,008	93,677	1094,988	17738,804
260,100	0,661	-3,116	0,636	59,280	17,345	28,405	92,994	1089,714	17653,370
260,550	0,675	-3,101	0,633	59,280	17,258	27,816	92,380	1084,400	17567,280
261,000	0,680	-3,085	0,630	59,280	17,172	27,243	91,840	1079,043	17480,497
261,450	0,675	-3,070	0,626	59,280	17,085	26,683	91,371	1073,643	17393,022
261,900	0,661	-3,054	0,623	59,280	17,000	26,136	90,972	1068,203	17304,892
262,350	0,638	-3,039	0,620	59,280	16,915	25,603	90,639	1062,727	17216,179
262,800	0,606	-3,024	0,617	59,280	16,830	25,083	90,364	1057,222	17126,990
263,250	0,564	-3,009	0,614	59,280	16,746	24,575	90,138	1051,696	17037,471
263,700	0,513	-2,994	0,611	59,280	16,662	24,079	89,880	1046,231	16948,944
264,150	0,453	-2,979	0,608	59,280	16,578	23,596	89,720	1040,697	16859,288
264,600	0,383	-2,964	0,605	59,280	16,495	23,123	89,568	1035,183	16769,970

x [m]	e [m]	σ_c [MPa]	μ	$\Delta\sigma_{pt,s}$ [MPa]	$\Delta\sigma_{pt,c}$ [MPa]	$\Delta\sigma_{pt,r}$ [MPa]	$\Delta\sigma_{pt,s+c+r}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
265,050	0,304	-2,949	0,602	59,280	16,412	22,662	89,405	1029,710	16681,297
265,500	0,216	-2,934	0,599	59,280	16,330	22,212	89,208	1024,298	16593,623
266,000	0,114	-2,919	0,596	59,280	16,354	21,772	89,027	1018,898	16506,146
266,500	0,016	-2,903	0,592	59,280	16,263	21,295	88,639	1013,118	16412,519
267,000	-0,080	-2,897	0,591	59,280	16,228	21,116	88,437	1010,959	16377,532
267,500	-0,174	-2,891	0,590	59,280	16,194	20,938	88,151	1008,888	16343,985
268,000	-0,264	-2,885	0,589	59,280	16,159	20,761	87,791	1006,897	16311,734
268,500	-0,351	-2,878	0,587	59,280	16,124	20,587	87,364	1004,977	16280,633
269,000	-0,436	-2,872	0,586	59,280	16,090	20,414	86,880	1003,120	16250,541
269,500	-0,517	-2,866	0,585	59,280	16,055	20,243	86,348	1001,316	16221,319
270,000	-0,596	-2,860	0,584	59,280	16,021	20,074	85,775	999,558	16192,836
270,500	-0,672	-3,285	0,670	59,280	18,404	35,555	99,119	1147,635	18591,687
271,000	-0,745	-3,292	0,672	59,280	18,443	35,889	98,849	1150,583	18639,442
271,500	-0,815	-3,299	0,673	59,280	18,483	36,226	98,553	1153,562	18687,711
272,000	-0,882	-3,306	0,675	59,280	18,522	36,566	98,239	1156,567	18736,378
272,500	-0,947	-3,314	0,676	59,280	18,562	36,911	97,912	1159,589	18785,336
273,000	-1,008	-3,321	0,678	59,280	18,602	37,259	97,579	1162,623	18834,486
273,500	-1,067	-3,328	0,679	59,280	18,642	37,611	97,246	1165,663	18883,737
274,000	-1,123	-3,335	0,680	59,280	18,682	37,967	96,917	1168,704	18933,003
274,500	-1,176	-3,342	0,682	59,280	18,722	38,327	96,599	1171,741	18982,209
275,000	-1,226	-3,349	0,683	59,280	18,762	38,691	96,294	1174,771	19031,284
275,500	-1,273	-3,356	0,685	59,280	18,803	39,060	96,006	1177,788	19080,164
276,000	-1,318	-3,364	0,686	59,280	18,843	39,432	95,741	1180,790	19128,793
276,500	-1,359	-3,371	0,688	59,280	18,884	39,808	95,500	1183,773	19177,117
277,000	-1,398	-3,378	0,689	59,280	18,924	40,189	95,286	1186,734	19225,091
277,500	-1,434	-3,385	0,691	59,280	18,965	40,574	95,103	1189,671	19272,672
278,000	-1,467	-3,393	0,692	59,280	19,005	40,963	94,952	1192,582	19319,822
278,500	-1,497	-3,400	0,694	59,280	19,046	41,357	94,836	1195,463	19366,508
279,000	-1,524	-3,407	0,695	59,280	19,087	41,755	94,756	1198,315	19412,699
279,500	-1,548	-3,415	0,697	59,280	19,128	42,157	94,715	1201,134	19458,368
280,000	-1,570	-3,422	0,698	59,280	19,169	42,565	94,713	1203,919	19503,490
280,500	-1,588	-3,429	0,700	59,280	19,210	42,976	94,752	1206,669	19548,045
281,000	-1,604	-3,437	0,701	59,280	19,252	43,393	94,833	1209,383	19592,012
281,500	-1,617	-3,444	0,703	59,280	19,293	43,814	94,958	1212,060	19635,374
282,000	-1,627	-3,451	0,704	59,280	19,335	44,240	95,127	1214,699	19678,116
282,500	-1,634	-3,459	0,706	59,280	19,376	44,671	95,341	1217,298	19720,224
283,000	-1,639	-3,457	0,705	59,280	19,364	44,547	95,184	1216,647	19709,679
283,500	-1,640	-3,449	0,704	59,280	19,323	44,117	94,841	1214,177	19669,674
284,000	-1,638	-3,440	0,702	59,280	19,269	43,564	94,462	1210,897	19616,537

x [m]	e [m]	σ_c [MPa]	μ	$\Delta_{\sigma_{pt,s}}$ [MPa]	$\Delta_{\sigma_{pt,c}}$ [MPa]	$\Delta_{\sigma_{pt,r}}$ [MPa]	$\Delta_{\sigma_{pt,s+c+r}}$ [MPa]	$\sigma_{p\infty}$ [MPa]	P_{∞} [kN]
284,500	-1,631	-3,430	0,700	59,280	19,215	43,019	94,154	1207,555	19562,395
285,000	-1,620	-3,420	0,698	59,280	19,161	42,482	93,918	1204,152	19507,269
285,500	-1,604	-3,411	0,696	59,280	19,107	41,953	93,751	1200,690	19451,184
286,000	-1,584	-3,401	0,694	59,280	19,054	41,432	93,651	1197,171	19394,169
286,500	-1,559	-3,392	0,692	59,280	19,001	40,918	93,617	1193,596	19336,261
287,000	-1,530	-3,382	0,690	59,280	18,948	40,411	93,645	1189,969	19277,497
287,500	-1,496	-3,373	0,688	59,280	18,895	39,912	93,734	1186,292	19217,925
288,000	-1,458	-3,363	0,686	59,280	18,842	39,420	93,879	1182,568	19157,596
288,500	-1,415	-3,354	0,684	59,280	18,789	38,936	94,077	1178,801	19096,572
289,000	-1,368	-3,345	0,682	59,280	18,737	38,458	94,324	1174,995	19034,920
289,500	-1,316	-3,335	0,681	59,280	18,684	37,987	94,615	1171,156	18972,720
290,000	-1,260	-3,326	0,679	59,280	18,632	37,523	94,944	1167,288	18910,062
290,500	-1,199	-3,317	0,677	59,280	18,580	37,065	95,305	1163,398	18847,050
291,000	-1,134	-3,307	0,675	59,280	18,528	36,614	95,690	1159,494	18783,800
291,500	-1,064	-3,298	0,673	59,280	18,476	36,170	96,091	1155,583	18720,444
292,000	-0,990	-3,289	0,671	59,280	18,424	35,732	96,500	1151,675	18657,131
292,500	-0,911	-3,280	0,669	59,280	18,373	35,300	96,906	1147,779	18594,027
292,950	-0,836	-3,271	0,668	59,280	18,208	34,917	97,214	1144,339	18538,287
293,400	-0,758	-3,263	0,666	59,280	18,162	34,538	97,541	1140,888	18482,379
293,850	-0,676	-3,255	0,664	59,280	18,116	34,164	97,837	1137,475	18427,093
294,300	-0,590	-3,247	0,662	59,280	18,071	33,795	98,092	1134,111	18372,601
294,750	-0,501	-3,239	0,661	59,280	18,025	33,431	98,295	1130,808	18319,083
295,200	-0,408	-3,231	0,659	59,280	17,980	33,071	98,503	1127,506	18265,593
295,650	-0,312	-3,222	0,657	59,280	17,935	32,716	98,561	1124,363	18214,682
296,100	-0,211	-3,214	0,656	59,280	17,890	32,365	98,530	1121,316	18165,318
296,550	-0,108	-3,206	0,654	59,280	17,845	32,019	98,400	1118,377	18117,703
297,000	0,000	-3,198	0,653	59,280	17,800	31,677	98,156	1115,558	18072,035

ANEXO C - VALOR DOS ESFORÇOS CARACTERÍSTICOS LONGITUDINAIS

C.1 Momento fletor

C.1.1 MOMENTO FLETOR DEVIDO AO: PP (INÍCIO DE EXPLORAÇÃO E A LONGO PRAZO); RCP; SC; VDT

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
0,450	1195,623	1016,939	209,976	462,269	-80,674	44,943	-39,656
0,900	2313,960	1982,969	412,655	917,249	-161,348	89,886	-79,311
1,350	3360,141	2899,203	608,035	1343,753	-242,022	134,829	-118,967
1,800	4339,294	3766,751	796,117	1777,090	-322,696	179,772	-158,622
2,250	5256,547	4586,726	976,901	2194,317	-403,370	224,715	-198,278
2,700	6117,031	5357,781	1150,387	2569,022	-484,044	269,658	-237,934
3,150	6925,875	6095,186	1316,575	2971,678	-564,718	314,601	-277,589
3,600	7688,207	6794,937	1475,464	3310,811	-645,392	359,544	-317,245
4,050	8409,157	7458,118	1627,056	3691,857	-726,066	404,487	-356,900
4,500	9093,853	8085,810	1771,350	4048,078	-806,739	449,430	-396,556
5,000	9817,173	8740,338	1923,116	4375,144	-896,377	499,367	-440,618
5,500	10502,068	9360,570	2065,873	4763,159	-986,015	549,304	-484,680
6,000	11148,538	9942,386	2199,619	5049,407	-1075,653	599,240	-528,741
6,500	11756,583	10485,786	2324,356	5411,691	-1165,290	649,177	-572,803
7,000	12326,203	10990,770	2440,083	5657,434	-1254,928	699,114	-616,865
7,500	12857,398	11457,338	2546,799	5994,036	-1344,566	749,050	-660,927
8,000	13350,169	11885,489	2644,506	6199,639	-1434,203	798,987	-704,988
8,500	13804,514	12275,225	2733,202	6510,616	-1523,841	848,924	-749,050
9,000	14220,434	12626,545	2812,889	6676,498	-1613,479	898,860	-793,112
9,500	14597,929	12939,449	2883,566	6961,914	-1703,117	948,797	-837,174
10,000	14936,999	13213,937	2945,232	7088,545	-1792,754	998,734	-881,236
10,500	15237,644	13450,008	2997,889	7348,472	-1882,392	1048,670	-925,297
11,000	15499,864	13647,664	3041,535	7436,377	-1972,030	1098,607	-969,359
11,500	15723,659	13806,904	3076,172	7670,894	-2061,668	1148,544	-1013,421
12,000	15909,029	13927,728	3101,799	7720,649	-2151,305	1198,480	-1057,483
12,500	16055,975	14010,135	3118,415	7929,843	-2240,943	1248,417	-1101,544
13,000	16164,495	14054,127	3126,022	7942,078	-2330,581	1298,354	-1145,606

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
13,500	16234,590	14059,703	3124,619	8126,043	-2420,218	1348,290	-1189,668
14,000	16266,260	14026,863	3114,205	8101,440	-2509,856	1398,227	-1233,730
14,500	16259,505	13955,606	3094,782	8260,277	-2599,494	1448,164	-1277,792
15,000	16214,325	13845,934	3066,348	8199,571	-2689,132	1498,100	-1321,853
15,500	16130,720	13697,846	3028,905	8333,391	-2778,769	1548,037	-1365,915
16,000	16008,690	13511,341	2982,452	8237,370	-2868,407	1597,974	-1409,977
16,500	15848,235	13286,421	2926,988	8346,288	-2958,045	1647,910	-1454,039
17,000	15649,355	13023,085	2862,515	8221,206	-3047,682	1697,847	-1498,100
17,500	15412,051	12721,332	2789,031	8299,934	-3137,320	1747,784	-1542,162
18,000	15136,320	12381,164	2706,538	8150,075	-3226,958	1797,720	-1586,224
18,500	14822,166	12002,580	2615,035	8195,354	-3316,596	1847,657	-1630,286
19,000	14469,586	11585,579	2514,521	8020,850	-3406,233	1897,594	-1674,347
19,500	14078,581	11130,163	2404,998	8033,634	-3495,871	1947,531	-1718,409
20,000	13649,151	10636,330	2286,464	7834,624	-3585,509	1997,467	-1762,471
20,500	13181,296	10104,082	2158,921	7815,919	-3675,146	2047,404	-1806,533
21,000	12675,016	9533,418	2022,368	7592,551	-3764,784	2097,341	-1850,595
21,500	12130,311	8924,337	1876,804	7543,416	-3854,422	2147,277	-1894,656
22,000	11547,181	8276,841	1722,231	7295,844	-3944,060	2197,214	-1938,718
22,500	10925,626	7590,928	1558,648	7217,392	-4033,697	2247,151	-1982,780
23,000	10265,647	6866,600	1386,054	6945,778	-4123,335	2297,087	-2026,842
23,500	9567,242	6103,855	1204,451	6839,172	-4212,973	2347,024	-2070,903
24,000	8830,412	5302,695	1013,837	6543,687	-4302,610	2396,961	-2114,965
24,500	8055,157	4463,118	814,214	6410,145	-4392,248	2446,897	-2159,027
25,000	7241,477	3585,126	605,581	6090,965	-4481,886	2496,834	-2203,089
25,500	6389,372	2668,717	387,937	5931,758	-4571,524	2546,771	-2247,151
26,000	5498,842	1713,893	161,284	5589,067	-4661,161	2596,707	-2291,212
26,500	4569,887	720,652	-74,380	5405,519	-4750,799	2646,644	-2335,274
27,000	3602,507	-311,004	-319,053	5039,510	-4840,437	2696,581	-2379,336
27,500	2596,702	-1381,077	-572,736	4832,995	-4930,074	2746,517	-2423,398
28,000	1552,473	-2489,565	-835,430	4443,868	-5019,712	2796,454	-2467,459
28,500	469,818	-3636,470	-1107,133	4215,815	-5109,350	2846,391	-2511,521
29,000	-651,262	-4821,790	-1387,847	3803,777	-5198,988	2896,327	-2555,583
29,500	-1810,767	-6045,527	-1677,570	3555,668	-5288,625	2946,264	-2599,645
30,000	-3008,697	-7307,680	-1976,303	3120,934	-5378,263	2996,201	-2643,707
30,500	-4245,052	-8608,248	-2284,047	2854,303	-5467,901	3046,137	-2687,768
31,000	-5519,832	-9947,233	-2600,800	2397,095	-5557,538	3096,074	-2731,830
31,500	-6833,037	-11324,633	-2926,564	2179,031	-5712,677	3146,011	-2775,892
31,950	-8048,427	-12580,409	-3227,454	2007,660	-6053,082	3190,954	-2815,547
32,400	-9298,853	-13889,696	-3535,643	1980,594	-6400,776	3235,897	-2855,203

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
32,850	-10588,228	-15235,041	-3851,130	1850,602	-6755,761	3280,840	-2894,859
33,300	-11920,464	-16617,268	-4173,915	1781,713	-7118,036	3325,783	-2934,514
33,750	-13299,473	-18037,203	-4503,998	1743,732	-7487,600	3370,726	-2974,170
34,200	-14729,167	-19463,035	-4841,379	1747,706	-7864,455	3415,669	-3013,825
34,650	-16213,459	-20970,534	-5186,058	1770,702	-8248,600	3460,612	-3053,481
35,100	-17756,261	-22524,873	-5538,035	1793,698	-8640,034	3505,555	-3093,137
35,550	-19361,484	-24126,897	-5897,311	1816,694	-9038,759	3550,498	-3132,792
36,000	-21033,042	-25777,457	-6263,884	1839,690	-9444,774	3595,441	-3172,448
36,450	-19311,208	-24138,410	-5903,126	1758,968	-8898,461	3585,814	-3163,954
36,900	-17655,708	-22547,897	-5549,666	1678,246	-8360,919	3576,188	-3155,460
37,350	-16062,630	-21005,071	-5203,504	1597,524	-7869,878	3566,561	-3146,966
37,800	-14528,062	-19509,083	-4864,640	1516,802	-7453,673	3556,935	-3138,472
38,250	-13048,091	-18059,086	-4533,074	1503,039	-7044,758	3547,308	-3129,978
38,700	-11618,805	-16689,154	-4208,806	1439,252	-6643,133	3537,682	-3121,484
39,150	-10236,293	-15318,908	-3891,837	1561,406	-6248,798	3528,055	-3112,990
39,600	-8896,642	-13985,544	-3582,165	1539,369	-5861,753	3518,429	-3104,496
40,050	-7595,939	-12688,238	-3279,792	1620,356	-5481,999	3508,802	-3096,002
40,500	-6330,273	-11426,165	-2984,717	1700,579	-5109,534	3499,176	-3087,508
41,000	-4961,205	-10083,182	-2665,415	1644,049	-4704,234	3488,479	-3078,070
41,500	-3630,563	-8757,792	-2355,123	1785,686	-4307,934	3477,783	-3068,632
42,000	-2338,345	-7470,818	-2053,841	1770,858	-3960,630	3467,087	-3059,195
42,500	-1084,553	-6222,260	-1761,569	2202,877	-3876,998	3456,391	-3049,757
43,000	130,815	-5012,119	-1478,307	2433,982	-3793,366	3445,695	-3040,319
43,500	1307,758	-3840,393	-1204,055	2843,515	-3709,734	3434,999	-3030,881
44,000	2446,275	-2707,083	-938,813	3055,519	-3626,102	3424,303	-3021,443
44,500	3546,368	-1612,190	-682,581	3442,379	-3542,470	3413,606	-3012,006
45,000	4608,035	-555,712	-435,359	3634,011	-3458,838	3402,910	-3002,568
45,500	5631,278	462,350	-197,147	3998,022	-3375,206	3392,214	-2993,130
46,000	6616,096	1441,995	32,055	4168,092	-3291,574	3381,518	-2983,692
46,500	7562,488	2383,225	252,246	4548,894	-3247,743	3370,822	-2974,255
47,000	8470,456	3286,039	463,428	4777,753	-3245,565	3360,126	-2964,817
47,500	9339,998	4150,436	665,600	5177,046	-3243,387	3349,429	-2955,379
48,000	10171,116	4976,418	858,762	5382,224	-3241,209	3338,733	-2945,941
48,500	10963,808	5763,983	1042,914	5758,217	-3239,031	3328,037	-2936,503
49,000	11718,076	6513,133	1218,056	5938,782	-3236,852	3317,341	-2927,066
49,500	12433,918	7223,866	1384,188	6291,349	-3234,674	3306,645	-2917,628
50,000	13111,336	7896,184	1541,310	6446,457	-3232,496	3295,949	-2908,190
50,500	13750,329	8530,086	1689,422	6775,484	-3230,318	3285,253	-2898,752
51,000	14350,896	9125,571	1828,524	6904,374	-3228,140	3274,556	-2889,314

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
51,500	14913,039	9682,641	1958,616	7209,760	-3225,962	3263,860	-2879,877
52,000	15436,756	10201,294	2079,698	7311,757	-3223,784	3253,164	-2870,439
52,500	15922,049	10681,532	2191,770	7593,413	-3221,606	3242,468	-2861,001
53,000	16368,916	11123,353	2294,832	7667,930	-3219,427	3231,772	-2851,563
53,500	16777,359	11526,759	2388,883	7925,778	-3217,249	3221,076	-2842,126
54,000	17147,377	11891,748	2473,925	7972,312	-3215,071	3210,380	-2832,688
54,500	17478,969	12218,322	2549,957	8206,288	-3212,893	3199,683	-2823,250
55,000	17772,137	12506,479	2616,979	8224,421	-3210,715	3188,987	-2813,812
55,500	18026,879	12756,221	2674,991	8434,472	-3208,537	3178,291	-2804,374
56,000	18243,197	12967,546	2723,993	8423,873	-3206,359	3167,595	-2794,937
56,500	18421,090	13140,456	2763,985	8609,959	-3204,180	3156,899	-2785,499
57,000	18560,557	13274,949	2794,967	8570,383	-3202,002	3146,203	-2776,061
57,500	18661,600	13371,026	2816,939	8732,476	-3199,824	3135,506	-2766,623
58,000	18724,217	13428,688	2829,901	8663,763	-3218,115	3124,810	-2757,186
58,500	18748,410	13447,933	2833,853	8801,846	-3265,091	3114,114	-2747,748
59,000	18734,177	13428,763	2828,795	8705,929	-3312,067	3103,418	-2738,310
59,500	18681,520	13371,176	2814,727	8817,992	-3359,043	3092,722	-2728,872
60,000	18590,438	13275,173	2791,649	8698,062	-3406,020	3082,026	-2719,434
60,500	18460,930	13140,755	2759,560	8780,934	-3452,996	3071,330	-2709,997
61,000	18292,998	12967,920	2718,462	8637,000	-3499,972	3060,633	-2700,559
61,500	18086,640	12756,670	2668,354	8690,790	-3546,948	3049,937	-2691,121
62,000	17841,858	12507,003	2609,236	8522,872	-3593,924	3039,241	-2681,683
62,500	17558,650	12218,920	2541,108	8547,776	-3640,900	3028,545	-2672,246
63,000	17237,018	11892,422	2463,970	8355,908	-3687,876	3017,849	-2662,808
63,500	16876,960	11527,507	2377,822	8352,205	-3734,852	3007,153	-2653,370
64,000	16478,478	11124,176	2282,664	8136,433	-3781,828	2996,457	-2643,932
64,500	16041,571	10682,429	2178,496	8104,491	-3828,804	2985,760	-2634,494
65,000	15566,238	10202,267	2065,318	7864,872	-3875,780	2975,064	-2625,057
65,500	15052,481	9683,688	1943,130	7805,143	-3922,756	2964,368	-2615,619
66,000	14500,298	9126,693	1811,932	7541,746	-3969,732	2953,672	-2606,181
66,500	13909,691	8531,283	1671,724	7454,768	-4016,708	2942,976	-2596,743
67,000	13280,658	7897,456	1522,505	7167,676	-4063,684	2932,280	-2587,306
67,500	12613,201	7225,213	1364,277	7054,072	-4110,661	2921,584	-2577,868
68,000	11907,319	6514,554	1197,039	6743,379	-4157,637	2910,887	-2568,430
68,500	11163,011	5765,479	1020,791	6603,860	-4204,613	2900,191	-2558,992
69,000	10380,279	4977,989	835,533	6269,672	-4251,589	2889,495	-2549,554
69,500	9559,121	4152,082	641,265	6105,032	-4298,565	2878,799	-2540,117
70,000	8699,539	3287,759	437,987	5747,469	-4345,541	2868,103	-2530,679
70,500	7801,531	2385,020	225,699	5558,588	-4392,517	2857,407	-2521,241

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
71,000	6865,099	1443,866	4,401	5177,781	-4439,493	2846,710	-2511,803
71,500	5890,242	464,295	-225,907	5007,546	-4528,388	2836,014	-2502,366
72,000	4876,959	-553,692	-465,225	4646,352	-4618,079	2825,318	-2492,928
72,500	3825,252	-1610,095	-713,553	4454,692	-4707,770	2814,622	-2483,490
73,000	2735,119	-2704,914	-970,891	4070,553	-4797,462	2803,926	-2474,052
73,500	1606,562	-3838,149	-1237,240	3857,808	-4887,153	2793,230	-2464,614
74,000	439,579	-5009,800	-1512,598	3450,891	-4976,844	2782,534	-2455,177
74,500	-765,828	-6219,866	-1796,966	3218,287	-5066,535	2771,837	-2445,739
75,000	-2009,661	-7468,349	-2090,344	2788,772	-5156,227	2761,141	-2436,301
75,500	-3291,918	-8755,248	-2392,732	2653,872	-5362,172	2750,445	-2426,863
76,000	-4612,600	-10080,563	-2704,130	2510,284	-5760,196	2739,749	-2417,426
76,500	-5971,708	-11444,294	-3024,538	2559,305	-6167,219	2729,053	-2407,988
76,950	-7228,410	-12683,993	-3320,609	2426,295	-6541,235	2719,426	-2399,494
77,400	-8520,149	-13981,195	-3623,978	2447,166	-6922,541	2709,800	-2391,000
77,850	-9850,836	-15314,455	-3934,645	2355,556	-7311,137	2700,173	-2382,506
78,300	-11224,384	-16684,598	-4252,610	2334,180	-7707,023	2690,547	-2374,012
78,750	-12644,705	-18092,449	-4577,873	2336,795	-8110,199	2680,920	-2365,518
79,200	-14115,712	-19501,251	-4910,434	2379,814	-8520,665	2671,294	-2357,024
79,650	-15641,316	-20997,069	-5250,294	2441,207	-8938,421	2661,667	-2348,530
80,100	-17225,430	-22539,725	-5597,451	2502,600	-9363,467	2652,041	-2340,036
80,550	-18871,965	-24130,067	-5951,907	2563,992	-9795,803	2642,414	-2331,542
81,000	-20584,835	-25768,944	-6313,661	2625,385	-10235,429	2632,787	-2323,048
81,450	-18868,068	-24129,874	-5952,273	2534,779	-9763,689	2635,328	-2325,289
81,900	-17217,635	-22539,340	-5598,184	2444,173	-9319,596	2637,868	-2327,531
82,350	-15629,624	-20996,492	-5251,393	2353,567	-8882,793	2640,408	-2329,772
82,800	-14100,123	-19500,482	-4911,900	2270,271	-8453,281	2642,949	-2332,013
83,250	-12625,219	-18050,462	-4579,705	2271,354	-8031,058	2645,489	-2334,255
83,700	-11201,001	-16683,613	-4254,808	2197,242	-7616,125	2648,029	-2336,496
84,150	-9823,556	-15313,306	-3937,210	2315,006	-7208,482	2650,569	-2338,738
84,600	-8488,971	-13979,881	-3626,909	2282,560	-6808,129	2653,110	-2340,979
85,050	-7193,335	-12682,515	-3323,907	2358,456	-6415,066	2655,650	-2343,220
85,500	-5932,736	-11420,381	-3028,202	2429,436	-6029,293	2658,190	-2345,462
86,000	-4569,298	-10078,907	-2708,201	2365,833	-5609,207	2661,013	-2347,952
86,500	-3244,286	-8753,427	-2397,210	2495,722	-5198,120	2663,835	-2350,443
87,000	-1957,698	-7466,362	-2095,229	2588,687	-4951,579	2666,658	-2352,933
87,500	-709,536	-6217,714	-1802,258	3006,896	-4851,168	2669,480	-2355,424
88,000	500,202	-5007,482	-1518,297	3227,622	-4750,757	2672,303	-2357,914
88,500	1671,515	-3835,665	-1243,346	3623,284	-4650,346	2675,125	-2360,405
89,000	2804,403	-2702,265	-977,406	3824,333	-4549,935	2677,948	-2362,895

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
89,500	3898,865	-1607,280	-720,475	4197,268	-4449,524	2680,770	-2365,386
90,000	4954,903	-550,712	-472,554	4377,417	-4349,112	2683,593	-2367,876
90,500	5972,515	467,441	-233,643	4727,457	-4248,701	2686,415	-2370,366
91,000	6951,703	1447,177	-3,742	4885,565	-4148,290	2689,238	-2372,857
91,500	7892,465	2388,497	217,149	5290,538	-4125,864	2692,060	-2375,347
92,000	8794,803	3291,402	429,030	5505,528	-4105,431	2694,883	-2377,838
92,500	9658,716	4155,890	631,901	5889,300	-4084,998	2697,705	-2380,328
93,000	10484,203	4981,962	825,762	6080,221	-4064,565	2700,528	-2382,819
93,500	11271,266	5769,619	1010,613	6440,665	-4044,133	2703,350	-2385,309
94,000	12019,903	6518,859	1186,454	6606,628	-4023,700	2706,173	-2387,800
94,500	12730,116	7229,683	1353,285	6943,625	-4003,267	2708,996	-2390,290
95,000	13401,904	7902,092	1511,106	7083,827	-3982,834	2711,818	-2392,781
95,500	14035,266	8536,084	1659,917	7397,268	-3962,401	2714,641	-2395,271
96,000	14630,204	9131,660	1799,718	7510,987	-3941,968	2717,463	-2397,762
96,500	15186,717	9688,821	1930,509	7800,777	-3921,535	2720,286	-2400,252
97,000	15704,804	10207,565	2052,290	7887,376	-3901,102	2723,108	-2402,742
97,500	16184,467	10687,893	2165,061	8153,430	-3880,670	2725,931	-2405,233
98,000	16625,705	11129,806	2268,822	8212,356	-3860,237	2728,753	-2407,723
98,500	17028,517	11533,302	2363,573	8454,602	-3839,804	2731,576	-2410,214
99,000	17392,905	11898,382	2449,313	8485,386	-3819,371	2734,398	-2412,704
99,500	17718,867	12225,046	2526,044	8703,764	-3798,938	2737,221	-2415,195
100,000	18006,405	12513,295	2593,765	8706,021	-3778,505	2740,043	-2417,685
100,500	18255,518	12763,127	2652,476	8900,483	-3758,072	2742,866	-2420,176
101,000	18466,205	12974,543	2702,177	8873,911	-3737,640	2745,688	-2422,666
101,500	18638,468	13147,543	2742,868	9044,420	-3717,207	2748,511	-2425,157
102,000	18772,306	13282,127	2774,549	8988,802	-3696,774	2751,333	-2427,647
102,500	18867,718	13378,296	2797,220	9135,334	-3676,341	2754,156	-2430,137
103,000	18924,706	13436,048	2810,881	9050,535	-3655,908	2756,978	-2432,628
103,500	18943,268	13455,384	2815,532	9173,079	-3640,170	2759,801	-2435,118
104,000	18923,406	13436,304	2811,173	9061,622	-3671,484	2762,623	-2437,609
104,500	18865,119	13378,808	2797,804	9157,604	-3702,799	2765,446	-2440,099
105,000	18768,406	13282,897	2775,425	9022,158	-3734,113	2768,268	-2442,590
105,500	18633,269	13148,569	2744,036	9088,955	-3765,427	2771,091	-2445,080
106,000	18459,707	12975,825	2703,637	8929,531	-3796,741	2773,913	-2447,571
106,500	18247,719	12764,665	2654,228	8967,273	-3828,055	2776,736	-2450,061
107,000	17997,307	12515,089	2595,809	8783,895	-3859,370	2779,558	-2452,552
107,500	17708,469	12227,097	2528,380	8792,796	-3890,684	2782,381	-2455,042
108,000	17381,207	11900,689	2451,941	8585,500	-3921,998	2785,204	-2457,533
108,500	17015,520	11535,865	2366,491	8565,856	-3953,312	2788,026	-2460,023

X [m]	M _{PPo} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
109,000	16611,407	11132,625	2272,032	8334,690	-3984,626	2790,849	-2462,513
109,500	16168,870	10690,969	2168,563	8286,884	-4015,941	2793,671	-2465,004
110,000	15687,907	10210,897	2056,084	8031,906	-4047,255	2796,494	-2467,494
110,500	15168,520	9692,409	1934,595	7956,402	-4078,569	2799,316	-2469,985
111,000	14610,708	9135,506	1804,096	7677,685	-4109,883	2802,139	-2472,475
111,500	14014,470	8540,186	1664,587	7575,033	-4141,198	2804,961	-2474,966
112,000	13379,808	7906,450	1516,068	7272,659	-4172,512	2807,784	-2477,456
112,500	12706,721	7234,298	1358,539	7143,491	-4203,826	2810,606	-2479,947
113,000	11995,208	6523,730	1192,000	6817,557	-4235,140	2813,429	-2482,437
113,500	11245,271	5774,746	1016,451	6662,590	-4266,454	2816,251	-2484,928
114,000	10456,908	4987,346	831,892	6313,204	-4297,769	2819,074	-2487,418
114,500	9630,121	4161,530	638,323	6133,238	-4329,083	2821,896	-2489,908
115,000	8764,909	3297,297	435,744	5760,518	-4360,397	2824,719	-2492,399
115,500	7861,271	2394,649	224,155	5556,438	-4391,711	2827,541	-2494,889
116,000	6919,209	1453,585	3,556	5160,516	-4423,026	2830,364	-2497,380
116,500	5938,721	474,105	-226,054	5001,375	-4522,424	2833,186	-2499,870
117,000	4919,809	-543,791	-464,673	4651,754	-4623,098	2836,009	-2502,361
117,500	3862,472	-1600,103	-712,302	4471,793	-4723,771	2838,831	-2504,851
118,000	2766,709	-2694,831	-968,941	4099,269	-4824,445	2841,654	-2507,342
118,500	1632,522	-3827,975	-1234,590	3898,350	-4925,118	2844,476	-2509,832
119,000	459,910	-4999,535	-1509,249	3503,090	-5025,791	2847,299	-2512,323
119,500	-751,128	-6209,511	-1792,918	3282,433	-5126,465	2850,121	-2514,813
120,000	-2000,590	-7457,903	-2085,597	2864,617	-5227,138	2852,944	-2517,304
120,500	-3288,477	-8744,712	-2387,286	2759,730	-5462,015	2855,767	-2519,794
121,000	-4614,790	-10069,936	-2697,985	2629,873	-5873,013	2858,589	-2522,284
121,500	-5979,527	-11433,576	-3017,694	2693,060	-6293,011	2861,412	-2524,775
121,950	-7241,296	-12673,289	-3313,136	2572,443	-6678,704	2863,952	-2527,016
122,400	-8538,102	-13970,431	-3615,876	2606,196	-7071,687	2866,492	-2529,258
122,850	-9873,856	-15303,631	-3925,913	2527,015	-7471,961	2869,032	-2531,499
123,300	-11252,471	-16673,713	-4243,249	2518,601	-7879,524	2871,573	-2533,741
123,750	-12677,859	-18081,502	-4567,884	2533,815	-8294,377	2874,113	-2535,982
124,200	-14153,933	-19490,615	-4899,816	2589,050	-8716,520	2876,653	-2538,223
124,650	-15684,604	-20986,410	-5239,046	2662,909	-9145,953	2879,193	-2540,465
125,100	-17273,785	-22529,044	-5585,574	2736,769	-9582,677	2881,734	-2542,706
125,550	-18925,388	-24119,364	-5939,401	2810,628	-10026,690	2884,274	-2544,948
126,000	-20643,324	-25758,219	-6300,526	2884,488	-10477,993	2886,814	-2547,189
126,450	-18922,691	-24118,545	-5939,270	2804,091	-10022,465	2886,814	-2547,189
126,900	-17268,391	-22527,406	-5585,312	2727,693	-9575,760	2886,814	-2547,189
127,350	-15676,513	-20983,954	-5238,652	2651,295	-9136,345	2886,814	-2547,189

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
127,800	-14143,145	-19487,340	-4899,290	2574,897	-8704,219	2886,814	-2547,189
128,250	-12664,374	-18036,716	-4567,227	2520,650	-8279,384	2886,814	-2547,189
128,700	-11236,289	-16668,886	-4242,461	2443,953	-7861,839	2886,814	-2547,189
129,150	-9854,977	-15297,999	-3924,994	2559,618	-7451,584	2886,814	-2547,189
129,600	-8516,526	-13963,995	-3614,825	2524,580	-7048,619	2886,814	-2547,189
130,050	-7217,023	-12666,049	-3311,954	2598,321	-6652,944	2886,814	-2547,189
130,500	-5952,557	-11403,336	-3016,381	2666,805	-6264,559	2886,814	-2547,189
131,000	-4584,823	-10061,083	-2696,526	2600,690	-5841,570	2886,814	-2547,189
131,500	-3255,514	-8734,973	-2385,681	2727,684	-5427,581	2886,814	-2547,189
132,000	-1964,630	-7447,280	-2083,846	2827,595	-5187,652	2886,814	-2547,189
132,500	-712,171	-6198,003	-1791,021	3242,728	-5084,163	2886,814	-2547,189
133,000	501,863	-4987,141	-1507,206	3460,659	-4980,674	2886,814	-2547,189
133,500	1677,472	-3814,696	-1232,401	3853,239	-4877,185	2886,814	-2547,189
134,000	2814,656	-2680,666	-966,606	4051,445	-4773,696	2886,814	-2547,189
134,500	3913,415	-1585,053	-709,821	4421,294	-4670,207	2886,814	-2547,189
135,000	4973,749	-527,856	-462,046	4598,556	-4566,718	2886,814	-2547,189
135,500	5995,658	490,926	-223,281	4945,505	-4463,229	2886,814	-2547,189
136,000	6979,142	1471,291	6,475	5101,858	-4360,912	2886,814	-2547,189
136,500	7924,201	2413,240	227,220	5503,289	-4334,959	2886,814	-2547,189
137,000	8830,835	3316,774	438,955	5712,873	-4309,006	2886,814	-2547,189
137,500	9699,044	4181,891	641,680	6091,105	-4283,053	2886,814	-2547,189
138,000	10528,828	5008,592	835,395	6276,589	-4257,100	2886,814	-2547,189
138,500	11320,187	5796,878	1020,100	6631,491	-4231,147	2886,814	-2547,189
139,000	12073,122	6546,747	1195,795	6791,988	-4205,194	2886,814	-2547,189
139,500	12787,631	7258,200	1362,480	7123,441	-4179,241	2886,814	-2547,189
140,000	13463,715	7931,238	1520,155	7258,150	-4153,287	2886,814	-2547,189
140,500	14101,374	8565,859	1668,820	7566,046	-4127,334	2886,814	-2547,189
141,000	14700,608	9162,064	1808,475	7674,251	-4101,381	2886,814	-2547,189
141,500	15261,417	9719,853	1939,120	7958,494	-4075,428	2886,814	-2547,189
142,000	15783,801	10239,227	2060,755	8039,559	-4049,475	2886,814	-2547,189
142,500	16267,760	10720,184	2173,380	8300,066	-4023,522	2886,814	-2547,189
143,000	16713,294	11162,725	2276,995	8353,443	-3997,569	2886,814	-2547,189
143,500	17120,403	11566,850	2371,600	8590,141	-3971,616	2886,814	-2547,189
144,000	17489,087	11932,559	2457,195	8615,362	-3945,663	2886,814	-2547,189
144,500	17819,346	12259,853	2533,780	8828,193	-3919,710	2886,814	-2547,189
145,000	18111,180	12548,730	2601,355	8824,876	-3893,756	2886,814	-2547,189
145,500	18364,589	12799,191	2659,920	9013,791	-3867,803	2886,814	-2547,189
146,000	18579,573	13011,236	2709,475	8981,636	-3841,850	2886,814	-2547,189
146,500	18756,132	13184,865	2750,020	9146,600	-3815,897	2886,814	-2547,189

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
147,000	18894,266	13320,079	2781,555	9085,393	-3789,944	2886,814	-2547,189
147,500	18993,975	13416,876	2804,080	9226,381	-3763,991	2886,814	-2547,189
148,000	19055,259	13475,257	2817,595	9135,990	-3738,038	2886,814	-2547,189
148,500	19078,119	13495,222	2822,100	9252,990	-3712,085	2886,814	-2547,189
149,000	19062,552	13476,771	2817,595	9135,990	-3738,038	2886,814	-2547,189
149,500	19008,561	13419,904	2804,080	9226,381	-3763,991	2886,814	-2547,189
150,000	18916,146	13324,621	2781,555	9085,393	-3789,944	2886,814	-2547,189
150,500	18785,305	13190,922	2750,020	9146,600	-3815,897	2886,814	-2547,189
151,000	18616,039	13018,807	2709,475	8981,636	-3841,850	2886,814	-2547,189
151,500	18408,348	12808,276	2659,920	9013,791	-3867,803	2886,814	-2547,189
152,000	18162,232	12559,330	2601,355	8824,876	-3893,756	2886,814	-2547,189
152,500	17877,691	12271,967	2533,780	8828,193	-3919,710	2886,814	-2547,189
153,000	17554,725	11946,188	2457,195	8615,362	-3945,663	2886,814	-2547,189
153,500	17193,334	11581,993	2371,600	8590,141	-3971,616	2886,814	-2547,189
154,000	16793,518	11179,382	2276,995	8353,443	-3997,569	2886,814	-2547,189
154,500	16355,277	10738,355	2173,380	8300,066	-4023,522	2886,814	-2547,189
155,000	15878,611	10258,912	2060,755	8039,559	-4049,475	2886,814	-2547,189
155,500	15363,520	9741,053	1939,120	7958,494	-4075,428	2886,814	-2547,189
156,000	14810,004	9184,778	1808,475	7674,251	-4101,381	2886,814	-2547,189
156,500	14218,063	8590,087	1668,820	7566,046	-4127,334	2886,814	-2547,189
157,000	13587,697	7956,980	1520,155	7258,150	-4153,287	2886,814	-2547,189
157,500	12918,906	7285,457	1362,480	7123,441	-4179,241	2886,814	-2547,189
158,000	12211,690	6575,518	1195,795	6791,988	-4205,194	2886,814	-2547,189
158,500	11466,049	5827,163	1020,100	6631,491	-4231,147	2886,814	-2547,189
159,000	10681,983	5040,391	835,395	6276,589	-4257,100	2886,814	-2547,189
159,500	9859,492	4215,204	641,680	6091,105	-4283,053	2886,814	-2547,189
160,000	8998,576	3351,601	438,955	5712,873	-4309,006	2886,814	-2547,189
160,500	8099,236	2449,582	227,220	5503,289	-4334,959	2886,814	-2547,189
161,000	7161,470	1509,147	6,475	5101,858	-4360,912	2886,814	-2547,189
161,500	6185,279	530,296	-223,281	4945,505	-4463,229	2886,814	-2547,189
162,000	5170,663	-486,971	-462,046	4598,556	-4566,718	2886,814	-2547,189
162,500	4117,622	-1542,654	-709,821	4421,294	-4670,207	2886,814	-2547,189
163,000	3026,156	-2636,753	-966,606	4051,445	-4773,696	2886,814	-2547,189
163,500	1896,265	-3769,269	-1232,401	3853,239	-4877,185	2886,814	-2547,189
164,000	727,949	-4940,200	-1507,206	3460,659	-4980,674	2886,814	-2547,189
164,500	-478,792	-6149,547	-1791,021	3242,728	-5084,163	2886,814	-2547,189
165,000	-1723,958	-7397,310	-2083,846	2827,595	-5187,652	2886,814	-2547,189
165,500	-3007,549	-8683,489	-2385,681	2727,684	-5427,581	2886,814	-2547,189
166,000	-4329,565	-10008,084	-2696,526	2600,690	-5841,570	2886,814	-2547,189

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
166,500	-5690,006	-11371,096	-3016,381	2666,805	-6264,559	2886,814	-2547,189
166,950	-6947,908	-12609,306	-3311,954	2548,768	-6652,944	2886,814	-2547,189
167,400	-8240,847	-13905,868	-3614,825	2585,175	-7048,619	2886,814	-2547,189
167,850	-9572,734	-15238,488	-3924,994	2508,576	-7451,584	2886,814	-2547,189
168,300	-10947,483	-16607,991	-4242,461	2502,828	-7861,839	2886,814	-2547,189
168,750	-12369,004	-18015,201	-4567,227	2520,650	-8279,384	2886,814	-2547,189
169,200	-13841,211	-19421,882	-4899,290	2574,897	-8704,219	2886,814	-2547,189
169,650	-15368,015	-20917,073	-5238,652	2651,295	-9136,345	2886,814	-2547,189
170,100	-16953,329	-22459,103	-5585,312	2727,693	-9575,760	2886,814	-2547,189
170,550	-18601,065	-24048,819	-5939,270	2804,091	-10022,465	2886,814	-2547,189
171,000	-20315,135	-25687,069	-6300,526	2884,488	-10477,993	2886,814	-2547,189
171,450	-18609,176	-24050,811	-5939,401	2810,628	-10026,690	2884,274	-2544,948
171,900	-16969,551	-22463,088	-5585,574	2736,769	-9582,677	2881,734	-2542,706
172,350	-15392,348	-20923,051	-5239,046	2662,909	-9145,953	2879,193	-2540,465
172,800	-13873,655	-19429,852	-4899,816	2589,050	-8716,520	2876,653	-2538,223
173,250	-12409,559	-17982,644	-4567,884	2533,815	-8294,377	2874,113	-2535,982
173,700	-10996,148	-16619,667	-4243,249	2459,705	-7879,524	2871,573	-2533,741
174,150	-9629,511	-15252,110	-3925,913	2578,036	-7471,961	2869,032	-2531,499
174,600	-8305,735	-13921,436	-3615,876	2545,582	-7071,687	2866,492	-2529,258
175,050	-7020,907	-12626,820	-3313,136	2621,979	-6678,704	2863,952	-2527,016
175,500	-5771,116	-11367,437	-3017,694	2693,060	-6293,011	2861,412	-2524,775
176,000	-4419,687	-10029,427	-2697,985	2629,873	-5873,013	2858,589	-2522,284
176,500	-3106,683	-8706,966	-2387,286	2759,730	-5462,015	2855,767	-2519,794
177,000	-1832,104	-7422,921	-2085,597	2864,617	-5227,138	2852,944	-2517,304
177,500	-595,950	-6177,292	-1792,918	3282,433	-5126,465	2850,121	-2514,813
178,000	601,778	-4970,079	-1509,249	3503,090	-5025,791	2847,299	-2512,323
178,500	1761,082	-3801,283	-1234,590	3898,350	-4925,118	2844,476	-2509,832
179,000	2881,961	-2670,902	-968,941	4099,269	-4824,445	2841,654	-2507,342
179,500	3964,415	-1578,937	-712,302	4471,793	-4723,771	2838,831	-2504,851
180,000	5008,444	-525,388	-464,673	4651,754	-4623,098	2836,009	-2502,361
180,500	6014,047	489,745	-226,054	5001,375	-4522,424	2833,186	-2499,870
181,000	6981,226	1466,462	3,556	5160,516	-4423,026	2830,364	-2497,380
181,500	7909,980	2404,763	224,155	5556,438	-4391,711	2827,541	-2494,889
182,000	8800,309	3304,647	435,744	5760,518	-4360,397	2824,719	-2492,399
182,500	9652,212	4166,116	638,323	6133,238	-4329,083	2821,896	-2489,908
183,000	10465,691	4989,169	831,892	6313,204	-4297,769	2819,074	-2487,418
183,500	11240,745	5773,806	1016,451	6662,590	-4266,454	2816,251	-2484,928
184,000	11977,374	6520,027	1192,000	6817,557	-4235,140	2813,429	-2482,437
184,500	12675,578	7227,831	1358,539	7143,491	-4203,826	2810,606	-2479,947

X [m]	M _{PPo} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
185,000	13335,356	7897,220	1516,068	7272,659	-4172,512	2807,784	-2477,456
185,500	13956,710	8528,193	1664,587	7575,033	-4141,198	2804,961	-2474,966
186,000	14539,639	9120,750	1804,096	7677,685	-4109,883	2802,139	-2472,475
186,500	15084,143	9674,890	1934,595	7956,402	-4078,569	2799,316	-2469,985
187,000	15590,222	10190,615	2056,084	8031,906	-4047,255	2796,494	-2467,494
187,500	16057,875	10667,924	2168,563	8286,884	-4015,941	2793,671	-2465,004
188,000	16487,104	11106,817	2272,032	8334,690	-3984,626	2790,849	-2462,513
188,500	16877,908	11507,293	2366,491	8565,856	-3953,312	2788,026	-2460,023
189,000	17230,287	11869,354	2451,941	8585,500	-3921,998	2785,204	-2457,533
189,500	17544,240	12192,999	2528,380	8792,796	-3890,684	2782,381	-2455,042
190,000	17819,769	12478,227	2595,809	8783,895	-3859,370	2779,558	-2452,552
190,500	18056,873	12725,040	2654,228	8967,273	-3828,055	2776,736	-2450,061
191,000	18255,552	12933,437	2703,637	8929,531	-3796,741	2773,913	-2447,571
191,500	18415,806	13103,417	2744,036	9088,955	-3765,427	2771,091	-2445,080
192,000	18537,634	13234,982	2775,425	9022,158	-3734,113	2768,268	-2442,590
192,500	18621,038	13328,131	2797,804	9157,604	-3702,799	2765,446	-2440,099
193,000	18666,017	13382,863	2811,173	9061,622	-3671,484	2762,623	-2437,609
193,500	18672,571	13399,180	2815,532	9173,079	-3640,170	2759,801	-2435,118
194,000	18640,699	13377,081	2810,881	9050,535	-3655,908	2756,978	-2432,628
194,500	18570,403	13316,565	2797,220	9135,334	-3676,341	2754,156	-2430,137
195,000	18461,682	13217,634	2774,549	8988,802	-3696,774	2751,333	-2427,647
195,500	18314,536	13080,286	2742,868	9044,420	-3717,207	2748,511	-2425,157
196,000	18128,965	12904,523	2702,177	8873,911	-3737,640	2745,688	-2422,666
196,500	17904,968	12690,344	2652,476	8900,483	-3758,072	2742,866	-2420,176
197,000	17642,547	12437,748	2593,765	8706,021	-3778,505	2740,043	-2417,685
197,500	17341,701	12146,737	2526,044	8703,764	-3798,938	2737,221	-2415,195
198,000	17002,430	11817,309	2449,313	8485,386	-3819,371	2734,398	-2412,704
198,500	16624,734	11449,466	2363,573	8454,602	-3839,804	2731,576	-2410,214
199,000	16208,612	11043,206	2268,822	8212,356	-3860,237	2728,753	-2407,723
199,500	15754,066	10598,531	2165,061	8153,430	-3880,670	2725,931	-2405,233
200,000	15261,095	10115,439	2052,290	7887,376	-3901,102	2723,108	-2402,742
200,500	14729,699	9593,932	1930,509	7800,777	-3921,535	2720,286	-2400,252
201,000	14159,877	9034,008	1799,718	7510,987	-3941,968	2717,463	-2397,762
201,500	13551,631	8435,669	1659,917	7397,268	-3962,401	2714,641	-2395,271
202,000	12904,960	7798,913	1511,106	7083,827	-3982,834	2711,818	-2392,781
202,500	12219,864	7123,741	1353,285	6943,625	-4003,267	2708,996	-2390,290
203,000	11496,343	6410,154	1186,454	6606,628	-4023,700	2706,173	-2387,800
203,500	10734,396	5658,150	1010,613	6440,665	-4044,133	2703,350	-2385,309
204,000	9934,025	4867,731	825,762	6080,221	-4064,565	2700,528	-2382,819

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
204,500	9095,229	4038,895	631,901	5889,300	-4084,998	2697,705	-2380,328
205,000	8218,008	3171,644	429,030	5505,528	-4105,431	2694,883	-2377,838
205,500	7302,361	2265,976	217,149	5290,538	-4125,864	2692,060	-2375,347
206,000	6348,290	1321,892	-3,742	4885,565	-4148,290	2689,238	-2372,857
206,500	5355,794	339,393	-233,643	4727,457	-4248,701	2686,415	-2370,366
207,000	4324,873	-681,523	-472,554	4377,417	-4349,112	2683,593	-2367,876
207,500	3255,527	-1740,854	-720,475	4197,268	-4449,524	2680,770	-2365,386
208,000	2147,755	-2838,602	-977,406	3824,333	-4549,935	2677,948	-2362,895
208,500	1001,559	-3974,766	-1243,346	3623,284	-4650,346	2675,125	-2360,405
209,000	-183,062	-5149,345	-1518,297	3227,622	-4750,757	2672,303	-2357,914
209,500	-1406,108	-6362,341	-1802,258	3006,896	-4851,168	2669,480	-2355,424
210,000	-2667,580	-7613,753	-2095,229	2588,687	-4951,579	2666,658	-2352,933
210,500	-3967,476	-8903,580	-2397,210	2495,722	-5198,120	2663,835	-2350,443
211,000	-5305,797	-10231,824	-2708,201	2365,833	-5609,207	2661,013	-2347,952
211,500	-6682,543	-11598,484	-3028,202	2429,436	-6029,293	2658,190	-2345,462
211,950	-7955,120	-12843,138	-3323,907	2308,800	-6415,066	2655,650	-2343,220
212,400	-9262,734	-14143,030	-3626,909	2343,040	-6808,129	2653,110	-2340,979
212,850	-10609,296	-15478,980	-3937,210	2263,848	-7208,482	2650,569	-2338,738
213,300	-11998,719	-16851,813	-4254,808	2255,991	-7616,125	2648,029	-2336,496
213,750	-13434,915	-18262,353	-4579,705	2271,354	-8031,058	2645,489	-2334,255
214,200	-14921,797	-19678,616	-4911,900	2270,271	-8453,281	2642,949	-2332,013
214,650	-16463,276	-21177,222	-5251,393	2353,567	-8882,793	2640,408	-2329,772
215,100	-18063,265	-22722,667	-5598,184	2444,173	-9319,596	2637,868	-2327,531
215,550	-19725,675	-24315,798	-5952,273	2534,779	-9763,689	2635,328	-2325,289
216,000	-21454,420	-25957,464	-6313,661	2625,385	-10235,429	2632,787	-2323,048
216,450	-19697,158	-24308,964	-5951,907	2563,992	-9795,803	2642,414	-2331,542
216,900	-18006,230	-22708,997	-5597,451	2502,600	-9363,467	2652,041	-2340,036
217,350	-16377,725	-21156,718	-5250,294	2441,207	-8938,421	2661,667	-2348,530
217,800	-14807,728	-19651,276	-4910,434	2379,814	-8520,665	2671,294	-2357,024
218,250	-13292,330	-18191,825	-4577,873	2336,795	-8110,199	2680,920	-2365,518
218,700	-11827,617	-16811,791	-4252,610	2275,154	-7707,023	2690,547	-2374,012
219,150	-10409,676	-15432,288	-3934,645	2406,451	-7311,137	2700,173	-2382,506
219,600	-9034,597	-14089,667	-3623,978	2386,433	-6922,541	2709,800	-2391,000
220,050	-7698,467	-12783,105	-3320,609	2475,715	-6541,235	2719,426	-2399,494
220,500	-6397,373	-11511,775	-3024,538	2559,305	-6167,219	2729,053	-2407,988
221,000	-4988,941	-10158,701	-2704,130	2510,284	-5760,196	2739,749	-2417,426
221,500	-3618,934	-8823,145	-2392,732	2653,872	-5362,172	2750,445	-2426,863
222,000	-2287,352	-7526,006	-2090,344	2788,772	-5156,227	2761,141	-2436,301
222,500	-994,195	-6267,282	-1796,966	3218,287	-5066,535	2771,837	-2445,739

X [m]	M _{PPo} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
223,000	260,537	-5046,974	-1512,598	3450,891	-4976,844	2782,534	-2455,177
223,500	1476,844	-3865,082	-1237,240	3857,808	-4887,153	2793,230	-2464,614
224,000	2654,726	-2721,606	-970,891	4070,553	-4797,462	2803,926	-2474,052
224,500	3794,182	-1616,546	-713,553	4454,692	-4707,770	2814,622	-2483,490
225,000	4895,214	-549,902	-465,225	4646,352	-4618,079	2825,318	-2492,928
225,500	5957,821	478,326	-225,907	5007,546	-4528,388	2836,014	-2502,366
226,000	6982,003	1468,138	4,401	5177,781	-4439,493	2846,710	-2511,803
226,500	7967,760	2419,534	225,699	5558,588	-4392,517	2857,407	-2521,241
227,000	8915,092	3332,514	437,987	5747,469	-4345,541	2868,103	-2530,679
227,500	9823,998	4207,077	641,265	6105,032	-4298,565	2878,799	-2540,117
228,000	10694,480	5043,225	835,533	6269,672	-4251,589	2889,495	-2549,554
228,500	11526,537	5840,957	1020,791	6603,860	-4204,613	2900,191	-2558,992
229,000	12320,169	6600,273	1197,039	6743,379	-4157,637	2910,887	-2568,430
229,500	13075,376	7321,173	1364,277	7054,072	-4110,661	2921,584	-2577,868
230,000	13792,158	8003,657	1522,505	7167,676	-4063,684	2932,280	-2587,306
230,500	14470,515	8647,725	1671,724	7454,768	-4016,708	2942,976	-2596,743
231,000	15110,446	9253,376	1811,932	7541,746	-3969,732	2953,672	-2606,181
231,500	15711,953	9820,612	1943,130	7805,143	-3922,756	2964,368	-2615,619
232,000	16275,035	10349,432	2065,318	7864,872	-3875,780	2975,064	-2625,057
232,500	16799,692	10839,836	2178,496	8104,491	-3828,804	2985,760	-2634,494
233,000	17285,924	11291,823	2282,664	8136,433	-3781,828	2996,457	-2643,932
233,500	17733,731	11705,395	2377,822	8352,205	-3734,852	3007,153	-2653,370
234,000	18143,113	12080,551	2463,970	8355,908	-3687,876	3017,849	-2662,808
234,500	18514,069	12417,291	2541,108	8547,776	-3640,900	3028,545	-2672,246
235,000	18846,601	12715,614	2609,236	8522,872	-3593,924	3039,241	-2681,683
235,500	19140,708	12975,522	2668,354	8690,790	-3546,948	3049,937	-2691,121
236,000	19396,390	13197,014	2718,462	8637,000	-3499,972	3060,633	-2700,559
236,500	19613,647	13380,090	2759,560	8780,934	-3452,996	3071,330	-2709,997
237,000	19792,479	13524,749	2791,649	8698,062	-3406,020	3082,026	-2719,434
237,500	19932,886	13630,993	2814,727	8817,992	-3359,043	3092,722	-2728,872
238,000	20034,867	13698,821	2828,795	8705,929	-3312,067	3103,418	-2738,310
238,500	20098,424	13728,232	2833,853	8801,846	-3265,091	3114,114	-2747,748
239,000	20123,556	13719,228	2829,901	8663,763	-3218,115	3124,810	-2757,186
239,500	20110,263	13671,808	2816,939	8732,476	-3199,824	3135,506	-2766,623
240,000	20058,545	13585,971	2794,967	8570,383	-3202,002	3146,203	-2776,061
240,500	19968,402	13461,719	2763,985	8609,959	-3204,180	3156,899	-2785,499
241,000	19839,834	13299,050	2723,993	8423,873	-3206,359	3167,595	-2794,937
241,500	19672,840	13097,966	2674,991	8434,472	-3208,537	3178,291	-2804,374
242,000	19467,422	12858,466	2616,979	8224,421	-3210,715	3188,987	-2813,812

X [m]	M _{PPo} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
242,500	19223,579	12580,549	2549,957	8206,288	-3212,893	3199,683	-2823,250
243,000	18941,311	12264,217	2473,925	7972,312	-3215,071	3210,380	-2832,688
243,500	18620,618	11909,468	2388,883	7925,778	-3217,249	3221,076	-2842,126
244,000	18261,500	11516,304	2294,832	7667,930	-3219,427	3231,772	-2851,563
244,500	17863,956	11084,724	2191,770	7593,413	-3221,606	3242,468	-2861,001
245,000	17427,988	10614,727	2079,698	7311,757	-3223,784	3253,164	-2870,439
245,500	16953,595	10106,315	1958,616	7209,760	-3225,962	3263,860	-2879,877
246,000	16440,777	9559,486	1828,524	6904,374	-3228,140	3274,556	-2889,314
246,500	15889,534	8974,242	1689,422	6775,484	-3230,318	3285,253	-2898,752
247,000	15299,866	8350,581	1541,310	6446,457	-3232,496	3295,949	-2908,190
247,500	14671,773	7688,505	1384,188	6291,349	-3234,674	3306,645	-2917,628
248,000	14005,254	6988,012	1218,056	5938,782	-3236,852	3317,341	-2927,066
248,500	13300,311	6249,104	1042,914	5758,217	-3239,031	3328,037	-2936,503
249,000	12556,943	5471,779	858,762	5382,224	-3241,209	3338,733	-2945,941
249,500	11775,150	4656,039	665,600	5177,046	-3243,387	3349,429	-2955,379
250,000	10954,932	3801,882	463,428	4777,753	-3245,565	3360,126	-2964,817
250,500	10096,289	2909,309	252,246	4548,894	-3247,743	3370,822	-2974,255
251,000	9199,221	1978,321	32,055	4168,092	-3291,574	3381,518	-2983,692
251,500	8263,727	1008,916	-197,147	3998,022	-3375,206	3392,214	-2993,130
252,000	7289,809	1,096	-435,359	3634,011	-3458,838	3402,910	-3002,568
252,500	6277,466	-1045,141	-682,581	3442,379	-3542,470	3413,606	-3012,006
253,000	5226,698	-2129,794	-938,813	3055,519	-3626,102	3424,303	-3021,443
253,500	4137,505	-3252,862	-1204,055	2843,515	-3709,734	3434,999	-3030,881
254,000	3009,887	-4414,347	-1478,307	2433,982	-3793,366	3445,695	-3040,319
254,500	1843,844	-5614,247	-1761,569	2202,877	-3876,998	3456,391	-3049,757
255,000	639,375	-6852,564	-2053,841	1770,858	-3960,630	3467,087	-3059,195
255,500	-603,518	-8129,297	-2355,123	1785,686	-4307,934	3477,783	-3068,632
256,000	-1884,836	-9444,445	-2665,415	1644,049	-4704,234	3488,479	-3078,070
256,500	-3204,579	-10798,010	-2984,717	1700,579	-5109,534	3499,176	-3087,508
256,950	-4425,853	-12019,821	-3279,792	1569,438	-5481,999	3508,802	-3096,002
257,400	-5682,164	-13307,767	-3582,165	1598,459	-5861,753	3518,429	-3104,496
257,850	-6977,424	-14631,771	-3891,837	1508,838	-6248,798	3528,055	-3112,990
258,300	-8315,544	-15992,657	-4208,806	1496,451	-6643,133	3537,682	-3121,484
258,750	-9700,437	-17391,251	-4533,074	1503,039	-7044,758	3547,308	-3129,978
259,200	-11136,016	-18773,708	-4864,640	1516,802	-7453,673	3556,935	-3138,472
259,650	-12626,192	-20260,072	-5203,504	1597,524	-7869,878	3566,561	-3146,966
260,100	-14174,878	-21793,274	-5549,666	1678,246	-8360,919	3576,188	-3155,460
260,550	-15785,986	-23374,163	-5903,126	1758,968	-8898,461	3585,814	-3163,954
261,000	-17463,428	-25003,586	-6263,884	1839,690	-9444,774	3595,441	-3172,448

X [m]	M _{PP0} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
261,450	-15836,491	-23362,700	-5897,311	1816,694	-9038,759	3550,498	-3132,792
261,900	-14275,888	-21770,349	-5538,035	1793,698	-8640,034	3505,555	-3093,137
262,350	-12777,706	-20225,684	-5186,058	1770,702	-8248,600	3460,612	-3053,481
262,800	-11338,034	-18727,857	-4841,379	1747,706	-7864,455	3415,669	-3013,825
263,250	-9952,960	-17276,021	-4503,998	1743,732	-7487,600	3370,726	-2974,170
263,700	-8618,571	-15921,060	-4173,915	1723,303	-7118,036	3325,783	-2934,514
264,150	-7330,956	-14548,241	-3851,130	1899,171	-6755,761	3280,840	-2894,859
264,600	-6086,201	-13212,304	-3535,643	1917,538	-6400,776	3235,897	-2855,203
265,050	-4880,395	-11912,425	-3227,454	2054,651	-6053,082	3190,954	-2815,547
265,500	-3709,625	-10647,780	-2926,564	2179,031	-5712,677	3146,011	-2775,892
266,000	-2445,998	-9309,023	-2600,800	2397,095	-5557,538	3096,074	-2731,830
266,500	-1220,796	-7980,332	-2284,047	2854,303	-5467,901	3046,137	-2687,768
267,000	-34,019	-6690,057	-1976,303	3120,934	-5378,263	2996,201	-2643,707
267,500	1114,333	-5438,198	-1677,570	3555,668	-5288,625	2946,264	-2599,645
268,000	2224,260	-4224,755	-1387,847	3803,777	-5198,988	2896,327	-2555,583
268,500	3295,762	-3049,729	-1107,133	4215,815	-5109,350	2846,391	-2511,521
269,000	4328,839	-1913,118	-835,430	4443,868	-5019,712	2796,454	-2467,459
269,500	5323,491	-814,923	-572,736	4832,995	-4930,074	2746,517	-2423,398
270,000	6279,717	244,856	-319,053	5039,510	-4840,437	2696,581	-2379,336
270,500	7197,519	1266,219	-74,380	5405,519	-4750,799	2646,644	-2335,274
271,000	8076,896	2249,166	161,284	5589,067	-4661,161	2596,707	-2291,212
271,500	8917,848	3193,696	387,937	5931,758	-4571,524	2546,771	-2247,151
272,000	9720,375	4099,811	605,581	6090,965	-4481,886	2496,834	-2203,089
272,500	10484,477	4967,510	814,214	6410,145	-4392,248	2446,897	-2159,027
273,000	11210,154	5796,793	1013,837	6543,687	-4302,610	2396,961	-2114,965
273,500	11897,406	6587,660	1204,451	6839,172	-4212,973	2347,024	-2070,903
274,000	12546,233	7340,110	1386,054	6945,778	-4123,335	2297,087	-2026,842
274,500	13156,635	8054,145	1558,648	7217,392	-4033,697	2247,151	-1982,780
275,000	13728,612	8729,764	1722,231	7295,844	-3944,060	2197,214	-1938,718
275,500	14262,164	9366,966	1876,804	7543,416	-3854,422	2147,277	-1894,656
276,000	14757,291	9965,753	2022,368	7592,551	-3764,784	2097,341	-1850,595
276,500	15213,993	10526,124	2158,921	7815,919	-3675,146	2047,404	-1806,533
277,000	15632,270	11048,079	2286,464	7834,624	-3585,509	1997,467	-1762,471
277,500	16012,122	11531,617	2404,998	8033,634	-3495,871	1947,531	-1718,409
278,000	16353,548	11976,740	2514,521	8020,850	-3406,233	1897,594	-1674,347
278,500	16656,550	12383,447	2615,035	8195,354	-3316,596	1847,657	-1630,286
279,000	16921,127	12751,737	2706,538	8150,075	-3226,958	1797,720	-1586,224
279,500	17147,279	13081,612	2789,031	8299,934	-3137,320	1747,784	-1542,162
280,000	17335,006	13373,071	2862,515	8221,206	-3047,682	1697,847	-1498,100

X [m]	M _{PPo} [kN.m]	M _{PP∞} [kN.m]	M _{RCP} [kN.m]	M _{SCmax} [kN.m]	M _{SCmin} [kN.m]	M _{VDTmax} [kN.m]	M _{VDTmin} [kN.m]
280,500	17484,308	13626,113	2926,988	8346,288	-2958,045	1647,910	-1454,039
281,000	17595,185	13840,740	2982,452	8237,370	-2868,407	1597,974	-1409,977
281,500	17667,637	14016,951	3028,905	8333,391	-2778,769	1548,037	-1365,915
282,000	17701,664	14154,745	3066,348	8199,571	-2689,132	1498,100	-1321,853
282,500	17697,266	14254,124	3094,782	8260,277	-2599,494	1448,164	-1277,792
283,000	17654,443	14315,086	3114,205	8101,440	-2509,856	1398,227	-1233,730
283,500	17573,195	14337,633	3124,619	8126,043	-2420,218	1348,290	-1189,668
284,000	17453,522	14321,763	3126,022	7942,078	-2330,581	1298,354	-1145,606
284,500	17295,424	14267,478	3118,415	7929,843	-2240,943	1248,417	-1101,544
285,000	17098,901	14174,777	3101,799	7720,649	-2151,305	1198,480	-1057,483
285,500	16863,953	14043,659	3076,172	7670,894	-2061,668	1148,544	-1013,421
286,000	16590,579	13874,126	3041,535	7436,377	-1972,030	1098,607	-969,359
286,500	16278,781	13666,176	2997,889	7348,472	-1882,392	1048,670	-925,297
287,000	15928,558	13419,811	2945,232	7088,545	-1792,754	998,734	-881,236
287,500	15539,910	13135,029	2883,566	6961,914	-1703,117	948,797	-837,174
288,000	15112,837	12811,832	2812,889	6676,498	-1613,479	898,860	-793,112
288,500	14647,339	12450,218	2733,202	6510,616	-1523,841	848,924	-749,050
289,000	14143,416	12050,189	2644,506	6199,639	-1434,203	798,987	-704,988
289,500	13601,068	11611,743	2546,799	5994,036	-1344,566	749,050	-660,927
290,000	13020,295	11134,882	2440,083	5657,434	-1254,928	699,114	-616,865
290,500	12401,097	10619,604	2324,356	5411,691	-1165,290	649,177	-572,803
291,000	11743,474	10065,911	2199,619	5049,407	-1075,653	599,240	-528,741
291,500	11047,426	9473,801	2065,873	4763,159	-986,015	549,304	-484,680
292,000	10312,953	8843,275	1923,116	4375,144	-896,377	499,367	-440,618
292,500	9540,055	8174,334	1771,350	4048,078	-806,739	449,430	-396,556
292,950	8810,738	7542,792	1627,056	3676,075	-726,066	404,487	-356,900
293,400	8045,168	6870,203	1475,464	3307,969	-645,392	359,544	-317,245
293,850	7238,216	6161,043	1316,575	2959,363	-564,718	314,601	-277,589
294,300	6384,752	5414,231	1150,387	2558,467	-484,044	269,658	-237,934
294,750	5479,648	4628,685	976,901	2194,317	-403,370	224,715	-198,278
295,200	4517,774	3805,444	796,117	1770,033	-322,696	179,772	-158,622
295,650	3494,001	2928,223	608,035	1338,460	-242,022	134,829	-118,967
296,100	2403,201	2002,316	412,655	913,717	-161,348	89,886	-79,311
296,550	1240,243	1026,612	209,976	460,503	-80,674	44,943	-39,656
297,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

C.1.2 MOMENTO FLETOR DEVIDO AO PRÉ-ESFORÇO [PE] (INÍCIO DE EXPLORAÇÃO E LONGO PRAZO)

X [m]	M _{PE,0} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,0} [kN.m]	M _{PE,Hip,∞} [kN.m]
0,000	0,000	0,000	0,000	0,000	0,000	0,000
0,450	-1756,966	-1534,472	-1853,472	-1694,893	96,505	160,421
0,900	-3459,807	-3019,696	-3653,307	-3341,414	193,500	321,718
1,350	-5108,087	-4455,638	-5399,066	-4939,571	290,980	483,933
1,800	-6701,354	-5842,158	-7090,304	-6489,267	388,951	647,109
2,250	-8239,164	-7179,025	-8726,576	-7990,303	487,412	811,278
2,700	-9721,066	-8462,660	-10307,433	-9442,465	586,366	979,804
3,150	-11146,606	-9698,717	-11832,424	-10845,320	685,818	1146,603
3,600	-12515,333	-10883,988	-13301,097	-12198,445	785,764	1314,458
4,050	-13826,786	-12017,968	-14712,996	-13501,342	886,210	1483,374
4,500	-15080,504	-13100,105	-16067,665	-14753,464	987,161	1653,359
5,000	-16405,258	-14238,034	-17505,169	-16084,975	1099,911	1846,942
5,500	-17657,528	-15313,080	-18870,816	-17351,814	1213,288	2038,734
6,000	-18836,675	-16321,686	-20163,968	-18553,509	1327,293	2231,823
6,500	-19942,057	-17262,959	-21383,981	-19689,149	1441,924	2426,190
7,000	-20973,024	-18135,994	-22530,213	-20757,808	1557,189	2621,814
7,500	-21928,926	-18939,885	-23602,012	-21758,558	1673,086	2818,674
8,000	-22809,110	-19673,730	-24598,728	-22690,471	1789,618	3016,741
8,500	-23612,916	-20336,637	-25519,704	-23552,626	1906,788	3215,988
9,000	-24339,673	-20927,728	-26364,279	-24344,115	2024,606	3416,388
9,500	-24988,726	-21446,140	-27131,789	-25064,049	2143,063	3617,908
10,000	-25559,399	-21891,032	-27821,568	-25711,552	2262,169	3820,520
10,500	-26051,020	-22261,581	-28432,944	-26285,773	2381,924	4024,192
11,000	-26462,912	-22556,989	-28965,242	-26785,882	2502,331	4228,893
11,500	-26794,388	-22776,482	-29417,783	-27211,072	2623,395	4434,590
12,000	-27044,768	-22919,312	-29789,884	-27560,563	2745,116	4641,251
12,500	-27213,361	-22984,753	-30080,859	-27833,599	2867,498	4848,846
13,000	-27299,471	-22972,109	-30290,016	-28029,451	2990,545	5057,342
13,500	-27302,405	-22880,706	-30416,663	-28147,415	3114,258	5266,709
14,000	-27218,859	-22709,345	-30455,379	-28182,737	3236,521	5473,392
14,500	-27081,476	-22486,990	-30440,772	-28167,721	3359,296	5680,731
15,000	-26889,909	-22213,353	-30372,497	-28102,063	3482,588	5888,710
15,500	-26643,816	-21888,158	-30250,208	-27985,467	3606,392	6097,308
16,000	-26342,844	-21511,141	-30073,560	-27817,651	3730,716	6306,510
16,500	-25986,650	-21082,049	-29842,203	-27598,346	3855,553	6516,298
17,000	-25574,875	-20600,636	-29555,788	-27327,292	3980,913	6726,656

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
17,500	-25107,172	-20066,674	-29213,964	-27004,243	4106,792	6937,568
18,000	-24583,178	-19479,940	-28816,378	-26628,963	4233,200	7149,022
18,500	-24002,544	-18840,224	-28362,675	-26201,229	4360,131	7361,006
19,000	-23364,910	-18147,323	-27852,500	-25720,830	4487,590	7573,507
19,500	-22669,922	-17401,046	-27285,495	-25187,565	4615,573	7786,519
20,000	-21917,213	-16601,208	-26661,302	-24601,244	4744,089	8000,036
20,500	-21106,426	-15747,633	-25979,560	-23961,687	4873,134	8214,054
21,000	-20237,190	-14840,150	-25239,907	-23268,724	5002,717	8428,574
21,500	-19309,147	-13878,592	-24441,979	-22522,193	5132,832	8643,601
22,000	-18321,926	-12862,794	-23585,413	-21721,937	5263,487	8859,143
22,500	-17275,162	-11792,593	-22669,840	-20867,806	5394,678	9075,213
23,000	-16168,483	-10667,819	-21694,893	-19959,651	5526,410	9291,832
23,500	-15001,524	-9488,303	-20660,203	-18997,326	5658,679	9509,023
24,000	-13773,899	-8253,857	-19565,398	-17980,679	5791,499	9726,821
24,500	-12485,241	-6964,286	-18410,105	-16909,552	5924,864	9945,266
25,000	-11135,175	-5619,372	-17193,949	-15783,778	6058,774	10164,406
25,500	-9723,321	-4218,873	-15916,555	-14603,173	6193,235	10384,299
26,000	-8249,301	-2762,515	-14577,546	-13367,530	6328,245	10605,015
26,500	-6712,734	-1249,990	-13176,541	-12076,619	6463,807	10826,629
27,000	-5113,239	319,059	-11713,161	-10730,173	6599,922	11049,232
27,500	-3450,426	1945,041	-10187,022	-9327,885	6736,596	11272,926
28,000	-1723,912	3628,423	-8597,741	-7869,399	6873,828	11497,822
28,500	66,686	5369,742	-6944,932	-6354,303	7011,618	11724,044
29,000	1921,760	7169,609	-5228,208	-4782,120	7149,967	11951,729
29,500	3841,705	9028,718	-3447,179	-3152,304	7288,885	12181,022
30,000	5826,904	10947,848	-1601,456	-1464,227	7428,360	12412,074
30,500	7877,759	12927,877	309,354	282,823	7568,405	12645,055
31,000	9983,779	14953,862	2283,155	2087,424	7700,624	12866,438
31,500	12112,664	16985,160	4304,586	3936,404	7808,078	13048,755
31,950	13951,167	18718,683	6048,503	5532,651	7902,664	13186,033
32,400	15600,935	20306,136	7602,409	6956,132	7998,527	13350,004
32,850	17007,767	21654,710	8938,774	8181,998	8068,993	13472,712
33,300	18217,760	22823,131	10079,208	9229,282	8138,552	13593,849
33,750	19233,767	23813,413	11026,557	10100,203	8207,209	13713,210
34,200	20058,614	24580,306	11783,636	10796,860	8274,978	13783,445
34,650	20695,093	25219,954	12353,234	11321,614	8341,859	13898,339
35,100	21145,973	25687,693	12738,111	11676,645	8407,862	14011,048
35,550	21413,999	25985,731	12940,999	11864,238	8472,999	14121,493
36,000	21501,872	26116,358	12964,605	11886,738	8537,267	14229,620

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
36,450	21302,542	25879,396	12811,608	11746,551	8490,934	14132,845
36,900	20929,513	25481,945	12484,659	11446,148	8444,855	14035,798
37,350	20385,403	24926,589	11986,383	10988,054	8399,021	13938,535
37,800	19672,815	24215,997	11319,380	10374,846	8353,435	13841,151
38,250	18794,318	23352,898	10486,222	9609,134	8308,096	13743,764
38,700	17752,462	22387,680	9489,457	8694,130	8263,005	13693,549
39,150	16549,760	21227,357	8331,606	7631,188	8218,154	13596,169
39,600	15188,709	19922,895	7015,164	6423,569	8173,545	13499,326
40,050	13671,782	18477,051	5542,602	5073,783	8129,180	13403,268
40,500	12001,419	16892,495	3916,366	3584,223	8085,053	13308,272
41,000	10103,194	15121,900	2062,402	1886,999	8040,792	13234,902
41,500	8270,494	13387,251	278,181	254,495	7992,313	13132,755
42,000	6531,392	11760,263	-1440,082	-1317,481	7971,473	13077,745
42,500	4850,871	10187,811	-3099,816	-2836,186	7950,686	13023,997
43,000	3228,579	8669,122	-4701,375	-4302,270	7929,954	12971,392
43,500	1664,163	7203,495	-6245,109	-5716,311	7909,272	12919,806
44,000	157,279	5790,308	-7731,369	-7078,816	7888,648	12869,124
44,500	-1292,428	4429,001	-9160,502	-8390,227	7868,074	12819,228
45,000	-2685,302	3119,083	-10532,856	-9650,930	7847,554	12770,013
45,500	-4021,688	1860,114	-11848,775	-10861,259	7827,087	12721,373
46,000	-5296,260	651,002	-13094,580	-12008,482	7798,321	12659,484
46,500	-6547,431	-508,130	-14358,860	-13174,825	7811,429	12666,695
47,000	-7753,390	-1627,073	-15577,947	-14301,103	7824,558	12674,030
47,500	-8913,823	-2705,507	-16751,533	-15386,924	7837,711	12681,418
48,000	-10028,424	-3743,085	-17879,308	-16431,876	7850,884	12688,791
48,500	-11096,881	-4739,442	-18960,960	-17435,529	7864,079	12696,087
49,000	-12118,882	-5694,188	-19996,177	-18397,438	7877,295	12703,251
49,500	-13094,115	-6606,924	-20984,645	-19317,153	7890,530	12710,230
50,000	-14022,259	-7477,234	-21926,048	-20194,216	7903,789	12716,982
50,500	-14903,000	-8304,701	-22820,069	-21028,166	7917,070	12723,465
51,000	-15736,020	-9088,898	-23666,392	-21818,541	7930,372	12729,643
51,500	-16521,002	-9829,399	-24464,695	-22564,882	7943,692	12735,483
52,000	-17257,619	-10525,774	-25214,658	-23266,734	7957,039	12740,959
52,500	-17945,554	-11177,596	-25915,959	-23923,643	7970,405	12746,047
53,000	-18584,481	-11784,444	-26568,274	-24535,166	7983,793	12750,722
53,500	-19174,074	-12345,895	-27171,277	-25100,864	7997,204	12754,969
54,000	-19714,010	-12861,537	-27724,644	-25620,307	8010,634	12758,770
54,500	-20203,958	-13330,962	-28228,044	-26093,072	8024,086	12762,111
55,000	-20643,588	-13753,767	-28681,150	-26518,748	8037,562	12764,981

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
55,500	-21032,570	-14129,563	-29083,630	-26896,932	8051,059	12767,369
56,000	-21370,575	-14457,962	-29435,151	-27227,230	8064,577	12769,268
56,500	-21657,263	-14738,590	-29735,382	-27509,260	8078,118	12770,670
57,000	-21892,304	-14971,079	-29983,985	-27742,650	8091,681	12771,571
57,500	-22075,361	-15155,073	-30180,625	-27927,037	8105,265	12771,964
58,000	-22206,091	-15290,224	-30324,964	-28062,072	8118,873	12771,848
58,500	-22284,163	-15376,193	-30416,663	-28147,415	8132,499	12771,222
59,000	-22309,229	-15412,654	-30455,379	-28182,737	8146,150	12770,082
59,500	-22280,948	-15399,289	-30440,772	-28167,721	8159,824	12768,432
60,000	-22198,978	-15335,791	-30372,497	-28102,063	8173,519	12766,272
60,500	-22062,973	-15221,864	-30250,208	-27985,467	8187,235	12763,602
61,000	-21872,587	-15057,222	-30073,560	-27817,651	8200,973	12760,430
61,500	-21627,468	-14841,589	-29842,203	-27598,346	8214,735	12756,757
62,000	-21327,269	-14574,700	-29555,788	-27327,292	8228,519	12752,592
62,500	-20971,640	-14256,302	-29213,964	-27004,243	8242,325	12747,940
63,000	-20560,223	-13886,149	-28816,378	-26628,963	8256,155	12742,814
63,500	-20092,672	-13464,008	-28362,675	-26201,229	8270,003	12737,221
64,000	-19568,623	-12989,653	-27852,500	-25720,830	8283,876	12731,177
64,500	-18987,722	-12462,866	-27285,495	-25187,565	8297,773	12724,699
65,000	-18349,610	-11883,444	-26661,302	-24601,244	8311,691	12717,800
65,500	-17653,930	-11251,183	-25979,560	-23961,687	8325,629	12710,504
66,000	-16900,314	-10565,888	-25239,907	-23268,724	8339,593	12702,836
66,500	-16088,400	-9827,371	-24441,979	-22522,193	8353,579	12694,822
67,000	-15217,825	-9035,444	-23585,413	-21721,937	8367,588	12686,493
67,500	-14288,220	-8189,922	-22669,840	-20867,806	8381,620	12677,884
68,000	-13299,221	-7290,617	-21694,893	-19959,651	8395,672	12669,034
68,500	-12250,455	-6337,337	-20660,203	-18997,326	8409,748	12659,989
69,000	-11141,551	-5329,881	-19565,398	-17980,679	8423,847	12650,798
69,500	-9972,135	-4268,038	-18410,105	-16909,552	8437,970	12641,515
70,000	-8741,832	-3151,578	-17193,949	-15783,778	8452,117	12632,201
70,500	-7450,274	-1980,249	-15916,555	-14603,173	8466,282	12622,923
71,000	-6097,072	-753,777	-14577,546	-13367,530	8480,474	12613,753
71,500	-4681,854	528,151	-13176,541	-12076,619	8494,687	12604,770
72,000	-3204,237	1865,885	-11713,161	-10730,173	8508,923	12596,059
72,500	-1663,838	3259,823	-10187,022	-9327,885	8523,184	12587,708
73,000	-60,276	4710,416	-8597,741	-7869,399	8537,465	12579,814
73,500	1606,837	6218,174	-6944,932	-6354,303	8551,769	12572,476
74,000	3337,892	7783,679	-5228,208	-4782,120	8566,100	12565,799
74,500	5133,272	9407,583	-3447,179	-3152,304	8580,451	12559,887

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
75,000	6993,370	11090,622	-1601,456	-1464,227	8594,826	12554,849
75,500	8918,577	12833,611	309,354	282,823	8609,223	12550,789
76,000	10897,409	14621,898	2283,155	2087,424	8614,254	12534,474
76,500	12896,316	16416,699	4304,586	3936,404	8591,730	12480,295
76,950	14618,176	17945,105	6048,503	5533,015	8569,674	12412,090
77,400	16151,916	19321,667	7602,409	6956,588	8549,507	12365,079
77,850	17441,816	20463,625	8938,774	8182,532	8503,042	12281,093
78,300	18536,037	21427,370	10079,208	9229,883	8456,828	12197,487
78,750	19437,424	22214,933	11026,557	10100,859	8410,866	12114,074
79,200	20148,787	22793,812	11783,636	10796,860	8365,151	11996,952
79,650	20672,916	23235,444	12353,234	11321,614	8319,682	11913,830
80,100	21012,573	23507,213	12738,111	11676,645	8274,463	11830,568
80,550	21170,487	23611,358	12940,999	11864,238	8229,488	11747,120
81,000	21149,361	23550,202	12964,605	11886,738	8184,756	11663,464
81,450	20955,081	23358,127	12811,608	11746,551	8143,473	11611,575
81,900	20587,057	23005,332	12484,659	11446,148	8102,399	11559,184
82,350	20047,913	22494,392	11986,383	10988,054	8061,530	11506,338
82,800	19340,250	21827,955	11319,380	10374,846	8020,871	11453,110
83,250	18466,641	21008,727	10486,222	9609,134	7980,418	11399,594
83,700	17429,622	20071,702	9489,457	8694,130	7940,165	11377,572
84,150	16231,727	18954,907	8331,606	7631,188	7900,121	11323,719
84,600	14875,438	17693,593	7015,164	6423,569	7860,274	11270,024
85,050	13363,234	16290,482	5542,602	5073,783	7820,632	11216,699
85,500	11697,556	14748,201	3916,366	3584,223	7781,190	11163,978
86,000	9804,324	13015,474	2062,402	1886,999	7741,921	11128,475
86,500	7976,735	11326,728	278,181	254,495	7698,554	11072,233
87,000	6241,703	9738,014	-1440,082	-1317,481	7681,785	11055,496
87,500	4565,236	8203,518	-3099,816	-2836,186	7665,052	11039,704
88,000	2946,987	6722,490	-4701,375	-4302,270	7648,361	11024,760
88,500	1386,596	5294,258	-6245,109	-5716,311	7631,705	11010,569
89,000	-116,285	3918,218	-7731,369	-7078,816	7615,084	10997,033
89,500	-1562,000	2593,837	-9160,502	-8390,227	7598,502	10984,064
90,000	-2950,898	1320,641	-10532,856	-9650,930	7581,958	10971,571
90,500	-4260,419	97,679	-11785,415	-10802,440	7524,996	10900,119
91,000	-5553,677	-1072,661	-13094,580	-12008,482	7540,904	10935,821
91,500	-6802,013	-2202,965	-14358,860	-13174,825	7556,847	10971,859
92,000	-8005,120	-3292,936	-15577,947	-14301,103	7572,827	11008,167
92,500	-9162,694	-4342,243	-16751,533	-15386,924	7588,839	11044,682
93,000	-10274,422	-5350,532	-17879,308	-16431,876	7604,886	11081,345

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
93,500	-11339,992	-6317,424	-18960,960	-17435,529	7620,968	11118,105
94,000	-12359,093	-7242,526	-19996,177	-18397,438	7637,084	11154,912
94,500	-13331,409	-8125,429	-20984,645	-19317,153	7653,235	11191,724
95,000	-14256,622	-8965,717	-21926,048	-20194,216	7669,425	11228,499
95,500	-15134,424	-9762,966	-22820,069	-21028,166	7685,646	11265,200
96,000	-15964,489	-10516,746	-23666,392	-21818,541	7701,902	11301,794
96,500	-16746,498	-11226,628	-24464,695	-22564,882	7718,197	11338,255
97,000	-17480,134	-11892,182	-25214,658	-23266,734	7734,524	11374,552
97,500	-18165,071	-12512,980	-25915,959	-23923,643	7750,887	11410,664
98,000	-18800,988	-13088,598	-26568,274	-24535,166	7767,286	11446,568
98,500	-19387,555	-13618,617	-27171,277	-25100,864	7783,722	11482,247
99,000	-19924,450	-14102,623	-27724,644	-25620,307	7800,194	11517,683
99,500	-20411,344	-14540,210	-28228,044	-26093,072	7816,700	11552,862
100,000	-20847,908	-14930,978	-28681,150	-26518,748	7833,242	11587,770
100,500	-21233,810	-15274,536	-29083,630	-26896,932	7849,820	11622,396
101,000	-21568,718	-15570,501	-29435,151	-27227,230	7866,433	11656,729
101,500	-21852,296	-15818,499	-29735,382	-27509,260	7883,085	11690,761
102,000	-22084,214	-16018,167	-29983,985	-27742,650	7899,771	11724,482
102,500	-22264,134	-16169,149	-30180,625	-27927,037	7916,492	11757,888
103,000	-22391,711	-16271,100	-30324,964	-28062,072	7933,254	11790,972
103,500	-22466,615	-16323,686	-30416,663	-28147,415	7950,048	11823,729
104,000	-22488,500	-16326,582	-30455,379	-28182,737	7966,879	11856,155
104,500	-22457,021	-16279,473	-30440,772	-28167,721	7983,751	11888,249
105,000	-22371,841	-16182,057	-30372,497	-28102,063	8000,656	11920,006
105,500	-22232,610	-16034,039	-30250,208	-27985,467	8017,598	11951,428
106,000	-22038,982	-15835,138	-30073,560	-27817,651	8034,578	11982,513
106,500	-21790,611	-15585,082	-29842,203	-27598,346	8051,592	12013,264
107,000	-21487,142	-15283,608	-29555,788	-27327,292	8068,646	12043,684
107,500	-21128,230	-14930,467	-29213,964	-27004,243	8085,735	12073,776
108,000	-20713,515	-14525,416	-28816,378	-26628,963	8102,863	12103,546
108,500	-20242,647	-14068,225	-28362,675	-26201,229	8120,028	12133,004
109,000	-19715,271	-13558,674	-27852,500	-25720,830	8137,229	12162,156
109,500	-19131,025	-12996,548	-27285,495	-25187,565	8154,470	12191,017
110,000	-18489,556	-12381,645	-26661,302	-24601,244	8171,746	12219,599
110,500	-17790,499	-11713,765	-25979,560	-23961,687	8189,060	12247,922
111,000	-17033,491	-10992,719	-25239,907	-23268,724	8206,415	12276,005
111,500	-16218,176	-10218,320	-24441,979	-22522,193	8223,803	12303,872
112,000	-15344,180	-9390,385	-23585,413	-21721,937	8241,232	12331,552
112,500	-14411,142	-8508,728	-22669,840	-20867,806	8258,698	12359,077

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
113,000	-13418,693	-7573,167	-21694,893	-19959,651	8276,201	12386,484
113,500	-12366,460	-6583,510	-20660,203	-18997,326	8293,743	12413,816
114,000	-11254,074	-5539,559	-19565,398	-17980,679	8311,324	12441,120
114,500	-10081,163	-4441,103	-18410,105	-16909,552	8328,942	12468,450
115,000	-8847,351	-3287,913	-17193,949	-15783,778	8346,598	12495,865
115,500	-7552,263	-2079,739	-15916,555	-14603,173	8364,293	12523,434
116,000	-6195,518	-816,303	-14577,546	-13367,530	8382,028	12551,227
116,500	-4776,741	502,708	-13176,541	-12076,619	8399,800	12579,327
117,000	-3295,553	1877,646	-11713,161	-10730,173	8417,608	12607,819
117,500	-1751,560	3308,915	-10187,022	-9327,885	8435,462	12636,799
118,000	-144,389	4796,966	-8597,741	-7869,399	8453,351	12666,365
118,500	1526,345	6342,321	-6944,932	-6354,303	8471,277	12696,623
119,000	3261,035	7945,564	-5228,208	-4782,120	8489,243	12727,684
119,500	5060,071	9607,360	-3447,179	-3152,304	8507,251	12759,663
120,000	6923,839	11328,450	-1601,456	-1464,227	8525,295	12792,676
120,500	8852,735	13109,666	309,354	282,823	8543,381	12826,844
121,000	10835,336	14936,031	2283,155	2087,424	8552,180	12848,607
121,500	12838,210	16767,929	4304,586	3936,404	8533,624	12831,525
121,950	14563,635	18327,802	6048,503	5533,015	8515,133	12794,787
122,400	16100,911	19737,432	7602,409	6956,588	8498,502	12780,844
122,850	17394,485	20910,999	8938,774	8182,532	8455,712	12728,466
123,300	18492,345	21906,045	10079,208	9229,883	8413,137	12676,161
123,750	19397,331	22724,596	11026,557	10100,859	8370,774	12623,737
124,200	20112,267	23329,782	11783,636	10796,860	8328,630	12532,922
124,650	20639,927	23801,543	12353,234	11321,614	8286,693	12479,928
125,100	20983,083	24103,110	12738,111	11676,645	8244,973	12426,465
125,550	21144,458	24236,715	12940,999	11864,238	8203,458	12372,477
126,000	21126,764	24204,676	12964,605	11886,738	8162,159	12317,938
126,450	20932,582	24002,767	12811,608	11746,551	8120,975	12256,215
126,900	20564,660	23640,180	12484,659	11446,148	8080,002	12194,032
127,350	20025,618	23119,493	11986,383	10988,054	8039,236	12131,439
127,800	19318,059	22443,359	11319,380	10374,846	7998,679	12068,514
128,250	18444,545	21614,491	10486,222	9609,134	7958,323	12005,357
128,700	17407,630	20672,603	9489,457	8694,130	7918,173	11978,473
129,150	16209,830	19546,223	8331,606	7631,188	7878,225	11915,035
129,600	14853,644	18275,406	7015,164	6423,569	7838,480	11851,836
130,050	13341,540	16862,881	5542,602	5073,783	7798,938	11789,097
130,500	11675,959	15311,284	3916,366	3584,223	7759,594	11727,062
131,000	9782,821	13570,963	2062,402	1886,999	7720,419	11683,964

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
131,500	7955,340	11872,107	278,181	254,495	7677,158	11617,611
132,000	6220,345	10275,290	-1440,082	-1317,481	7660,426	11592,772
132,500	4543,915	8732,764	-3099,816	-2836,186	7643,731	11568,950
133,000	2925,697	7243,778	-4701,375	-4302,270	7627,071	11546,049
133,500	1365,339	5807,649	-6245,109	-5716,311	7610,448	11523,960
134,000	-137,505	4423,773	-7731,369	-7078,816	7593,863	11502,589
134,500	-1583,187	3091,606	-9160,502	-8390,227	7577,315	11481,833
135,000	-2972,050	1810,673	-10532,856	-9650,930	7560,806	11461,603
135,500	-4281,425	577,403	-11785,415	-10802,440	7503,990	11379,842
136,000	-5574,739	-598,496	-13094,580	-12008,482	7519,842	11409,986
136,500	-6823,133	-1734,385	-14358,860	-13174,825	7535,727	11440,440
137,000	-8026,299	-2829,964	-15577,947	-14301,103	7551,648	11471,138
137,500	-9183,931	-3884,913	-16751,533	-15386,924	7567,602	11502,012
138,000	-10295,716	-4898,872	-17879,308	-16431,876	7583,592	11533,004
138,500	-11361,342	-5871,473	-18960,960	-17435,529	7599,618	11564,056
139,000	-12380,500	-6802,317	-19996,177	-18397,438	7615,677	11595,121
139,500	-13352,872	-7691,005	-20984,645	-19317,153	7631,773	11626,149
140,000	-14278,146	-8537,114	-21926,048	-20194,216	7647,902	11657,102
140,500	-15156,002	-9340,228	-22820,069	-21028,166	7664,067	11687,938
141,000	-15986,127	-10099,913	-23666,392	-21818,541	7680,265	11718,627
141,500	-16768,195	-10815,745	-24464,695	-22564,882	7696,500	11749,137
142,000	-17501,886	-11487,291	-25214,658	-23266,734	7712,772	11779,442
142,500	-18186,883	-12114,128	-25915,959	-23923,643	7729,076	11809,516
143,000	-18822,857	-12695,827	-26568,274	-24535,166	7745,417	11839,340
143,500	-19409,484	-13231,973	-27171,277	-25100,864	7761,794	11868,891
144,000	-19946,440	-13722,150	-27724,644	-25620,307	7778,203	11898,157
144,500	-20433,394	-14165,953	-28228,044	-26093,072	7794,650	11927,119
145,000	-20870,015	-14562,980	-28681,150	-26518,748	7811,135	11955,769
145,500	-21255,977	-14912,843	-29083,630	-26896,932	7827,652	11984,089
146,000	-21590,943	-15215,155	-29435,151	-27227,230	7844,209	12012,075
146,500	-21874,583	-15469,547	-29735,382	-27509,260	7860,799	12039,713
147,000	-22106,562	-15675,649	-29983,985	-27742,650	7877,424	12067,001
147,500	-22286,536	-15833,109	-30180,625	-27927,037	7894,089	12093,928
148,000	-22414,176	-15941,579	-30324,964	-28062,072	7910,788	12120,493
148,500	-22489,138	-16000,728	-30416,663	-28147,415	7927,524	12146,687
149,000	-22511,083	-16010,226	-30455,379	-28182,737	7944,296	12172,511
149,500	-22479,669	-15969,762	-30440,772	-28167,721	7961,103	12197,960
150,000	-22394,549	-15879,028	-30372,497	-28102,063	7977,948	12223,035
150,500	-22255,378	-15737,734	-30250,208	-27985,467	7994,830	12247,733

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
151,000	-22061,812	-15545,593	-30073,560	-27817,651	8011,748	12272,059
151,500	-21813,499	-15302,336	-29842,203	-27598,346	8028,704	12296,010
152,000	-21510,093	-15007,697	-29555,788	-27327,292	8045,696	12319,595
152,500	-21151,241	-14661,429	-29213,964	-27004,243	8062,723	12342,814
153,000	-20736,589	-14263,284	-28816,378	-26628,963	8079,789	12365,678
153,500	-20265,784	-13813,037	-28362,675	-26201,229	8096,891	12388,192
154,000	-19738,469	-13310,461	-27852,500	-25720,830	8114,031	12410,369
154,500	-19154,286	-12755,345	-27285,495	-25187,565	8131,209	12432,220
155,000	-18512,878	-12147,481	-26661,302	-24601,244	8148,423	12453,763
155,500	-17813,883	-11486,675	-25979,560	-23961,687	8165,676	12475,012
156,000	-17056,941	-10772,730	-25239,907	-23268,724	8182,966	12495,994
156,500	-16241,685	-10005,464	-24441,979	-22522,193	8200,294	12516,729
157,000	-15367,756	-9184,688	-23585,413	-21721,937	8217,657	12537,249
157,500	-14434,780	-8310,220	-22669,840	-20867,806	8235,060	12557,586
158,000	-13442,391	-7381,871	-21694,893	-19959,651	8252,503	12577,780
158,500	-12390,223	-6399,456	-20660,203	-18997,326	8269,980	12597,870
159,000	-11277,901	-5362,769	-19565,398	-17980,679	8287,497	12617,910
159,500	-10105,052	-4271,602	-18410,105	-16909,552	8305,052	12637,950
160,000	-8871,306	-3125,724	-17193,949	-15783,778	8322,643	12658,055
160,500	-7576,281	-1924,885	-15916,555	-14603,173	8340,275	12678,287
161,000	-6219,602	-668,805	-14577,546	-13367,530	8357,944	12698,726
161,500	-4800,890	642,827	-13176,541	-12076,619	8375,651	12719,446
162,000	-3319,761	2010,368	-11713,161	-10730,173	8393,399	12740,541
162,500	-1775,838	3434,214	-10187,022	-9327,885	8411,183	12762,099
163,000	-168,736	4914,827	-8597,741	-7869,399	8429,005	12784,225
163,500	1501,939	6452,719	-6944,932	-6354,303	8446,871	12807,022
164,000	3236,565	8048,482	-5228,208	-4782,120	8464,772	12830,602
164,500	5035,534	9702,772	-3447,179	-3152,304	8482,713	12855,076
165,000	6899,237	11416,338	-1601,456	-1464,227	8500,693	12880,564
165,500	8828,064	13190,002	309,354	282,823	8518,710	12907,180
166,000	10810,629	15008,717	2283,155	2087,424	8527,474	12921,293
166,500	12813,542	16832,748	4304,586	3936,404	8508,957	12896,344
166,950	14539,008	18385,239	6048,503	5533,015	8490,506	12852,224
167,400	16076,322	19787,874	7602,409	6956,588	8473,913	12831,285
167,850	17370,008	20954,338	8938,774	8182,532	8431,234	12771,806
168,300	18467,974	21942,346	10079,208	9229,883	8388,766	12712,462
168,750	19373,075	22753,923	11026,557	10100,859	8346,517	12653,065
169,200	20088,118	23351,860	11783,636	10796,860	8304,482	12555,000
169,650	20615,890	23816,827	12353,234	11321,614	8262,656	12495,213

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
170,100	20959,155	24111,665	12738,111	11676,645	8221,044	12435,021
170,550	21120,640	24238,604	12940,999	11864,238	8179,641	12374,366
171,000	21103,051	24199,962	12964,605	11886,738	8138,445	12313,224
171,450	20909,970	23991,714	12811,608	11746,551	8098,362	12245,163
171,900	20543,133	23622,853	12484,659	11446,148	8058,475	12176,706
172,350	20005,168	23095,959	11986,383	10988,054	8018,786	12107,905
172,800	19298,675	22413,683	11319,380	10374,846	7979,296	12038,837
173,250	18426,217	21578,736	10486,222	9609,134	7939,994	11969,602
173,700	17390,349	20630,639	9489,457	8694,130	7900,892	11936,508
174,150	16193,588	19498,261	8331,606	7631,188	7861,983	11867,073
174,600	14838,425	18221,510	7015,164	6423,569	7823,261	11797,940
175,050	13327,337	16803,114	5542,602	5073,783	7784,735	11729,331
175,500	11662,765	15245,712	3916,366	3584,223	7746,399	11661,489
176,000	9770,729	13498,719	2062,402	1886,999	7708,326	11611,720
176,500	7944,342	11793,514	278,181	254,495	7666,161	11539,019
177,000	6210,393	10190,118	-1440,082	-1317,481	7650,475	11507,599
177,500	4535,008	8641,036	-3099,816	-2836,186	7634,824	11477,222
178,000	2917,834	7145,513	-4701,375	-4302,270	7619,209	11447,783
178,500	1358,513	5702,867	-6245,109	-5716,311	7603,622	11419,178
179,000	-143,300	4312,490	-7731,369	-7078,816	7588,068	11391,306
179,500	-1587,953	2973,844	-9160,502	-8390,227	7572,549	11364,071
180,000	-2975,795	1686,447	-10532,856	-9650,930	7557,061	11337,377
180,500	-4284,137	447,441	-11785,415	-10802,440	7501,278	11249,881
181,000	-5576,449	-735,443	-13094,580	-12008,482	7518,131	11273,039
181,500	-6823,834	-1878,353	-14358,860	-13174,825	7535,026	11296,471
182,000	-8025,991	-2980,996	-15577,947	-14301,103	7551,957	11320,106
182,500	-9182,608	-4043,044	-16751,533	-15386,924	7568,926	11343,881
183,000	-10293,372	-5064,142	-17879,308	-16431,876	7585,936	11367,734
183,500	-11357,977	-6043,917	-18960,960	-17435,529	7602,983	11391,612
184,000	-12376,107	-6981,974	-19996,177	-18397,438	7620,070	11415,464
184,500	-13347,446	-7877,907	-20984,645	-19317,153	7637,199	11439,247
185,000	-14271,683	-8731,300	-21926,048	-20194,216	7654,365	11462,916
185,500	-15148,499	-9541,728	-22820,069	-21028,166	7671,571	11486,438
186,000	-15977,576	-10308,764	-23666,392	-21818,541	7688,815	11509,777
186,500	-16758,594	-11031,977	-24464,695	-22564,882	7706,100	11532,906
187,000	-17491,234	-11710,938	-25214,658	-23266,734	7723,424	11555,796
187,500	-18175,172	-12345,217	-25915,959	-23923,643	7740,787	11578,426
188,000	-18810,079	-12934,391	-26568,274	-24535,166	7758,194	11600,775
188,500	-19395,640	-13478,040	-27171,277	-25100,864	7775,637	11622,824

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
189,000	-19931,523	-13975,749	-27724,644	-25620,307	7793,121	11644,557
189,500	-20417,399	-14427,111	-28228,044	-26093,072	7810,646	11665,962
190,000	-20852,940	-14831,725	-28681,150	-26518,748	7828,210	11687,023
190,500	-21237,814	-15189,199	-29083,630	-26896,932	7845,815	11707,733
191,000	-21571,689	-15499,149	-29435,151	-27227,230	7863,462	11728,081
191,500	-21854,235	-15761,200	-29735,382	-27509,260	7881,147	11748,060
192,000	-22085,110	-15974,988	-29983,985	-27742,650	7898,875	11767,662
192,500	-22263,984	-16140,155	-30180,625	-27927,037	7916,641	11786,882
193,000	-22390,513	-16256,355	-30324,964	-28062,072	7934,451	11805,717
193,500	-22464,362	-16323,253	-30416,663	-28147,415	7952,301	11824,162
194,000	-22485,190	-16340,523	-30455,379	-28182,737	7970,189	11842,214
194,500	-22452,649	-16307,848	-30440,772	-28167,721	7988,123	11859,873
195,000	-22366,401	-16224,925	-30372,497	-28102,063	8006,095	11877,138
195,500	-22226,098	-16091,458	-30250,208	-27985,467	8024,110	11894,009
196,000	-22031,395	-15907,164	-30073,560	-27817,651	8042,165	11910,488
196,500	-21781,942	-15671,769	-29842,203	-27598,346	8060,261	11926,577
197,000	-21477,388	-15385,010	-29555,788	-27327,292	8078,401	11942,282
197,500	-21117,382	-15046,636	-29213,964	-27004,243	8096,582	11957,607
198,000	-20701,572	-14656,404	-28816,378	-26628,963	8114,805	11972,558
198,500	-20229,605	-14214,082	-28362,675	-26201,229	8133,070	11987,147
199,000	-19701,126	-13719,449	-27852,500	-25720,830	8151,374	12001,381
199,500	-19115,772	-13172,289	-27285,495	-25187,565	8169,723	12015,276
200,000	-18473,189	-12572,398	-26661,302	-24601,244	8188,113	12028,846
200,500	-17773,013	-11919,577	-25979,560	-23961,687	8206,546	12042,110
201,000	-17014,884	-11213,635	-25239,907	-23268,724	8225,023	12055,089
201,500	-16198,440	-10454,385	-24441,979	-22522,193	8243,539	12067,807
202,000	-15323,312	-9641,643	-23585,413	-21721,937	8262,101	12080,293
202,500	-14389,135	-8775,225	-22669,840	-20867,806	8280,705	12092,580
203,000	-13395,545	-7854,948	-21694,893	-19959,651	8299,348	12104,703
203,500	-12342,166	-6880,620	-20660,203	-18997,326	8318,037	12116,707
204,000	-11228,629	-5852,044	-19565,398	-17980,679	8336,769	12128,635
204,500	-10054,558	-4769,009	-18410,105	-16909,552	8355,546	12140,543
205,000	-8819,583	-3631,291	-17193,949	-15783,778	8374,366	12152,487
205,500	-7523,330	-2438,640	-15916,555	-14603,173	8393,226	12164,533
206,000	-6165,416	-1190,781	-14577,546	-13367,530	8412,130	12176,750
206,500	-4745,464	112,597	-13176,541	-12076,619	8431,077	12189,216
207,000	-3263,090	1471,841	-11713,161	-10730,173	8450,071	12202,014
207,500	-1717,913	2887,350	-10187,022	-9327,885	8469,109	12215,235
208,000	-109,555	4359,571	-8597,741	-7869,399	8488,186	12228,970

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
208,500	1562,378	5889,020	-6944,932	-6354,303	8507,310	12243,322
209,000	3298,270	7476,274	-5228,208	-4782,120	8526,477	12258,394
209,500	5098,510	9121,992	-3447,179	-3152,304	8545,689	12274,296
210,000	6963,491	10826,907	-1601,456	-1464,227	8564,947	12291,134
210,500	8893,599	12591,842	309,354	282,823	8584,245	12309,020
211,000	10877,377	14402,380	2283,155	2087,424	8594,222	12314,956
211,500	12881,290	16220,077	4304,586	3936,404	8576,704	12283,672
211,950	14607,637	17769,703	6048,503	5533,015	8559,134	12236,688
212,400	16145,844	19166,640	7602,409	6956,588	8543,435	12210,052
212,850	17440,196	20329,313	8938,774	8182,532	8501,423	12146,781
213,300	18538,831	21313,587	10079,208	9229,883	8459,622	12083,704
213,750	19444,581	22121,492	11026,557	10100,859	8418,024	12020,634
214,200	20160,268	22721,166	11783,636	10796,860	8376,632	11924,306
214,650	20688,679	23182,648	12353,234	11321,614	8335,445	11861,034
215,100	21032,571	23474,082	12738,111	11676,645	8294,460	11797,437
215,550	21194,677	23597,704	12940,999	11864,238	8253,677	11733,466
216,000	21177,702	23555,835	12964,605	11886,738	8213,097	11669,097
216,450	20980,895	23381,537	12811,608	11746,551	8169,288	11634,985
216,900	20610,372	23046,339	12484,659	11446,148	8125,713	11600,191
217,350	20068,749	22552,814	11986,383	10988,054	8082,367	11564,760
217,800	19358,636	21903,607	11319,380	10374,846	8039,256	11528,761
218,250	18482,595	21101,425	10486,222	9609,134	7996,373	11492,291
218,700	17443,176	20182,007	9489,457	8694,130	7953,719	11487,877
219,150	16242,898	19082,035	8331,606	7631,188	7911,292	11450,847
219,600	14884,253	17837,362	7015,164	6423,569	7869,089	11413,793
220,050	13369,716	16450,713	5542,602	5073,783	7827,114	11376,929
220,500	11701,728	14924,721	3916,366	3584,223	7785,362	11340,499
221,000	9805,958	13210,788	2062,402	1886,999	7743,556	11323,789
221,500	7975,852	11539,847	278,181	254,495	7697,671	11285,352
222,000	6238,325	9969,554	-1440,082	-1317,481	7678,407	11287,036
222,500	4559,372	8453,418	-3099,816	-2836,186	7659,188	11289,604
223,000	2938,646	6990,695	-4701,375	-4302,270	7640,021	11292,965
223,500	1375,789	5580,712	-6245,109	-5716,311	7620,898	11297,023
224,000	-129,543	4222,871	-7731,369	-7078,816	7601,825	11301,687
224,500	-1577,704	2916,635	-9160,502	-8390,227	7582,798	11306,862
225,000	-2969,034	1661,534	-10532,856	-9650,930	7563,822	11312,464
225,500	-4280,869	454,669	-11785,415	-10802,440	7504,546	11257,109
226,000	-5576,625	-696,146	-13094,580	-12008,482	7517,956	11312,336
226,500	-6827,468	-1806,815	-14358,860	-13174,825	7531,392	11368,010

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
227,000	-8033,098	-2877,045	-15577,947	-14301,103	7544,850	11424,058
227,500	-9193,201	-3906,503	-16751,533	-15386,924	7558,332	11480,422
228,000	-10307,470	-4894,837	-17879,308	-16431,876	7571,838	11537,040
228,500	-11375,590	-5841,671	-18960,960	-17435,529	7585,370	11593,858
229,000	-12397,253	-6746,613	-19996,177	-18397,438	7598,924	11650,825
229,500	-13372,142	-7609,258	-20984,645	-19317,153	7612,503	11707,895
230,000	-14299,941	-8429,189	-21926,048	-20194,216	7626,107	11765,027
230,500	-15180,335	-9205,985	-22820,069	-21028,166	7639,734	11822,181
231,000	-16013,005	-9939,219	-23666,392	-21818,541	7653,387	11879,322
231,500	-16797,634	-10628,464	-24464,695	-22564,882	7667,061	11936,418
232,000	-17533,896	-11273,292	-25214,658	-23266,734	7680,762	11993,441
232,500	-18221,472	-11873,277	-25915,959	-23923,643	7694,487	12050,366
233,000	-18860,036	-12428,001	-26568,274	-24535,166	7708,237	12107,166
233,500	-19449,266	-12937,041	-27171,277	-25100,864	7722,011	12163,823
234,000	-19988,835	-13399,990	-27724,644	-25620,307	7735,809	12220,317
234,500	-20478,411	-13816,442	-28228,044	-26093,072	7749,633	12276,630
235,000	-20917,670	-14186,001	-28681,150	-26518,748	7763,480	12332,747
235,500	-21306,277	-14508,278	-29083,630	-26896,932	7777,353	12388,654
236,000	-21643,903	-14782,891	-29435,151	-27227,230	7791,249	12444,339
236,500	-21930,209	-15009,469	-29735,382	-27509,260	7805,172	12499,791
237,000	-22164,867	-15187,651	-29983,985	-27742,650	7819,118	12554,999
237,500	-22347,536	-15317,083	-30180,625	-27927,037	7833,090	12609,954
238,000	-22477,877	-15397,423	-30324,964	-28062,072	7847,087	12664,649
238,500	-22555,554	-15428,337	-30416,663	-28147,415	7861,109	12719,078
239,000	-22580,223	-15409,506	-30455,379	-28182,737	7875,156	12773,231
239,500	-22551,546	-15340,613	-30440,772	-28167,721	7889,226	12827,108
240,000	-22469,174	-15221,359	-30372,497	-28102,063	7903,323	12880,703
240,500	-22332,764	-15051,454	-30250,208	-27985,467	7917,445	12934,013
241,000	-22141,967	-14830,614	-30073,560	-27817,651	7931,593	12987,038
241,500	-21896,440	-14558,571	-29842,203	-27598,346	7945,763	13039,775
242,000	-21595,827	-14235,064	-29555,788	-27327,292	7959,961	13092,228
242,500	-21239,778	-13859,843	-29213,964	-27004,243	7974,186	13144,399
243,000	-20827,945	-13432,670	-28816,378	-26628,963	7988,433	13196,293
243,500	-20359,968	-12953,314	-28362,675	-26201,229	8002,707	13247,916
244,000	-19835,495	-12421,553	-27852,500	-25720,830	8017,005	13299,277
244,500	-19254,164	-11837,176	-27285,495	-25187,565	8031,331	13350,389
245,000	-18615,622	-11199,981	-26661,302	-24601,244	8045,680	13401,263
245,500	-17919,504	-10509,766	-25979,560	-23961,687	8060,056	13451,921
246,000	-17165,450	-9766,343	-25239,907	-23268,724	8074,456	13502,381

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
246,500	-16353,094	-8969,523	-24441,979	-22522,193	8088,885	13552,669
247,000	-15482,074	-8119,120	-23585,413	-21721,937	8103,339	13602,817
247,500	-14552,025	-7214,950	-22669,840	-20867,806	8117,815	13652,856
248,000	-13562,573	-6256,822	-21694,893	-19959,651	8132,320	13702,829
248,500	-12513,352	-5244,545	-20660,203	-18997,326	8146,851	13752,781
249,000	-11403,990	-4177,912	-19565,398	-17980,679	8161,408	13802,767
249,500	-10234,117	-3056,710	-18410,105	-16909,552	8175,988	13852,842
250,000	-9003,352	-1880,702	-17193,949	-15783,778	8190,597	13903,077
250,500	-7711,322	-649,628	-15916,555	-14603,173	8205,233	13953,545
251,000	-6357,654	636,795	-14577,546	-13367,530	8219,892	14004,325
251,500	-4941,963	1978,894	-13176,541	-12076,619	8234,579	14055,514
252,000	-3463,871	3377,032	-11713,161	-10730,173	8249,290	14107,205
252,500	-1922,991	4831,622	-10187,022	-9327,885	8264,031	14159,507
253,000	-318,946	6343,136	-8597,741	-7869,399	8278,795	14212,535
253,500	1348,655	7912,106	-6944,932	-6354,303	8293,587	14266,408
254,000	3080,196	9539,137	-5228,208	-4782,120	8308,403	14321,257
254,500	4876,071	11224,909	-3447,179	-3152,304	8323,250	14377,213
255,000	6736,665	12970,186	-1601,456	-1464,227	8338,121	14434,412
255,500	8662,371	14775,815	309,354	282,823	8353,017	14492,992
256,000	10641,984	16625,047	2283,155	2087,424	8358,829	14537,623
256,500	12642,491	18474,688	4304,586	3936,404	8337,905	14538,284
256,950	14365,836	20042,596	6048,503	5533,015	8317,333	14509,581
257,400	15901,003	21468,185	7602,409	6956,588	8298,594	14511,596
257,850	17193,096	22652,394	8938,774	8182,532	8254,323	14469,862
258,300	18289,495	23657,929	10079,208	9229,883	8210,287	14428,045
258,750	19193,043	24486,785	11026,557	10100,859	8166,485	14385,927
259,200	19906,555	25087,178	11783,636	10796,860	8122,918	14290,318
259,650	20432,819	25568,733	12353,234	11321,614	8079,585	14247,119
260,100	20774,593	25879,863	12738,111	11676,645	8036,482	14203,218
260,550	20934,605	26022,786	12940,999	11864,238	7993,606	14158,548
261,000	20915,565	25999,818	12964,605	11886,738	7950,960	14113,080
261,450	20623,811	25613,459	12811,608	11746,551	7812,203	13866,908
261,900	20159,296	25068,133	12484,659	11446,148	7674,637	13621,985
262,350	19524,635	24366,443	11986,383	10988,054	7538,252	13378,389
262,800	18722,425	23511,066	11319,380	10374,846	7403,045	13136,220
263,250	17755,227	22504,736	10486,222	9609,134	7269,005	12895,602
263,700	16625,578	21398,095	9489,457	8694,130	7136,121	12703,964
264,150	15335,993	20097,169	8331,606	7631,188	7004,387	12465,981
264,600	13888,958	18653,629	7015,164	6423,569	6873,795	12230,060

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
265,050	12286,941	17070,197	5542,602	5073,783	6744,339	11996,414
265,500	10532,372	15349,494	3916,366	3584,223	6616,006	11765,271
266,000	8540,743	13427,307	2062,402	1886,999	6478,341	11540,308
266,500	6616,532	11544,251	278,181	254,495	6338,351	11289,756
267,000	4780,984	9763,510	-1440,082	-1317,481	6221,065	11080,991
267,500	3004,438	8037,790	-3099,816	-2836,186	6104,254	10873,976
268,000	1286,541	6366,294	-4701,375	-4302,270	5987,916	10668,564
268,500	-373,060	4748,309	-6245,109	-5716,311	5872,049	10464,620
269,000	-1974,716	3183,199	-7731,369	-7078,816	5756,653	10262,015
269,500	-3518,777	1670,404	-9160,502	-8390,227	5641,725	10060,631
270,000	-5005,591	209,425	-10532,856	-9650,930	5527,265	9860,355
270,500	-7408,538	-1380,343	-13640,280	-12491,777	6231,741	11111,435
271,000	-9028,206	-2955,457	-15155,490	-13885,234	6127,284	10929,777
271,500	-10596,402	-4485,223	-16618,750	-15232,561	6022,348	10747,338
272,000	-12112,769	-5969,313	-18029,705	-16533,350	5916,936	10564,036
272,500	-13576,954	-7407,362	-19387,997	-17787,162	5811,043	10379,800
273,000	-14988,600	-8798,970	-20693,268	-18993,533	5704,669	10194,563
273,500	-16347,344	-10143,705	-21945,158	-20151,978	5597,814	10008,273
274,000	-17652,832	-11441,116	-23143,304	-21261,997	5490,472	9820,881
274,500	-18904,696	-12690,731	-24287,343	-22323,078	5382,647	9632,347
275,000	-20102,578	-13892,064	-25376,910	-23334,704	5274,332	9442,639
275,500	-21246,108	-15044,618	-26411,639	-24296,352	5165,531	9251,733
276,000	-22334,925	-16147,893	-27391,160	-25207,498	5056,236	9059,605
276,500	-23368,654	-17201,379	-28315,106	-26067,621	4946,452	8866,242
277,000	-24346,933	-18204,572	-29183,103	-26876,202	4836,170	8671,630
277,500	-25269,384	-19156,964	-29994,779	-27632,728	4725,395	8475,765
278,000	-26135,636	-20058,050	-30749,759	-28336,693	4614,123	8278,643
278,500	-26945,316	-20907,331	-31447,668	-28987,597	4502,352	8080,266
279,000	-27698,045	-21704,317	-32088,126	-29584,953	4390,081	7880,636
279,500	-28393,448	-22448,520	-32670,755	-30128,280	4277,307	7679,759
280,000	-29031,143	-23139,465	-33195,174	-30617,109	4164,031	7477,644
280,500	-29610,750	-23776,684	-33660,998	-31050,983	4050,248	7274,300
281,000	-30131,885	-24359,717	-34067,845	-31429,457	3935,960	7069,741
281,500	-30594,166	-24888,117	-34415,327	-31752,097	3821,162	6863,980
282,000	-30997,203	-25361,449	-34703,058	-32018,481	3705,855	6657,032
282,500	-31340,612	-25779,288	-34930,646	-32228,203	3590,034	6448,915
283,000	-31536,778	-26072,424	-35000,899	-32295,647	3464,121	6223,223
283,500	-31623,145	-26269,466	-34956,404	-32258,266	3333,259	5988,800
284,000	-31610,006	-26375,561	-34810,855	-32126,991	3200,850	5751,430

X [m]	M _{PE,o} [kN.m]	M _{PE,∞} [kN.m]	M _{PE,Iso,0} [kN.m]	M _{PE,Iso,∞} [kN.m]	M _{PE,Hip,o} [kN.m]	M _{PE,Hip,∞} [kN.m]
284,500	-31501,329	-26391,320	-34570,481	-31906,293	3069,152	5514,973
285,000	-31297,913	-26317,489	-34236,078	-31596,959	2938,165	5279,470
285,500	-31000,556	-26154,845	-33808,440	-31199,805	2807,884	5044,961
286,000	-30610,048	-25904,198	-33288,357	-30715,682	2678,309	4811,484
286,500	-30127,179	-25566,391	-32676,612	-30145,469	2549,434	4579,078
287,000	-29552,730	-25142,290	-31973,987	-29490,076	2421,258	4347,786
287,500	-28887,481	-24632,793	-31181,257	-28750,438	2293,776	4117,645
288,000	-28132,206	-24038,826	-30299,194	-27927,518	2166,988	3888,692
288,500	-27287,676	-23361,338	-29328,565	-27022,304	2040,889	3660,966
289,000	-26354,657	-22601,301	-28270,132	-26035,801	1915,476	3434,500
289,500	-25333,906	-21759,705	-27124,655	-24969,036	1790,749	3209,331
290,000	-24226,186	-20837,555	-25892,887	-23823,047	1666,701	2985,492
290,500	-23032,245	-19835,866	-24575,579	-22598,880	1543,334	2763,013
291,000	-21752,836	-18755,661	-23173,476	-21297,582	1420,639	2541,921
291,500	-20388,699	-17597,953	-21687,319	-19920,196	1298,621	2322,243
292,000	-18940,579	-16363,748	-20117,847	-18467,744	1177,269	2103,996
292,500	-17409,205	-15054,028	-18465,792	-16941,224	1056,587	1887,196
292,950	-15960,397	-13815,386	-16908,937	-15505,423	948,540	1690,037
293,400	-14445,282	-12512,735	-15286,309	-14010,464	841,027	1497,730
293,850	-12864,384	-11150,937	-13598,434	-12457,534	734,051	1306,597
294,300	-11218,229	-9730,552	-11845,835	-10847,184	627,607	1116,631
294,750	-9507,341	-8252,078	-10029,033	-9179,896	521,693	927,818
295,200	-7732,240	-6718,226	-8148,545	-7455,609	416,305	737,383
295,650	-5893,442	-5124,197	-6204,887	-5675,695	311,445	551,498
296,100	-3991,462	-3473,075	-4198,570	-3839,745	207,108	366,670
296,550	-2026,811	-1765,000	-2130,106	-1947,854	103,295	182,854
297,000	0,000	0,000	0,000	0,000	0,000	0,000

C.2 Esforço transverso

x [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
0,000	-2198,714	3525,023	-474,723	179,275	-1035,365	88,124	-99,873
0,450	-2101,809	3393,803	-458,505	179,275	-1019,165	88,124	-99,873
0,900	-2004,903	3262,583	-442,287	179,275	-1002,965	88,124	-99,873
1,350	-1907,997	3131,363	-426,069	179,275	-971,072	88,124	-99,873
1,800	-1811,091	3000,143	-409,851	179,275	-954,872	88,124	-99,873
2,250	-1714,185	2868,923	-393,633	179,275	-934,752	88,124	-99,873
2,700	-1635,773	2737,703	-377,415	179,275	-902,890	88,124	-99,873
3,150	-1557,361	2606,483	-361,197	179,275	-886,690	88,124	-99,873
3,600	-1478,950	2475,263	-344,979	179,275	-854,870	88,124	-99,873
4,050	-1400,538	2344,043	-328,761	179,275	-838,670	88,124	-99,873
4,500	-1322,126	2212,823	-312,543	193,472	-818,573	88,124	-99,873
5,000	-1245,299	2067,023	-294,523	197,369	-785,029	88,124	-99,873
5,500	-1168,471	1921,223	-276,503	197,369	-767,029	88,124	-99,873
6,000	-1091,644	1775,423	-258,483	212,913	-733,568	88,124	-99,873
6,500	-1014,817	1629,623	-240,463	212,913	-715,568	88,124	-99,873
7,000	-937,989	1483,823	-222,443	228,374	-682,205	88,124	-99,873
7,500	-861,162	1338,023	-204,423	228,374	-664,205	88,124	-99,873
8,000	-784,335	1192,223	-186,403	243,737	-630,955	88,124	-99,873
8,500	-707,507	1046,423	-168,383	243,737	-612,955	88,124	-99,873
9,000	-630,680	900,623	-150,363	258,987	-579,833	88,124	-99,873
9,500	-553,853	754,823	-132,343	258,987	-561,833	88,124	-99,873
10,000	-477,025	609,023	-114,323	274,108	-528,855	88,124	-99,873
10,500	-400,198	463,223	-96,303	274,108	-510,855	88,124	-99,873
11,000	-323,371	317,423	-78,283	289,087	-478,034	88,124	-99,873
11,500	-246,544	171,623	-60,263	289,087	-460,034	88,124	-99,873
12,000	-169,716	25,823	-42,243	303,907	-427,387	88,124	-99,873
12,500	-92,889	-119,977	-24,223	303,907	-409,387	88,124	-99,873
13,000	-16,062	-265,777	-6,203	318,554	-376,929	88,124	-99,873
13,500	60,766	-411,577	11,817	318,554	-358,929	88,124	-99,873
14,000	137,593	-504,403	29,837	333,012	-326,674	88,124	-99,873
14,500	214,420	-597,229	47,857	333,012	-308,674	88,124	-99,873
15,000	291,248	-690,055	65,877	347,267	-276,638	88,124	-99,873
15,500	368,075	-782,881	83,897	347,267	-258,638	88,124	-99,873
16,000	444,902	-875,707	101,917	372,383	-237,915	88,124	-99,873
16,500	521,730	-968,533	119,937	390,383	-237,915	88,124	-99,873
17,000	598,557	-1061,359	137,957	422,185	-224,361	88,124	-99,873
17,500	675,384	-1154,185	155,977	440,185	-224,361	88,124	-99,873

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
18,000	752,211	-1247,011	173,997	471,739	-211,071	88,124	-99,873
18,500	829,039	-1339,837	192,017	489,739	-211,071	88,124	-99,873
19,000	905,866	-1432,663	210,037	521,029	-198,061	88,124	-99,873
19,500	982,693	-1525,489	228,057	539,029	-198,061	88,124	-99,873
20,000	1059,521	-1618,315	246,077	570,040	-185,344	88,124	-99,873
20,500	1136,348	-1711,141	264,097	588,040	-185,344	88,124	-99,873
21,000	1213,175	-1803,967	282,117	618,756	-172,936	88,124	-99,873
21,500	1290,003	-1896,793	300,137	636,756	-172,936	88,124	-99,873
22,000	1366,830	-1989,619	318,157	667,164	-160,852	88,124	-99,873
22,500	1443,657	-2082,445	336,177	685,164	-160,852	88,124	-99,873
23,000	1520,485	-2175,271	354,197	715,248	-149,108	88,124	-99,873
23,500	1597,312	-2268,097	372,217	733,248	-149,108	88,124	-99,873
24,000	1674,139	-2360,923	390,237	762,992	-137,718	88,124	-99,873
24,500	1750,966	-2453,749	408,257	780,992	-137,718	88,124	-99,873
25,000	1827,794	-2546,575	426,277	810,382	-126,697	88,124	-99,873
25,500	1904,621	-2639,401	444,297	828,382	-126,697	88,124	-99,873
26,000	1981,448	-2732,227	462,317	857,403	-116,061	88,124	-99,873
26,500	2058,276	-2825,053	480,337	875,403	-116,061	88,124	-99,873
27,000	2135,103	-2917,879	498,357	904,039	-105,825	88,124	-99,873
27,500	2211,930	-3010,705	516,377	922,039	-105,825	88,124	-99,873
28,000	2288,758	-3103,531	534,397	950,276	-96,003	88,124	-99,873
28,500	2365,585	-3196,357	552,417	968,276	-96,003	88,124	-99,873
29,000	2442,412	-3289,183	570,437	996,097	-86,611	88,124	-99,873
29,500	2519,240	-3382,009	588,457	1014,097	-86,611	88,124	-99,873
30,000	2596,067	-3474,835	606,477	1041,490	-77,663	88,124	-99,873
30,500	2672,894	-3567,661	624,497	1059,490	-77,663	88,124	-99,873
31,000	2749,721	-3660,487	642,517	1086,437	-69,176	88,124	-99,873
31,500	2826,549	-3753,313	660,537	1104,437	-69,176	88,124	-99,873
31,950	2904,961	-3419,204	676,755	1129,125	-61,129	88,124	-99,873
32,400	2983,372	-3085,112	692,973	1145,325	-61,129	88,124	-99,873
32,850	3061,784	-2751,003	709,191	1169,571	-53,505	88,124	-99,873
33,300	3140,196	-2416,910	725,409	1185,771	-53,505	88,124	-99,873
33,750	3218,608	-2082,802	741,627	1209,595	-51,666	88,124	-99,873
34,200	3315,514	-1748,709	757,845	1227,634	-51,103	88,124	-99,873
34,650	3412,420	-1414,600	774,063	1243,834	-51,103	88,124	-99,873
35,100	3509,326	-1080,508	790,281	1267,157	-51,103	88,124	-99,873
35,550	3606,231	-746,399	806,499	1283,357	-51,103	88,124	-99,873
36,000	3703,137	-412,306	822,717	1306,319	-51,103	88,124	-99,873
36,450	-3542,859	400,318	-793,576	179,382	-1363,209	21,392	-18,876

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
36,900	-3445,953	734,427	-777,358	179,382	-1347,009	21,392	-18,876
37,350	-3349,047	1068,520	-761,140	179,382	-1324,066	21,392	-18,876
37,800	-3252,141	1402,628	-744,922	179,382	-1307,866	21,392	-18,876
38,250	-3155,235	1736,721	-728,704	179,382	-1289,924	21,392	-18,876
38,700	-3076,823	2070,830	-712,486	179,382	-1266,502	21,392	-18,876
39,150	-2998,412	2404,922	-696,268	179,382	-1250,302	21,392	-18,876
39,600	-2920,000	2739,031	-680,050	179,382	-1226,469	21,392	-18,876
40,050	-2841,588	3073,124	-663,832	179,382	-1210,269	21,392	-18,876
40,500	-2763,176	3407,233	-647,614	179,382	-1192,098	21,392	-18,876
41,000	-2686,349	3314,407	-629,594	179,382	-1165,949	21,392	-18,876
41,500	-2609,521	3221,581	-611,574	179,382	-1147,949	21,392	-18,876
42,000	-2532,694	3128,755	-593,554	179,382	-1121,376	21,392	-18,876
42,500	-2455,867	3035,929	-575,534	179,382	-1103,376	21,392	-18,876
43,000	-2379,040	2943,103	-557,514	179,382	-1076,404	21,392	-18,876
43,500	-2302,212	2850,277	-539,494	179,382	-1058,404	21,392	-18,876
44,000	-2225,385	2757,451	-521,474	184,270	-1031,058	21,392	-18,876
44,500	-2148,558	2664,625	-503,454	184,270	-1013,058	21,392	-18,876
45,000	-2071,730	2571,799	-485,434	193,616	-985,361	21,392	-18,876
45,500	-1994,903	2478,973	-467,414	193,616	-967,361	21,392	-18,876
46,000	-1918,076	2386,147	-449,394	203,313	-939,339	21,392	-18,876
46,500	-1841,248	2293,321	-431,374	203,313	-921,339	21,392	-18,876
47,000	-1764,421	2200,495	-413,354	213,335	-893,016	21,392	-18,876
47,500	-1687,594	2107,669	-395,334	213,335	-875,016	21,392	-18,876
48,000	-1610,766	2014,843	-377,314	223,658	-846,417	21,392	-18,876
48,500	-1533,939	1922,017	-359,294	223,658	-828,417	21,392	-18,876
49,000	-1457,112	1829,191	-341,274	234,257	-799,565	21,392	-18,876
49,500	-1380,285	1736,365	-323,254	234,257	-781,565	21,392	-18,876
50,000	-1303,457	1643,539	-305,234	245,109	-752,486	21,392	-18,876
50,500	-1226,630	1550,713	-287,214	245,109	-734,486	21,392	-18,876
51,000	-1149,803	1457,887	-269,194	256,188	-705,203	21,392	-18,876
51,500	-1072,975	1365,061	-251,174	256,188	-687,203	21,392	-18,876
52,000	-996,148	1272,235	-233,154	267,471	-657,742	21,392	-18,876
52,500	-919,321	1179,409	-215,134	267,471	-639,742	21,392	-18,876
53,000	-842,493	1086,583	-197,114	278,932	-610,127	21,392	-18,876
53,500	-765,666	993,757	-179,094	278,932	-592,127	21,392	-18,876
54,000	-688,839	900,931	-161,074	290,547	-562,382	21,392	-18,876
54,500	-612,011	808,105	-143,054	290,547	-544,382	21,392	-18,876
55,000	-535,184	715,279	-125,034	302,292	-514,532	21,392	-18,876
55,500	-458,357	622,453	-107,014	302,292	-496,532	21,392	-18,876

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
56,000	-381,530	529,627	-88,994	314,141	-466,602	21,392	-18,876
56,500	-304,702	436,801	-70,974	314,141	-448,602	21,392	-18,876
57,000	-227,875	343,975	-52,954	326,072	-418,615	21,392	-18,876
57,500	-151,048	251,149	-34,934	326,072	-400,615	21,392	-18,876
58,000	-74,220	158,323	-16,914	338,059	-370,597	21,392	-18,876
58,500	2,607	65,497	1,106	338,059	-352,597	21,392	-18,876
59,000	79,434	-27,329	19,126	363,742	-336,235	21,392	-18,876
59,500	156,262	-120,155	37,146	381,742	-336,235	21,392	-18,876
60,000	233,089	-212,981	55,166	411,767	-324,227	21,392	-18,876
60,500	309,916	-305,807	73,186	429,767	-324,227	21,392	-18,876
61,000	386,743	-398,633	91,206	459,776	-312,260	21,392	-18,876
61,500	463,571	-491,459	109,226	477,776	-312,260	21,392	-18,876
62,000	540,398	-584,285	127,246	507,742	-300,360	21,392	-18,876
62,500	617,225	-677,111	145,266	525,742	-300,360	21,392	-18,876
63,000	694,053	-769,937	163,286	555,643	-288,550	21,392	-18,876
63,500	770,880	-862,763	181,306	573,643	-288,550	21,392	-18,876
64,000	847,707	-955,589	199,326	603,452	-276,855	21,392	-18,876
64,500	924,535	-1048,415	217,346	621,452	-276,855	21,392	-18,876
65,000	1001,362	-1141,241	235,366	651,147	-265,301	21,392	-18,876
65,500	1078,189	-1234,067	253,386	669,147	-265,301	21,392	-18,876
66,000	1155,017	-1326,893	271,406	698,702	-253,910	21,392	-18,876
66,500	1231,844	-1419,719	289,426	716,702	-253,910	21,392	-18,876
67,000	1308,671	-1512,545	307,446	746,092	-242,708	21,392	-18,876
67,500	1385,498	-1605,371	325,466	764,092	-242,708	21,392	-18,876
68,000	1462,326	-1698,197	343,486	793,294	-231,720	21,392	-18,876
68,500	1539,153	-1791,023	361,506	811,294	-231,720	21,392	-18,876
69,000	1615,980	-1883,849	379,526	840,283	-220,969	21,392	-18,876
69,500	1692,808	-1976,675	397,546	858,283	-220,969	21,392	-18,876
70,000	1769,635	-2069,501	415,566	887,034	-210,480	21,392	-18,876
70,500	1846,462	-2162,327	433,586	905,034	-210,480	21,392	-18,876
71,000	1923,290	-2255,153	451,606	933,523	-200,277	21,392	-18,876
71,500	2000,117	-2347,979	469,626	951,523	-200,277	21,392	-18,876
72,000	2076,944	-2440,805	487,646	979,725	-190,386	21,392	-18,876
72,500	2153,772	-2533,631	505,666	997,725	-190,386	21,392	-18,876
73,000	2230,599	-2626,457	523,686	1025,616	-180,831	21,392	-18,876
73,500	2307,426	-2719,283	541,706	1043,616	-180,831	21,392	-18,876
74,000	2384,253	-2812,109	559,726	1071,172	-171,635	21,392	-18,876
74,500	2461,081	-2904,935	577,746	1089,172	-171,635	21,392	-18,876
75,000	2537,908	-2997,761	595,766	1116,367	-167,264	21,392	-18,876

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
75,500	2614,735	-3090,587	613,786	1134,367	-167,264	21,392	-18,876
76,000	2691,563	-3183,413	631,806	1161,178	-167,264	21,392	-18,876
76,500	2768,390	-3276,239	649,826	1179,178	-167,264	21,392	-18,876
76,950	2846,802	-2942,147	666,044	1203,780	-167,264	21,392	-18,876
77,400	2925,214	-2608,038	682,262	1219,980	-167,264	21,392	-18,876
77,850	3003,626	-2273,945	698,480	1244,179	-167,264	21,392	-18,876
78,300	3082,037	-1939,837	714,698	1260,379	-167,264	21,392	-18,876
78,750	3160,449	-1605,744	730,916	1284,184	-167,264	21,392	-18,876
79,200	3257,355	-1271,635	747,134	1302,221	-167,264	21,392	-18,876
79,650	3354,261	-937,543	763,352	1318,421	-167,264	21,392	-18,876
80,100	3451,167	-603,434	779,570	1341,747	-167,264	21,392	-18,876
80,550	3548,073	-269,341	795,788	1357,947	-167,264	21,392	-18,876
81,000	3644,979	64,768	812,006	1380,918	-167,264	21,392	-18,876
81,450	-3546,154	317,552	-794,974	201,347	-1386,868	4,981	-5,645
81,900	-3449,248	651,645	-778,756	201,347	-1370,668	4,981	-5,645
82,350	-3352,342	985,754	-762,538	201,347	-1347,522	4,981	-5,645
82,800	-3255,436	1319,846	-746,320	201,347	-1331,322	4,981	-5,645
83,250	-3158,530	1653,955	-730,102	201,347	-1313,332	4,981	-5,645
83,700	-3080,118	1988,048	-713,884	201,347	-1289,723	4,981	-5,645
84,150	-3001,706	2322,157	-697,666	201,347	-1273,523	4,981	-5,645
84,600	-2923,295	2656,249	-681,448	201,347	-1249,518	4,981	-5,645
85,050	-2844,883	2990,358	-665,230	201,347	-1233,318	4,981	-5,645
85,500	-2766,471	3324,451	-649,012	201,347	-1215,107	4,981	-5,645
86,000	-2689,644	3231,625	-630,992	201,347	-1188,804	4,981	-5,645
86,500	-2612,816	3138,799	-612,972	201,347	-1170,804	4,981	-5,645
87,000	-2535,989	3045,973	-594,952	201,347	-1144,094	4,981	-5,645
87,500	-2459,162	2953,147	-576,932	201,347	-1126,094	4,981	-5,645
88,000	-2382,334	2860,321	-558,912	201,347	-1098,999	4,981	-5,645
88,500	-2305,507	2767,495	-540,892	201,347	-1080,999	4,981	-5,645
89,000	-2228,680	2674,669	-522,872	208,026	-1053,545	4,981	-5,645
89,500	-2151,853	2581,843	-504,852	208,026	-1035,545	4,981	-5,645
90,000	-2075,025	2489,017	-486,832	217,481	-1007,754	4,981	-5,645
90,500	-1998,198	2396,191	-468,812	217,481	-989,754	4,981	-5,645
91,000	-1921,371	2303,365	-450,792	227,271	-961,652	4,981	-5,645
91,500	-1844,543	2210,539	-432,772	227,271	-943,652	4,981	-5,645
92,000	-1767,716	2117,713	-414,752	237,374	-915,261	4,981	-5,645
92,500	-1690,889	2024,887	-396,732	237,374	-897,261	4,981	-5,645
93,000	-1614,061	1932,061	-378,712	247,764	-868,607	4,981	-5,645
93,500	-1537,234	1839,235	-360,692	247,764	-850,607	4,981	-5,645

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
94,000	-1460,407	1746,409	-342,672	258,419	-821,712	4,981	-5,645
94,500	-1383,579	1653,583	-324,652	258,419	-803,712	4,981	-5,645
95,000	-1306,752	1560,757	-306,632	269,313	-774,601	4,981	-5,645
95,500	-1229,925	1467,931	-288,612	269,313	-756,601	4,981	-5,645
96,000	-1153,098	1375,105	-270,592	280,424	-727,298	4,981	-5,645
96,500	-1076,270	1282,279	-252,572	280,424	-709,298	4,981	-5,645
97,000	-999,443	1189,453	-234,552	291,728	-679,826	4,981	-5,645
97,500	-922,616	1096,627	-216,532	291,728	-661,826	4,981	-5,645
98,000	-845,788	1003,801	-198,512	303,199	-632,211	4,981	-5,645
98,500	-768,961	910,975	-180,492	303,199	-614,211	4,981	-5,645
99,000	-692,134	818,149	-162,472	314,815	-584,474	4,981	-5,645
99,500	-615,306	725,323	-144,452	314,815	-566,474	4,981	-5,645
100,000	-538,479	632,497	-126,432	326,551	-536,642	4,981	-5,645
100,500	-461,652	539,671	-108,412	326,551	-518,642	4,981	-5,645
101,000	-384,824	446,845	-90,392	338,384	-488,737	4,981	-5,645
101,500	-307,997	354,019	-72,372	338,384	-470,737	4,981	-5,645
102,000	-231,170	261,193	-54,352	350,289	-440,783	4,981	-5,645
102,500	-154,343	168,367	-36,332	350,289	-422,783	4,981	-5,645
103,000	-77,515	75,541	-18,312	362,242	-392,805	4,981	-5,645
103,500	-0,688	-17,285	-0,292	362,242	-374,805	4,981	-5,645
104,000	76,139	-110,111	17,728	391,870	-362,476	4,981	-5,645
104,500	152,967	-202,937	35,748	409,870	-362,476	4,981	-5,645
105,000	229,794	-295,763	53,768	439,848	-350,520	4,981	-5,645
105,500	306,621	-388,589	71,788	457,848	-350,520	4,981	-5,645
106,000	383,449	-481,415	89,808	487,804	-338,612	4,981	-5,645
106,500	460,276	-574,241	107,828	505,804	-338,612	4,981	-5,645
107,000	537,103	-667,067	125,848	535,712	-326,776	4,981	-5,645
107,500	613,931	-759,893	143,868	553,712	-326,776	4,981	-5,645
108,000	690,758	-852,719	161,888	583,548	-315,034	4,981	-5,645
108,500	767,585	-945,545	179,908	601,548	-315,034	4,981	-5,645
109,000	844,412	-1038,371	197,928	631,290	-303,412	4,981	-5,645
109,500	921,240	-1131,197	215,948	649,290	-303,412	4,981	-5,645
110,000	998,067	-1224,023	233,968	678,912	-291,933	4,981	-5,645
110,500	1074,894	-1316,849	251,988	696,912	-291,933	4,981	-5,645
111,000	1151,722	-1409,675	270,008	726,391	-280,621	4,981	-5,645
111,500	1228,549	-1502,501	288,028	744,391	-280,621	4,981	-5,645
112,000	1305,376	-1595,327	306,048	773,703	-269,500	4,981	-5,645
112,500	1382,204	-1688,153	324,068	791,703	-269,500	4,981	-5,645
113,000	1459,031	-1780,979	342,088	820,824	-258,594	4,981	-5,645

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
113,500	1535,858	-1873,805	360,108	838,824	-258,594	4,981	-5,645
114,000	1612,686	-1966,631	378,128	867,730	-247,928	4,981	-5,645
114,500	1689,513	-2059,457	396,148	885,730	-247,928	4,981	-5,645
115,000	1766,340	-2152,283	414,168	914,397	-237,524	4,981	-5,645
115,500	1843,167	-2245,109	432,188	932,397	-237,524	4,981	-5,645
116,000	1919,995	-2337,935	450,208	960,800	-227,407	4,981	-5,645
116,500	1996,822	-2430,761	468,228	978,800	-227,407	4,981	-5,645
117,000	2073,649	-2523,587	486,248	1006,917	-217,601	4,981	-5,645
117,500	2150,477	-2616,413	504,268	1024,917	-217,601	4,981	-5,645
118,000	2227,304	-2709,239	522,288	1052,724	-208,129	4,981	-5,645
118,500	2304,131	-2802,065	540,308	1070,724	-208,129	4,981	-5,645
119,000	2380,959	-2894,891	558,328	1098,195	-200,822	4,981	-5,645
119,500	2457,786	-2987,717	576,348	1116,195	-200,822	4,981	-5,645
120,000	2534,613	-3080,543	594,368	1143,307	-200,822	4,981	-5,645
120,500	2611,440	-3173,369	612,388	1161,307	-200,822	4,981	-5,645
121,000	2688,268	-3266,195	630,408	1188,037	-200,822	4,981	-5,645
121,500	2765,095	-3359,021	648,428	1206,037	-200,822	4,981	-5,645
121,950	2843,507	-3024,913	664,646	1230,560	-200,822	4,981	-5,645
122,400	2921,919	-2690,820	680,864	1246,760	-200,822	4,981	-5,645
122,850	3000,331	-2356,711	697,082	1270,883	-200,822	4,981	-5,645
123,300	3078,742	-2022,619	713,300	1287,083	-200,822	4,981	-5,645
123,750	3157,154	-1688,510	729,518	1310,815	-200,822	4,981	-5,645
124,200	3254,060	-1354,417	745,736	1328,835	-200,822	4,981	-5,645
124,650	3350,966	-1020,308	761,954	1345,035	-200,822	4,981	-5,645
125,100	3447,872	-686,216	778,172	1368,291	-200,822	4,981	-5,645
125,550	3544,778	-352,107	794,390	1384,491	-200,822	4,981	-5,645
126,000	3641,684	-18,014	810,608	1407,397	-200,822	4,981	-5,645
126,450	-3545,466	334,838	-794,682	206,978	-1392,263	0,000	0,000
126,900	-3448,560	668,930	-778,464	206,978	-1376,063	0,000	0,000
127,350	-3351,654	1003,039	-762,246	206,978	-1352,900	0,000	0,000
127,800	-3254,748	1337,132	-746,028	206,978	-1336,700	0,000	0,000
128,250	-3157,842	1671,241	-729,810	206,978	-1318,706	0,000	0,000
128,700	-3079,430	2005,333	-713,592	206,978	-1295,082	0,000	0,000
129,150	-3001,019	2339,442	-697,374	206,978	-1278,882	0,000	0,000
129,600	-2922,607	2673,535	-681,156	206,978	-1254,862	0,000	0,000
130,050	-2844,195	3007,643	-664,938	206,978	-1238,662	0,000	0,000
130,500	-2765,783	3341,736	-648,720	206,978	-1220,447	0,000	0,000
131,000	-2688,956	3248,910	-630,700	206,978	-1194,132	0,000	0,000
131,500	-2612,128	3156,084	-612,680	206,978	-1176,132	0,000	0,000

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
132,000	-2535,301	3063,258	-594,660	206,978	-1149,409	0,000	0,000
132,500	-2458,474	2970,432	-576,640	206,978	-1131,409	0,000	0,000
133,000	-2381,647	2877,606	-558,620	206,978	-1104,304	0,000	0,000
133,500	-2304,819	2784,780	-540,600	206,978	-1086,304	0,000	0,000
134,000	-2227,992	2691,954	-522,580	213,839	-1058,841	0,000	0,000
134,500	-2151,165	2599,128	-504,560	213,839	-1040,841	0,000	0,000
135,000	-2074,337	2506,302	-486,540	223,303	-1013,042	0,000	0,000
135,500	-1997,510	2413,476	-468,520	223,303	-995,042	0,000	0,000
136,000	-1920,683	2320,650	-450,500	233,101	-966,933	0,000	0,000
136,500	-1843,855	2227,824	-432,480	233,101	-948,933	0,000	0,000
137,000	-1767,028	2134,998	-414,460	243,211	-920,536	0,000	0,000
137,500	-1690,201	2042,172	-396,440	243,211	-902,536	0,000	0,000
138,000	-1613,373	1949,346	-378,420	253,607	-873,876	0,000	0,000
138,500	-1536,546	1856,520	-360,400	253,607	-855,876	0,000	0,000
139,000	-1459,719	1763,694	-342,380	264,267	-826,978	0,000	0,000
139,500	-1382,892	1670,868	-324,360	264,267	-808,978	0,000	0,000
140,000	-1306,064	1578,042	-306,340	275,166	-779,864	0,000	0,000
140,500	-1229,237	1485,216	-288,320	275,166	-761,864	0,000	0,000
141,000	-1152,410	1392,390	-270,300	286,280	-732,558	0,000	0,000
141,500	-1075,582	1299,564	-252,280	286,280	-714,558	0,000	0,000
142,000	-998,755	1206,738	-234,260	297,585	-685,085	0,000	0,000
142,500	-921,928	1113,912	-216,240	297,585	-667,085	0,000	0,000
143,000	-845,100	1021,086	-198,220	309,058	-637,469	0,000	0,000
143,500	-768,273	928,260	-180,200	309,058	-619,469	0,000	0,000
144,000	-691,446	835,434	-162,180	320,675	-589,733	0,000	0,000
144,500	-614,618	742,608	-144,160	320,675	-571,733	0,000	0,000
145,000	-537,791	649,782	-126,140	332,410	-541,901	0,000	0,000
145,500	-460,964	556,956	-108,120	332,410	-523,901	0,000	0,000
146,000	-384,137	464,130	-90,100	344,242	-493,998	0,000	0,000
146,500	-307,309	371,304	-72,080	344,242	-475,998	0,000	0,000
147,000	-230,482	278,478	-54,060	356,145	-446,047	0,000	0,000
147,500	-153,655	185,652	-36,040	356,145	-428,047	0,000	0,000
148,000	-76,827	92,826	-18,020	368,097	-398,072	0,000	0,000
148,500	0,000	-92,826	0,000	368,097	-380,072	0,000	0,000
149,000	76,827	-185,652	18,020	398,072	-368,097	0,000	0,000
149,500	153,655	-278,478	36,040	416,072	-368,097	0,000	0,000
150,000	230,482	-371,304	54,060	446,047	-356,145	0,000	0,000
150,500	307,309	-464,130	72,080	464,047	-356,145	0,000	0,000
151,000	384,137	-556,956	90,100	493,998	-344,242	0,000	0,000

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
151,500	460,964	-649,782	108,120	511,998	-344,242	0,000	0,000
152,000	537,791	-742,608	126,140	541,901	-332,410	0,000	0,000
152,500	614,618	-835,434	144,160	559,901	-332,410	0,000	0,000
153,000	691,446	-928,260	162,180	589,733	-320,675	0,000	0,000
153,500	768,273	-1021,086	180,200	607,733	-320,675	0,000	0,000
154,000	845,100	-1113,912	198,220	637,469	-309,058	0,000	0,000
154,500	921,928	-1206,738	216,240	655,469	-309,058	0,000	0,000
155,000	998,755	-1299,564	234,260	685,085	-297,585	0,000	0,000
155,500	1075,582	-1392,390	252,280	703,085	-297,585	0,000	0,000
156,000	1152,410	-1485,216	270,300	732,558	-286,280	0,000	0,000
156,500	1229,237	-1578,042	288,320	750,558	-286,280	0,000	0,000
157,000	1306,064	-1670,868	306,340	779,864	-275,166	0,000	0,000
157,500	1382,892	-1763,694	324,360	797,864	-275,166	0,000	0,000
158,000	1459,719	-1856,520	342,380	826,978	-264,267	0,000	0,000
158,500	1536,546	-1949,346	360,400	844,978	-264,267	0,000	0,000
159,000	1613,373	-2042,172	378,420	873,876	-253,607	0,000	0,000
159,500	1690,201	-2134,998	396,440	891,876	-253,607	0,000	0,000
160,000	1767,028	-2227,824	414,460	920,536	-243,211	0,000	0,000
160,500	1843,855	-2320,650	432,480	938,536	-243,211	0,000	0,000
161,000	1920,683	-2413,476	450,500	966,933	-233,101	0,000	0,000
161,500	1997,510	-2506,302	468,520	984,933	-233,101	0,000	0,000
162,000	2074,337	-2599,128	486,540	1013,042	-223,303	0,000	0,000
162,500	2151,165	-2691,954	504,560	1031,042	-223,303	0,000	0,000
163,000	2227,992	-2784,780	522,580	1058,841	-213,839	0,000	0,000
163,500	2304,819	-2877,606	540,600	1076,841	-213,839	0,000	0,000
164,000	2381,647	-2970,432	558,620	1104,304	-206,978	0,000	0,000
164,500	2458,474	-3063,258	576,640	1122,304	-206,978	0,000	0,000
165,000	2535,301	-3156,084	594,660	1149,409	-206,978	0,000	0,000
165,500	2612,128	-3248,910	612,680	1167,409	-206,978	0,000	0,000
166,000	2688,956	-3341,736	630,700	1194,132	-206,978	0,000	0,000
166,500	2765,783	-3007,643	648,720	1212,132	-206,978	0,000	0,000
166,950	2844,195	-2673,535	664,938	1236,647	-206,978	0,000	0,000
167,400	2922,607	-2339,442	681,156	1252,847	-206,978	0,000	0,000
167,850	3001,019	-2005,333	697,374	1276,963	-206,978	0,000	0,000
168,300	3079,430	-1671,241	713,592	1293,163	-206,978	0,000	0,000
168,750	3157,842	-1337,132	729,810	1316,888	-206,978	0,000	0,000
169,200	3254,748	-1003,039	746,028	1334,906	-206,978	0,000	0,000
169,650	3351,654	-668,930	762,246	1351,106	-206,978	0,000	0,000
170,100	3448,560	-334,838	778,464	1374,355	-206,978	0,000	0,000

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
170,550	3545,466	-0,729	794,682	1390,555	-206,978	0,000	0,000
171,000	3642,372	352,107	810,900	1413,454	-206,978	0,000	0,000
171,450	-3544,778	686,216	-794,390	200,822	-1386,201	5,645	-4,981
171,900	-3447,872	1020,308	-778,172	200,822	-1370,001	5,645	-4,981
172,350	-3350,966	1354,417	-761,954	200,822	-1346,831	5,645	-4,981
172,800	-3254,060	1688,510	-745,736	200,822	-1330,631	5,645	-4,981
173,250	-3157,154	2022,619	-729,518	200,822	-1312,635	5,645	-4,981
173,700	-3078,742	2356,711	-713,300	200,822	-1289,004	5,645	-4,981
174,150	-3000,331	2690,820	-697,082	200,822	-1272,804	5,645	-4,981
174,600	-2921,919	3024,913	-680,864	200,822	-1248,777	5,645	-4,981
175,050	-2843,507	3359,021	-664,646	200,822	-1232,577	5,645	-4,981
175,500	-2765,095	3266,195	-648,428	200,822	-1214,360	5,645	-4,981
176,000	-2688,268	3173,369	-630,408	200,822	-1188,037	5,645	-4,981
176,500	-2611,440	3080,543	-612,388	200,822	-1170,037	5,645	-4,981
177,000	-2534,613	2987,717	-594,368	200,822	-1143,307	5,645	-4,981
177,500	-2457,786	2894,891	-576,348	200,822	-1125,307	5,645	-4,981
178,000	-2380,959	2802,065	-558,328	200,822	-1098,195	5,645	-4,981
178,500	-2304,131	2709,239	-540,308	200,822	-1080,195	5,645	-4,981
179,000	-2227,304	2616,413	-522,288	208,129	-1052,724	5,645	-4,981
179,500	-2150,477	2523,587	-504,268	208,129	-1034,724	5,645	-4,981
180,000	-2073,649	2430,761	-486,248	217,601	-1006,917	5,645	-4,981
180,500	-1996,822	2337,935	-468,228	217,601	-988,917	5,645	-4,981
181,000	-1919,995	2245,109	-450,208	227,407	-960,800	5,645	-4,981
181,500	-1843,167	2152,283	-432,188	227,407	-942,800	5,645	-4,981
182,000	-1766,340	2059,457	-414,168	237,524	-914,397	5,645	-4,981
182,500	-1689,513	1966,631	-396,148	237,524	-896,397	5,645	-4,981
183,000	-1612,686	1873,805	-378,128	247,928	-867,730	5,645	-4,981
183,500	-1535,858	1780,979	-360,108	247,928	-849,730	5,645	-4,981
184,000	-1459,031	1688,153	-342,088	258,594	-820,824	5,645	-4,981
184,500	-1382,204	1595,327	-324,068	258,594	-802,824	5,645	-4,981
185,000	-1305,376	1502,501	-306,048	269,500	-773,703	5,645	-4,981
185,500	-1228,549	1409,675	-288,028	269,500	-755,703	5,645	-4,981
186,000	-1151,722	1316,849	-270,008	280,621	-726,391	5,645	-4,981
186,500	-1074,894	1224,023	-251,988	280,621	-708,391	5,645	-4,981
187,000	-998,067	1131,197	-233,968	291,933	-678,912	5,645	-4,981
187,500	-921,240	1038,371	-215,948	291,933	-660,912	5,645	-4,981
188,000	-844,412	945,545	-197,928	303,412	-631,290	5,645	-4,981
188,500	-767,585	852,719	-179,908	303,412	-613,290	5,645	-4,981
189,000	-690,758	759,893	-161,888	315,034	-583,548	5,645	-4,981

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
189,500	-613,931	667,067	-143,868	315,034	-565,548	5,645	-4,981
190,000	-537,103	574,241	-125,848	326,776	-535,712	5,645	-4,981
190,500	-460,276	481,415	-107,828	326,776	-517,712	5,645	-4,981
191,000	-383,449	388,589	-89,808	338,612	-487,804	5,645	-4,981
191,500	-306,621	295,763	-71,788	338,612	-469,804	5,645	-4,981
192,000	-229,794	202,937	-53,768	350,520	-439,848	5,645	-4,981
192,500	-152,967	110,111	-35,748	350,520	-421,848	5,645	-4,981
193,000	-76,139	17,285	-17,728	362,476	-391,870	5,645	-4,981
193,500	0,688	-75,541	0,292	362,827	-374,220	5,645	-4,981
194,000	77,515	-168,367	18,312	392,805	-362,242	5,645	-4,981
194,500	154,343	-261,193	36,332	410,805	-362,242	5,645	-4,981
195,000	231,170	-354,019	54,352	440,783	-350,289	5,645	-4,981
195,500	307,997	-446,845	72,372	458,783	-350,289	5,645	-4,981
196,000	384,824	-539,671	90,392	488,737	-338,384	5,645	-4,981
196,500	461,652	-632,497	108,412	506,737	-338,384	5,645	-4,981
197,000	538,479	-725,323	126,432	536,642	-326,551	5,645	-4,981
197,500	615,306	-818,149	144,452	554,642	-326,551	5,645	-4,981
198,000	692,134	-910,975	162,472	584,474	-314,815	5,645	-4,981
198,500	768,961	-1003,801	180,492	602,474	-314,815	5,645	-4,981
199,000	845,788	-1096,627	198,512	632,211	-303,199	5,645	-4,981
199,500	922,616	-1189,453	216,532	650,211	-303,199	5,645	-4,981
200,000	999,443	-1282,279	234,552	679,826	-291,728	5,645	-4,981
200,500	1076,270	-1375,105	252,572	697,826	-291,728	5,645	-4,981
201,000	1153,098	-1467,931	270,592	727,298	-280,424	5,645	-4,981
201,500	1229,925	-1560,757	288,612	745,298	-280,424	5,645	-4,981
202,000	1306,752	-1653,583	306,632	774,601	-269,313	5,645	-4,981
202,500	1383,579	-1746,409	324,652	792,601	-269,313	5,645	-4,981
203,000	1460,407	-1839,235	342,672	821,712	-258,419	5,645	-4,981
203,500	1537,234	-1932,061	360,692	839,712	-258,419	5,645	-4,981
204,000	1614,061	-2024,887	378,712	868,607	-247,764	5,645	-4,981
204,500	1690,889	-2117,713	396,732	886,607	-247,764	5,645	-4,981
205,000	1767,716	-2210,539	414,752	915,261	-237,374	5,645	-4,981
205,500	1844,543	-2303,365	432,772	933,261	-237,374	5,645	-4,981
206,000	1921,371	-2396,191	450,792	961,652	-227,271	5,645	-4,981
206,500	1998,198	-2489,017	468,812	979,652	-227,271	5,645	-4,981
207,000	2075,025	-2581,843	486,832	1007,754	-217,481	5,645	-4,981
207,500	2151,853	-2674,669	504,852	1025,754	-217,481	5,645	-4,981
208,000	2228,680	-2767,495	522,872	1053,545	-208,026	5,645	-4,981
208,500	2305,507	-2860,321	540,892	1071,545	-208,026	5,645	-4,981

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
209,000	2382,334	-2953,147	558,912	1098,999	-201,347	5,645	-4,981
209,500	2459,162	-3045,973	576,932	1116,999	-201,347	5,645	-4,981
210,000	2535,989	-3138,799	594,952	1144,094	-201,347	5,645	-4,981
210,500	2612,816	-3231,625	612,972	1162,094	-201,347	5,645	-4,981
211,000	2689,644	-3324,451	630,992	1188,804	-201,347	5,645	-4,981
211,500	2766,471	-2990,358	649,012	1206,804	-201,347	5,645	-4,981
211,950	2844,883	-2656,249	665,230	1231,307	-201,347	5,645	-4,981
212,400	2923,295	-2322,157	681,448	1247,507	-201,347	5,645	-4,981
212,850	3001,706	-1988,048	697,666	1271,608	-201,347	5,645	-4,981
213,300	3080,118	-1653,955	713,884	1287,808	-201,347	5,645	-4,981
213,750	3158,530	-1319,846	730,102	1311,518	-201,347	5,645	-4,981
214,200	3255,436	-985,754	746,320	1329,532	-201,347	5,645	-4,981
214,650	3352,342	-651,645	762,538	1345,732	-201,347	5,645	-4,981
215,100	3449,248	-317,552	778,756	1368,964	-201,347	5,645	-4,981
215,550	3546,154	16,556	794,974	1385,164	-201,347	5,645	-4,981
216,000	3643,060	269,341	811,192	1408,045	-201,347	5,645	-4,981
216,450	-3548,073	603,434	-795,788	167,264	-1359,673	18,876	-21,392
216,900	-3451,167	937,543	-779,570	167,264	-1343,473	18,876	-21,392
217,350	-3354,261	1271,635	-763,352	167,264	-1320,235	18,876	-21,392
217,800	-3257,355	1605,744	-747,134	167,264	-1304,035	18,876	-21,392
218,250	-3160,449	1939,837	-730,916	167,264	-1286,021	18,876	-21,392
218,700	-3082,037	2273,945	-714,698	167,264	-1262,318	18,876	-21,392
219,150	-3003,626	2608,038	-698,480	167,264	-1246,118	18,876	-21,392
219,600	-2925,214	2942,147	-682,262	167,264	-1222,015	18,876	-21,392
220,050	-2846,802	3276,239	-666,044	167,264	-1205,815	18,876	-21,392
220,500	-2768,390	3183,413	-649,826	167,264	-1187,580	18,876	-21,392
221,000	-2691,563	3090,587	-631,806	167,264	-1161,178	18,876	-21,392
221,500	-2614,735	2997,761	-613,786	167,264	-1143,178	18,876	-21,392
222,000	-2537,908	2904,935	-595,766	167,264	-1116,367	18,876	-21,392
222,500	-2461,081	2812,109	-577,746	167,264	-1098,367	18,876	-21,392
223,000	-2384,253	2719,283	-559,726	171,635	-1071,172	18,876	-21,392
223,500	-2307,426	2626,457	-541,706	171,635	-1053,172	18,876	-21,392
224,000	-2230,599	2533,631	-523,686	180,831	-1025,616	18,876	-21,392
224,500	-2153,772	2440,805	-505,666	180,831	-1007,616	18,876	-21,392
225,000	-2076,944	2347,979	-487,646	190,386	-979,725	18,876	-21,392
225,500	-2000,117	2255,153	-469,626	190,386	-961,725	18,876	-21,392
226,000	-1923,290	2162,327	-451,606	200,277	-933,523	18,876	-21,392
226,500	-1846,462	2069,501	-433,586	200,277	-915,523	18,876	-21,392
227,000	-1769,635	1976,675	-415,566	210,480	-887,034	18,876	-21,392

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
227,500	-1692,808	1883,849	-397,546	210,480	-869,034	18,876	-21,392
228,000	-1615,980	1791,023	-379,526	220,969	-840,283	18,876	-21,392
228,500	-1539,153	1698,197	-361,506	220,969	-822,283	18,876	-21,392
229,000	-1462,326	1605,371	-343,486	231,720	-793,294	18,876	-21,392
229,500	-1385,498	1512,545	-325,466	231,720	-775,294	18,876	-21,392
230,000	-1308,671	1419,719	-307,446	242,708	-746,092	18,876	-21,392
230,500	-1231,844	1326,893	-289,426	242,708	-728,092	18,876	-21,392
231,000	-1155,017	1234,067	-271,406	253,910	-698,702	18,876	-21,392
231,500	-1078,189	1141,241	-253,386	253,910	-680,702	18,876	-21,392
232,000	-1001,362	1048,415	-235,366	265,301	-651,147	18,876	-21,392
232,500	-924,535	955,589	-217,346	265,301	-633,147	18,876	-21,392
233,000	-847,707	862,763	-199,326	276,855	-603,452	18,876	-21,392
233,500	-770,880	769,937	-181,306	276,855	-585,452	18,876	-21,392
234,000	-694,053	677,111	-163,286	288,550	-555,643	18,876	-21,392
234,500	-617,225	584,285	-145,266	288,550	-537,643	18,876	-21,392
235,000	-540,398	491,459	-127,246	300,360	-507,742	18,876	-21,392
235,500	-463,571	398,633	-109,226	300,360	-489,742	18,876	-21,392
236,000	-386,743	305,807	-91,206	312,260	-459,776	18,876	-21,392
236,500	-309,916	212,981	-73,186	312,260	-441,776	18,876	-21,392
237,000	-233,089	120,155	-55,166	324,227	-411,767	18,876	-21,392
237,500	-156,262	27,329	-37,146	324,227	-393,767	18,876	-21,392
238,000	-79,434	-65,497	-19,126	336,235	-363,742	18,876	-21,392
238,500	-2,607	-158,323	-1,106	340,571	-350,077	18,876	-21,392
239,000	74,220	-251,149	16,914	370,597	-338,059	18,876	-21,392
239,500	151,048	-343,975	34,934	388,597	-338,059	18,876	-21,392
240,000	227,875	-436,801	52,954	418,615	-326,072	18,876	-21,392
240,500	304,702	-529,627	70,974	436,615	-326,072	18,876	-21,392
241,000	381,530	-622,453	88,994	466,602	-314,141	18,876	-21,392
241,500	458,357	-715,279	107,014	484,602	-314,141	18,876	-21,392
242,000	535,184	-808,105	125,034	514,532	-302,292	18,876	-21,392
242,500	612,011	-900,931	143,054	532,532	-302,292	18,876	-21,392
243,000	688,839	-993,757	161,074	562,382	-290,547	18,876	-21,392
243,500	765,666	-1086,583	179,094	580,382	-290,547	18,876	-21,392
244,000	842,493	-1179,409	197,114	610,127	-278,932	18,876	-21,392
244,500	919,321	-1272,235	215,134	628,127	-278,932	18,876	-21,392
245,000	996,148	-1365,061	233,154	657,742	-267,471	18,876	-21,392
245,500	1072,975	-1457,887	251,174	675,742	-267,471	18,876	-21,392
246,000	1149,803	-1550,713	269,194	705,203	-256,188	18,876	-21,392
246,500	1226,630	-1643,539	287,214	723,203	-256,188	18,876	-21,392

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
247,000	1303,457	-1736,365	305,234	752,486	-245,109	18,876	-21,392
247,500	1380,285	-1829,191	323,254	770,486	-245,109	18,876	-21,392
248,000	1457,112	-1922,017	341,274	799,565	-234,257	18,876	-21,392
248,500	1533,939	-2014,843	359,294	817,565	-234,257	18,876	-21,392
249,000	1610,766	-2107,669	377,314	846,417	-223,658	18,876	-21,392
249,500	1687,594	-2200,495	395,334	864,417	-223,658	18,876	-21,392
250,000	1764,421	-2293,321	413,354	893,016	-213,335	18,876	-21,392
250,500	1841,248	-2386,147	431,374	911,016	-213,335	18,876	-21,392
251,000	1918,076	-2478,973	449,394	939,339	-203,313	18,876	-21,392
251,500	1994,903	-2571,799	467,414	957,339	-203,313	18,876	-21,392
252,000	2071,730	-2664,625	485,434	985,361	-193,616	18,876	-21,392
252,500	2148,558	-2757,451	503,454	1003,361	-193,616	18,876	-21,392
253,000	2225,385	-2850,277	521,474	1031,058	-184,270	18,876	-21,392
253,500	2302,212	-2943,103	539,494	1049,058	-184,270	18,876	-21,392
254,000	2379,040	-3035,929	557,514	1076,404	-179,382	18,876	-21,392
254,500	2455,867	-3128,755	575,534	1094,404	-179,382	18,876	-21,392
255,000	2532,694	-3221,581	593,554	1121,376	-179,382	18,876	-21,392
255,500	2609,521	-3314,407	611,574	1139,376	-179,382	18,876	-21,392
256,000	2686,349	-3407,233	629,594	1165,949	-179,382	18,876	-21,392
256,500	2763,176	-3407,233	647,614	1183,949	-179,382	18,876	-21,392
256,950	2841,588	-3073,124	663,832	1208,298	-179,382	18,876	-21,392
257,400	2920,000	-2739,031	680,050	1224,498	-179,382	18,876	-21,392
257,850	2998,412	-2404,922	696,268	1248,432	-179,382	18,876	-21,392
258,300	3076,823	-2070,830	712,486	1264,632	-179,382	18,876	-21,392
258,750	3155,235	-1736,721	728,704	1288,159	-179,382	18,876	-21,392
259,200	3252,141	-1402,628	744,922	1306,124	-179,382	18,876	-21,392
259,650	3349,047	-1068,520	761,140	1322,324	-179,382	18,876	-21,392
260,100	3445,953	-734,427	777,358	1345,357	-179,382	18,876	-21,392
260,550	3542,859	-400,318	793,576	1361,557	-179,382	18,876	-21,392
261,000	3639,765	-66,226	809,794	1384,226	-179,382	18,876	-21,392
261,450	-3606,231	746,399	-806,499	51,103	-1285,082	99,873	-88,124
261,900	-3509,326	1080,508	-790,281	51,103	-1268,882	99,873	-88,124
262,350	-3412,420	1414,600	-774,063	51,103	-1245,648	99,873	-88,124
262,800	-3315,514	1748,709	-757,845	51,103	-1229,448	99,873	-88,124
263,250	-3218,608	2082,802	-741,627	51,103	-1211,434	99,873	-88,124
263,700	-3140,196	2416,910	-725,409	51,666	-1187,717	99,873	-88,124
264,150	-3061,784	2751,003	-709,191	51,666	-1171,517	99,873	-88,124
264,600	-2983,372	3085,112	-692,973	59,183	-1147,375	99,873	-88,124
265,050	-2904,961	3419,204	-676,755	59,183	-1131,175	99,873	-88,124

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
265,500	-2826,549	3753,313	-660,537	67,125	-1112,925	99,873	-88,124
266,000	-2749,721	3660,487	-642,517	69,176	-1086,437	99,873	-88,124
266,500	-2672,894	3567,661	-624,497	69,176	-1068,437	99,873	-88,124
267,000	-2596,067	3474,835	-606,477	77,663	-1041,490	99,873	-88,124
267,500	-2519,240	3382,009	-588,457	77,663	-1023,490	99,873	-88,124
268,000	-2442,412	3289,183	-570,437	86,611	-996,097	99,873	-88,124
268,500	-2365,585	3196,357	-552,417	86,611	-978,097	99,873	-88,124
269,000	-2288,758	3103,531	-534,397	96,003	-950,276	99,873	-88,124
269,500	-2211,930	3010,705	-516,377	96,003	-932,276	99,873	-88,124
270,000	-2135,103	2917,879	-498,357	105,825	-904,039	99,873	-88,124
270,500	-2058,276	2825,053	-480,337	105,825	-886,039	99,873	-88,124
271,000	-1981,448	2732,227	-462,317	116,061	-857,403	99,873	-88,124
271,500	-1904,621	2639,401	-444,297	116,061	-839,403	99,873	-88,124
272,000	-1827,794	2546,575	-426,277	126,697	-810,382	99,873	-88,124
272,500	-1750,966	2453,749	-408,257	126,697	-792,382	99,873	-88,124
273,000	-1674,139	2360,923	-390,237	137,718	-762,992	99,873	-88,124
273,500	-1597,312	2268,097	-372,217	137,718	-744,992	99,873	-88,124
274,000	-1520,485	2175,271	-354,197	149,108	-715,248	99,873	-88,124
274,500	-1443,657	2082,445	-336,177	149,108	-697,248	99,873	-88,124
275,000	-1366,830	1989,619	-318,157	160,852	-667,164	99,873	-88,124
275,500	-1290,003	1896,793	-300,137	160,852	-649,164	99,873	-88,124
276,000	-1213,175	1803,967	-282,117	172,936	-618,756	99,873	-88,124
276,500	-1136,348	1711,141	-264,097	172,936	-600,756	99,873	-88,124
277,000	-1059,521	1618,315	-246,077	185,344	-570,040	99,873	-88,124
277,500	-982,693	1525,489	-228,057	185,344	-552,040	99,873	-88,124
278,000	-905,866	1432,663	-210,037	198,061	-521,029	99,873	-88,124
278,500	-829,039	1339,837	-192,017	198,061	-503,029	99,873	-88,124
279,000	-752,211	1247,011	-173,997	211,071	-471,739	99,873	-88,124
279,500	-675,384	1154,185	-155,977	211,071	-453,739	99,873	-88,124
280,000	-598,557	1061,359	-137,957	224,361	-422,185	99,873	-88,124
280,500	-521,730	968,533	-119,937	224,361	-404,185	99,873	-88,124
281,000	-444,902	875,707	-101,917	237,915	-372,383	99,873	-88,124
281,500	-368,075	782,881	-83,897	244,836	-361,303	99,873	-88,124
282,000	-291,248	690,055	-65,877	276,638	-347,267	99,873	-88,124
282,500	-214,420	597,229	-47,857	294,638	-347,267	99,873	-88,124
283,000	-137,593	504,403	-29,837	326,674	-333,012	99,873	-88,124
283,500	-60,766	411,577	-11,817	344,674	-333,012	99,873	-88,124
284,000	16,062	265,777	6,203	376,929	-318,554	99,873	-88,124
284,500	92,889	119,977	24,223	394,929	-318,554	99,873	-88,124

X [m]	V _{PP} [kN]	V _{PE} [kN]	V _{RCP} [kN]	V _{SCmax} [kN]	V _{SCmin} [kN]	V _{VDTmax} [kN]	V _{VDTmin} [kN]
285,000	169,716	-25,823	42,243	427,387	-303,907	99,873	-88,124
285,500	246,544	-171,623	60,263	445,387	-303,907	99,873	-88,124
286,000	323,371	-317,423	78,283	478,034	-289,087	99,873	-88,124
286,500	400,198	-463,223	96,303	496,034	-289,087	99,873	-88,124
287,000	477,025	-609,023	114,323	528,855	-274,108	99,873	-88,124
287,500	553,853	-754,823	132,343	546,855	-274,108	99,873	-88,124
288,000	630,680	-900,623	150,363	579,833	-258,987	99,873	-88,124
288,500	707,507	-1046,423	168,383	597,833	-258,987	99,873	-88,124
289,000	784,335	-1192,223	186,403	630,955	-243,737	99,873	-88,124
289,500	861,162	-1338,023	204,423	648,955	-243,737	99,873	-88,124
290,000	937,989	-1483,823	222,443	682,205	-228,374	99,873	-88,124
290,500	1014,817	-1629,623	240,463	700,205	-228,374	99,873	-88,124
291,000	1091,644	-1775,423	258,483	733,568	-212,913	99,873	-88,124
291,500	1168,471	-1921,223	276,503	751,568	-212,913	99,873	-88,124
292,000	1245,299	-2067,023	294,523	785,029	-197,369	99,873	-88,124
292,500	1322,126	-2212,823	312,543	803,029	-197,369	99,873	-88,124
292,950	1400,538	-2344,043	328,761	834,773	-181,761	99,873	-88,124
293,400	1478,950	-2475,263	344,979	850,973	-181,761	99,873	-88,124
293,850	1557,361	-2606,483	361,197	882,780	-179,275	99,873	-88,124
294,300	1635,773	-2737,703	377,415	898,980	-179,275	99,873	-88,124
294,750	1714,185	-2868,923	393,633	930,833	-179,275	99,873	-88,124
295,200	1811,091	-3000,143	409,851	950,952	-179,275	99,873	-88,124
295,650	1907,997	-3131,363	426,069	967,152	-179,275	99,873	-88,124
296,100	2004,903	-3262,583	442,287	999,041	-179,275	99,873	-88,124
296,550	2101,809	-3393,803	458,505	1015,241	-179,275	99,873	-88,124
297,000	2198,714	-3525,023	474,723	1047,143	-179,275	99,873	-88,124

ANEXO D - ESTADO LIMITE DE DESCOMPRESSÃO

D.1 Início de exploração

v_{inf} [m]	v_{sup} [m]	f_{ctm}	f_{ctk}
1,94	0,86	3,200	2,200

X [m]	A_c [m ²]	I_c [m ⁴]	$M_{qp,0}$ [kN.m]	P_0 [kN]	$P_0 \times e$ [kN.m]	$M_{PE,Hip,0}$ [kN.m]	σ_{sup} [Mpa]	σ_{inf} [Mpa]
0,000	16,290	13,155	0,000	17196,429	0,000	0,000	-1,056	-1,056
0,450	11,615	8,100	1511,536	17239,814	-1853,472	96,505	-1,458	-1,543
0,900	11,030	7,767	2937,031	17283,309	-3653,307	193,500	-1,509	-1,697
1,350	10,641	7,458	4277,375	17326,914	-5399,066	290,980	-1,532	-1,844
1,800	9,958	7,075	5544,760	17370,628	-7090,304	388,951	-1,604	-2,062
2,250	9,550	6,747	6739,726	17414,453	-8726,576	487,412	-1,632	-2,255
2,700	9,138	6,410	7862,120	17458,389	-10307,433	586,366	-1,661	-2,473
3,150	8,722	6,063	8931,165	17502,435	-11832,424	685,818	-1,693	-2,716
3,600	8,354	5,720	9933,697	17546,592	-13301,097	785,764	-1,712	-2,976
4,050	7,983	5,366	10895,930	17590,861	-14712,996	886,210	-1,734	-3,263
4,500	6,148	4,697	11809,647	17635,242	-16067,665	987,161	-2,270	-4,219
5,000	6,148	4,697	12765,128	17684,685	-17505,169	1099,911	-2,210	-4,380
5,500	6,148	4,697	13685,363	17734,266	-18870,816	1213,288	-2,157	-4,525
6,000	6,148	4,697	14537,811	17783,987	-20163,968	1327,293	-2,106	-4,668
6,500	6,148	4,697	15358,030	17833,847	-21383,981	1441,924	-2,061	-4,794
7,000	6,148	4,697	16107,506	17883,847	-22530,213	1557,189	-2,018	-4,918
7,500	6,148	4,697	16827,720	17933,987	-23602,012	1673,086	-1,983	-5,024
8,000	6,148	4,697	17474,298	17984,268	-24598,728	1789,618	-1,948	-5,129
8,500	6,148	4,697	18094,516	18034,689	-25519,704	1906,788	-1,923	-5,213
9,000	6,148	4,697	18638,280	18085,252	-26364,279	2024,606	-1,898	-5,296
9,500	6,148	4,697	19158,516	18135,957	-27131,789	2143,063	-1,882	-5,358
10,000	6,148	4,697	19599,560	18186,804	-27821,568	2262,169	-1,867	-5,420
10,500	6,148	4,697	20019,828	18237,793	-28432,944	2381,924	-1,862	-5,457
11,000	6,148	4,697	20358,257	18288,925	-28965,242	2502,331	-1,857	-5,496
11,500	6,148	4,697	20678,573	18340,201	-29417,783	2623,395	-1,863	-5,509
12,000	6,148	4,697	20914,502	18391,621	-29789,884	2745,116	-1,869	-5,523
12,500	6,148	4,697	21134,884	18443,184	-30080,859	2867,498	-1,887	-5,510
13,000	6,148	4,697	21268,438	18494,892	-30290,016	2990,545	-1,904	-5,499
13,500	6,148	4,697	21388,904	18546,746	-30416,663	3114,258	-1,934	-5,459
14,000	6,148	4,697	21420,221	18586,584	-30455,379	3236,521	-1,962	-5,418
14,500	6,148	4,697	21440,791	18626,507	-30440,772	3359,296	-1,997	-5,359

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
15,000	6,148	4,697	21370,018	18666,517	-30372,497	3482,588	-2,026	-5,316
15,500	6,148	4,697	21290,714	18706,612	-30250,208	3606,392	-2,063	-5,254
16,000	6,148	4,697	21118,008	18746,794	-30073,560	3730,716	-2,093	-5,207
16,500	6,148	4,697	20938,854	18787,061	-29842,203	3855,553	-2,132	-5,141
17,000	6,148	4,697	20665,465	18827,416	-29555,788	3980,913	-2,164	-5,090
17,500	6,148	4,697	20385,404	18867,857	-29213,964	4106,792	-2,204	-5,019
18,000	6,148	4,697	20012,189	18908,384	-28816,378	4233,200	-2,239	-4,963
18,500	6,148	4,697	19630,568	18948,999	-28362,675	4360,131	-2,282	-4,888
19,000	6,148	4,697	19157,555	18989,701	-27852,500	4487,590	-2,318	-4,826
19,500	6,148	4,697	18674,564	19030,491	-27285,495	4615,573	-2,364	-4,746
20,000	6,148	4,697	18101,780	19071,368	-26661,302	4744,089	-2,403	-4,678
20,500	6,148	4,697	17517,622	19112,333	-25979,560	4873,134	-2,452	-4,591
21,000	6,148	4,697	16845,096	19153,386	-25239,907	5002,717	-2,494	-4,516
21,500	6,148	4,697	16159,982	19194,527	-24441,979	5132,832	-2,546	-4,423
22,000	6,148	4,697	15387,745	19235,757	-23585,413	5263,487	-2,592	-4,341
22,500	6,148	4,697	14601,897	19277,075	-22669,840	5394,678	-2,646	-4,240
23,000	6,148	4,697	13729,982	19318,482	-21694,893	5526,410	-2,696	-4,149
23,500	6,148	4,697	12843,634	19359,977	-20660,203	5658,679	-2,754	-4,040
24,000	6,148	4,697	11872,075	19401,562	-19565,398	5791,499	-2,808	-3,941
24,500	6,148	4,697	10885,469	19443,236	-18410,105	5924,864	-2,870	-3,823
25,000	6,148	4,697	9814,300	19485,000	-17193,949	6058,774	-2,927	-3,715
25,500	6,148	4,697	8727,692	19526,854	-15916,555	6193,235	-2,994	-3,587
26,000	6,148	4,697	7556,951	19568,797	-14577,546	6328,245	-3,056	-3,469
26,500	6,148	4,697	6370,605	19610,830	-13176,541	6463,807	-3,127	-3,331
27,000	6,148	4,697	5100,330	19652,954	-11713,161	6599,922	-3,194	-3,202
27,500	6,148	4,697	3814,520	19695,168	-10187,022	6736,596	-3,270	-3,053
28,000	6,148	4,697	2444,752	19737,473	-8597,741	6873,828	-3,342	-2,913
28,500	6,148	4,697	1059,765	19779,869	-6944,932	7011,618	-3,424	-2,752
29,000	6,148	4,697	-409,455	19822,356	-5228,208	7149,967	-3,501	-2,600
29,500	6,148	4,697	-1893,324	19864,934	-3447,179	7288,885	-3,588	-2,426
30,000	6,148	4,697	-3461,954	19907,603	-1601,456	7428,360	-3,671	-2,261
30,500	6,148	4,697	-5044,397	19950,365	309,354	7568,405	-3,764	-2,075
31,000	6,148	4,697	-6712,391	19971,445	2283,155	7700,624	-3,847	-1,897
31,500	6,148	4,697	-8379,991	19928,638	4304,586	7808,078	-3,925	-1,700
31,950	6,517	5,007	-9917,063	19885,924	6048,503	7902,664	-3,744	-1,488
32,400	6,800	5,305	-11467,608	19847,559	7602,409	7998,527	-3,589	-1,407
32,850	7,107	5,589	-13084,985	19748,086	8938,774	8068,993	-3,382	-1,417
33,300	7,428	5,865	-14740,301	19649,112	10079,208	8138,552	-3,155	-1,495
33,750	7,750	6,133	-16443,506	19550,633	11026,557	8207,209	-2,914	-1,640

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P_E,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
34,200	8,073	6,393	-18196,304	19452,649	11783,636	8274,978	-2,660	-1,845
34,650	8,395	6,647	-20007,193	19355,155	12353,234	8341,859	-2,394	-2,105
35,100	8,719	6,895	-21883,890	19258,150	12738,111	8407,862	-2,117	-2,416
35,550	9,043	7,139	-23830,306	19161,631	12940,999	8472,999	-1,828	-2,776
36,000	13,876	11,856	-25850,355	19065,596	12964,605	8537,267	-1,059	-2,086
36,450	9,043	7,139	-23786,796	18970,042	12811,608	8490,934	-1,798	-2,773
36,900	8,719	6,895	-21796,868	18874,968	12484,659	8444,855	-2,057	-2,409
37,350	8,395	6,647	-19876,661	18780,369	11986,383	8399,021	-2,303	-2,088
37,800	8,073	6,393	-18022,261	18686,245	11319,380	8353,435	-2,537	-1,814
38,250	7,750	6,133	-16216,365	18592,592	10486,222	8308,096	-2,760	-1,583
38,700	7,428	5,865	-14478,457	18499,409	9489,457	8263,005	-2,970	-1,407
39,150	7,107	5,589	-12757,432	18406,693	8331,606	8218,154	-3,173	-1,274
39,600	6,800	5,305	-11115,405	18314,442	7015,164	8173,545	-3,354	-1,204
40,050	6,517	5,007	-9499,019	18222,653	5542,602	8129,180	-3,513	-1,179
40,500	6,148	4,697	-7925,121	18131,323	3916,366	8085,053	-3,695	-1,266
41,000	6,148	4,697	-6251,267	18040,452	2062,402	8040,792	-3,640	-1,343
41,500	6,148	4,697	-4585,213	17940,018	278,181	7992,313	-3,593	-1,396
42,000	6,148	4,697	-2997,888	17901,566	-1440,082	7971,473	-3,559	-1,452
42,500	6,148	4,697	-1368,629	17863,196	-3099,816	7950,686	-3,543	-1,467
43,000	6,148	4,697	173,013	17824,908	-4701,375	7929,954	-3,522	-1,494
43,500	6,148	4,697	1702,905	17786,703	-6245,109	7909,272	-3,510	-1,502
44,000	6,148	4,697	3145,857	17748,579	-7731,369	7888,648	-3,492	-1,523
44,500	6,148	4,697	4576,344	17710,537	-9160,502	7868,074	-3,482	-1,524
45,000	6,148	4,697	5920,351	17672,577	-10532,856	7847,554	-3,467	-1,538
45,500	6,148	4,697	7251,399	17634,698	-11848,775	7827,087	-3,460	-1,534
46,000	6,148	4,697	8496,224	17578,074	-13094,580	7798,321	-3,445	-1,538
46,500	6,148	4,697	9735,760	17615,832	-14358,860	7811,429	-3,449	-1,548
47,000	6,148	4,697	10897,472	17653,670	-15577,947	7824,558	-3,447	-1,573
47,500	6,148	4,697	12045,836	17691,590	-16751,533	7837,711	-3,451	-1,584
48,000	6,148	4,697	13107,943	17729,591	-17879,308	7850,884	-3,448	-1,612
48,500	6,148	4,697	14156,777	17767,674	-18960,960	7864,079	-3,450	-1,626
49,000	6,148	4,697	15119,091	17805,839	-19996,177	7877,295	-3,446	-1,657
49,500	6,148	4,697	16068,370	17844,086	-20984,645	7890,530	-3,447	-1,674
50,000	6,148	4,697	16930,722	17882,414	-21926,048	7903,789	-3,441	-1,707
50,500	6,148	4,697	17780,423	17920,825	-22820,069	7917,070	-3,442	-1,726
51,000	6,148	4,697	18542,661	17959,319	-23666,392	7930,372	-3,435	-1,762
51,500	6,148	4,697	19292,764	17997,895	-24464,695	7943,692	-3,435	-1,783
52,000	6,148	4,697	19954,754	18036,555	-25214,658	7957,039	-3,428	-1,820
52,500	6,148	4,697	20605,241	18075,297	-25915,959	7970,405	-3,427	-1,842

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
53,000	6,148	4,697	21166,865	18114,122	-26568,274	7983,793	-3,419	-1,880
53,500	6,148	4,697	21717,721	18153,031	-27171,277	7997,204	-3,418	-1,902
54,000	6,148	4,697	22178,878	18192,023	-27724,644	8010,634	-3,410	-1,941
54,500	6,148	4,697	22630,089	18231,100	-28228,044	8024,086	-3,410	-1,963
55,000	6,148	4,697	22990,696	18270,260	-28681,150	8037,562	-3,401	-2,002
55,500	6,148	4,697	23342,252	18309,504	-29083,630	8051,059	-3,401	-2,024
56,000	6,148	4,697	23602,243	18348,832	-29435,151	8064,577	-3,393	-2,063
56,500	6,148	4,697	23854,136	18388,245	-29735,382	8078,118	-3,393	-2,084
57,000	6,148	4,697	24013,461	18427,743	-29983,985	8091,681	-3,386	-2,121
57,500	6,148	4,697	24165,685	18467,325	-30180,625	8105,265	-3,387	-2,140
58,000	6,148	4,697	24224,313	18506,993	-30324,964	8118,873	-3,380	-2,177
58,500	6,148	4,697	24276,866	18546,746	-30416,663	8132,499	-3,382	-2,194
59,000	6,148	4,697	24235,183	18586,584	-30455,379	8146,150	-3,376	-2,228
59,500	6,148	4,697	24187,661	18626,507	-30440,772	8159,824	-3,379	-2,242
60,000	6,148	4,697	24046,306	18666,517	-30372,497	8173,519	-3,374	-2,273
60,500	6,148	4,697	23898,076	18706,612	-30250,208	8187,235	-3,379	-2,285
61,000	6,148	4,697	23657,050	18746,794	-30073,560	8200,973	-3,376	-2,312
61,500	6,148	4,697	23408,133	18787,061	-29842,203	8214,735	-3,382	-2,320
62,000	6,148	4,697	23067,441	18827,416	-29555,788	8228,519	-3,381	-2,344
62,500	6,148	4,697	22717,877	18867,857	-29213,964	8242,325	-3,389	-2,348
63,000	6,148	4,697	22277,524	18908,384	-28816,378	8256,155	-3,390	-2,366
63,500	6,148	4,697	21827,369	18948,999	-28362,675	8270,003	-3,400	-2,366
64,000	6,148	4,697	21287,365	18989,701	-27852,500	8283,876	-3,403	-2,379
64,500	6,148	4,697	20736,693	19030,491	-27285,495	8297,773	-3,416	-2,373
65,000	6,148	4,697	20097,049	19071,368	-26661,302	8311,691	-3,422	-2,380
65,500	6,148	4,697	19445,949	19112,333	-25979,560	8325,629	-3,437	-2,369
66,000	6,148	4,697	18706,681	19153,386	-25239,907	8339,593	-3,446	-2,369
66,500	6,148	4,697	17955,261	19194,527	-24441,979	8353,579	-3,464	-2,351
67,000	6,148	4,697	17116,383	19235,757	-23585,413	8367,588	-3,476	-2,345
67,500	6,148	4,697	16264,768	19277,075	-22669,840	8381,620	-3,497	-2,319
68,000	6,148	4,697	15326,300	19318,482	-21694,893	8395,672	-3,513	-2,305
68,500	6,148	4,697	14374,632	19359,977	-20660,203	8409,748	-3,538	-2,272
69,000	6,148	4,697	13336,595	19401,562	-19565,398	8423,847	-3,558	-2,249
69,500	6,148	4,697	12285,032	19443,236	-18410,105	8437,970	-3,586	-2,207
70,000	6,148	4,697	11147,450	19485,000	-17193,949	8452,117	-3,610	-2,176
70,500	6,148	4,697	9996,170	19526,854	-15916,555	8466,282	-3,642	-2,125
71,000	6,148	4,697	8759,069	19568,797	-14577,546	8480,474	-3,670	-2,084
71,500	6,148	4,697	7516,648	19610,830	-13176,541	8494,687	-3,709	-2,019
72,000	6,148	4,697	6188,600	19652,954	-11713,161	8508,923	-3,743	-1,964

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P₀,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
72,500	6,148	4,697	4847,023	19695,168	-10187,022	8523,184	-3,786	-1,889
73,000	6,148	4,697	3419,516	19737,473	-8597,741	8537,465	-3,825	-1,823
73,500	6,148	4,697	1978,853	19779,869	-6944,932	8551,769	-3,874	-1,736
74,000	6,148	4,697	451,920	19822,356	-5228,208	8566,100	-3,918	-1,659
74,500	6,148	4,697	-1087,585	19864,934	-3447,179	8580,451	-3,972	-1,560
75,000	6,148	4,697	-2713,907	19907,603	-1601,456	8594,826	-4,022	-1,471
75,500	6,148	4,697	-4328,742	19950,365	309,354	8609,223	-4,085	-1,349
76,000	6,148	4,697	-5992,749	19971,445	2283,155	8614,254	-4,146	-1,223
76,500	6,148	4,697	-7665,669	19928,638	4304,586	8591,730	-4,199	-1,081
76,950	6,517	5,007	-9247,932	19885,924	6048,503	8569,674	-3,974	-0,971
77,400	6,800	5,305	-10841,753	19847,559	7602,409	8549,507	-3,780	-0,977
77,850	7,107	5,589	-12504,317	19748,086	8938,774	8503,042	-3,538	-1,065
78,300	7,428	5,865	-14202,994	19649,112	10079,208	8456,828	-3,280	-1,212
78,750	7,750	6,133	-15950,943	19550,633	11026,557	8410,866	-3,012	-1,420
79,200	8,073	6,393	-17748,795	19452,649	11783,636	8365,151	-2,733	-1,681
79,650	8,395	6,647	-19604,868	19355,155	12353,234	8319,682	-2,444	-1,994
80,100	8,719	6,895	-21526,749	19258,150	12738,111	8274,463	-2,145	-2,353
80,550	9,043	7,139	-23518,350	19161,631	12940,999	8229,488	-1,836	-2,757
81,000	13,876	11,856	-25583,583	19065,596	12964,605	8184,756	-1,052	-2,100
81,450	9,043	7,139	-23522,788	18970,042	12811,608	8143,473	-1,788	-2,796
81,900	8,719	6,895	-21535,625	18874,968	12484,659	8102,399	-2,046	-2,432
82,350	8,395	6,647	-19618,182	18780,369	11986,383	8061,530	-2,293	-2,112
82,800	8,073	6,393	-17765,084	18686,245	11319,380	8020,871	-2,527	-1,837
83,250	7,750	6,133	-15957,007	18592,592	10486,222	7980,418	-2,751	-1,605
83,700	7,428	5,865	-14221,952	18499,409	9489,457	7940,165	-2,961	-1,429
84,150	7,107	5,589	-12502,593	18406,693	8331,606	7900,121	-3,164	-1,295
84,600	6,800	5,305	-10863,435	18314,442	7015,164	7860,274	-3,344	-1,226
85,050	6,517	5,007	-9248,856	18222,653	5542,602	7820,632	-3,503	-1,202
85,500	6,148	4,697	-7677,594	18131,323	3916,366	7781,190	-3,685	-1,289
86,000	6,148	4,697	-6006,029	18040,452	2062,402	7741,921	-3,630	-1,366
86,500	6,148	4,697	-4343,201	17940,018	278,181	7698,554	-3,583	-1,417
87,000	6,148	4,697	-2735,193	17901,566	-1440,082	7681,785	-3,554	-1,464
87,500	6,148	4,697	-1109,571	17863,196	-3099,816	7665,052	-3,538	-1,478
88,000	6,148	4,697	429,120	17824,908	-4701,375	7648,361	-3,517	-1,505
88,500	6,148	4,697	1955,363	17786,703	-6245,109	7631,705	-3,505	-1,513
89,000	6,148	4,697	3395,248	17748,579	-7731,369	7615,084	-3,487	-1,533
89,500	6,148	4,697	4822,075	17710,537	-9160,502	7598,502	-3,478	-1,534
90,000	6,148	4,697	6162,910	17672,577	-10532,856	7581,958	-3,463	-1,548
90,500	6,148	4,697	7490,288	17540,398	-11785,415	7524,996	-3,444	-1,519

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
91,000	6,148	4,697	8731,845	17578,074	-13094,580	7540,904	-3,441	-1,547
91,500	6,148	4,697	9975,340	17615,832	-14358,860	7556,847	-3,446	-1,555
92,000	6,148	4,697	11133,404	17653,670	-15577,947	7572,827	-3,444	-1,579
92,500	6,148	4,697	12277,788	17691,590	-16751,533	7588,839	-3,448	-1,591
93,000	6,148	4,697	13336,168	17729,591	-17879,308	7604,886	-3,444	-1,619
93,500	6,148	4,697	14381,017	17767,674	-18960,960	7620,968	-3,447	-1,634
94,000	6,148	4,697	15339,535	17805,839	-19996,177	7637,084	-3,442	-1,665
94,500	6,148	4,697	16284,825	17844,086	-20984,645	7653,235	-3,443	-1,683
95,000	6,148	4,697	17143,320	17882,414	-21926,048	7669,425	-3,437	-1,716
95,500	6,148	4,697	17989,029	17920,825	-22820,069	7685,646	-3,438	-1,736
96,000	6,148	4,697	18747,358	17959,319	-23666,392	7701,902	-3,431	-1,772
96,500	6,148	4,697	19493,466	17997,895	-24464,695	7718,197	-3,430	-1,793
97,000	6,148	4,697	20151,501	18036,555	-25214,658	7734,524	-3,423	-1,830
97,500	6,148	4,697	20797,993	18075,297	-25915,959	7750,887	-3,422	-1,853
98,000	6,148	4,697	21355,623	18114,122	-26568,274	7767,286	-3,414	-1,891
98,500	6,148	4,697	21902,483	18153,031	-27171,277	7783,722	-3,413	-1,914
99,000	6,148	4,697	22359,615	18192,023	-27724,644	7800,194	-3,405	-1,953
99,500	6,148	4,697	22806,831	18231,100	-28228,044	7816,700	-3,404	-1,976
100,000	6,148	4,697	23163,387	18270,260	-28681,150	7833,242	-3,396	-2,015
100,500	6,148	4,697	23510,950	18309,504	-29083,630	7849,820	-3,395	-2,038
101,000	6,148	4,697	23766,871	18348,832	-29435,151	7866,433	-3,387	-2,077
101,500	6,148	4,697	24014,773	18388,245	-29735,382	7883,085	-3,387	-2,098
102,000	6,148	4,697	24170,015	18427,743	-29983,985	7899,771	-3,379	-2,136
102,500	6,148	4,697	24318,252	18467,325	-30180,625	7916,492	-3,380	-2,155
103,000	6,148	4,697	24372,787	18506,993	-30324,964	7933,254	-3,373	-2,192
103,500	6,148	4,697	24421,356	18546,746	-30416,663	7950,048	-3,375	-2,209
104,000	6,148	4,697	24375,690	18586,584	-30455,379	7966,879	-3,369	-2,244
104,500	6,148	4,697	24324,077	18626,507	-30440,772	7983,751	-3,372	-2,259
105,000	6,148	4,697	24178,743	18666,517	-30372,497	8000,656	-3,367	-2,290
105,500	6,148	4,697	24026,423	18706,612	-30250,208	8017,598	-3,371	-2,302
106,000	6,148	4,697	23781,424	18746,794	-30073,560	8034,578	-3,368	-2,330
106,500	6,148	4,697	23528,422	18787,061	-29842,203	8051,592	-3,374	-2,338
107,000	6,148	4,697	23183,762	18827,416	-29555,788	8068,646	-3,373	-2,362
107,500	6,148	4,697	22830,122	18867,857	-29213,964	8085,735	-3,381	-2,366
108,000	6,148	4,697	22385,808	18908,384	-28816,378	8102,863	-3,382	-2,385
108,500	6,148	4,697	21931,590	18948,999	-28362,675	8120,028	-3,391	-2,385
109,000	6,148	4,697	21387,632	18989,701	-27852,500	8137,229	-3,395	-2,398
109,500	6,148	4,697	20832,911	19030,491	-27285,495	8154,470	-3,407	-2,392
110,000	6,148	4,697	20189,321	19071,368	-26661,302	8171,746	-3,413	-2,400

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P_E,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
110,500	6,148	4,697	19534,191	19112,333	-25979,560	8189,060	-3,428	-2,389
111,000	6,148	4,697	18790,982	19153,386	-25239,907	8206,415	-3,437	-2,390
111,500	6,148	4,697	18035,552	19194,527	-24441,979	8223,803	-3,455	-2,371
112,000	6,148	4,697	17192,743	19235,757	-23585,413	8241,232	-3,467	-2,365
112,500	6,148	4,697	16337,140	19277,075	-22669,840	8258,698	-3,488	-2,340
113,000	6,148	4,697	15394,748	19318,482	-21694,893	8276,201	-3,504	-2,326
113,500	6,148	4,697	14439,115	19359,977	-20660,203	8293,743	-3,528	-2,293
114,000	6,148	4,697	13397,163	19401,562	-19565,398	8311,324	-3,548	-2,271
114,500	6,148	4,697	12341,660	19443,236	-18410,105	8328,942	-3,576	-2,229
115,000	6,148	4,697	11200,172	19485,000	-17193,949	8346,598	-3,600	-2,198
115,500	6,148	4,697	10044,976	19526,854	-15916,555	8364,293	-3,633	-2,147
116,000	6,148	4,697	8803,977	19568,797	-14577,546	8382,028	-3,661	-2,106
116,500	6,148	4,697	7562,899	19610,830	-13176,541	8399,800	-3,700	-2,039
117,000	6,148	4,697	6236,290	19652,954	-11713,161	8417,608	-3,735	-1,982
117,500	6,148	4,697	4896,178	19695,168	-10187,022	8435,462	-3,779	-1,905
118,000	6,148	4,697	3470,119	19737,473	-8597,741	8453,351	-3,819	-1,837
118,500	6,148	4,697	2030,945	19779,869	-6944,932	8471,277	-3,869	-1,748
119,000	6,148	4,697	505,469	19822,356	-5228,208	8489,243	-3,914	-1,669
119,500	6,148	4,697	-1032,522	19864,934	-3447,179	8507,251	-3,969	-1,568
120,000	6,148	4,697	-2657,380	19907,603	-1601,456	8525,295	-4,019	-1,476
120,500	6,148	4,697	-4267,087	19950,365	309,354	8543,381	-4,085	-1,351
121,000	6,148	4,697	-5929,223	19971,445	2283,155	8552,180	-4,147	-1,222
121,500	6,148	4,697	-7600,186	19928,638	4304,586	8533,624	-4,201	-1,078
121,950	6,517	5,007	-9180,758	19885,924	6048,503	8515,133	-3,976	-0,966
122,400	6,800	5,305	-10772,790	19847,559	7602,409	8498,502	-3,783	-0,971
122,850	7,107	5,589	-12433,657	19748,086	8938,774	8455,712	-3,542	-1,057
123,300	7,428	5,865	-14130,529	19649,112	10079,208	8413,137	-3,285	-1,202
123,750	7,750	6,133	-15876,746	19550,633	11026,557	8370,774	-3,016	-1,409
124,200	8,073	6,393	-17672,943	19452,649	11783,636	8328,630	-2,738	-1,670
124,650	8,395	6,647	-19527,310	19355,155	12353,234	8286,693	-2,449	-1,981
125,100	8,719	6,895	-21447,485	19258,150	12738,111	8244,973	-2,151	-2,339
125,550	9,043	7,139	-23437,381	19161,631	12940,999	8203,458	-1,843	-2,742
126,000	13,876	11,856	-25500,908	19065,596	12964,605	8162,159	-1,057	-2,090
126,450	9,043	7,139	-23435,098	18970,042	12811,608	8120,975	-1,796	-2,778
126,900	8,719	6,895	-21442,120	18874,968	12484,659	8080,002	-2,055	-2,412
127,350	8,395	6,647	-19518,862	18780,369	11986,383	8039,236	-2,303	-2,089
127,800	8,073	6,393	-17661,412	18686,245	11319,380	7998,679	-2,538	-1,812
128,250	7,750	6,133	-15861,427	18592,592	10486,222	7958,323	-2,761	-1,582
128,700	7,428	5,865	-14123,916	18499,409	9489,457	7918,173	-2,972	-1,404

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
129,150	7,107	5,589	-12402,003	18406,693	8331,606	7878,225	-3,176	-1,268
129,600	6,800	5,305	-10760,390	18314,442	7015,164	7838,480	-3,357	-1,197
130,050	6,517	5,007	-9143,268	18222,653	5542,602	7798,938	-3,517	-1,170
130,500	6,148	4,697	-7569,532	18131,323	3916,366	7759,594	-3,701	-1,253
131,000	6,148	4,697	-5895,166	18040,452	2062,402	7720,419	-3,646	-1,329
131,500	6,148	4,697	-4229,614	17940,018	278,181	7677,158	-3,600	-1,379
132,000	6,148	4,697	-2616,912	17901,566	-1440,082	7660,426	-3,572	-1,424
132,500	6,148	4,697	-988,602	17863,196	-3099,816	7643,731	-3,556	-1,437
133,000	6,148	4,697	552,834	17824,908	-4701,375	7627,071	-3,536	-1,463
133,500	6,148	4,697	2081,764	17786,703	-6245,109	7610,448	-3,524	-1,469
134,000	6,148	4,697	3524,384	17748,579	-7731,369	7593,863	-3,507	-1,488
134,500	6,148	4,697	4953,898	17710,537	-9160,502	7577,315	-3,498	-1,489
135,000	6,148	4,697	6297,459	17672,577	-10532,856	7560,806	-3,483	-1,501
135,500	6,148	4,697	7627,523	17540,398	-11785,415	7503,990	-3,466	-1,471
136,000	6,148	4,697	8872,033	17578,074	-13094,580	7519,842	-3,463	-1,497
136,500	6,148	4,697	10118,123	17615,832	-14358,860	7535,727	-3,469	-1,504
137,000	6,148	4,697	11278,409	17653,670	-15577,947	7551,648	-3,467	-1,528
137,500	6,148	4,697	12424,989	17691,590	-16751,533	7567,602	-3,471	-1,539
138,000	6,148	4,697	13485,585	17729,591	-17879,308	7583,592	-3,468	-1,566
138,500	6,148	4,697	14532,629	17767,674	-18960,960	7599,618	-3,471	-1,580
139,000	6,148	4,697	15493,358	17805,839	-19996,177	7615,677	-3,466	-1,611
139,500	6,148	4,697	16440,842	17844,086	-20984,645	7631,773	-3,468	-1,627
140,000	6,148	4,697	17301,543	17882,414	-21926,048	7647,902	-3,462	-1,660
140,500	6,148	4,697	18149,447	17920,825	-22820,069	7664,067	-3,463	-1,679
141,000	6,148	4,697	18909,977	17959,319	-23666,392	7680,265	-3,456	-1,714
141,500	6,148	4,697	19658,279	17997,895	-24464,695	7696,500	-3,457	-1,734
142,000	6,148	4,697	20318,511	18036,555	-25214,658	7712,772	-3,449	-1,770
142,500	6,148	4,697	20967,197	18075,297	-25915,959	7729,076	-3,449	-1,792
143,000	6,148	4,697	21527,021	18114,122	-26568,274	7745,417	-3,441	-1,829
143,500	6,148	4,697	22076,075	18153,031	-27171,277	7761,794	-3,441	-1,851
144,000	6,148	4,697	22535,398	18192,023	-27724,644	7778,203	-3,433	-1,890
144,500	6,148	4,697	22984,808	18231,100	-28228,044	7794,650	-3,433	-1,912
145,000	6,148	4,697	23343,554	18270,260	-28681,150	7811,135	-3,425	-1,950
145,500	6,148	4,697	23693,311	18309,504	-29083,630	7827,652	-3,424	-1,971
146,000	6,148	4,697	23951,419	18348,832	-29435,151	7844,209	-3,417	-2,010
146,500	6,148	4,697	24201,516	18388,245	-29735,382	7860,799	-3,417	-2,030
147,000	6,148	4,697	24358,944	18427,743	-29983,985	7877,424	-3,410	-2,067
147,500	6,148	4,697	24509,375	18467,325	-30180,625	7894,089	-3,411	-2,086
148,000	6,148	4,697	24566,096	18506,993	-30324,964	7910,788	-3,404	-2,121

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P_E,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
148,500	6,148	4,697	24616,860	18546,746	-30416,663	7927,524	-3,406	-2,138
149,000	6,148	4,697	24573,389	18586,584	-30455,379	7944,296	-3,401	-2,171
149,500	6,148	4,697	24523,961	18626,507	-30440,772	7961,103	-3,404	-2,185
150,000	6,148	4,697	24380,823	18666,517	-30372,497	7977,948	-3,400	-2,216
150,500	6,148	4,697	24230,688	18706,612	-30250,208	7994,830	-3,404	-2,227
151,000	6,148	4,697	23987,885	18746,794	-30073,560	8011,748	-3,402	-2,254
151,500	6,148	4,697	23737,069	18787,061	-29842,203	8028,704	-3,408	-2,261
152,000	6,148	4,697	23394,606	18827,416	-29555,788	8045,696	-3,407	-2,284
152,500	6,148	4,697	23043,153	18867,857	-29213,964	8062,723	-3,415	-2,288
153,000	6,148	4,697	22601,036	18908,384	-28816,378	8079,789	-3,417	-2,305
153,500	6,148	4,697	22149,006	18948,999	-28362,675	8096,891	-3,427	-2,304
154,000	6,148	4,697	21607,245	18989,701	-27852,500	8114,031	-3,431	-2,317
154,500	6,148	4,697	21054,714	19030,491	-27285,495	8131,209	-3,443	-2,310
155,000	6,148	4,697	20413,322	19071,368	-26661,302	8148,423	-3,450	-2,317
155,500	6,148	4,697	19760,383	19112,333	-25979,560	8165,676	-3,465	-2,305
156,000	6,148	4,697	19019,373	19153,386	-25239,907	8182,966	-3,475	-2,305
156,500	6,148	4,697	18266,136	19194,527	-24441,979	8200,294	-3,493	-2,286
157,000	6,148	4,697	17425,526	19235,757	-23585,413	8217,657	-3,506	-2,279
157,500	6,148	4,697	16572,118	19277,075	-22669,840	8235,060	-3,527	-2,253
158,000	6,148	4,697	15631,927	19318,482	-21694,893	8252,503	-3,543	-2,238
158,500	6,148	4,697	14678,491	19359,977	-20660,203	8269,980	-3,568	-2,204
159,000	6,148	4,697	13638,740	19401,562	-19565,398	8287,497	-3,588	-2,181
159,500	6,148	4,697	12585,437	19443,236	-18410,105	8305,052	-3,617	-2,138
160,000	6,148	4,697	11446,150	19485,000	-17193,949	8322,643	-3,641	-2,106
160,500	6,148	4,697	10293,157	19526,854	-15916,555	8340,275	-3,674	-2,054
161,000	6,148	4,697	9054,360	19568,797	-14577,546	8357,944	-3,702	-2,012
161,500	6,148	4,697	7817,143	19610,830	-13176,541	8375,651	-3,742	-1,944
162,000	6,148	4,697	6494,372	19652,954	-11713,161	8393,399	-3,778	-1,885
162,500	6,148	4,697	5158,104	19695,168	-10187,022	8411,183	-3,823	-1,807
163,000	6,148	4,697	3735,883	19737,473	-8597,741	8429,005	-3,863	-1,737
163,500	6,148	4,697	2300,556	19779,869	-6944,932	8446,871	-3,913	-1,647
164,000	6,148	4,697	778,919	19822,356	-5228,208	8464,772	-3,959	-1,566
164,500	6,148	4,697	-755,223	19864,934	-3447,179	8482,713	-4,015	-1,463
165,000	6,148	4,697	-2376,240	19907,603	-1601,456	8500,693	-4,066	-1,370
165,500	6,148	4,697	-3981,649	19950,365	309,354	8518,710	-4,132	-1,243
166,000	6,148	4,697	-5639,908	19971,445	2283,155	8527,474	-4,195	-1,113
166,500	6,148	4,697	-7306,981	19928,638	4304,586	8508,957	-4,250	-0,967
166,950	6,517	5,007	-8884,064	19885,924	6048,503	8490,506	-4,023	-0,860
167,400	6,800	5,305	-10472,592	19847,559	7602,409	8473,913	-3,827	-0,870

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
167,850	7,107	5,589	-12129,969	19748,086	8938,774	8431,234	-3,585	-0,960
168,300	7,428	5,865	-13823,334	19649,112	10079,208	8388,766	-3,326	-1,109
168,750	7,750	6,133	-15566,057	19550,633	11026,557	8346,517	-3,056	-1,318
169,200	8,073	6,393	-17359,478	19452,649	11783,636	8304,482	-2,777	-1,582
169,650	8,395	6,647	-19210,364	19355,155	12353,234	8262,656	-2,487	-1,895
170,100	8,719	6,895	-21127,058	19258,150	12738,111	8221,044	-2,188	-2,256
170,550	9,043	7,139	-23113,472	19161,631	12940,999	8179,641	-1,879	-2,661
171,000	13,876	11,856	-25172,719	19065,596	12964,605	8138,445	-1,079	-2,040
171,450	9,043	7,139	-23121,169	18970,042	12811,608	8098,362	-1,831	-2,699
171,900	8,719	6,895	-21143,252	18874,968	12484,659	8058,475	-2,090	-2,334
172,350	8,395	6,647	-19235,054	18780,369	11986,383	8018,786	-2,337	-2,012
172,800	8,073	6,393	-17392,665	18686,245	11319,380	7979,296	-2,571	-1,736
173,250	7,750	6,133	-15608,446	18592,592	10486,222	7939,994	-2,794	-1,508
173,700	7,428	5,865	-13885,985	18499,409	9489,457	7900,892	-3,004	-1,331
174,150	7,107	5,589	-12179,108	18406,693	8331,606	7861,983	-3,207	-1,196
174,600	6,800	5,305	-10552,546	18314,442	7015,164	7823,261	-3,388	-1,126
175,050	6,517	5,007	-8950,461	18222,653	5542,602	7784,735	-3,548	-1,100
175,500	6,148	4,697	-7391,774	18131,323	3916,366	7746,399	-3,731	-1,185
176,000	6,148	4,697	-5734,120	18040,452	2062,402	7708,326	-3,673	-1,267
176,500	6,148	4,697	-4085,293	17940,018	278,181	7666,161	-3,625	-1,324
177,000	6,148	4,697	-2488,894	17901,566	-1440,082	7650,475	-3,593	-1,375
177,500	6,148	4,697	-877,345	17863,196	-3099,816	7634,824	-3,575	-1,395
178,000	6,148	4,697	647,337	17824,908	-4701,375	7619,209	-3,552	-1,427
178,500	6,148	4,697	2159,505	17786,703	-6245,109	7603,622	-3,537	-1,440
179,000	6,148	4,697	3585,370	17748,579	-7731,369	7588,068	-3,517	-1,465
179,500	6,148	4,697	4998,121	17710,537	-9160,502	7572,549	-3,505	-1,472
180,000	6,148	4,697	6324,924	17672,577	-10532,856	7557,061	-3,488	-1,491
180,500	6,148	4,697	7638,225	17540,398	-11785,415	7501,278	-3,467	-1,468
181,000	6,148	4,697	8865,994	17578,074	-13094,580	7518,131	-3,461	-1,501
181,500	6,148	4,697	10093,685	17615,832	-14358,860	7535,026	-3,464	-1,515
182,000	6,148	4,697	11235,572	17653,670	-15577,947	7551,957	-3,459	-1,546
182,500	6,148	4,697	12363,752	17691,590	-16751,533	7568,926	-3,460	-1,564
183,000	6,148	4,697	13405,946	17729,591	-17879,308	7585,936	-3,454	-1,598
183,500	6,148	4,697	14434,589	17767,674	-18960,960	7602,983	-3,453	-1,619
184,000	6,148	4,697	15376,914	17805,839	-19996,177	7620,070	-3,446	-1,657
184,500	6,148	4,697	16305,997	17844,086	-20984,645	7637,199	-3,444	-1,681
185,000	6,148	4,697	17148,291	17882,414	-21926,048	7654,365	-3,435	-1,721
185,500	6,148	4,697	17977,792	17920,825	-22820,069	7671,571	-3,433	-1,746
186,000	6,148	4,697	18719,914	17959,319	-23666,392	7688,815	-3,423	-1,789

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P_E,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
186,500	6,148	4,697	19449,813	17997,895	-24464,695	7706,100	-3,420	-1,816
187,000	6,148	4,697	20091,635	18036,555	-25214,658	7723,424	-3,410	-1,860
187,500	6,148	4,697	20721,917	18075,297	-25915,959	7740,787	-3,406	-1,888
188,000	6,148	4,697	21263,329	18114,122	-26568,274	7758,194	-3,396	-1,933
188,500	6,148	4,697	21793,978	18153,031	-27171,277	7775,637	-3,392	-1,962
189,000	6,148	4,697	22234,888	18192,023	-27724,644	7793,121	-3,381	-2,008
189,500	6,148	4,697	22665,893	18231,100	-28228,044	7810,646	-3,377	-2,037
190,000	6,148	4,697	23006,224	18270,260	-28681,150	7828,210	-3,366	-2,082
190,500	6,148	4,697	23337,576	18309,504	-29083,630	7845,815	-3,363	-2,111
191,000	6,148	4,697	23577,269	18348,832	-29435,151	7863,462	-3,352	-2,156
191,500	6,148	4,697	23808,959	18388,245	-29735,382	7881,147	-3,349	-2,184
192,000	6,148	4,697	23947,971	18427,743	-29983,985	7898,875	-3,338	-2,228
192,500	6,148	4,697	24079,996	18467,325	-30180,625	7916,641	-3,336	-2,254
193,000	6,148	4,697	24118,301	18506,993	-30324,964	7934,451	-3,327	-2,297
193,500	6,148	4,697	24150,659	18546,746	-30416,663	7952,301	-3,325	-2,320
194,000	6,148	4,697	24088,781	18586,584	-30455,379	7970,189	-3,317	-2,361
194,500	6,148	4,697	24020,937	18626,507	-30440,772	7988,123	-3,317	-2,382
195,000	6,148	4,697	23859,391	18666,517	-30372,497	8006,095	-3,310	-2,420
195,500	6,148	4,697	23690,841	18706,612	-30250,208	8024,110	-3,311	-2,438
196,000	6,148	4,697	23429,630	18746,794	-30073,560	8042,165	-3,305	-2,472
196,500	6,148	4,697	23160,401	18787,061	-29842,203	8060,261	-3,308	-2,486
197,000	6,148	4,697	22799,530	18827,416	-29555,788	8078,401	-3,304	-2,516
197,500	6,148	4,697	22429,664	18867,857	-29213,964	8096,582	-3,309	-2,527
198,000	6,148	4,697	21969,140	18908,384	-28816,378	8114,805	-3,308	-2,552
198,500	6,148	4,697	21498,699	18948,999	-28362,675	8133,070	-3,314	-2,558
199,000	6,148	4,697	20938,531	18989,701	-27852,500	8151,374	-3,315	-2,578
199,500	6,148	4,697	20367,592	19030,491	-27285,495	8169,723	-3,325	-2,578
200,000	6,148	4,697	19707,792	19071,368	-26661,302	8188,113	-3,328	-2,592
200,500	6,148	4,697	19036,448	19112,333	-25979,560	8206,546	-3,340	-2,587
201,000	6,148	4,697	18277,031	19153,386	-25239,907	8225,023	-3,346	-2,594
201,500	6,148	4,697	17505,394	19194,527	-24441,979	8243,539	-3,361	-2,582
202,000	6,148	4,697	16646,377	19235,757	-23585,413	8262,101	-3,371	-2,582
202,500	6,148	4,697	15774,572	19277,075	-22669,840	8280,705	-3,389	-2,563
203,000	6,148	4,697	14815,974	19318,482	-21694,893	8299,348	-3,402	-2,556
203,500	6,148	4,697	13844,147	19359,977	-20660,203	8318,037	-3,424	-2,529
204,000	6,148	4,697	12785,990	19401,562	-19565,398	8336,769	-3,441	-2,513
204,500	6,148	4,697	11714,302	19443,236	-18410,105	8355,546	-3,466	-2,477
205,000	6,148	4,697	10556,608	19485,000	-17193,949	8374,366	-3,487	-2,452
205,500	6,148	4,697	9385,236	19526,854	-15916,555	8393,226	-3,517	-2,407

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
206,000	6,148	4,697	8128,433	19568,797	-14577,546	8412,130	-3,542	-2,372
206,500	6,148	4,697	6873,567	19610,830	-13176,541	8431,077	-3,579	-2,311
207,000	6,148	4,697	5532,880	19652,954	-11713,161	8450,071	-3,612	-2,259
207,500	6,148	4,697	4178,737	19695,168	-10187,022	8469,109	-3,654	-2,187
208,000	6,148	4,697	2738,601	19737,473	-8597,741	8488,186	-3,692	-2,125
208,500	6,148	4,697	1285,407	19779,869	-6944,932	8507,310	-3,739	-2,041
209,000	6,148	4,697	-254,144	19822,356	-5228,208	8526,477	-3,782	-1,967
209,500	6,148	4,697	-1806,143	19864,934	-3447,179	8545,689	-3,834	-1,871
210,000	6,148	4,697	-3445,074	19907,603	-1601,456	8564,947	-3,882	-1,785
210,500	6,148	4,697	-5066,391	19950,365	309,354	8584,245	-3,946	-1,664
211,000	6,148	4,697	-6742,528	19971,445	2283,155	8594,222	-4,005	-1,541
211,500	6,148	4,697	-8427,401	19928,638	4304,586	8576,704	-4,057	-1,402
211,950	6,517	5,007	-10020,572	19885,924	6048,503	8559,134	-3,839	-1,274
212,400	6,800	5,305	-11625,102	19847,559	7602,409	8543,435	-3,652	-1,266
212,850	7,107	5,589	-13298,565	19748,086	8938,774	8501,423	-3,416	-1,341
213,300	7,428	5,865	-15007,921	19649,112	10079,208	8459,622	-3,163	-1,477
213,750	7,750	6,133	-16766,703	19550,633	11026,557	8418,024	-2,898	-1,675
214,200	8,073	6,393	-18586,758	19452,649	11783,636	8376,632	-2,621	-1,932
214,650	8,395	6,647	-20451,833	19355,155	12353,234	8335,445	-2,336	-2,236
215,100	8,719	6,895	-22381,254	19258,150	12738,111	8294,460	-2,041	-2,588
215,550	9,043	7,139	-24380,394	19161,631	12940,999	8253,677	-1,735	-2,985
216,000	13,876	11,856	-26453,167	19065,596	12964,605	8213,097	-0,991	-2,237
216,450	9,043	7,139	-24343,542	18970,042	12811,608	8169,288	-1,693	-3,012
216,900	8,719	6,895	-22307,550	18874,968	12484,659	8125,713	-1,953	-2,642
217,350	8,395	6,647	-20341,277	18780,369	11986,383	8082,367	-2,202	-2,317
217,800	8,073	6,393	-18440,812	18686,245	11319,380	8039,256	-2,438	-2,036
218,250	7,750	6,133	-16598,568	18592,592	10486,222	7996,373	-2,663	-1,803
218,700	7,428	5,865	-14818,032	18499,409	9489,457	7953,719	-2,875	-1,622
219,150	7,107	5,589	-13052,979	18406,693	8331,606	7911,292	-3,081	-1,483
219,600	6,800	5,305	-11368,348	18314,442	7015,164	7869,089	-3,263	-1,408
220,050	6,517	5,007	-9708,104	18222,653	5542,602	7827,114	-3,425	-1,377
220,500	6,148	4,697	-8091,334	18131,323	3916,366	7785,362	-3,610	-1,458
221,000	6,148	4,697	-6369,089	18040,452	2062,402	7743,556	-3,564	-1,515
221,500	6,148	4,697	-4655,758	17940,018	278,181	7697,671	-3,526	-1,547
222,000	6,148	4,697	-2991,599	17901,566	-1440,082	7678,407	-3,506	-1,571
222,500	6,148	4,697	-1315,952	17863,196	-3099,816	7659,188	-3,499	-1,566
223,000	6,148	4,697	272,878	17824,908	-4701,375	7640,021	-3,487	-1,573
223,500	6,148	4,697	1849,135	17786,703	-6245,109	7620,898	-3,484	-1,561
224,000	6,148	4,697	3339,122	17748,579	-7731,369	7601,825	-3,475	-1,561

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P₀,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
224,500	6,148	4,697	4815,954	17710,537	-9160,502	7582,798	-3,474	-1,543
225,000	6,148	4,697	6206,855	17672,577	-10532,856	7563,822	-3,467	-1,537
225,500	6,148	4,697	7584,227	17540,398	-11785,415	7504,546	-3,458	-1,489
226,000	6,148	4,697	8875,973	17578,074	-13094,580	7517,956	-3,463	-1,496
226,500	6,148	4,697	10162,398	17615,832	-14358,860	7531,392	-3,476	-1,488
227,000	6,148	4,697	11363,003	17653,670	-15577,947	7544,850	-3,481	-1,496
227,500	6,148	4,697	12549,910	17691,590	-16751,533	7558,332	-3,492	-1,491
228,000	6,148	4,697	13650,796	17729,591	-17879,308	7571,838	-3,496	-1,503
228,500	6,148	4,697	14738,158	17767,674	-18960,960	7585,370	-3,506	-1,501
229,000	6,148	4,697	15739,150	17805,839	-19996,177	7598,924	-3,508	-1,516
229,500	6,148	4,697	16726,943	17844,086	-20984,645	7612,503	-3,517	-1,517
230,000	6,148	4,697	17627,882	17882,414	-21926,048	7626,107	-3,518	-1,534
230,500	6,148	4,697	18516,084	17920,825	-22820,069	7639,734	-3,526	-1,537
231,000	6,148	4,697	19316,829	17959,319	-23666,392	7653,387	-3,526	-1,557
231,500	6,148	4,697	20105,422	17997,895	-24464,695	7667,061	-3,533	-1,561
232,000	6,148	4,697	20805,846	18036,555	-25214,658	7680,762	-3,533	-1,582
232,500	6,148	4,697	21494,814	18075,297	-25915,959	7694,487	-3,539	-1,588
233,000	6,148	4,697	22094,811	18114,122	-26568,274	7708,237	-3,539	-1,610
233,500	6,148	4,697	22684,139	18153,031	-27171,277	7722,011	-3,545	-1,617
234,000	6,148	4,697	23183,619	18192,023	-27724,644	7735,809	-3,544	-1,640
234,500	6,148	4,697	23673,296	18231,100	-28228,044	7749,633	-3,550	-1,646
235,000	6,148	4,697	24072,184	18270,260	-28681,150	7763,480	-3,549	-1,669
235,500	6,148	4,697	24462,201	18309,504	-29083,630	7777,353	-3,556	-1,675
236,000	6,148	4,697	24760,442	18348,832	-29435,151	7791,249	-3,555	-1,697
236,500	6,148	4,697	25050,793	18388,245	-29735,382	7805,172	-3,562	-1,702
237,000	6,148	4,697	25248,347	18427,743	-29983,985	7819,118	-3,562	-1,724
237,500	6,148	4,697	25439,027	18467,325	-30180,625	7833,090	-3,570	-1,727
238,000	6,148	4,697	25535,873	18506,993	-30324,964	7847,087	-3,570	-1,747
238,500	6,148	4,697	25626,880	18546,746	-30416,663	7861,109	-3,579	-1,748
239,000	6,148	4,697	25623,652	18586,584	-30455,379	7875,156	-3,580	-1,766
239,500	6,148	4,697	25614,349	18626,507	-30440,772	7889,226	-3,590	-1,765
240,000	6,148	4,697	25511,449	18666,517	-30372,497	7903,323	-3,593	-1,780
240,500	6,148	4,697	25401,448	18706,612	-30250,208	7917,445	-3,605	-1,775
241,000	6,148	4,697	25198,880	18746,794	-30073,560	7931,593	-3,609	-1,787
241,500	6,148	4,697	24988,213	18787,061	-29842,203	7945,763	-3,622	-1,779
242,000	6,148	4,697	24685,982	18827,416	-29555,788	7959,961	-3,628	-1,786
242,500	6,148	4,697	24374,699	18867,857	-29213,964	7974,186	-3,643	-1,774
243,000	6,148	4,697	23972,812	18908,384	-28816,378	7988,433	-3,651	-1,777
243,500	6,148	4,697	23560,979	18948,999	-28362,675	8002,707	-3,668	-1,760

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
244,000	6,148	4,697	23059,449	18989,701	-27852,500	8017,005	-3,679	-1,757
244,500	6,148	4,697	22547,149	19030,491	-27285,495	8031,331	-3,698	-1,735
245,000	6,148	4,697	21945,987	19071,368	-26661,302	8045,680	-3,712	-1,727
245,500	6,148	4,697	21333,321	19112,333	-25979,560	8060,056	-3,734	-1,699
246,000	6,148	4,697	20632,542	19153,386	-25239,907	8074,456	-3,750	-1,683
246,500	6,148	4,697	19919,628	19194,527	-24441,979	8088,885	-3,775	-1,649
247,000	6,148	4,697	19119,251	19235,757	-23585,413	8103,339	-3,795	-1,627
247,500	6,148	4,697	18306,224	19277,075	-22669,840	8117,815	-3,823	-1,585
248,000	6,148	4,697	17406,269	19318,482	-21694,893	8132,320	-3,846	-1,555
248,500	6,148	4,697	16493,280	19359,977	-20660,203	8146,851	-3,878	-1,505
249,000	6,148	4,697	15493,770	19401,562	-19565,398	8161,408	-3,905	-1,467
249,500	6,148	4,697	14480,988	19443,236	-18410,105	8175,988	-3,940	-1,409
250,000	6,148	4,697	13381,948	19485,000	-17193,949	8190,597	-3,971	-1,361
250,500	6,148	4,697	12269,560	19526,854	-15916,555	8205,233	-4,011	-1,294
251,000	6,148	4,697	11079,349	19568,797	-14577,546	8219,892	-4,047	-1,233
251,500	6,148	4,697	9883,849	19610,830	-13176,541	8234,579	-4,095	-1,149
252,000	6,148	4,697	8602,125	19652,954	-11713,161	8249,290	-4,137	-1,074
252,500	6,148	4,697	7307,443	19695,168	-10187,022	8264,031	-4,189	-0,980
253,000	6,148	4,697	5926,279	19737,473	-8597,741	8278,795	-4,237	-0,894
253,500	6,148	4,697	4532,652	19779,869	-6944,932	8293,587	-4,294	-0,788
254,000	6,148	4,697	3052,084	19822,356	-5228,208	8308,403	-4,347	-0,691
254,500	6,148	4,697	1559,767	19864,934	-3447,179	8323,250	-4,409	-0,573
255,000	6,148	4,697	-20,168	19907,603	-1601,456	8338,121	-4,468	-0,464
255,500	6,148	4,697	-1558,168	19950,365	309,354	8353,017	-4,546	-0,311
256,000	6,148	4,697	-3174,897	19971,445	2283,155	8358,829	-4,616	-0,164
256,500	6,148	4,697	-4799,427	19928,638	4304,586	8337,905	-4,677	-0,002
256,950	6,517	5,007	-6339,117	19885,924	6048,503	8317,333	-4,430	0,059
257,400	6,800	5,305	-7889,109	19847,559	7602,409	8298,594	-4,218	0,011
257,850	7,107	5,589	-9509,076	19748,086	8938,774	8254,323	-3,961	-0,111
258,300	7,428	5,865	-11163,756	19649,112	10079,208	8210,287	-3,690	-0,288
258,750	7,750	6,133	-12868,711	19550,633	11026,557	8166,485	-3,409	-0,522
259,200	8,073	6,393	-14630,215	19452,649	11783,636	8122,918	-3,120	-0,809
259,650	8,395	6,647	-16440,223	19355,155	12353,234	8079,585	-2,822	-1,140
260,100	8,719	6,895	-18316,039	19258,150	12738,111	8036,482	-2,515	-1,517
260,550	9,043	7,139	-20261,574	19161,631	12940,999	7993,606	-2,200	-1,936
261,000	13,876	11,856	-22280,742	19065,596	12964,605	7950,960	-1,275	-1,597
261,450	9,043	7,139	-20305,313	18970,042	12811,608	7812,203	-2,136	-2,011
261,900	8,719	6,895	-18403,517	18874,968	12484,659	7674,637	-2,384	-1,671
262,350	8,395	6,647	-16571,440	18780,369	11986,383	7538,252	-2,619	-1,375

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{P_E,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
262,800	8,073	6,393	-14805,171	18686,245	11319,380	7403,045	-2,842	-1,126
263,250	7,750	6,133	-13096,994	18592,592	10486,222	7269,005	-3,052	-0,925
263,700	7,428	5,865	-11450,090	18499,409	9489,457	7136,121	-3,249	-0,778
264,150	7,107	5,589	-9817,999	18406,693	8331,606	7004,387	-3,439	-0,675
264,600	6,800	5,305	-8267,567	18314,442	7015,164	6873,795	-3,605	-0,638
265,050	6,517	5,007	-6739,632	18222,653	5542,602	6744,339	-3,749	-0,647
265,500	6,148	4,697	-5256,579	18131,323	3916,366	6616,006	-3,915	-0,770
266,000	6,148	4,697	-3638,557	18040,452	2062,402	6478,341	-3,832	-0,910
266,500	6,148	4,697	-2020,141	17940,018	278,181	6338,351	-3,760	-1,020
267,000	6,148	4,697	-487,276	17901,566	-1440,082	6221,065	-3,698	-1,138
267,500	6,148	4,697	1031,776	17863,196	-3099,816	6104,254	-3,645	-1,239
268,000	6,148	4,697	2466,067	17824,908	-4701,375	5987,916	-3,586	-1,349
268,500	6,148	4,697	3885,709	17786,703	-6245,109	5872,049	-3,536	-1,442
269,000	6,148	4,697	5221,118	17748,579	-7731,369	5756,653	-3,481	-1,546
269,500	6,148	4,697	6541,308	17710,537	-9160,502	5641,725	-3,434	-1,632
270,000	6,148	4,697	7777,541	17672,577	-10532,856	5527,265	-3,382	-1,730
270,500	6,148	4,697	8998,237	20301,019	-13640,280	6231,741	-3,593	-2,645
271,000	6,148	4,697	10135,006	20344,625	-15155,490	6127,284	-3,512	-2,852
271,500	6,148	4,697	11256,168	20388,325	-16618,750	6022,348	-3,437	-3,044
272,000	6,148	4,697	12293,199	20432,119	-18029,705	5916,936	-3,356	-3,249
272,500	6,148	4,697	13314,789	20476,006	-19387,997	5811,043	-3,283	-3,439
273,000	6,148	4,697	14251,817	20519,989	-20693,268	5704,669	-3,203	-3,642
273,500	6,148	4,697	15173,798	20564,065	-21945,158	5597,814	-3,130	-3,830
274,000	6,148	4,697	16010,569	20608,236	-23143,304	5490,472	-3,051	-4,030
274,500	6,148	4,697	16832,906	20652,502	-24287,343	5382,647	-2,980	-4,215
275,000	6,148	4,697	17569,176	20696,864	-25376,910	5274,332	-2,903	-4,413
275,500	6,148	4,697	18291,834	20741,320	-26411,639	5165,531	-2,833	-4,594
276,000	6,148	4,697	18927,371	20785,872	-27391,160	5056,236	-2,757	-4,788
276,500	6,148	4,697	19550,319	20830,520	-28315,106	4946,452	-2,689	-4,965
277,000	6,148	4,697	20084,899	20875,263	-29183,103	4836,170	-2,615	-5,156
277,500	6,148	4,697	20608,105	20920,103	-29994,779	4725,395	-2,549	-5,328
278,000	6,148	4,697	21041,518	20965,039	-30749,759	4614,123	-2,477	-5,514
278,500	6,148	4,697	21464,953	21010,072	-31447,668	4502,352	-2,414	-5,681
279,000	6,148	4,697	21796,996	21055,201	-32088,126	4390,081	-2,344	-5,862
279,500	6,148	4,697	22120,632	21100,427	-32670,755	4277,307	-2,284	-6,023
280,000	6,148	4,697	22351,116	21145,751	-33195,174	4164,031	-2,216	-6,198
280,500	6,148	4,697	22574,927	21191,171	-33660,998	4050,248	-2,159	-6,353
281,000	6,148	4,697	22704,503	21236,690	-34067,845	3935,960	-2,094	-6,522
281,500	6,148	4,697	22827,631	21282,306	-34415,327	3821,162	-2,040	-6,669

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [Mpa]	σ _{inf} [Mpa]
282,000	6,148	4,697	22857,357	21328,020	-34703,058	3705,855	-1,979	-6,831
282,500	6,148	4,697	22878,552	21373,832	-34930,646	3590,034	-1,927	-6,971
283,000	6,148	4,697	22808,404	21360,664	-35000,899	3464,121	-1,876	-7,079
283,500	6,148	4,697	22727,509	21314,881	-34956,404	3333,259	-1,838	-7,141
284,000	6,148	4,697	22557,465	21255,288	-34810,855	3200,850	-1,800	-7,196
284,500	6,148	4,697	22374,333	21195,862	-34570,481	3069,152	-1,777	-7,217
285,000	6,148	4,697	22104,373	21136,603	-34236,078	2938,165	-1,755	-7,235
285,500	6,148	4,697	21818,866	21077,509	-33808,440	2807,884	-1,747	-7,220
286,000	6,148	4,697	21448,972	21018,580	-33288,357	2678,309	-1,741	-7,202
286,500	6,148	4,697	21060,966	20959,816	-32676,612	2549,434	-1,749	-7,154
287,000	6,148	4,697	20591,120	20901,217	-31973,987	2421,258	-1,759	-7,101
287,500	6,148	4,697	20100,498	20842,781	-31181,257	2293,776	-1,781	-7,019
288,000	6,148	4,697	19530,684	20784,508	-30299,194	2166,988	-1,806	-6,933
288,500	6,148	4,697	18937,342	20726,399	-29328,565	2040,889	-1,842	-6,820
289,000	6,148	4,697	18267,546	20668,452	-28270,132	1915,476	-1,881	-6,702
289,500	6,148	4,697	17571,389	20610,667	-27124,655	1790,749	-1,931	-6,558
290,000	6,148	4,697	16801,598	20553,043	-25892,887	1666,701	-1,984	-6,409
290,500	6,148	4,697	16002,544	20495,581	-24575,579	1543,334	-2,047	-6,237
291,000	6,148	4,697	15132,747	20438,279	-23173,476	1420,639	-2,112	-6,059
291,500	6,148	4,697	14230,721	20381,137	-21687,319	1298,621	-2,188	-5,858
292,000	6,148	4,697	13260,908	20324,156	-20117,847	1177,269	-2,266	-5,652
292,500	6,148	4,697	12255,849	20267,333	-18465,792	1056,587	-2,353	-5,425
292,950	7,983	5,366	11294,355	20216,329	-16908,937	948,540	-1,785	-4,219
293,400	8,354	5,720	10290,090	20165,453	-15286,309	841,027	-1,789	-3,823
293,850	8,722	6,063	9241,044	20114,705	-13598,434	734,051	-1,792	-3,466
294,300	9,138	6,410	8127,730	20064,084	-11845,835	627,607	-1,781	-3,131
294,750	9,550	6,747	6962,827	20013,591	-10029,033	521,693	-1,771	-2,827
295,200	9,958	7,075	5721,829	19963,226	-8148,545	416,305	-1,760	-2,556
295,650	10,641	7,458	4410,177	19912,987	-6204,887	311,445	-1,700	-2,257
296,100	11,030	7,767	3025,565	19862,874	-4198,570	207,108	-1,694	-2,042
296,550	11,615	8,100	1555,803	19812,887	-2130,106	103,295	-1,656	-1,819
297,000	16,280	13,155	0,000	19763,027	0,000	0,000	-1,214	-1,214

D.2 Longo prazo

v_{inf} [m]	v_{sup} [m]	f_{ctm}	f_{ctk}
1,94	0,86	3,200	2,200

X [m]	A_c [m ²]	I_c [m ⁴]	$M_{qp,\infty}$ [kN.m]	P_∞ [kN]	$P_\infty \times e$ [kN.m]	$M_{PE,Hip,\infty}$ [kN.m]	σ_{sup} [MPa]	σ_{inf} [MPa]
0,000	16,290	13,155	0,000	15723,565	0,000	0,000	-0,965	-0,965
0,450	11,615	8,100	1332,852	15764,818	-1694,893	160,421	-1,336	-1,406
0,900	11,030	7,767	2606,039	15807,783	-3341,414	321,718	-1,387	-1,536
1,350	10,641	7,458	3816,437	15852,283	-4939,571	483,933	-1,416	-1,656
1,800	9,958	7,075	4972,217	15898,138	-6489,267	647,109	-1,491	-1,835
2,250	9,550	6,747	6069,905	15945,171	-7990,303	811,278	-1,528	-1,989
2,700	9,138	6,410	7102,870	15993,335	-9442,465	979,804	-1,568	-2,162
3,150	8,722	6,063	8100,476	16042,318	-10845,320	1146,603	-1,613	-2,351
3,600	8,354	5,720	9040,427	16091,992	-12198,445	1314,458	-1,649	-2,552
4,050	7,983	5,366	9944,892	16142,207	-13501,342	1483,374	-1,690	-2,772
4,500	6,148	4,697	10801,604	16192,826	-14753,464	1653,359	-2,213	-3,583
5,000	6,148	4,697	11688,293	16249,927	-16084,975	1846,942	-2,176	-3,696
5,500	6,148	4,697	12543,866	16306,750	-17351,814	2038,734	-2,145	-3,796
6,000	6,148	4,697	13331,659	16363,613	-18553,509	2231,823	-2,114	-3,897
6,500	6,148	4,697	14087,233	16420,388	-19689,149	2426,190	-2,089	-3,982
7,000	6,148	4,697	14772,073	16476,962	-20757,808	2621,814	-2,064	-4,069
7,500	6,148	4,697	15427,659	16533,238	-21758,558	2818,674	-2,046	-4,140
8,000	6,148	4,697	16009,619	16589,130	-22690,471	3016,741	-2,027	-4,212
8,500	6,148	4,697	16565,228	16644,562	-23552,626	3215,988	-2,017	-4,265
9,000	6,148	4,697	17044,392	16699,469	-24344,115	3416,388	-2,005	-4,320
9,500	6,148	4,697	17500,036	16753,797	-25064,049	3617,908	-2,003	-4,355
10,000	6,148	4,697	17876,498	16807,498	-25711,552	3820,520	-1,999	-4,392
10,500	6,148	4,697	18232,193	16860,529	-26285,773	4024,192	-2,005	-4,407
11,000	6,148	4,697	18506,057	16912,857	-26785,882	4228,893	-2,009	-4,424
11,500	6,148	4,697	18761,818	16964,451	-27211,072	4434,590	-2,024	-4,417
12,000	6,148	4,697	18933,200	17015,287	-27560,563	4641,251	-2,038	-4,414
12,500	6,148	4,697	19089,045	17065,344	-27833,599	4848,846	-2,062	-4,385
13,000	6,148	4,697	19158,071	17114,605	-28029,451	5057,342	-2,085	-4,359
13,500	6,148	4,697	19214,017	17163,058	-28147,415	5266,709	-2,120	-4,306
14,000	6,148	4,697	19180,824	17199,615	-28182,737	5473,392	-2,152	-4,255
14,500	6,148	4,697	19136,892	17235,643	-28167,721	5680,731	-2,190	-4,187
15,000	6,148	4,697	19001,627	17271,139	-28102,063	5888,710	-2,221	-4,136
15,500	6,148	4,697	18857,840	17306,105	-27985,467	6097,308	-2,260	-4,066

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
16,000	6,148	4,697	18620,659	17340,540	-27817,651	6306,510	-2,291	-4,014
16,500	6,148	4,697	18377,040	17374,448	-27598,346	6516,298	-2,331	-3,943
17,000	6,148	4,697	18039,195	17407,835	-27327,292	6726,656	-2,362	-3,889
17,500	6,148	4,697	17694,686	17440,707	-27004,243	6937,568	-2,403	-3,816
18,000	6,148	4,697	17257,033	17473,073	-26628,963	7149,022	-2,435	-3,760
18,500	6,148	4,697	16810,982	17504,945	-26201,229	7361,006	-2,476	-3,685
19,000	6,148	4,697	16273,549	17536,339	-25720,830	7573,507	-2,509	-3,626
19,500	6,148	4,697	15726,146	17567,272	-25187,565	7786,519	-2,551	-3,549
20,000	6,148	4,697	15088,960	17597,767	-24601,244	8000,036	-2,585	-3,487
20,500	6,148	4,697	14440,408	17627,849	-23961,687	8214,054	-2,628	-3,407
21,000	6,148	4,697	13703,498	17657,548	-23268,724	8428,574	-2,664	-3,342
21,500	6,148	4,697	12954,008	17686,900	-22522,193	8643,601	-2,708	-3,259
22,000	6,148	4,697	12117,405	17715,946	-21721,937	8859,143	-2,745	-3,189
22,500	6,148	4,697	11267,199	17744,733	-20867,806	9075,213	-2,790	-3,103
23,000	6,148	4,697	10330,936	17773,314	-19959,651	9291,832	-2,829	-3,030
23,500	6,148	4,697	9380,248	17801,752	-18997,326	9509,023	-2,876	-2,940
24,000	6,148	4,697	8344,358	17830,113	-17980,679	9726,821	-2,917	-2,863
24,500	6,148	4,697	7293,430	17858,477	-16909,552	9945,266	-2,965	-2,769
25,000	6,148	4,697	6157,949	17886,928	-15783,778	10164,406	-3,008	-2,687
25,500	6,148	4,697	5007,037	17915,561	-14603,173	10384,299	-3,058	-2,589
26,000	6,148	4,697	3772,002	17944,481	-13367,530	10605,015	-3,104	-2,502
26,500	6,148	4,697	2521,370	17973,801	-12076,619	10826,629	-3,156	-2,398
27,000	6,148	4,697	1186,819	18003,646	-10730,173	11049,232	-3,204	-2,306
27,500	6,148	4,697	-163,259	18034,148	-9327,885	11272,926	-3,260	-2,197
28,000	6,148	4,697	-1597,285	18065,449	-7869,399	11497,822	-3,310	-2,100
28,500	6,148	4,697	-3046,523	18097,697	-6354,303	11724,044	-3,369	-1,984
29,000	6,148	4,697	-4579,983	18131,049	-4782,120	11951,729	-3,423	-1,880
29,500	6,148	4,697	-6128,084	18165,666	-3152,304	12181,022	-3,486	-1,757
30,000	6,148	4,697	-7760,936	18201,713	-1464,227	12412,074	-3,544	-1,644
30,500	6,148	4,697	-9407,593	18239,354	282,823	12645,055	-3,611	-1,513
31,000	6,148	4,697	-11139,792	18259,323	2087,424	12866,438	-3,668	-1,395
31,500	6,148	4,697	-12871,588	18224,094	3936,404	13048,755	-3,717	-1,265
31,950	6,517	5,007	-14449,045	18189,935	5532,651	13186,033	-3,525	-1,137
32,400	6,800	5,305	-16058,451	18160,328	6956,132	13350,004	-3,359	-1,118
32,850	7,107	5,589	-17731,798	18076,170	8181,998	13472,712	-3,147	-1,182
33,300	7,428	5,865	-19437,105	17992,207	9229,282	13593,849	-2,919	-1,302
33,750	7,750	6,133	-21181,236	17908,162	10100,203	13713,210	-2,680	-1,478
34,200	8,073	6,393	-22930,171	17823,660	10796,860	13783,445	-2,430	-1,707
34,650	8,395	6,647	-24764,268	17738,804	11321,614	13898,339	-2,172	-1,980

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
35,100	8,719	6,895	-26652,502	17653,370	11676,645	14011,048	-1,904	-2,296
35,550	9,043	7,139	-28595,720	17567,280	11864,238	14121,493	-1,628	-2,652
36,000	13,876	11,856	-30594,770	17480,497	11886,738	14229,620	-0,935	-1,993
36,450	9,043	7,139	-28613,998	17393,022	11746,551	14132,845	-1,594	-2,667
36,900	8,719	6,895	-26689,057	17304,892	11446,148	14035,798	-1,834	-2,324
37,350	8,395	6,647	-24819,102	17216,179	10988,054	13938,535	-2,065	-2,019
37,800	8,073	6,393	-23003,282	17126,990	10374,846	13841,151	-2,285	-1,754
38,250	7,750	6,133	-21227,360	17037,471	9609,134	13743,764	-2,496	-1,526
38,700	7,428	5,865	-19548,806	16948,944	8694,130	13693,549	-2,698	-1,343
39,150	7,107	5,589	-17840,047	16859,288	7631,188	13596,169	-2,893	-1,196
39,600	6,800	5,305	-16204,307	16769,970	6423,569	13499,326	-3,069	-1,107
40,050	6,517	5,007	-14591,318	16681,297	5073,783	13403,268	-3,227	-1,054
40,500	6,148	4,697	-13021,013	16593,623	3584,223	13308,272	-3,408	-1,100
41,000	6,148	4,697	-11373,243	16506,146	1886,999	13234,902	-3,371	-1,137
41,500	6,148	4,697	-9712,442	16412,519	254,495	13132,755	-3,342	-1,152
42,000	6,148	4,697	-8130,361	16377,532	-1317,481	13077,745	-3,328	-1,165
42,500	6,148	4,697	-6506,337	16343,985	-2836,186	13023,997	-3,332	-1,138
43,000	6,148	4,697	-4969,921	16311,734	-4302,270	12971,392	-3,330	-1,125
43,500	6,148	4,697	-3445,246	16280,633	-5716,311	12919,806	-3,336	-1,096
44,000	6,148	4,697	-2007,502	16250,541	-7078,816	12869,124	-3,336	-1,081
44,500	6,148	4,697	-582,213	16221,319	-8390,227	12819,228	-3,343	-1,050
45,000	6,148	4,697	756,604	16192,836	-9650,930	12770,013	-3,343	-1,033
45,500	6,148	4,697	2082,471	16164,964	-10861,259	12721,373	-3,351	-1,001
46,000	6,148	4,697	3322,124	16120,103	-12008,482	12659,484	-3,349	-0,981
46,500	6,148	4,697	4556,497	16163,225	-13174,825	12666,695	-3,370	-0,957
47,000	6,148	4,697	5713,055	16206,689	-14301,103	12674,030	-3,384	-0,949
47,500	6,148	4,697	6856,274	16250,403	-15386,924	12681,418	-3,403	-0,929
48,000	6,148	4,697	7913,245	16294,280	-16431,876	12688,791	-3,414	-0,928
48,500	6,148	4,697	8956,952	16338,244	-17435,529	12696,087	-3,430	-0,916
49,000	6,148	4,697	9914,148	16382,223	-18397,438	12703,251	-3,437	-0,922
49,500	6,148	4,697	10858,318	16426,151	-19317,153	12710,230	-3,450	-0,916
50,000	6,148	4,697	11715,570	16469,970	-20194,216	12716,982	-3,455	-0,928
50,500	6,148	4,697	12560,180	16513,626	-21028,166	12723,465	-3,465	-0,928
51,000	6,148	4,697	13317,337	16557,072	-21818,541	12729,643	-3,467	-0,947
51,500	6,148	4,697	14062,366	16600,264	-22564,882	12735,483	-3,475	-0,952
52,000	6,148	4,697	14719,292	16643,165	-23266,734	12740,959	-3,475	-0,975
52,500	6,148	4,697	15364,724	16685,740	-23923,643	12746,047	-3,481	-0,985
53,000	6,148	4,697	15921,302	16727,959	-24535,166	12750,722	-3,478	-1,012
53,500	6,148	4,697	16467,120	16769,795	-25100,864	12754,969	-3,482	-1,026

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
54,000	6,148	4,697	16923,250	16811,225	-25620,307	12758,770	-3,478	-1,057
54,500	6,148	4,697	17369,442	16852,227	-26093,072	12762,111	-3,480	-1,073
55,000	6,148	4,697	17725,039	16892,782	-26518,748	12764,981	-3,475	-1,108
55,500	6,148	4,697	18071,593	16932,875	-26896,932	12767,369	-3,476	-1,126
56,000	6,148	4,697	18326,592	16972,492	-27227,230	12769,268	-3,469	-1,163
56,500	6,148	4,697	18573,502	17011,620	-27509,260	12770,670	-3,469	-1,183
57,000	6,148	4,697	18727,853	17050,249	-27742,650	12771,571	-3,461	-1,222
57,500	6,148	4,697	18875,112	17088,370	-27927,037	12771,964	-3,461	-1,243
58,000	6,148	4,697	18928,784	17125,974	-28062,072	12771,848	-3,452	-1,283
58,500	6,148	4,697	18976,389	17163,058	-28147,415	12771,222	-3,451	-1,305
59,000	6,148	4,697	18929,768	17199,615	-28182,737	12770,082	-3,442	-1,345
59,500	6,148	4,697	18877,317	17235,643	-28167,721	12768,432	-3,440	-1,367
60,000	6,148	4,697	18731,042	17271,139	-28102,063	12766,272	-3,431	-1,407
60,500	6,148	4,697	18577,901	17306,105	-27985,467	12763,602	-3,429	-1,429
61,000	6,148	4,697	18331,972	17340,540	-27817,651	12760,430	-3,420	-1,468
61,500	6,148	4,697	18078,163	17374,448	-27598,346	12756,757	-3,419	-1,489
62,000	6,148	4,697	17732,586	17407,835	-27327,292	12752,592	-3,410	-1,527
62,500	6,148	4,697	17378,147	17440,707	-27004,243	12747,940	-3,408	-1,547
63,000	6,148	4,697	16932,928	17473,073	-26628,963	12742,814	-3,400	-1,584
63,500	6,148	4,697	16477,916	17504,945	-26201,229	12737,221	-3,399	-1,602
64,000	6,148	4,697	15933,064	17536,339	-25720,830	12731,177	-3,391	-1,637
64,500	6,148	4,697	15377,552	17567,272	-25187,565	12724,699	-3,391	-1,654
65,000	6,148	4,697	14733,078	17597,767	-24601,244	12717,800	-3,384	-1,685
65,500	6,148	4,697	14077,157	17627,849	-23961,687	12710,504	-3,385	-1,700
66,000	6,148	4,697	13333,076	17657,548	-23268,724	12702,836	-3,379	-1,729
66,500	6,148	4,697	12576,852	17686,900	-22522,193	12694,822	-3,380	-1,741
67,000	6,148	4,697	11733,180	17715,946	-21721,937	12686,493	-3,376	-1,767
67,500	6,148	4,697	10876,780	17744,733	-20867,806	12677,884	-3,378	-1,777
68,000	6,148	4,697	9933,536	17773,314	-19959,651	12669,034	-3,375	-1,799
68,500	6,148	4,697	8977,100	17801,752	-18997,326	12659,989	-3,379	-1,805
69,000	6,148	4,697	7934,305	17830,113	-17980,679	12650,798	-3,377	-1,824
69,500	6,148	4,697	6877,993	17858,477	-16909,552	12641,515	-3,383	-1,827
70,000	6,148	4,697	5735,671	17886,928	-15783,778	12632,201	-3,383	-1,842
70,500	6,148	4,697	4579,659	17915,561	-14603,173	12622,923	-3,390	-1,840
71,000	6,148	4,697	3337,836	17944,481	-13367,530	12613,753	-3,392	-1,852
71,500	6,148	4,697	2090,701	17973,801	-12076,619	12604,770	-3,403	-1,842
72,000	6,148	4,697	757,948	18003,646	-10730,173	12596,059	-3,409	-1,845
72,500	6,148	4,697	-588,323	18034,148	-9327,885	12587,708	-3,422	-1,830
73,000	6,148	4,697	-2020,517	18065,449	-7869,399	12579,814	-3,431	-1,827

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
73,500	6,148	4,697	-3465,858	18097,697	-6354,303	12572,476	-3,448	-1,807
74,000	6,148	4,697	-4997,459	18131,049	-4782,120	12565,799	-3,459	-1,798
74,500	6,148	4,697	-6541,624	18165,666	-3152,304	12559,887	-3,479	-1,771
75,000	6,148	4,697	-8172,596	18201,713	-1464,227	12554,849	-3,495	-1,755
75,500	6,148	4,697	-9792,072	18239,354	282,823	12550,789	-3,524	-1,711
76,000	6,148	4,697	-11460,712	18259,323	2087,424	12534,474	-3,549	-1,664
76,500	6,148	4,697	-13138,255	18224,094	3936,404	12480,295	-3,564	-1,610
76,950	6,517	5,007	-14703,515	18191,132	5533,015	12412,090	-3,348	-1,535
77,400	6,800	5,305	-16302,800	18161,519	6956,588	12365,079	-3,160	-1,567
77,850	7,107	5,589	-17967,937	18077,352	8182,532	12281,093	-2,927	-1,677
78,300	7,428	5,865	-19663,208	17993,378	9229,883	12197,487	-2,681	-1,839
78,750	7,750	6,133	-21398,687	17909,324	10100,859	12114,074	-2,425	-2,053
79,200	8,073	6,393	-23134,335	17823,660	10796,860	11996,952	-2,162	-2,311
79,650	8,395	6,647	-24960,621	17738,804	11321,614	11913,830	-1,890	-2,616
80,100	8,719	6,895	-26841,044	17653,370	11676,645	11830,568	-1,609	-2,963
80,550	9,043	7,139	-28776,451	17567,280	11864,238	11747,120	-1,320	-3,346
81,000	13,876	11,856	-30767,691	17480,497	11886,738	11663,464	-0,736	-2,441
81,450	9,043	7,139	-28784,594	17393,022	11746,551	11611,575	-1,270	-3,398
81,900	8,719	6,895	-26857,329	17304,892	11446,148	11559,184	-1,504	-3,069
82,350	8,395	6,647	-24985,049	17216,179	10988,054	11506,338	-1,728	-2,778
82,800	8,073	6,393	-23165,443	17126,990	10374,846	11453,110	-1,942	-2,528
83,250	7,750	6,133	-21382,250	17037,471	9609,134	11399,594	-2,146	-2,316
83,700	7,428	5,865	-19704,564	16948,944	8694,130	11377,572	-2,335	-2,160
84,150	7,107	5,589	-17992,343	16859,288	7631,188	11323,719	-2,520	-2,038
84,600	6,800	5,305	-16354,345	16769,970	6423,569	11270,024	-2,683	-1,977
85,050	6,517	5,007	-14738,035	16681,297	5073,783	11216,699	-2,826	-1,958
85,500	6,148	4,697	-13165,238	16593,623	3584,223	11163,978	-2,989	-2,045
86,000	6,148	4,697	-11515,638	16506,146	1886,999	11128,475	-2,959	-2,065
86,500	6,148	4,697	-9852,342	16412,519	254,495	11072,233	-2,940	-2,061
87,000	6,148	4,697	-8243,857	16377,532	-1317,481	11055,496	-2,937	-2,047
87,500	6,148	4,697	-6617,749	16343,985	-2836,186	11039,704	-2,949	-2,003
88,000	6,148	4,697	-5078,564	16311,734	-4302,270	11024,760	-2,954	-1,974
88,500	6,148	4,697	-3551,817	16280,633	-5716,311	11010,569	-2,967	-1,928
89,000	6,148	4,697	-2111,419	16250,541	-7078,816	10997,033	-2,974	-1,897
89,500	6,148	4,697	-684,070	16221,319	-8390,227	10984,064	-2,988	-1,850
90,000	6,148	4,697	657,296	16192,836	-9650,930	10971,571	-2,996	-1,817
90,500	6,148	4,697	1985,214	16077,422	-10802,440	10900,119	-2,996	-1,755
91,000	6,148	4,697	3227,320	16120,103	-12008,482	10935,821	-3,016	-1,732
91,500	6,148	4,697	4471,372	16163,225	-13174,825	10971,859	-3,044	-1,692

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
92,000	6,148	4,697	5630,002	16206,689	-14301,103	11008,167	-3,064	-1,671
92,500	6,148	4,697	6774,963	16250,403	-15386,924	11044,682	-3,089	-1,638
93,000	6,148	4,697	7833,927	16294,280	-16431,876	11081,345	-3,105	-1,625
93,500	6,148	4,697	8879,370	16338,244	-17435,529	11118,105	-3,127	-1,599
94,000	6,148	4,697	9838,491	16382,223	-18397,438	11154,912	-3,140	-1,592
94,500	6,148	4,697	10784,392	16426,151	-19317,153	11191,724	-3,159	-1,574
95,000	6,148	4,697	11643,508	16469,970	-20194,216	11228,499	-3,169	-1,573
95,500	6,148	4,697	12489,847	16513,626	-21028,166	11265,200	-3,185	-1,560
96,000	6,148	4,697	13248,815	16557,072	-21818,541	11301,794	-3,193	-1,565
96,500	6,148	4,697	13995,570	16600,264	-22564,882	11338,255	-3,207	-1,557
97,000	6,148	4,697	14654,262	16643,165	-23266,734	11374,552	-3,213	-1,566
97,500	6,148	4,697	15301,419	16685,740	-23923,643	11410,664	-3,225	-1,562
98,000	6,148	4,697	15859,724	16727,959	-24535,166	11446,568	-3,228	-1,576
98,500	6,148	4,697	16407,267	16769,795	-25100,864	11482,247	-3,238	-1,576
99,000	6,148	4,697	16865,092	16811,225	-25620,307	11517,683	-3,240	-1,593
99,500	6,148	4,697	17313,010	16852,227	-26093,072	11552,862	-3,249	-1,596
100,000	6,148	4,697	17670,277	16892,782	-26518,748	11587,770	-3,249	-1,616
100,500	6,148	4,697	18018,559	16932,875	-26896,932	11622,396	-3,257	-1,621
101,000	6,148	4,697	18275,209	16972,492	-27227,230	11656,729	-3,256	-1,644
101,500	6,148	4,697	18523,849	17011,620	-27509,260	11690,761	-3,262	-1,650
102,000	6,148	4,697	18679,837	17050,249	-27742,650	11724,482	-3,261	-1,674
102,500	6,148	4,697	18828,829	17088,370	-27927,037	11757,888	-3,266	-1,681
103,000	6,148	4,697	18884,129	17125,974	-28062,072	11790,972	-3,264	-1,706
103,500	6,148	4,697	18933,472	17163,058	-28147,415	11823,729	-3,269	-1,714
104,000	6,148	4,697	18888,589	17199,615	-28182,737	11856,155	-3,267	-1,739
104,500	6,148	4,697	18837,767	17235,643	-28167,721	11888,249	-3,272	-1,747
105,000	6,148	4,697	18693,233	17271,139	-28102,063	11920,006	-3,269	-1,772
105,500	6,148	4,697	18541,723	17306,105	-27985,467	11951,428	-3,274	-1,779
106,000	6,148	4,697	18297,542	17340,540	-27817,651	11982,513	-3,271	-1,804
106,500	6,148	4,697	18045,368	17374,448	-27598,346	12013,264	-3,276	-1,810
107,000	6,148	4,697	17701,544	17407,835	-27327,292	12043,684	-3,274	-1,833
107,500	6,148	4,697	17348,750	17440,707	-27004,243	12073,776	-3,280	-1,838
108,000	6,148	4,697	16905,291	17473,073	-26628,963	12103,546	-3,278	-1,859
108,500	6,148	4,697	16451,936	17504,945	-26201,229	12133,004	-3,284	-1,863
109,000	6,148	4,697	15908,850	17536,339	-25720,830	12162,156	-3,283	-1,882
109,500	6,148	4,697	15355,011	17567,272	-25187,565	12191,017	-3,289	-1,883
110,000	6,148	4,697	14712,311	17597,767	-24601,244	12219,599	-3,289	-1,900
110,500	6,148	4,697	14058,080	17627,849	-23961,687	12247,922	-3,296	-1,899
111,000	6,148	4,697	13315,780	17657,548	-23268,724	12276,005	-3,297	-1,913

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
111,500	6,148	4,697	12561,267	17686,900	-22522,193	12303,872	-3,306	-1,909
112,000	6,148	4,697	11719,384	17715,946	-21721,937	12331,552	-3,308	-1,920
112,500	6,148	4,697	10864,717	17744,733	-20867,806	12359,077	-3,318	-1,913
113,000	6,148	4,697	9923,270	17773,314	-19959,651	12386,484	-3,321	-1,920
113,500	6,148	4,697	8968,590	17801,752	-18997,326	12413,816	-3,332	-1,910
114,000	6,148	4,697	7927,600	17830,113	-17980,679	12441,120	-3,337	-1,914
114,500	6,148	4,697	6873,069	17858,477	-16909,552	12468,450	-3,350	-1,900
115,000	6,148	4,697	5732,560	17886,928	-15783,778	12495,865	-3,357	-1,900
115,500	6,148	4,697	4578,354	17915,561	-14603,173	12523,434	-3,372	-1,882
116,000	6,148	4,697	3338,353	17944,481	-13367,530	12551,227	-3,381	-1,877
116,500	6,148	4,697	2098,283	17973,801	-12076,619	12579,327	-3,400	-1,849
117,000	6,148	4,697	772,690	18003,646	-10730,173	12607,819	-3,414	-1,834
117,500	6,148	4,697	-566,397	18034,148	-9327,885	12636,799	-3,435	-1,801
118,000	6,148	4,697	-1991,422	18065,449	-7869,399	12666,365	-3,452	-1,780
118,500	6,148	4,697	-3429,552	18097,697	-6354,303	12696,623	-3,477	-1,741
119,000	6,148	4,697	-4953,976	18131,049	-4782,120	12727,684	-3,497	-1,714
119,500	6,148	4,697	-6490,906	18165,666	-3152,304	12759,663	-3,525	-1,668
120,000	6,148	4,697	-8114,694	18201,713	-1464,227	12792,676	-3,549	-1,633
120,500	6,148	4,697	-9723,322	18239,354	282,823	12826,844	-3,587	-1,568
121,000	6,148	4,697	-11384,369	18259,323	2087,424	12848,607	-3,620	-1,503
121,500	6,148	4,697	-13054,235	18224,094	3936,404	12831,525	-3,644	-1,430
121,950	6,517	5,007	-14612,751	18191,132	5533,015	12794,787	-3,429	-1,352
122,400	6,800	5,305	-16205,120	18161,519	6956,588	12780,844	-3,244	-1,379
122,850	7,107	5,589	-17863,431	18077,352	8182,532	12728,466	-3,012	-1,486
123,300	7,428	5,865	-19551,770	17993,378	9229,883	12676,161	-2,767	-1,644
123,750	7,750	6,133	-21280,389	17909,324	10100,859	12623,737	-2,513	-1,854
124,200	8,073	6,393	-23009,625	17823,660	10796,860	12532,922	-2,251	-2,111
124,650	8,395	6,647	-24829,116	17738,804	11321,614	12479,928	-1,980	-2,413
125,100	8,719	6,895	-26702,744	17653,370	11676,645	12426,465	-1,700	-2,756
125,550	9,043	7,139	-28631,357	17567,280	11864,238	12372,477	-1,413	-3,137
126,000	13,876	11,856	-30615,802	17480,497	11886,738	12317,938	-0,795	-2,309
126,450	9,043	7,139	-28630,952	17393,022	11746,551	12256,215	-1,366	-3,181
126,900	8,719	6,895	-26701,135	17304,892	11446,148	12194,032	-1,603	-2,846
127,350	8,395	6,647	-24826,303	17216,179	10988,054	12131,439	-1,830	-2,549
127,800	8,073	6,393	-23005,607	17126,990	10374,846	12068,514	-2,046	-2,292
128,250	7,750	6,133	-21233,768	17037,471	9609,134	12005,357	-2,252	-2,078
128,700	7,428	5,865	-19556,512	16948,944	8694,130	11978,473	-2,445	-1,912
129,150	7,107	5,589	-17845,025	16859,288	7631,188	11915,035	-2,634	-1,782
129,600	6,800	5,305	-16207,860	16769,970	6423,569	11851,836	-2,802	-1,710

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
130,050	6,517	5,007	-14592,294	16681,297	5073,783	11789,097	-2,950	-1,680
130,500	6,148	4,697	-13020,311	16593,623	3584,223	11727,062	-3,118	-1,753
131,000	6,148	4,697	-11371,426	16506,146	1886,999	11683,964	-3,088	-1,776
131,500	6,148	4,697	-9709,073	16412,519	254,495	11617,611	-3,066	-1,776
132,000	6,148	4,697	-8099,562	16377,532	-1317,481	11592,772	-3,062	-1,765
132,500	6,148	4,697	-6474,433	16343,985	-2836,186	11568,950	-3,072	-1,726
133,000	6,148	4,697	-4936,171	16311,734	-4302,270	11546,049	-3,076	-1,700
133,500	6,148	4,697	-3410,404	16280,633	-5716,311	11523,960	-3,087	-1,658
134,000	6,148	4,697	-1970,939	16250,541	-7078,816	11502,589	-3,092	-1,630
134,500	6,148	4,697	-544,570	16221,319	-8390,227	11481,833	-3,105	-1,587
135,000	6,148	4,697	795,854	16192,836	-9650,930	11461,603	-3,111	-1,557
135,500	6,148	4,697	2122,790	16077,422	-10802,440	11379,842	-3,109	-1,500
136,000	6,148	4,697	3364,181	16120,103	-12008,482	11409,986	-3,128	-1,480
136,500	6,148	4,697	4607,162	16163,225	-13174,825	11440,440	-3,155	-1,443
137,000	6,148	4,697	5764,347	16206,689	-14301,103	11471,138	-3,173	-1,424
137,500	6,148	4,697	6907,836	16250,403	-15386,924	11502,012	-3,197	-1,395
138,000	6,148	4,697	7965,349	16294,280	-16431,876	11533,004	-3,212	-1,384
138,500	6,148	4,697	9009,320	16338,244	-17435,529	11564,056	-3,232	-1,362
139,000	6,148	4,697	9966,983	16382,223	-18397,438	11595,121	-3,244	-1,358
139,500	6,148	4,697	10911,412	16426,151	-19317,153	11626,149	-3,261	-1,342
140,000	6,148	4,697	11769,066	16469,970	-20194,216	11657,102	-3,271	-1,344
140,500	6,148	4,697	12613,932	16513,626	-21028,166	11687,938	-3,285	-1,334
141,000	6,148	4,697	13371,433	16557,072	-21818,541	11718,627	-3,292	-1,342
141,500	6,148	4,697	14116,716	16600,264	-22564,882	11749,137	-3,304	-1,337
142,000	6,148	4,697	14773,937	16643,165	-23266,734	11779,442	-3,309	-1,350
142,500	6,148	4,697	15419,621	16685,740	-23923,643	11809,516	-3,319	-1,349
143,000	6,148	4,697	15976,452	16727,959	-24535,166	11839,340	-3,322	-1,366
143,500	6,148	4,697	16522,522	16769,795	-25100,864	11868,891	-3,330	-1,369
144,000	6,148	4,697	16978,871	16811,225	-25620,307	11898,157	-3,331	-1,389
144,500	6,148	4,697	17425,315	16852,227	-26093,072	11927,119	-3,338	-1,395
145,000	6,148	4,697	17781,104	16892,782	-26518,748	11955,769	-3,337	-1,419
145,500	6,148	4,697	18127,913	16932,875	-26896,932	11984,089	-3,343	-1,426
146,000	6,148	4,697	18383,082	16972,492	-27227,230	12012,075	-3,341	-1,452
146,500	6,148	4,697	18630,249	17011,620	-27509,260	12039,713	-3,346	-1,462
147,000	6,148	4,697	18784,756	17050,249	-27742,650	12067,001	-3,343	-1,489
147,500	6,148	4,697	18932,276	17088,370	-27927,037	12093,928	-3,347	-1,500
148,000	6,148	4,697	18986,094	17125,974	-28062,072	12120,493	-3,343	-1,528
148,500	6,148	4,697	19033,964	17163,058	-28147,415	12146,687	-3,347	-1,539
149,000	6,148	4,697	18987,608	17199,615	-28182,737	12172,511	-3,343	-1,568

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
149,500	6,148	4,697	18935,304	17235,643	-28167,721	12197,960	-3,346	-1,579
150,000	6,148	4,697	18789,299	17271,139	-28102,063	12223,035	-3,342	-1,607
150,500	6,148	4,697	18636,306	17306,105	-27985,467	12247,733	-3,346	-1,618
151,000	6,148	4,697	18390,653	17340,540	-27817,651	12272,059	-3,341	-1,645
151,500	6,148	4,697	18136,998	17374,448	-27598,346	12296,010	-3,345	-1,655
152,000	6,148	4,697	17791,704	17407,835	-27327,292	12319,595	-3,341	-1,682
152,500	6,148	4,697	17437,429	17440,707	-27004,243	12342,814	-3,345	-1,690
153,000	6,148	4,697	16992,499	17473,073	-26628,963	12365,678	-3,342	-1,715
153,500	6,148	4,697	16537,665	17504,945	-26201,229	12388,192	-3,346	-1,722
154,000	6,148	4,697	15993,109	17536,339	-25720,830	12410,369	-3,344	-1,744
154,500	6,148	4,697	15437,792	17567,272	-25187,565	12432,220	-3,349	-1,750
155,000	6,148	4,697	14793,622	17597,767	-24601,244	12453,763	-3,347	-1,769
155,500	6,148	4,697	14137,915	17627,849	-23961,687	12475,012	-3,353	-1,772
156,000	6,148	4,697	13394,147	17657,548	-23268,724	12495,994	-3,352	-1,789
156,500	6,148	4,697	12638,160	17686,900	-22522,193	12516,729	-3,359	-1,790
157,000	6,148	4,697	11794,809	17715,946	-21721,937	12537,249	-3,359	-1,804
157,500	6,148	4,697	10938,669	17744,733	-20867,806	12557,586	-3,367	-1,801
158,000	6,148	4,697	9995,754	17773,314	-19959,651	12577,780	-3,369	-1,811
158,500	6,148	4,697	9039,604	17801,752	-18997,326	12597,870	-3,379	-1,805
159,000	6,148	4,697	7997,148	17830,113	-17980,679	12617,910	-3,382	-1,812
159,500	6,148	4,697	6941,149	17858,477	-16909,552	12637,950	-3,394	-1,802
160,000	6,148	4,697	5799,175	17886,928	-15783,778	12658,055	-3,399	-1,805
160,500	6,148	4,697	4643,504	17915,561	-14603,173	12678,287	-3,412	-1,791
161,000	6,148	4,697	3402,037	17944,481	-13367,530	12698,726	-3,419	-1,790
161,500	6,148	4,697	2162,161	17973,801	-12076,619	12719,446	-3,437	-1,765
162,000	6,148	4,697	836,739	18003,646	-10730,173	12740,541	-3,450	-1,752
162,500	6,148	4,697	-502,172	18034,148	-9327,885	12762,099	-3,470	-1,722
163,000	6,148	4,697	-1927,026	18065,449	-7869,399	12784,225	-3,485	-1,704
163,500	6,148	4,697	-3364,977	18097,697	-6354,303	12807,022	-3,509	-1,668
164,000	6,148	4,697	-4889,229	18131,049	-4782,120	12830,602	-3,528	-1,644
164,500	6,148	4,697	-6425,977	18165,666	-3152,304	12855,076	-3,555	-1,601
165,000	6,148	4,697	-8049,592	18201,713	-1464,227	12880,564	-3,577	-1,570
165,500	6,148	4,697	-9657,589	18239,354	282,823	12907,180	-3,613	-1,508
166,000	6,148	4,697	-11318,428	18259,323	2087,424	12921,293	-3,646	-1,446
166,500	6,148	4,697	-12988,071	18224,094	3936,404	12896,344	-3,668	-1,376
166,950	6,517	5,007	-14545,461	18191,132	5533,015	12852,224	-3,451	-1,304
167,400	6,800	5,305	-16137,613	18161,519	6956,588	12831,285	-3,263	-1,336
167,850	7,107	5,589	-17795,722	18077,352	8182,532	12771,806	-3,029	-1,447
168,300	7,428	5,865	-19483,842	17993,378	9229,883	12712,462	-2,783	-1,609

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
168,750	7,750	6,133	-21212,253	17909,324	10100,859	12653,065	-2,527	-1,823
169,200	8,073	6,393	-22940,149	17823,660	10796,860	12555,000	-2,263	-2,083
169,650	8,395	6,647	-24759,422	17738,804	11321,614	12495,213	-1,991	-2,388
170,100	8,719	6,895	-26632,832	17653,370	11676,645	12435,021	-1,710	-2,734
170,550	9,043	7,139	-28561,226	17567,280	11864,238	12374,366	-1,422	-3,117
171,000	13,876	11,856	-30544,653	17480,497	11886,738	12313,224	-0,800	-2,298
171,450	9,043	7,139	-28562,804	17393,022	11746,551	12245,163	-1,373	-3,166
171,900	8,719	6,895	-26636,788	17304,892	11446,148	12176,706	-1,609	-2,833
172,350	8,395	6,647	-24765,757	17216,179	10988,054	12107,905	-1,835	-2,538
172,800	8,073	6,393	-22948,862	17126,990	10374,846	12038,837	-2,050	-2,284
173,250	7,750	6,133	-21181,530	17037,471	9609,134	11969,602	-2,254	-2,073
173,700	7,428	5,865	-19509,503	16948,944	8694,130	11936,508	-2,446	-1,911
174,150	7,107	5,589	-17801,707	16859,288	7631,188	11867,073	-2,633	-1,783
174,600	6,800	5,305	-16168,248	16769,970	6423,569	11797,940	-2,799	-1,716
175,050	6,517	5,007	-14556,374	16681,297	5073,783	11729,331	-2,946	-1,689
175,500	6,148	4,697	-12988,095	16593,623	3584,223	11661,489	-3,112	-1,767
176,000	6,148	4,697	-11343,861	16506,146	1886,999	11611,720	-3,079	-1,795
176,500	6,148	4,697	-9685,576	16412,519	254,495	11539,019	-3,056	-1,799
177,000	6,148	4,697	-8079,712	16377,532	-1317,481	11507,599	-3,050	-1,792
177,500	6,148	4,697	-6458,687	16343,985	-2836,186	11477,222	-3,058	-1,757
178,000	6,148	4,697	-4924,520	16311,734	-4302,270	11447,783	-3,060	-1,736
178,500	6,148	4,697	-3402,859	16280,633	-5716,311	11419,178	-3,069	-1,698
179,000	6,148	4,697	-1967,492	16250,541	-7078,816	11391,306	-3,073	-1,675
179,500	6,148	4,697	-545,230	16221,319	-8390,227	11364,071	-3,083	-1,635
180,000	6,148	4,697	791,093	16192,836	-9650,930	11337,377	-3,087	-1,611
180,500	6,148	4,697	2113,922	16077,422	-10802,440	11249,881	-3,084	-1,557
181,000	6,148	4,697	3351,230	16120,103	-12008,482	11273,039	-3,101	-1,542
181,500	6,148	4,697	4588,467	16163,225	-13174,825	11296,471	-3,125	-1,510
182,000	6,148	4,697	5739,910	16206,689	-14301,103	11320,106	-3,141	-1,497
182,500	6,148	4,697	6877,656	16250,403	-15386,924	11343,881	-3,162	-1,472
183,000	6,148	4,697	7929,424	16294,280	-16431,876	11367,734	-3,175	-1,467
183,500	6,148	4,697	8967,650	16338,244	-17435,529	11391,612	-3,193	-1,450
184,000	6,148	4,697	9919,567	16382,223	-18397,438	11415,464	-3,202	-1,451
184,500	6,148	4,697	10858,251	16426,151	-19317,153	11439,247	-3,217	-1,441
185,000	6,148	4,697	11710,155	16469,970	-20194,216	11462,916	-3,224	-1,449
185,500	6,148	4,697	12549,275	16513,626	-21028,166	11486,438	-3,237	-1,444
186,000	6,148	4,697	13301,024	16557,072	-21818,541	11509,777	-3,241	-1,457
186,500	6,148	4,697	14040,561	16600,264	-22564,882	11532,906	-3,251	-1,458
187,000	6,148	4,697	14692,029	16643,165	-23266,734	11555,796	-3,253	-1,476

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
187,500	6,148	4,697	15331,965	16685,740	-23923,643	11578,426	-3,261	-1,480
188,000	6,148	4,697	15883,042	16727,959	-24535,166	11600,775	-3,261	-1,503
188,500	6,148	4,697	16423,364	16769,795	-25100,864	11622,824	-3,267	-1,511
189,000	6,148	4,697	16873,956	16811,225	-25620,307	11644,557	-3,265	-1,537
189,500	6,148	4,697	17314,652	16852,227	-26093,072	11665,962	-3,270	-1,549
190,000	6,148	4,697	17664,683	16892,782	-26518,748	11687,023	-3,266	-1,578
190,500	6,148	4,697	18005,743	16932,875	-26896,932	11707,733	-3,270	-1,591
191,000	6,148	4,697	18255,154	16972,492	-27227,230	11728,081	-3,265	-1,622
191,500	6,148	4,697	18496,571	17011,620	-27509,260	11748,060	-3,268	-1,637
192,000	6,148	4,697	18645,319	17050,249	-27742,650	11767,662	-3,262	-1,670
192,500	6,148	4,697	18787,089	17088,370	-27927,037	11786,882	-3,264	-1,686
193,000	6,148	4,697	18835,148	17125,974	-28062,072	11805,717	-3,258	-1,721
193,500	6,148	4,697	18877,268	17163,058	-28147,415	11824,162	-3,259	-1,737
194,000	6,148	4,697	18825,162	17199,615	-28182,737	11842,214	-3,253	-1,771
194,500	6,148	4,697	18767,099	17235,643	-28167,721	11859,873	-3,254	-1,788
195,000	6,148	4,697	18615,343	17271,139	-28102,063	11877,138	-3,247	-1,822
195,500	6,148	4,697	18456,592	17306,105	-27985,467	11894,009	-3,248	-1,838
196,000	6,148	4,697	18205,189	17340,540	-27817,651	11910,488	-3,241	-1,871
196,500	6,148	4,697	17945,776	17374,448	-27598,346	11926,577	-3,242	-1,887
197,000	6,148	4,697	17594,731	17407,835	-27327,292	11942,282	-3,236	-1,919
197,500	6,148	4,697	17234,700	17440,707	-27004,243	11957,607	-3,237	-1,933
198,000	6,148	4,697	16784,019	17473,073	-26628,963	11972,558	-3,232	-1,963
198,500	6,148	4,697	16323,431	17504,945	-26201,229	11987,147	-3,233	-1,976
199,000	6,148	4,697	15773,125	17536,339	-25720,830	12001,381	-3,228	-2,004
199,500	6,148	4,697	15212,056	17567,272	-25187,565	12015,276	-3,231	-2,015
200,000	6,148	4,697	14562,136	17597,767	-24601,244	12028,846	-3,227	-2,041
200,500	6,148	4,697	13900,681	17627,849	-23961,687	12042,110	-3,230	-2,049
201,000	6,148	4,697	13151,162	17657,548	-23268,724	12055,089	-3,227	-2,072
201,500	6,148	4,697	12389,431	17686,900	-22522,193	12067,807	-3,231	-2,078
202,000	6,148	4,697	11540,330	17715,946	-21721,937	12080,293	-3,229	-2,097
202,500	6,148	4,697	10678,450	17744,733	-20867,806	12092,580	-3,235	-2,100
203,000	6,148	4,697	9729,786	17773,314	-19959,651	12104,703	-3,234	-2,117
203,500	6,148	4,697	8767,901	17801,752	-18997,326	12116,707	-3,241	-2,116
204,000	6,148	4,697	7719,695	17830,113	-17980,679	12128,635	-3,242	-2,129
204,500	6,148	4,697	6657,968	17858,477	-16909,552	12140,543	-3,251	-2,125
205,000	6,148	4,697	5510,244	17886,928	-15783,778	12152,487	-3,253	-2,133
205,500	6,148	4,697	4348,851	17915,561	-14603,173	12164,533	-3,264	-2,125
206,000	6,148	4,697	3102,035	17944,481	-13367,530	12176,750	-3,269	-2,129
206,500	6,148	4,697	1857,166	17973,801	-12076,619	12189,216	-3,284	-2,110

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
207,000	6,148	4,697	526,485	18003,646	-10730,173	12202,014	-3,294	-2,103
207,500	6,148	4,697	-817,644	18034,148	-9327,885	12215,235	-3,312	-2,079
208,000	6,148	4,697	-2247,757	18065,449	-7869,399	12228,970	-3,325	-2,066
208,500	6,148	4,697	-3690,918	18097,697	-6354,303	12243,322	-3,346	-2,036
209,000	6,148	4,697	-5220,428	18131,049	-4782,120	12258,394	-3,362	-2,017
209,500	6,148	4,697	-6762,376	18165,666	-3152,304	12274,296	-3,387	-1,980
210,000	6,148	4,697	-8391,247	18201,713	-1464,227	12291,134	-3,407	-1,955
210,500	6,148	4,697	-10002,496	18239,354	282,823	12309,020	-3,441	-1,897
211,000	6,148	4,697	-11668,555	18259,323	2087,424	12314,956	-3,470	-1,841
211,500	6,148	4,697	-13343,342	18224,094	3936,404	12283,672	-3,491	-1,776
211,950	6,517	5,007	-14908,589	18191,132	5533,015	12236,688	-3,283	-1,683
212,400	6,800	5,305	-16505,398	18161,519	6956,588	12210,052	-3,102	-1,698
212,850	7,107	5,589	-18168,249	18077,352	8182,532	12146,781	-2,876	-1,793
213,300	7,428	5,865	-19861,014	17993,378	9229,883	12083,704	-2,635	-1,942
213,750	7,750	6,133	-21594,140	17909,324	10100,859	12020,634	-2,385	-2,144
214,200	8,073	6,393	-23343,577	17823,660	10796,860	11924,306	-2,124	-2,397
214,650	8,395	6,647	-25165,779	17738,804	11321,614	11861,034	-1,856	-2,692
215,100	8,719	6,895	-27040,656	17653,370	11676,645	11797,437	-1,580	-3,028
215,550	9,043	7,139	-28970,518	17567,280	11864,238	11733,466	-1,295	-3,403
216,000	13,876	11,856	-30956,212	17480,497	11886,738	11669,097	-0,723	-2,471
216,450	9,043	7,139	-28955,348	17393,022	11746,551	11634,985	-1,252	-3,438
216,900	8,719	6,895	-27010,317	17304,892	11446,148	11600,191	-1,490	-3,100
217,350	8,395	6,647	-25120,270	17216,179	10988,054	11564,760	-1,718	-2,800
217,800	8,073	6,393	-23284,360	17126,990	10374,846	11528,761	-1,936	-2,541
218,250	7,750	6,133	-21498,063	17037,471	9609,134	11492,291	-2,143	-2,324
218,700	7,428	5,865	-19802,206	16948,944	8694,130	11487,877	-2,337	-2,156
219,150	7,107	5,589	-18075,590	16859,288	7631,188	11450,847	-2,527	-2,023
219,600	6,800	5,305	-16423,419	16769,970	6423,569	11413,793	-2,696	-1,949
220,050	6,517	5,007	-14792,743	16681,297	5073,783	11376,929	-2,844	-1,917
220,500	6,148	4,697	-13205,736	16593,623	3584,223	11340,499	-3,014	-1,989
221,000	6,148	4,697	-11538,850	16506,146	1886,999	11323,789	-2,991	-1,994
221,500	6,148	4,697	-9859,969	16412,519	254,495	11285,352	-2,977	-1,976
222,000	6,148	4,697	-8230,252	16377,532	-1317,481	11287,036	-2,982	-1,946
222,500	6,148	4,697	-6589,039	16343,985	-2836,186	11289,604	-3,000	-1,888
223,000	6,148	4,697	-5034,633	16311,734	-4302,270	11292,965	-3,011	-1,845
223,500	6,148	4,697	-3492,791	16280,633	-5716,311	11297,023	-3,030	-1,786
224,000	6,148	4,697	-2037,209	16250,541	-7078,816	11301,687	-3,043	-1,741
224,500	6,148	4,697	-594,774	16221,319	-8390,227	11306,862	-3,064	-1,680
225,000	6,148	4,697	761,739	16192,836	-9650,930	11312,464	-3,078	-1,633

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
225,500	6,148	4,697	2104,732	16077,422	-10802,440	11257,109	-3,084	-1,558
226,000	6,148	4,697	3362,108	16120,103	-12008,482	11312,336	-3,110	-1,521
226,500	6,148	4,697	4614,172	16163,225	-13174,825	11368,010	-3,143	-1,470
227,000	6,148	4,697	5780,425	16206,689	-14301,103	11424,058	-3,168	-1,437
227,500	6,148	4,697	6932,989	16250,403	-15386,924	11480,422	-3,197	-1,393
228,000	6,148	4,697	7999,541	16294,280	-16431,876	11537,040	-3,219	-1,368
228,500	6,148	4,697	9052,578	16338,244	-17435,529	11593,858	-3,245	-1,331
229,000	6,148	4,697	10019,254	16382,223	-18397,438	11650,825	-3,264	-1,313
229,500	6,148	4,697	10972,740	16426,151	-19317,153	11707,895	-3,288	-1,283
230,000	6,148	4,697	11839,381	16469,970	-20194,216	11765,027	-3,303	-1,270
230,500	6,148	4,697	12693,294	16513,626	-21028,166	11822,181	-3,324	-1,246
231,000	6,148	4,697	13459,759	16557,072	-21818,541	11879,322	-3,338	-1,239
231,500	6,148	4,697	14214,081	16600,264	-22564,882	11936,418	-3,357	-1,219
232,000	6,148	4,697	14880,243	16643,165	-23266,734	11993,441	-3,367	-1,217
232,500	6,148	4,697	15534,958	16685,740	-23923,643	12050,366	-3,384	-1,202
233,000	6,148	4,697	16100,711	16727,959	-24535,166	12107,166	-3,393	-1,204
233,500	6,148	4,697	16655,804	16769,795	-25100,864	12163,823	-3,409	-1,192
234,000	6,148	4,697	17121,057	16811,225	-25620,307	12220,317	-3,416	-1,198
234,500	6,148	4,697	17576,517	16852,227	-26093,072	12276,630	-3,430	-1,188
235,000	6,148	4,697	17941,197	16892,782	-26518,748	12332,747	-3,435	-1,197
235,500	6,148	4,697	18297,015	16932,875	-26896,932	12388,654	-3,448	-1,189
236,000	6,148	4,697	18561,066	16972,492	-27227,230	12444,339	-3,452	-1,200
236,500	6,148	4,697	18817,235	17011,620	-27509,260	12499,791	-3,464	-1,194
237,000	6,148	4,697	18980,618	17050,249	-27742,650	12554,999	-3,468	-1,207
237,500	6,148	4,697	19137,134	17088,370	-27927,037	12609,954	-3,479	-1,202
238,000	6,148	4,697	19199,826	17125,974	-28062,072	12664,649	-3,482	-1,215
238,500	6,148	4,697	19256,688	17163,058	-28147,415	12719,078	-3,493	-1,210
239,000	6,148	4,697	19219,324	17199,615	-28182,737	12773,231	-3,495	-1,224
239,500	6,148	4,697	19175,893	17235,643	-28167,721	12827,108	-3,506	-1,219
240,000	6,148	4,697	19038,875	17271,139	-28102,063	12880,703	-3,508	-1,233
240,500	6,148	4,697	18894,765	17306,105	-27985,467	12934,013	-3,519	-1,228
241,000	6,148	4,697	18658,096	17340,540	-27817,651	12987,038	-3,521	-1,240
241,500	6,148	4,697	18413,339	17374,448	-27598,346	13039,775	-3,532	-1,234
242,000	6,148	4,697	18077,025	17407,835	-27327,292	13092,228	-3,535	-1,245
242,500	6,148	4,697	17731,669	17440,707	-27004,243	13144,399	-3,546	-1,238
243,000	6,148	4,697	17295,718	17473,073	-26628,963	13196,293	-3,549	-1,247
243,500	6,148	4,697	16849,830	17504,945	-26201,229	13247,916	-3,561	-1,238
244,000	6,148	4,697	16314,253	17536,339	-25720,830	13299,277	-3,565	-1,245
244,500	6,148	4,697	15767,916	17567,272	-25187,565	13350,389	-3,577	-1,234

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
245,000	6,148	4,697	15132,725	17597,767	-24601,244	13401,263	-3,582	-1,238
245,500	6,148	4,697	14486,040	17627,849	-23961,687	13451,921	-3,595	-1,225
246,000	6,148	4,697	13751,252	17657,548	-23268,724	13502,381	-3,602	-1,226
246,500	6,148	4,697	13004,336	17686,900	-22522,193	13552,669	-3,616	-1,210
247,000	6,148	4,697	12169,967	17715,946	-21721,937	13602,817	-3,623	-1,209
247,500	6,148	4,697	11322,956	17744,733	-20867,806	13652,856	-3,638	-1,190
248,000	6,148	4,697	10389,027	17773,314	-19959,651	13702,829	-3,647	-1,184
248,500	6,148	4,697	9442,072	17801,752	-18997,326	13752,781	-3,664	-1,162
249,000	6,148	4,697	8408,606	17830,113	-17980,679	13802,767	-3,675	-1,153
249,500	6,148	4,697	7361,877	17858,477	-16909,552	13852,842	-3,693	-1,127
250,000	6,148	4,697	6228,899	17886,928	-15783,778	13903,077	-3,705	-1,114
250,500	6,148	4,697	5082,581	17915,561	-14603,173	13953,545	-3,726	-1,083
251,000	6,148	4,697	3858,449	17944,481	-13367,530	14004,325	-3,742	-1,062
251,500	6,148	4,697	2629,037	17973,801	-12076,619	14055,514	-3,767	-1,020
252,000	6,148	4,697	1313,411	18003,646	-10730,173	14107,205	-3,787	-0,991
252,500	6,148	4,697	-15,165	18034,148	-9327,885	14159,507	-3,815	-0,944
253,000	6,148	4,697	-1430,212	18065,449	-7869,399	14212,535	-3,838	-0,909
253,500	6,148	4,697	-2857,715	18097,697	-6354,303	14266,408	-3,869	-0,856
254,000	6,148	4,697	-4372,149	18131,049	-4782,120	14321,257	-3,895	-0,815
254,500	6,148	4,697	-5898,324	18165,666	-3152,304	14377,213	-3,930	-0,755
255,000	6,148	4,697	-7512,107	18201,713	-1464,227	14434,412	-3,960	-0,706
255,500	6,148	4,697	-9083,947	18239,354	282,823	14492,992	-4,009	-0,616
256,000	6,148	4,697	-10734,507	18259,323	2087,424	14537,623	-4,048	-0,537
256,500	6,148	4,697	-12392,858	18224,094	3936,404	14538,284	-4,078	-0,452
256,950	6,517	5,007	-13933,085	18191,132	5533,015	14509,581	-3,841	-0,424
257,400	6,800	5,305	-15514,712	18161,519	6956,588	14511,596	-3,636	-0,494
257,850	7,107	5,589	-17163,424	18077,352	8182,532	14469,862	-3,388	-0,638
258,300	7,428	5,865	-18840,869	17993,378	9229,883	14428,045	-3,129	-0,829
258,750	7,750	6,133	-20559,525	17909,324	10100,859	14385,927	-2,862	-1,068
259,200	8,073	6,393	-22267,907	17823,660	10796,860	14290,318	-2,587	-1,352
259,650	8,395	6,647	-24074,103	17738,804	11321,614	14247,119	-2,306	-1,677
260,100	8,719	6,895	-25934,434	17653,370	11676,645	14203,218	-2,018	-2,040
260,550	9,043	7,139	-27849,751	17567,280	11864,238	14158,548	-1,723	-2,439
261,000	13,876	11,856	-29820,900	17480,497	11886,738	14113,080	-0,983	-1,885
261,450	9,043	7,139	-27831,523	17393,022	11746,551	13866,908	-1,656	-2,526
261,900	8,719	6,895	-25897,978	17304,892	11446,148	13621,985	-1,881	-2,218
262,350	8,395	6,647	-24019,418	17216,179	10988,054	13378,389	-2,096	-1,949
262,800	8,073	6,393	-22194,994	17126,990	10374,846	13136,220	-2,299	-1,722
263,250	7,750	6,133	-20420,054	17037,471	9609,134	12895,602	-2,491	-1,539

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
263,700	7,428	5,865	-18752,579	16948,944	8694,130	12703,964	-2,670	-1,407
264,150	7,107	5,589	-17035,284	16859,288	7631,188	12465,981	-2,843	-1,309
264,600	6,800	5,305	-15393,670	16769,970	6423,569	12230,060	-2,995	-1,274
265,050	6,517	5,007	-13771,663	16681,297	5073,783	11996,414	-3,126	-1,282
265,500	6,148	4,697	-12194,734	16593,623	3584,223	11765,271	-3,277	-1,396
266,000	6,148	4,697	-10501,582	16506,146	1886,999	11540,308	-3,220	-1,476
266,500	6,148	4,697	-8779,677	16412,519	254,495	11289,756	-3,176	-1,528
267,000	6,148	4,697	-7143,314	16377,532	-1317,481	11080,991	-3,144	-1,582
267,500	6,148	4,697	-5520,755	16343,985	-2836,186	10873,976	-3,119	-1,619
268,000	6,148	4,697	-3982,949	16311,734	-4302,270	10668,564	-3,090	-1,669
268,500	6,148	4,697	-2459,782	16280,633	-5716,311	10464,620	-3,067	-1,703
269,000	6,148	4,697	-1020,838	16250,541	-7078,816	10262,015	-3,039	-1,750
269,500	6,148	4,697	402,895	16221,319	-8390,227	10060,631	-3,018	-1,782
270,000	6,148	4,697	1742,679	16192,836	-9650,930	9860,355	-2,991	-1,828
270,500	6,148	4,697	3066,936	18591,687	-12491,777	11111,435	-3,333	-2,327
271,000	6,148	4,697	4307,275	18639,442	-13885,234	10929,777	-3,279	-2,473
271,500	6,148	4,697	5532,016	18687,711	-15232,561	10747,338	-3,231	-2,607
272,000	6,148	4,697	6672,635	18736,378	-16533,350	10564,036	-3,176	-2,757
272,500	6,148	4,697	7797,822	18785,336	-17787,162	10379,800	-3,127	-2,894
273,000	6,148	4,697	8838,456	18834,486	-18993,533	10194,563	-3,071	-3,047
273,500	6,148	4,697	9864,052	18883,737	-20151,978	10008,273	-3,020	-3,187
274,000	6,148	4,697	10804,446	18933,003	-21261,997	9820,881	-2,963	-3,342
274,500	6,148	4,697	11730,416	18982,209	-22323,078	9632,347	-2,912	-3,484
275,000	6,148	4,697	12570,328	19031,284	-23334,704	9442,639	-2,854	-3,641
275,500	6,148	4,697	13396,637	19080,164	-24296,352	9251,733	-2,802	-3,784
276,000	6,148	4,697	14135,833	19128,793	-25207,498	9059,605	-2,743	-3,942
276,500	6,148	4,697	14862,450	19177,117	-26067,621	8866,242	-2,691	-4,085
277,000	6,148	4,697	15500,708	19225,091	-26876,202	8671,630	-2,632	-4,244
277,500	6,148	4,697	16127,601	19272,672	-27632,728	8475,765	-2,580	-4,386
278,000	6,148	4,697	16664,709	19319,822	-28336,693	8278,643	-2,521	-4,544
278,500	6,148	4,697	17191,849	19366,508	-28987,597	8080,266	-2,470	-4,685
279,000	6,148	4,697	17627,606	19412,699	-29584,953	7880,636	-2,411	-4,841
279,500	6,148	4,697	18054,965	19458,368	-30128,280	7679,759	-2,361	-4,980
280,000	6,148	4,697	18389,181	19503,490	-30617,109	7477,644	-2,303	-5,134
280,500	6,148	4,697	18716,732	19548,045	-31050,983	7274,300	-2,253	-5,269
281,000	6,148	4,697	18950,058	19592,012	-31429,457	7069,741	-2,196	-5,421
281,500	6,148	4,697	19176,945	19635,374	-31752,097	6863,980	-2,148	-5,553
282,000	6,148	4,697	19310,438	19678,116	-32018,481	6657,032	-2,093	-5,700
282,500	6,148	4,697	19435,410	19720,224	-32228,203	6448,915	-2,046	-5,828

X [m]	A _c [m ²]	I _c [m ⁴]	M _{qp,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
283,000	6,148	4,697	19469,048	19709,679	-32295,647	6223,223	-1,997	-5,933
283,500	6,148	4,697	19491,947	19669,674	-32258,266	5988,800	-1,958	-5,999
284,000	6,148	4,697	19425,707	19616,537	-32126,991	5751,430	-1,918	-6,061
284,500	6,148	4,697	19346,387	19562,395	-31906,293	5514,973	-1,892	-6,092
285,000	6,148	4,697	19180,249	19507,269	-31596,959	5279,470	-1,866	-6,121
285,500	6,148	4,697	18998,573	19451,184	-31199,805	5044,961	-1,854	-6,119
286,000	6,148	4,697	18732,519	19394,169	-30715,682	4811,484	-1,842	-6,117
286,500	6,148	4,697	18448,361	19336,261	-30145,469	4579,078	-1,842	-6,085
287,000	6,148	4,697	18082,372	19277,497	-29490,076	4347,786	-1,843	-6,051
287,500	6,148	4,697	17695,617	19217,925	-28750,438	4117,645	-1,856	-5,991
288,000	6,148	4,697	17229,678	19157,596	-27927,518	3888,692	-1,869	-5,928
288,500	6,148	4,697	16740,221	19096,572	-27022,304	3660,966	-1,894	-5,841
289,000	6,148	4,697	16174,318	19034,920	-26035,801	3434,500	-1,919	-5,751
289,500	6,148	4,697	15582,065	18972,720	-24969,036	3209,331	-1,955	-5,637
290,000	6,148	4,697	14916,185	18910,062	-23823,047	2985,492	-1,992	-5,521
290,500	6,148	4,697	14221,051	18847,050	-22598,880	2763,013	-2,038	-5,385
291,000	6,148	4,697	13455,183	18783,800	-21297,582	2541,921	-2,085	-5,244
291,500	6,148	4,697	12657,097	18720,444	-19920,196	2322,243	-2,140	-5,086
292,000	6,148	4,697	11791,230	18657,131	-18467,744	2103,996	-2,197	-4,923
292,500	6,148	4,697	10890,128	18594,027	-16941,224	1887,196	-2,262	-4,744
292,950	7,983	5,366	10026,409	18538,287	-15505,423	1690,037	-1,715	-3,692
293,400	8,354	5,720	9115,124	18482,379	-14010,464	1497,730	-1,702	-3,365
293,850	8,722	6,063	8163,871	18427,093	-12457,534	1306,597	-1,689	-3,069
294,300	9,138	6,410	7157,208	18372,601	-10847,184	1116,631	-1,665	-2,789
294,750	9,550	6,747	6111,863	18319,083	-9179,896	927,818	-1,645	-2,534
295,200	9,958	7,075	5009,500	18265,593	-7455,609	737,383	-1,627	-2,303
295,650	10,641	7,458	3844,398	18214,682	-5675,695	551,498	-1,564	-2,045
296,100	11,030	7,767	2624,680	18165,318	-3839,745	366,670	-1,553	-1,859
296,550	11,615	8,100	1342,172	18117,703	-1947,854	182,854	-1,515	-1,661
297,000	16,280	13,155	0,000	18072,035	0,000	0,000	-1,110	-1,110

ANEXO E - ESTADO LIMITE DE LARGURA DE FENDAS

E.1 Início de exploração

v_{inf} [m]	v_{sup} [m]	f_{ctm}	f_{ctk}
1,94	0,86	3,200	2,200

X [m]	A_c [m ²]	I_c [m ⁴]	$M_{Efrq,0}$ [kN.m]	P_0 [kN]	$P_0 \times e$ [kN.m]	$M_{PE,Hip,0}$ [kN.m]	σ_{sup} [MPa]	σ_{inf} [MPa]
0,000	16,290	13,155	0,000	17196,429	0,000	0,000	-1,056	-1,056
0,450	11,615	8,100	1603,990	17239,814	-1853,472	96,505	-1,468	-1,521
0,900	11,030	7,767	3120,480	17283,309	-3653,307	193,500	-1,529	-1,652
1,350	10,641	7,458	4546,126	17326,914	-5399,066	290,980	-1,563	-1,774
1,800	9,958	7,075	5900,178	17370,628	-7090,304	388,951	-1,647	-1,964
2,250	9,550	6,747	7178,589	17414,453	-8726,576	487,412	-1,688	-2,128
2,700	9,138	6,410	8375,924	17458,389	-10307,433	586,366	-1,730	-2,318
3,150	8,722	6,063	9525,501	17502,435	-11832,424	685,818	-1,777	-2,526
3,600	8,354	5,720	10595,859	17546,592	-13301,097	785,764	-1,812	-2,751
4,050	7,983	5,366	11634,302	17590,861	-14712,996	886,210	-1,852	-2,996
4,500	6,148	4,697	12619,263	17635,242	-16067,665	987,161	-2,418	-3,885
5,000	6,148	4,697	13640,157	17684,685	-17505,169	1099,911	-2,370	-4,019
5,500	6,148	4,697	14637,995	17734,266	-18870,816	1213,288	-2,332	-4,132
6,000	6,148	4,697	15547,692	17783,987	-20163,968	1327,293	-2,290	-4,251
6,500	6,148	4,697	16440,369	17833,847	-21383,981	1441,924	-2,260	-4,347
7,000	6,148	4,697	17238,993	17883,847	-22530,213	1557,189	-2,225	-4,451
7,500	6,148	4,697	18026,527	17933,987	-23602,012	1673,086	-2,203	-4,529
8,000	6,148	4,697	18714,226	17984,268	-24598,728	1789,618	-2,175	-4,616
8,500	6,148	4,697	19396,640	18034,689	-25519,704	1906,788	-2,161	-4,675
9,000	6,148	4,697	19973,580	18085,252	-26364,279	2024,606	-2,142	-4,745
9,500	6,148	4,697	20550,899	18135,957	-27131,789	2143,063	-2,137	-4,783
10,000	6,148	4,697	21017,269	18186,804	-27821,568	2262,169	-2,127	-4,834
10,500	6,148	4,697	21489,523	18237,793	-28432,944	2381,924	-2,131	-4,850
11,000	6,148	4,697	21845,533	18288,925	-28965,242	2502,331	-2,129	-4,882
11,500	6,148	4,697	22212,752	18340,201	-29417,783	2623,395	-2,144	-4,875
12,000	6,148	4,697	22458,632	18391,621	-29789,884	2745,116	-2,152	-4,886
12,500	6,148	4,697	22720,852	18443,184	-30080,859	2867,498	-2,177	-4,855
13,000	6,148	4,697	22856,854	18494,892	-30290,016	2990,545	-2,195	-4,843
13,500	6,148	4,697	23014,112	18546,746	-30416,663	3114,258	-2,232	-4,788
14,000	6,148	4,697	23040,509	18586,584	-30455,379	3236,521	-2,258	-4,749
14,500	6,148	4,697	23092,846	18626,507	-30440,772	3359,296	-2,299	-4,677

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
15,000	6,148	4,697	23009,932	18666,517	-30372,497	3482,588	-2,326	-4,639
15,500	6,148	4,697	22957,392	18706,612	-30250,208	3606,392	-2,368	-4,565
16,000	6,148	4,697	22765,482	18746,794	-30073,560	3730,716	-2,394	-4,527
16,500	6,148	4,697	22608,112	18787,061	-29842,203	3855,553	-2,437	-4,451
17,000	6,148	4,697	22309,707	18827,416	-29555,788	3980,913	-2,465	-4,411
17,500	6,148	4,697	22045,390	18867,857	-29213,964	4106,792	-2,508	-4,333
18,000	6,148	4,697	21642,204	18908,384	-28816,378	4233,200	-2,537	-4,290
18,500	6,148	4,697	21269,639	18948,999	-28362,675	4360,131	-2,582	-4,211
19,000	6,148	4,697	20761,725	18989,701	-27852,500	4487,590	-2,612	-4,164
19,500	6,148	4,697	20281,291	19030,491	-27285,495	4615,573	-2,658	-4,082
20,000	6,148	4,697	19668,705	19071,368	-26661,302	4744,089	-2,690	-4,031
20,500	6,148	4,697	19080,806	19112,333	-25979,560	4873,134	-2,738	-3,945
21,000	6,148	4,697	18363,606	19153,386	-25239,907	5002,717	-2,772	-3,889
21,500	6,148	4,697	17668,665	19194,527	-24441,979	5132,832	-2,822	-3,800
22,000	6,148	4,697	16846,914	19235,757	-23585,413	5263,487	-2,859	-3,738
22,500	6,148	4,697	16045,376	19277,075	-22669,840	5394,678	-2,910	-3,643
23,000	6,148	4,697	15119,138	19318,482	-21694,893	5526,410	-2,950	-3,576
23,500	6,148	4,697	14211,468	19359,977	-20660,203	5658,679	-3,004	-3,475
24,000	6,148	4,697	13180,812	19401,562	-19565,398	5791,499	-3,047	-3,401
24,500	6,148	4,697	12167,498	19443,236	-18410,105	5924,864	-3,104	-3,294
25,000	6,148	4,697	11032,493	19485,000	-17193,949	6058,774	-3,151	-3,212
25,500	6,148	4,697	9914,044	19526,854	-15916,555	6193,235	-3,211	-3,097
26,000	6,148	4,697	8674,765	19568,797	-14577,546	6328,245	-3,261	-3,007
26,500	6,148	4,697	7451,708	19610,830	-13176,541	6463,807	-3,325	-2,885
27,000	6,148	4,697	6108,232	19652,954	-11713,161	6599,922	-3,379	-2,786
27,500	6,148	4,697	4781,119	19695,168	-10187,022	6736,596	-3,447	-2,654
28,000	6,148	4,697	3333,526	19737,473	-8597,741	6873,828	-3,505	-2,546
28,500	6,148	4,697	1902,928	19779,869	-6944,932	7011,618	-3,578	-2,404
29,000	6,148	4,697	351,300	19822,356	-5228,208	7149,967	-3,640	-2,285
29,500	6,148	4,697	-1182,191	19864,934	-3447,179	7288,885	-3,718	-2,133
30,000	6,148	4,697	-2837,767	19907,603	-1601,456	7428,360	-3,785	-2,004
30,500	6,148	4,697	-4473,536	19950,365	309,354	7568,405	-3,868	-1,839
31,000	6,148	4,697	-6232,972	19971,445	2283,155	7700,624	-3,935	-1,699
31,500	6,148	4,697	-7944,185	19928,638	4304,586	7808,078	-4,005	-1,520
31,950	6,517	5,007	-9515,531	19885,924	6048,503	7902,664	-3,813	-1,333
32,400	6,800	5,305	-11071,489	19847,559	7602,409	7998,527	-3,653	-1,263
32,850	7,107	5,589	-12714,865	19748,086	8938,774	8068,993	-3,439	-1,288
33,300	7,428	5,865	-14383,958	19649,112	10079,208	8138,552	-3,207	-1,377
33,750	7,750	6,133	-16094,760	19550,633	11026,557	8207,209	-2,963	-1,530

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
34,200	8,073	6,393	-17846,763	19452,649	11783,636	8274,978	-2,707	-1,739
34,650	8,395	6,647	-19653,053	19355,155	12353,234	8341,859	-2,440	-2,001
35,100	8,719	6,895	-21525,150	19258,150	12738,111	8407,862	-2,161	-2,315
35,550	9,043	7,139	-23466,968	19161,631	12940,999	8472,999	-1,872	-2,677
36,000	13,876	11,856	-25482,417	19065,596	12964,605	8537,267	-1,085	-2,025
36,450	9,043	7,139	-23435,002	18970,042	12811,608	8490,934	-1,841	-2,677
36,900	8,719	6,895	-21461,219	18874,968	12484,659	8444,855	-2,098	-2,314
37,350	8,395	6,647	-19557,156	18780,369	11986,383	8399,021	-2,344	-1,995
37,800	8,073	6,393	-17718,901	18686,245	11319,380	8353,435	-2,578	-1,722
38,250	7,750	6,133	-15915,757	18592,592	10486,222	8308,096	-2,803	-1,488
38,700	7,428	5,865	-14190,607	18499,409	9489,457	8263,005	-3,013	-1,312
39,150	7,107	5,589	-12445,151	18406,693	8331,606	8218,154	-3,221	-1,165
39,600	6,800	5,305	-10807,531	18314,442	7015,164	8173,545	-3,404	-1,091
40,050	6,517	5,007	-9174,948	18222,653	5542,602	8129,180	-3,569	-1,054
40,500	6,148	4,697	-7585,005	18131,323	3916,366	8085,053	-3,758	-1,125
41,000	6,148	4,697	-5922,457	18040,452	2062,402	8040,792	-3,700	-1,208
41,500	6,148	4,697	-4228,076	17940,018	278,181	7992,313	-3,658	-1,248
42,000	6,148	4,697	-2643,717	17901,566	-1440,082	7971,473	-3,624	-1,306
42,500	6,148	4,697	-928,053	17863,196	-3099,816	7950,686	-3,624	-1,285
43,000	6,148	4,697	659,809	17824,908	-4701,375	7929,954	-3,611	-1,293
43,500	6,148	4,697	2271,608	17786,703	-6245,109	7909,272	-3,614	-1,268
44,000	6,148	4,697	3756,960	17748,579	-7731,369	7888,648	-3,604	-1,270
44,500	6,148	4,697	5264,820	17710,537	-9160,502	7868,074	-3,608	-1,240
45,000	6,148	4,697	6647,153	17672,577	-10532,856	7847,554	-3,600	-1,238
45,500	6,148	4,697	8051,004	17634,698	-11848,775	7827,087	-3,606	-1,204
46,000	6,148	4,697	9329,842	17578,074	-13094,580	7798,321	-3,598	-1,193
46,500	6,148	4,697	10645,538	17615,832	-14358,860	7811,429	-3,616	-1,173
47,000	6,148	4,697	11853,023	17653,670	-15577,947	7824,558	-3,622	-1,178
47,500	6,148	4,697	13081,246	17691,590	-16751,533	7837,711	-3,641	-1,156
48,000	6,148	4,697	14184,387	17729,591	-17879,308	7850,884	-3,645	-1,167
48,500	6,148	4,697	15308,420	17767,674	-18960,960	7864,079	-3,661	-1,151
49,000	6,148	4,697	16306,847	17805,839	-19996,177	7877,295	-3,663	-1,167
49,500	6,148	4,697	17326,640	17844,086	-20984,645	7890,530	-3,677	-1,154
50,000	6,148	4,697	18220,013	17882,414	-21926,048	7903,789	-3,677	-1,175
50,500	6,148	4,697	19135,520	17920,825	-22820,069	7917,070	-3,690	-1,167
51,000	6,148	4,697	19923,536	17959,319	-23666,392	7930,372	-3,688	-1,192
51,500	6,148	4,697	20734,716	17997,895	-24464,695	7943,692	-3,699	-1,187
52,000	6,148	4,697	21417,106	18036,555	-25214,658	7957,039	-3,695	-1,216
52,500	6,148	4,697	22123,924	18075,297	-25915,959	7970,405	-3,705	-1,214

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
53,000	6,148	4,697	22700,451	18114,122	-26568,274	7983,793	-3,700	-1,246
53,500	6,148	4,697	23302,876	18153,031	-27171,277	7997,204	-3,709	-1,247
54,000	6,148	4,697	23773,340	18192,023	-27724,644	8010,634	-3,702	-1,282
54,500	6,148	4,697	24271,346	18231,100	-28228,044	8024,086	-3,710	-1,285
55,000	6,148	4,697	24635,580	18270,260	-28681,150	8037,562	-3,703	-1,323
55,500	6,148	4,697	25029,146	18309,504	-29083,630	8051,059	-3,710	-1,327
56,000	6,148	4,697	25287,018	18348,832	-29435,151	8064,577	-3,702	-1,367
56,500	6,148	4,697	25576,128	18388,245	-29735,382	8078,118	-3,708	-1,372
57,000	6,148	4,697	25727,538	18427,743	-29983,985	8091,681	-3,700	-1,413
57,500	6,148	4,697	25912,181	18467,325	-30180,625	8105,265	-3,706	-1,419
58,000	6,148	4,697	25957,066	18506,993	-30324,964	8118,873	-3,697	-1,461
58,500	6,148	4,697	26037,235	18546,746	-30416,663	8132,499	-3,704	-1,467
59,000	6,148	4,697	25976,369	18586,584	-30455,379	8146,150	-3,695	-1,509
59,500	6,148	4,697	25951,260	18626,507	-30440,772	8159,824	-3,702	-1,514
60,000	6,148	4,697	25785,918	18666,517	-30372,497	8173,519	-3,693	-1,555
60,500	6,148	4,697	25654,263	18706,612	-30250,208	8187,235	-3,700	-1,559
61,000	6,148	4,697	25384,450	18746,794	-30073,560	8200,973	-3,692	-1,599
61,500	6,148	4,697	25146,291	18787,061	-29842,203	8214,735	-3,700	-1,602
62,000	6,148	4,697	24772,015	18827,416	-29555,788	8228,519	-3,693	-1,640
62,500	6,148	4,697	24427,432	18867,857	-29213,964	8242,325	-3,702	-1,642
63,000	6,148	4,697	23948,706	18908,384	-28816,378	8256,155	-3,696	-1,676
63,500	6,148	4,697	23497,810	18948,999	-28362,675	8270,003	-3,706	-1,676
64,000	6,148	4,697	22914,652	18989,701	-27852,500	8283,876	-3,701	-1,707
64,500	6,148	4,697	22357,591	19030,491	-27285,495	8297,773	-3,712	-1,704
65,000	6,148	4,697	21670,024	19071,368	-26661,302	8311,691	-3,710	-1,731
65,500	6,148	4,697	21006,978	19112,333	-25979,560	8325,629	-3,723	-1,724
66,000	6,148	4,697	20215,030	19153,386	-25239,907	8339,593	-3,722	-1,746
66,500	6,148	4,697	19446,214	19194,527	-24441,979	8353,579	-3,737	-1,735
67,000	6,148	4,697	18549,918	19235,757	-23585,413	8367,588	-3,739	-1,753
67,500	6,148	4,697	17675,582	19277,075	-22669,840	8381,620	-3,756	-1,736
68,000	6,148	4,697	16674,976	19318,482	-21694,893	8395,672	-3,760	-1,748
68,500	6,148	4,697	15695,404	19359,977	-20660,203	8409,748	-3,780	-1,726
69,000	6,148	4,697	14590,529	19401,562	-19565,398	8423,847	-3,787	-1,731
69,500	6,148	4,697	13506,039	19443,236	-18410,105	8437,970	-3,810	-1,703
70,000	6,148	4,697	12296,944	19485,000	-17193,949	8452,117	-3,820	-1,701
70,500	6,148	4,697	11107,888	19526,854	-15916,555	8466,282	-3,846	-1,665
71,000	6,148	4,697	9794,625	19568,797	-14577,546	8480,474	-3,860	-1,656
71,500	6,148	4,697	8518,157	19610,830	-13176,541	8494,687	-3,892	-1,605
72,000	6,148	4,697	7117,870	19652,954	-11713,161	8508,923	-3,913	-1,580

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
72,500	6,148	4,697	5737,962	19695,168	-10187,022	8523,184	-3,949	-1,521
73,000	6,148	4,697	4233,627	19737,473	-8597,741	8537,465	-3,974	-1,487
73,500	6,148	4,697	2750,414	19779,869	-6944,932	8551,769	-4,015	-1,418
74,000	6,148	4,697	1142,098	19822,356	-5228,208	8566,100	-4,044	-1,374
74,500	6,148	4,697	-443,928	19864,934	-3447,179	8580,451	-4,090	-1,294
75,000	6,148	4,697	-2156,153	19907,603	-1601,456	8594,826	-4,124	-1,240
75,500	6,148	4,697	-3797,968	19950,365	309,354	8609,223	-4,183	-1,130
76,000	6,148	4,697	-5490,692	19971,445	2283,155	8614,254	-4,238	-1,015
76,500	6,148	4,697	-7153,808	19928,638	4304,586	8591,730	-4,293	-0,870
76,950	6,517	5,007	-8762,673	19885,924	6048,503	8569,674	-4,057	-0,783
77,400	6,800	5,305	-10352,320	19847,559	7602,409	8549,507	-3,859	-0,798
77,850	7,107	5,589	-12033,206	19748,086	8938,774	8503,042	-3,611	-0,901
78,300	7,428	5,865	-13736,158	19649,112	10079,208	8456,828	-3,349	-1,058
78,750	7,750	6,133	-15483,584	19550,633	11026,557	8410,866	-3,077	-1,272
79,200	8,073	6,393	-17272,832	19452,649	11783,636	8365,151	-2,797	-1,537
79,650	8,395	6,647	-19116,627	19355,155	12353,234	8319,682	-2,507	-1,851
80,100	8,719	6,895	-21026,229	19258,150	12738,111	8274,463	-2,207	-2,213
80,550	9,043	7,139	-23005,551	19161,631	12940,999	8229,488	-1,898	-2,618
81,000	13,876	11,856	-25058,506	19065,596	12964,605	8184,756	-1,090	-2,014
81,450	9,043	7,139	-23015,832	18970,042	12811,608	8143,473	-1,849	-2,658
81,900	8,719	6,895	-21046,790	18874,968	12484,659	8102,399	-2,107	-2,294
82,350	8,395	6,647	-19147,468	18780,369	11986,383	8061,530	-2,353	-1,974
82,800	8,073	6,393	-17311,030	18686,245	11319,380	8020,871	-2,588	-1,699
83,250	7,750	6,133	-15502,736	18592,592	10486,222	7980,418	-2,815	-1,461
83,700	7,428	5,865	-13782,504	18499,409	9489,457	7940,165	-3,025	-1,284
84,150	7,107	5,589	-12039,592	18406,693	8331,606	7900,121	-3,235	-1,135
84,600	6,800	5,305	-10406,923	18314,442	7015,164	7860,274	-3,418	-1,059
85,050	6,517	5,007	-8777,164	18222,653	5542,602	7820,632	-3,584	-1,019
85,500	6,148	4,697	-7191,707	18131,323	3916,366	7781,190	-3,774	-1,088
86,000	6,148	4,697	-5532,863	18040,452	2062,402	7741,921	-3,716	-1,170
86,500	6,148	4,697	-3844,057	17940,018	278,181	7698,554	-3,675	-1,211
87,000	6,148	4,697	-2217,455	17901,566	-1440,082	7681,785	-3,649	-1,250
87,500	6,148	4,697	-508,191	17863,196	-3099,816	7665,052	-3,648	-1,230
88,000	6,148	4,697	1074,644	17824,908	-4701,375	7648,361	-3,636	-1,238
88,500	6,148	4,697	2680,020	17786,703	-6245,109	7631,705	-3,638	-1,214
89,000	6,148	4,697	4160,115	17748,579	-7731,369	7615,084	-3,627	-1,217
89,500	6,148	4,697	5661,529	17710,537	-9160,502	7598,502	-3,631	-1,188
90,000	6,148	4,697	7038,394	17672,577	-10532,856	7581,958	-3,623	-1,186
90,500	6,148	4,697	8435,780	17540,398	-11785,415	7524,996	-3,617	-1,129

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
91,000	6,148	4,697	9708,958	17578,074	-13094,580	7540,904	-3,620	-1,143
91,500	6,148	4,697	11033,448	17615,832	-14358,860	7556,847	-3,640	-1,118
92,000	6,148	4,697	12234,509	17653,670	-15577,947	7572,827	-3,646	-1,125
92,500	6,148	4,697	13455,648	17691,590	-16751,533	7588,839	-3,664	-1,105
93,000	6,148	4,697	14552,212	17729,591	-17879,308	7604,886	-3,667	-1,117
93,500	6,148	4,697	15669,150	17767,674	-18960,960	7620,968	-3,683	-1,102
94,000	6,148	4,697	16660,861	17805,839	-19996,177	7637,084	-3,684	-1,120
94,500	6,148	4,697	17673,550	17844,086	-20984,645	7653,235	-3,697	-1,109
95,000	6,148	4,697	18560,086	17882,414	-21926,048	7669,425	-3,697	-1,131
95,500	6,148	4,697	19468,483	17920,825	-22820,069	7685,646	-3,708	-1,125
96,000	6,148	4,697	20249,555	17959,319	-23666,392	7701,902	-3,706	-1,151
96,500	6,148	4,697	21053,622	17997,895	-24464,695	7718,197	-3,716	-1,149
97,000	6,148	4,697	21728,977	18036,555	-25214,658	7734,524	-3,712	-1,179
97,500	6,148	4,697	22428,679	18075,297	-25915,959	7750,887	-3,721	-1,179
98,000	6,148	4,697	22998,094	18114,122	-26568,274	7767,286	-3,715	-1,213
98,500	6,148	4,697	23593,403	18153,031	-27171,277	7783,722	-3,723	-1,216
99,000	6,148	4,697	24056,692	18192,023	-27724,644	7800,194	-3,716	-1,252
99,500	6,148	4,697	24547,584	18231,100	-28228,044	7816,700	-3,723	-1,257
100,000	6,148	4,697	24904,592	18270,260	-28681,150	7833,242	-3,714	-1,296
100,500	6,148	4,697	25291,047	18309,504	-29083,630	7849,820	-3,721	-1,302
101,000	6,148	4,697	25541,653	18348,832	-29435,151	7866,433	-3,712	-1,344
101,500	6,148	4,697	25823,657	18388,245	-29735,382	7883,085	-3,718	-1,351
102,000	6,148	4,697	25967,775	18427,743	-29983,985	7899,771	-3,708	-1,393
102,500	6,148	4,697	26145,319	18467,325	-30180,625	7916,492	-3,714	-1,401
103,000	6,148	4,697	26182,894	18506,993	-30324,964	7933,254	-3,704	-1,444
103,500	6,148	4,697	26255,972	18546,746	-30416,663	7950,048	-3,710	-1,452
104,000	6,148	4,697	26188,015	18586,584	-30455,379	7966,879	-3,701	-1,495
104,500	6,148	4,697	26155,598	18626,507	-30440,772	7983,751	-3,707	-1,502
105,000	6,148	4,697	25983,175	18666,517	-30372,497	8000,656	-3,697	-1,545
105,500	6,148	4,697	25844,214	18706,612	-30250,208	8017,598	-3,704	-1,551
106,000	6,148	4,697	25567,330	18746,794	-30073,560	8034,578	-3,695	-1,592
106,500	6,148	4,697	25321,877	18787,061	-29842,203	8051,592	-3,702	-1,597
107,000	6,148	4,697	24940,541	18827,416	-29555,788	8068,646	-3,695	-1,636
107,500	6,148	4,697	24588,681	18867,857	-29213,964	8085,735	-3,703	-1,640
108,000	6,148	4,697	24102,908	18908,384	-28816,378	8102,863	-3,696	-1,676
108,500	6,148	4,697	23644,761	18948,999	-28362,675	8120,028	-3,705	-1,677
109,000	6,148	4,697	23054,570	18989,701	-27852,500	8137,229	-3,700	-1,710
109,500	6,148	4,697	22490,288	19030,491	-27285,495	8154,470	-3,710	-1,708
110,000	6,148	4,697	21795,702	19071,368	-26661,302	8171,746	-3,707	-1,737

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
110,500	6,148	4,697	21125,471	19112,333	-25979,560	8189,060	-3,719	-1,731
111,000	6,148	4,697	20326,519	19153,386	-25239,907	8206,415	-3,718	-1,755
111,500	6,148	4,697	19550,559	19194,527	-24441,979	8223,803	-3,732	-1,746
112,000	6,148	4,697	18647,275	19235,757	-23585,413	8241,232	-3,734	-1,765
112,500	6,148	4,697	17765,838	19277,075	-22669,840	8258,698	-3,750	-1,750
113,000	6,148	4,697	16758,260	19318,482	-21694,893	8276,201	-3,754	-1,763
113,500	6,148	4,697	15771,633	19359,977	-20660,203	8293,743	-3,772	-1,743
114,000	6,148	4,697	14659,804	19401,562	-19565,398	8311,324	-3,779	-1,749
114,500	6,148	4,697	13568,308	19443,236	-18410,105	8328,942	-3,801	-1,722
115,000	6,148	4,697	12352,275	19485,000	-17193,949	8346,598	-3,811	-1,722
115,500	6,148	4,697	11156,263	19526,854	-15916,555	8364,293	-3,836	-1,688
116,000	6,148	4,697	9836,080	19568,797	-14577,546	8382,028	-3,849	-1,679
116,500	6,148	4,697	8563,174	19610,830	-13176,541	8399,800	-3,883	-1,626
117,000	6,148	4,697	7166,641	19652,954	-11713,161	8417,608	-3,905	-1,598
117,500	6,148	4,697	5790,537	19695,168	-10187,022	8435,462	-3,943	-1,535
118,000	6,148	4,697	4289,972	19737,473	-8597,741	8453,351	-3,969	-1,498
118,500	6,148	4,697	2810,615	19779,869	-6944,932	8471,277	-4,011	-1,426
119,000	6,148	4,697	1206,087	19822,356	-5228,208	8489,243	-4,042	-1,379
119,500	6,148	4,697	-376,036	19864,934	-3447,179	8507,251	-4,089	-1,297
120,000	6,148	4,697	-2084,457	19907,603	-1601,456	8525,295	-4,124	-1,239
120,500	6,148	4,697	-3715,141	19950,365	309,354	8543,381	-4,186	-1,123
121,000	6,148	4,697	-5403,249	19971,445	2283,155	8552,180	-4,243	-1,005
121,500	6,148	4,697	-7061,574	19928,638	4304,586	8533,624	-4,299	-0,856
121,950	6,517	5,007	-8666,269	19885,924	6048,503	8515,133	-4,064	-0,766
122,400	6,800	5,305	-10251,551	19847,559	7602,409	8498,502	-3,867	-0,780
122,850	7,107	5,589	-11928,254	19748,086	8938,774	8455,712	-3,620	-0,881
123,300	7,428	5,865	-13626,808	19649,112	10079,208	8413,137	-3,359	-1,036
123,750	7,750	6,133	-15369,983	19550,633	11026,557	8370,774	-3,087	-1,249
124,200	8,073	6,393	-17155,133	19452,649	11783,636	8328,630	-2,808	-1,512
124,650	8,395	6,647	-18994,728	19355,155	12353,234	8286,693	-2,518	-1,825
125,100	8,719	6,895	-20900,132	19258,150	12738,111	8244,973	-2,219	-2,185
125,550	9,043	7,139	-22875,255	19161,631	12940,999	8203,458	-1,910	-2,589
126,000	13,876	11,856	-24924,011	19065,596	12964,605	8162,159	-1,099	-1,995
126,450	9,043	7,139	-22874,279	18970,042	12811,608	8120,975	-1,864	-2,625
126,900	8,719	6,895	-20896,581	18874,968	12484,659	8080,002	-2,123	-2,258
127,350	8,395	6,647	-18988,603	18780,369	11986,383	8039,236	-2,371	-1,934
127,800	8,073	6,393	-17146,432	18686,245	11319,380	7998,679	-2,607	-1,656
128,250	7,750	6,133	-15357,297	18592,592	10486,222	7958,323	-2,832	-1,422
128,700	7,428	5,865	-13635,125	18499,409	9489,457	7918,173	-3,044	-1,243

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
129,150	7,107	5,589	-11890,079	18406,693	8331,606	7878,225	-3,254	-1,090
129,600	6,800	5,305	-10255,474	18314,442	7015,164	7838,480	-3,439	-1,012
130,050	6,517	5,007	-8623,604	18222,653	5542,602	7798,938	-3,607	-0,968
130,500	6,148	4,697	-7036,171	18131,323	3916,366	7759,594	-3,799	-1,033
131,000	6,148	4,697	-5375,028	18040,452	2062,402	7720,419	-3,741	-1,114
131,500	6,148	4,697	-3684,077	17940,018	278,181	7677,158	-3,700	-1,154
132,000	6,148	4,697	-2051,393	17901,566	-1440,082	7660,426	-3,675	-1,190
132,500	6,148	4,697	-340,056	17863,196	-3099,816	7643,731	-3,675	-1,169
133,000	6,148	4,697	1244,965	17824,908	-4701,375	7627,071	-3,663	-1,177
133,500	6,148	4,697	2852,411	17786,703	-6245,109	7610,448	-3,665	-1,151
134,000	6,148	4,697	4334,673	17748,579	-7731,369	7593,863	-3,655	-1,153
134,500	6,148	4,697	5838,156	17710,537	-9160,502	7577,315	-3,660	-1,123
135,000	6,148	4,697	7217,170	17672,577	-10532,856	7560,806	-3,652	-1,121
135,500	6,148	4,697	8616,624	17540,398	-11785,415	7503,990	-3,647	-1,063
136,000	6,148	4,697	9892,404	17578,074	-13094,580	7519,842	-3,650	-1,076
136,500	6,148	4,697	11218,780	17615,832	-14358,860	7535,727	-3,670	-1,050
137,000	6,148	4,697	12420,983	17653,670	-15577,947	7551,648	-3,676	-1,056
137,500	6,148	4,697	13643,210	17691,590	-16751,533	7567,602	-3,694	-1,036
138,000	6,148	4,697	14740,903	17729,591	-17879,308	7583,592	-3,698	-1,048
138,500	6,148	4,697	15858,928	17767,674	-18960,960	7599,618	-3,713	-1,032
139,000	6,148	4,697	16851,755	17805,839	-19996,177	7615,677	-3,715	-1,050
139,500	6,148	4,697	17865,531	17844,086	-20984,645	7631,773	-3,729	-1,039
140,000	6,148	4,697	18753,173	17882,414	-21926,048	7647,902	-3,728	-1,060
140,500	6,148	4,697	19662,656	17920,825	-22820,069	7664,067	-3,740	-1,054
141,000	6,148	4,697	20444,827	17959,319	-23666,392	7680,265	-3,737	-1,080
141,500	6,148	4,697	21249,978	17997,895	-24464,695	7696,500	-3,748	-1,076
142,000	6,148	4,697	21926,423	18036,555	-25214,658	7712,772	-3,744	-1,106
142,500	6,148	4,697	22627,210	18075,297	-25915,959	7729,076	-3,753	-1,106
143,000	6,148	4,697	23197,710	18114,122	-26568,274	7745,417	-3,747	-1,139
143,500	6,148	4,697	23794,103	18153,031	-27171,277	7761,794	-3,755	-1,142
144,000	6,148	4,697	24258,471	18192,023	-27724,644	7778,203	-3,748	-1,178
144,500	6,148	4,697	24750,447	18231,100	-28228,044	7794,650	-3,756	-1,182
145,000	6,148	4,697	25108,529	18270,260	-28681,150	7811,135	-3,748	-1,221
145,500	6,148	4,697	25496,069	18309,504	-29083,630	7827,652	-3,754	-1,227
146,000	6,148	4,697	25747,746	18348,832	-29435,151	7844,209	-3,746	-1,268
146,500	6,148	4,697	26030,836	18388,245	-29735,382	7860,799	-3,752	-1,274
147,000	6,148	4,697	26176,022	18427,743	-29983,985	7877,424	-3,742	-1,317
147,500	6,148	4,697	26354,651	18467,325	-30180,625	7894,089	-3,749	-1,324
148,000	6,148	4,697	26393,294	18506,993	-30324,964	7910,788	-3,739	-1,367

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
148,500	6,148	4,697	26467,458	18546,746	-30416,663	7927,524	-3,745	-1,374
149,000	6,148	4,697	26400,587	18586,584	-30455,379	7944,296	-3,735	-1,417
149,500	6,148	4,697	26369,237	18626,507	-30440,772	7961,103	-3,742	-1,423
150,000	6,148	4,697	26197,902	18666,517	-30372,497	7977,948	-3,733	-1,465
150,500	6,148	4,697	26060,008	18706,612	-30250,208	7994,830	-3,739	-1,471
151,000	6,148	4,697	25784,212	18746,794	-30073,560	8011,748	-3,731	-1,512
151,500	6,148	4,697	25539,828	18787,061	-29842,203	8028,704	-3,738	-1,517
152,000	6,148	4,697	25159,581	18827,416	-29555,788	8045,696	-3,731	-1,555
152,500	6,148	4,697	24808,792	18867,857	-29213,964	8062,723	-3,739	-1,558
153,000	6,148	4,697	24324,108	18908,384	-28816,378	8079,789	-3,732	-1,594
153,500	6,148	4,697	23867,034	18948,999	-28362,675	8096,891	-3,741	-1,595
154,000	6,148	4,697	23277,934	18989,701	-27852,500	8114,031	-3,737	-1,627
154,500	6,148	4,697	22714,727	19030,491	-27285,495	8131,209	-3,747	-1,625
155,000	6,148	4,697	22021,233	19071,368	-26661,302	8148,423	-3,744	-1,653
155,500	6,148	4,697	21352,081	19112,333	-25979,560	8165,676	-3,757	-1,647
156,000	6,148	4,697	20554,223	19153,386	-25239,907	8182,966	-3,756	-1,671
156,500	6,148	4,697	19779,345	19194,527	-24441,979	8200,294	-3,770	-1,661
157,000	6,148	4,697	18877,156	19235,757	-23585,413	8217,657	-3,771	-1,679
157,500	6,148	4,697	17996,806	19277,075	-22669,840	8235,060	-3,788	-1,664
158,000	6,148	4,697	16990,324	19318,482	-21694,893	8252,503	-3,792	-1,677
158,500	6,148	4,697	16004,790	19359,977	-20660,203	8269,980	-3,811	-1,656
159,000	6,148	4,697	14894,058	19401,562	-19565,398	8287,497	-3,818	-1,662
159,500	6,148	4,697	13803,658	19443,236	-18410,105	8305,052	-3,840	-1,635
160,000	6,148	4,697	12588,724	19485,000	-17193,949	8322,643	-3,850	-1,634
160,500	6,148	4,697	11393,815	19526,854	-15916,555	8340,275	-3,875	-1,599
161,000	6,148	4,697	10074,731	19568,797	-14577,546	8357,944	-3,889	-1,591
161,500	6,148	4,697	8806,244	19610,830	-13176,541	8375,651	-3,923	-1,536
162,000	6,148	4,697	7414,083	19652,954	-11713,161	8393,399	-3,946	-1,506
162,500	6,148	4,697	6042,363	19695,168	-10187,022	8411,183	-3,985	-1,441
163,000	6,148	4,697	4546,173	19737,473	-8597,741	8429,005	-4,012	-1,402
163,500	6,148	4,697	3071,204	19779,869	-6944,932	8446,871	-4,055	-1,329
164,000	6,148	4,697	1471,051	19822,356	-5228,208	8464,772	-4,086	-1,280
164,500	6,148	4,697	-106,677	19864,934	-3447,179	8482,713	-4,134	-1,195
165,000	6,148	4,697	-1810,721	19907,603	-1601,456	8500,693	-4,170	-1,136
165,500	6,148	4,697	-3436,112	19950,365	309,354	8518,710	-4,232	-1,018
166,000	6,148	4,697	-5119,770	19971,445	2283,155	8527,474	-4,290	-0,898
166,500	6,148	4,697	-6773,620	19928,638	4304,586	8508,957	-4,347	-0,747
166,950	6,517	5,007	-8374,310	19885,924	6048,503	8490,506	-4,110	-0,663
167,400	6,800	5,305	-9955,557	19847,559	7602,409	8473,913	-3,911	-0,681

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
167,850	7,107	5,589	-11628,253	19748,086	8938,774	8431,234	-3,662	-0,786
168,300	7,428	5,865	-13322,769	19649,112	10079,208	8388,766	-3,400	-0,943
168,750	7,750	6,133	-15061,927	19550,633	11026,557	8346,517	-3,127	-1,159
169,200	8,073	6,393	-16844,498	19452,649	11783,636	8304,482	-2,846	-1,425
169,650	8,395	6,647	-18680,105	19355,155	12353,234	8262,656	-2,556	-1,740
170,100	8,719	6,895	-20581,520	19258,150	12738,111	8221,044	-2,256	-2,103
170,550	9,043	7,139	-22552,654	19161,631	12940,999	8179,641	-1,946	-2,508
171,000	13,876	11,856	-24595,821	19065,596	12964,605	8138,445	-1,121	-1,946
171,450	9,043	7,139	-22559,044	18970,042	12811,608	8098,362	-1,899	-2,546
171,900	8,719	6,895	-20595,898	18874,968	12484,659	8058,475	-2,158	-2,180
172,350	8,395	6,647	-18702,473	18780,369	11986,383	8018,786	-2,406	-1,857
172,800	8,073	6,393	-16874,855	18686,245	11319,380	7979,296	-2,641	-1,579
173,250	7,750	6,133	-15101,683	18592,592	10486,222	7939,994	-2,865	-1,347
173,700	7,428	5,865	-13394,044	18499,409	9489,457	7900,892	-3,076	-1,169
174,150	7,107	5,589	-11663,500	18406,693	8331,606	7861,983	-3,287	-1,017
174,600	6,800	5,305	-10043,430	18314,442	7015,164	7823,261	-3,471	-0,940
175,050	6,517	5,007	-8426,066	18222,653	5542,602	7784,735	-3,638	-0,897
175,500	6,148	4,697	-6853,162	18131,323	3916,366	7746,399	-3,830	-0,963
176,000	6,148	4,697	-5208,146	18040,452	2062,402	7708,326	-3,770	-1,050
176,500	6,148	4,697	-3533,347	17940,018	278,181	7666,161	-3,726	-1,096
177,000	6,148	4,697	-1915,971	17901,566	-1440,082	7650,475	-3,698	-1,138
177,500	6,148	4,697	-220,858	17863,196	-3099,816	7634,824	-3,695	-1,124
178,000	6,148	4,697	1347,955	17824,908	-4701,375	7619,209	-3,680	-1,137
178,500	6,148	4,697	2939,175	17786,703	-6245,109	7603,622	-3,680	-1,118
179,000	6,148	4,697	4405,224	17748,579	-7731,369	7588,068	-3,667	-1,127
179,500	6,148	4,697	5892,480	17710,537	-9160,502	7572,549	-3,669	-1,103
180,000	6,148	4,697	7255,275	17672,577	-10532,856	7557,061	-3,658	-1,107
180,500	6,148	4,697	8638,500	17540,398	-11785,415	7501,278	-3,650	-1,055
181,000	6,148	4,697	9898,097	17578,074	-13094,580	7518,131	-3,650	-1,074
181,500	6,148	4,697	11204,972	17615,832	-14358,860	7535,026	-3,667	-1,056
182,000	6,148	4,697	12387,675	17653,670	-15577,947	7551,957	-3,670	-1,070
182,500	6,148	4,697	13590,399	17691,590	-16751,533	7568,926	-3,685	-1,057
183,000	6,148	4,697	14668,587	17729,591	-17879,308	7585,936	-3,685	-1,077
183,500	6,148	4,697	15767,107	17767,674	-18960,960	7602,983	-3,697	-1,069
184,000	6,148	4,697	16740,425	17805,839	-19996,177	7620,070	-3,695	-1,094
184,500	6,148	4,697	17734,695	17844,086	-20984,645	7637,199	-3,706	-1,090
185,000	6,148	4,697	18602,823	17882,414	-21926,048	7654,365	-3,702	-1,120
185,500	6,148	4,697	19492,799	17920,825	-22820,069	7671,571	-3,710	-1,121
186,000	6,148	4,697	20255,451	17959,319	-23666,392	7688,815	-3,704	-1,154

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
186,500	6,148	4,697	21041,094	17997,895	-24464,695	7706,100	-3,712	-1,159
187,000	6,148	4,697	21698,016	18036,555	-25214,658	7723,424	-3,704	-1,196
187,500	6,148	4,697	22379,293	18075,297	-25915,959	7740,787	-3,710	-1,204
188,000	6,148	4,697	22930,267	18114,122	-26568,274	7758,194	-3,701	-1,245
188,500	6,148	4,697	23507,150	18153,031	-27171,277	7775,637	-3,705	-1,255
189,000	6,148	4,697	23951,988	18192,023	-27724,644	7793,121	-3,695	-1,299
189,500	6,148	4,697	24424,452	18231,100	-28228,044	7810,646	-3,699	-1,310
190,000	6,148	4,697	24763,003	18270,260	-28681,150	7828,210	-3,688	-1,357
190,500	6,148	4,697	25131,031	18309,504	-29083,630	7845,815	-3,691	-1,370
191,000	6,148	4,697	25363,175	18348,832	-29435,151	7863,462	-3,679	-1,419
191,500	6,148	4,697	25626,750	18388,245	-29735,382	7881,147	-3,682	-1,433
192,000	6,148	4,697	25752,403	18427,743	-29983,985	7898,875	-3,669	-1,483
192,500	6,148	4,697	25911,517	18467,325	-30180,625	7916,641	-3,672	-1,497
193,000	6,148	4,697	25930,626	18506,993	-30324,964	7934,451	-3,658	-1,548
193,500	6,148	4,697	25985,274	18546,746	-30416,663	7952,301	-3,661	-1,563
194,000	6,148	4,697	25898,888	18586,584	-30455,379	7970,189	-3,648	-1,613
194,500	6,148	4,697	25848,004	18626,507	-30440,772	7988,123	-3,651	-1,627
195,000	6,148	4,697	25657,152	18666,517	-30372,497	8006,095	-3,639	-1,677
195,500	6,148	4,697	25499,725	18706,612	-30250,208	8024,110	-3,642	-1,691
196,000	6,148	4,697	25204,413	18746,794	-30073,560	8042,165	-3,630	-1,739
196,500	6,148	4,697	24940,498	18787,061	-29842,203	8060,261	-3,634	-1,751
197,000	6,148	4,697	24540,734	18827,416	-29555,788	8078,401	-3,623	-1,797
197,500	6,148	4,697	24170,417	18867,857	-29213,964	8096,582	-3,628	-1,808
198,000	6,148	4,697	23666,217	18908,384	-28816,378	8114,805	-3,618	-1,851
198,500	6,148	4,697	23189,619	18948,999	-28362,675	8133,070	-3,624	-1,860
199,000	6,148	4,697	22581,002	18989,701	-27852,500	8151,374	-3,616	-1,899
199,500	6,148	4,697	21998,278	19030,491	-27285,495	8169,723	-3,623	-1,905
200,000	6,148	4,697	21285,267	19071,368	-26661,302	8188,113	-3,617	-1,941
200,500	6,148	4,697	20596,604	19112,333	-25979,560	8206,546	-3,626	-1,943
201,000	6,148	4,697	19779,229	19153,386	-25239,907	8225,023	-3,622	-1,974
201,500	6,148	4,697	18984,847	19194,527	-24441,979	8243,539	-3,632	-1,971
202,000	6,148	4,697	18063,142	19235,757	-23585,413	8262,101	-3,630	-1,997
202,500	6,148	4,697	17163,297	19277,075	-22669,840	8280,705	-3,643	-1,990
203,000	6,148	4,697	16137,300	19318,482	-21694,893	8299,348	-3,644	-2,010
203,500	6,148	4,697	15132,280	19359,977	-20660,203	8318,037	-3,660	-1,997
204,000	6,148	4,697	14002,034	19401,562	-19565,398	8336,769	-3,664	-2,010
204,500	6,148	4,697	12892,161	19443,236	-18410,105	8355,546	-3,682	-1,991
205,000	6,148	4,697	11657,714	19485,000	-17193,949	8374,366	-3,689	-1,997
205,500	6,148	4,697	10443,344	19526,854	-15916,555	8393,226	-3,711	-1,970

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
206,000	6,148	4,697	9105,546	19568,797	-14577,546	8412,130	-3,721	-1,969
206,500	6,148	4,697	7819,059	19610,830	-13176,541	8431,077	-3,753	-1,920
207,000	6,148	4,697	6408,364	19652,954	-11713,161	8450,071	-3,773	-1,898
207,500	6,148	4,697	5018,190	19695,168	-10187,022	8469,109	-3,808	-1,840
208,000	6,148	4,697	3503,467	19737,473	-8597,741	8488,186	-3,832	-1,809
208,500	6,148	4,697	2010,064	19779,869	-6944,932	8507,310	-3,871	-1,742
209,000	6,148	4,697	391,380	19822,356	-5228,208	8526,477	-3,900	-1,700
209,500	6,148	4,697	-1204,764	19864,934	-3447,179	8545,689	-3,944	-1,623
210,000	6,148	4,697	-2927,337	19907,603	-1601,456	8564,947	-3,977	-1,571
210,500	6,148	4,697	-4567,247	19950,365	309,354	8584,245	-4,037	-1,458
211,000	6,148	4,697	-6269,361	19971,445	2283,155	8594,222	-4,092	-1,345
211,500	6,148	4,697	-7941,514	19928,638	4304,586	8576,704	-4,146	-1,201
211,950	6,517	5,007	-9558,812	19885,924	6048,503	8559,134	-3,919	-1,095
212,400	6,800	5,305	-11156,494	19847,559	7602,409	8543,435	-3,728	-1,094
212,850	7,107	5,589	-12845,795	19748,086	8938,774	8501,423	-3,485	-1,184
213,300	7,428	5,865	-14556,722	19649,112	10079,208	8459,622	-3,229	-1,328
213,750	7,750	6,133	-16312,432	19550,633	11026,557	8418,024	-2,962	-1,532
214,200	8,073	6,393	-18132,704	19452,649	11783,636	8376,632	-2,682	-1,794
214,650	8,395	6,647	-19981,120	19355,155	12353,234	8335,445	-2,397	-2,099
215,100	8,719	6,895	-21892,419	19258,150	12738,111	8294,460	-2,102	-2,451
215,550	9,043	7,139	-23873,439	19161,631	12940,999	8253,677	-1,796	-2,847
216,000	13,876	11,856	-25928,090	19065,596	12964,605	8213,097	-1,029	-2,151
216,450	9,043	7,139	-23830,744	18970,042	12811,608	8169,288	-1,754	-2,872
216,900	8,719	6,895	-21807,030	18874,968	12484,659	8125,713	-2,016	-2,501
217,350	8,395	6,647	-19853,035	18780,369	11986,383	8082,367	-2,265	-2,174
217,800	8,073	6,393	-17964,849	18686,245	11319,380	8039,256	-2,502	-1,892
218,250	7,750	6,133	-16131,209	18592,592	10486,222	7996,373	-2,729	-1,655
218,700	7,428	5,865	-14363,001	18499,409	9489,457	7953,719	-2,942	-1,472
219,150	7,107	5,589	-12571,689	18406,693	8331,606	7911,292	-3,155	-1,316
219,600	6,800	5,305	-10891,062	18314,442	7015,164	7869,089	-3,341	-1,233
220,050	6,517	5,007	-9212,961	18222,653	5542,602	7827,114	-3,510	-1,186
220,500	6,148	4,697	-7579,473	18131,323	3916,366	7785,362	-3,704	-1,247
221,000	6,148	4,697	-5867,032	18040,452	2062,402	7743,556	-3,656	-1,308
221,500	6,148	4,697	-4124,983	17940,018	278,181	7697,671	-3,623	-1,328
222,000	6,148	4,697	-2433,844	17901,566	-1440,082	7678,407	-3,608	-1,340
222,500	6,148	4,697	-672,295	17863,196	-3099,816	7659,188	-3,617	-1,300
223,000	6,148	4,697	963,056	17824,908	-4701,375	7640,021	-3,614	-1,288
223,500	6,148	4,697	2620,696	17786,703	-6245,109	7620,898	-3,625	-1,242
224,000	6,148	4,697	4153,233	17748,579	-7731,369	7601,825	-3,624	-1,225

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
224,500	6,148	4,697	5706,892	17710,537	-9160,502	7582,798	-3,637	-1,175
225,000	6,148	4,697	7136,125	17672,577	-10532,856	7563,822	-3,637	-1,153
225,500	6,148	4,697	8585,736	17540,398	-11785,415	7504,546	-3,641	-1,075
226,000	6,148	4,697	9911,529	17578,074	-13094,580	7517,956	-3,653	-1,069
226,500	6,148	4,697	11274,116	17615,832	-14358,860	7531,392	-3,679	-1,029
227,000	6,148	4,697	12512,497	17653,670	-15577,947	7544,850	-3,692	-1,021
227,500	6,148	4,697	13770,916	17691,590	-16751,533	7558,332	-3,716	-0,987
228,000	6,148	4,697	14904,731	17729,591	-17879,308	7571,838	-3,726	-0,985
228,500	6,148	4,697	16058,930	17767,674	-18960,960	7585,370	-3,747	-0,956
229,000	6,148	4,697	17087,826	17805,839	-19996,177	7598,924	-3,755	-0,959
229,500	6,148	4,697	18137,757	17844,086	-20984,645	7612,503	-3,775	-0,934
230,000	6,148	4,697	19061,417	17882,414	-21926,048	7626,107	-3,780	-0,942
230,500	6,148	4,697	20007,038	17920,825	-22820,069	7639,734	-3,799	-0,921
231,000	6,148	4,697	20825,178	17959,319	-23666,392	7653,387	-3,802	-0,934
231,500	6,148	4,697	21666,451	17997,895	-24464,695	7667,061	-3,819	-0,917
232,000	6,148	4,697	22378,821	18036,555	-25214,658	7680,762	-3,821	-0,933
232,500	6,148	4,697	23115,712	18075,297	-25915,959	7694,487	-3,836	-0,919
233,000	6,148	4,697	23722,098	18114,122	-26568,274	7708,237	-3,837	-0,938
233,500	6,148	4,697	24354,581	18153,031	-27171,277	7722,011	-3,851	-0,927
234,000	6,148	4,697	24854,800	18192,023	-27724,644	7735,809	-3,850	-0,949
234,500	6,148	4,697	25382,851	18231,100	-28228,044	7749,633	-3,863	-0,940
235,000	6,148	4,697	25776,759	18270,260	-28681,150	7763,480	-3,861	-0,965
235,500	6,148	4,697	26200,359	18309,504	-29083,630	7777,353	-3,874	-0,957
236,000	6,148	4,697	26487,842	18348,832	-29435,151	7791,249	-3,871	-0,984
236,500	6,148	4,697	26806,979	18388,245	-29735,382	7805,172	-3,884	-0,977
237,000	6,148	4,697	26987,960	18427,743	-29983,985	7819,118	-3,880	-1,005
237,500	6,148	4,697	27202,625	18467,325	-30180,625	7833,090	-3,893	-0,999
238,000	6,148	4,697	27277,059	18506,993	-30324,964	7847,087	-3,889	-1,028
238,500	6,148	4,697	27387,249	18546,746	-30416,663	7861,109	-3,901	-1,021
239,000	6,148	4,697	27356,405	18586,584	-30455,379	7875,156	-3,898	-1,051
239,500	6,148	4,697	27360,844	18626,507	-30440,772	7889,226	-3,910	-1,043
240,000	6,148	4,697	27225,526	18666,517	-30372,497	7903,323	-3,907	-1,072
240,500	6,148	4,697	27123,440	18706,612	-30250,208	7917,445	-3,920	-1,064
241,000	6,148	4,697	26883,654	18746,794	-30073,560	7931,593	-3,917	-1,091
241,500	6,148	4,697	26675,107	18787,061	-29842,203	7945,763	-3,931	-1,082
242,000	6,148	4,697	26330,866	18827,416	-29555,788	7959,961	-3,929	-1,107
242,500	6,148	4,697	26015,956	18867,857	-29213,964	7974,186	-3,943	-1,096
243,000	6,148	4,697	25567,275	18908,384	-28816,378	7988,433	-3,943	-1,118
243,500	6,148	4,697	25146,135	18948,999	-28362,675	8002,707	-3,958	-1,105

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
244,000	6,148	4,697	24593,035	18989,701	-27852,500	8017,005	-3,960	-1,124
244,500	6,148	4,697	24065,832	19030,491	-27285,495	8031,331	-3,976	-1,108
245,000	6,148	4,697	23408,338	19071,368	-26661,302	8045,680	-3,980	-1,123
245,500	6,148	4,697	22775,273	19112,333	-25979,560	8060,056	-3,998	-1,103
246,000	6,148	4,697	22013,417	19153,386	-25239,907	8074,456	-4,003	-1,113
246,500	6,148	4,697	21274,725	19194,527	-24441,979	8088,885	-4,023	-1,089
247,000	6,148	4,697	20408,543	19235,757	-23585,413	8103,339	-4,031	-1,094
247,500	6,148	4,697	19564,494	19277,075	-22669,840	8117,815	-4,053	-1,065
248,000	6,148	4,697	18594,026	19318,482	-21694,893	8132,320	-4,063	-1,064
248,500	6,148	4,697	17644,923	19359,977	-20660,203	8146,851	-4,089	-1,030
249,000	6,148	4,697	16570,215	19401,562	-19565,398	8161,408	-4,102	-1,022
249,500	6,148	4,697	15516,397	19443,236	-18410,105	8175,988	-4,130	-0,981
250,000	6,148	4,697	14337,499	19485,000	-17193,949	8190,597	-4,146	-0,966
250,500	6,148	4,697	13179,339	19526,854	-15916,555	8205,233	-4,177	-0,918
251,000	6,148	4,697	11912,967	19568,797	-14577,546	8219,892	-4,200	-0,889
251,500	6,148	4,697	10683,453	19610,830	-13176,541	8234,579	-4,241	-0,818
252,000	6,148	4,697	9328,927	19652,954	-11713,161	8249,290	-4,270	-0,774
252,500	6,148	4,697	7995,918	19695,168	-10187,022	8264,031	-4,315	-0,695
253,000	6,148	4,697	6537,383	19737,473	-8597,741	8278,795	-4,349	-0,642
253,500	6,148	4,697	5101,355	19779,869	-6944,932	8293,587	-4,398	-0,553
254,000	6,148	4,697	3538,881	19822,356	-5228,208	8308,403	-4,436	-0,490
254,500	6,148	4,697	2000,343	19864,934	-3447,179	8323,250	-4,490	-0,391
255,000	6,148	4,697	334,004	19907,603	-1601,456	8338,121	-4,533	-0,318
255,500	6,148	4,697	-1201,031	19950,365	309,354	8353,017	-4,611	-0,163
256,000	6,148	4,697	-2846,087	19971,445	2283,155	8358,829	-4,676	-0,029
256,500	6,148	4,697	-4459,312	19928,638	4304,586	8337,905	-4,740	0,138
256,950	6,517	5,007	-6025,230	19885,924	6048,503	8317,333	-4,484	0,180
257,400	6,800	5,305	-7569,417	19847,559	7602,409	8298,594	-4,270	0,128
257,850	7,107	5,589	-9207,309	19748,086	8938,774	8254,323	-4,007	-0,007
258,300	7,428	5,865	-10864,465	19649,112	10079,208	8210,287	-3,734	-0,189
258,750	7,750	6,133	-12568,103	19550,633	11026,557	8166,485	-3,452	-0,427
259,200	8,073	6,393	-14326,855	19452,649	11783,636	8122,918	-3,160	-0,717
259,650	8,395	6,647	-16120,718	19355,155	12353,234	8079,585	-2,863	-1,047
260,100	8,719	6,895	-17980,389	19258,150	12738,111	8036,482	-2,557	-1,423
260,550	9,043	7,139	-19909,781	19161,631	12940,999	7993,606	-2,242	-1,840
261,000	13,876	11,856	-21912,804	19065,596	12964,605	7950,960	-1,302	-1,537
261,450	9,043	7,139	-19941,974	18970,042	12811,608	7812,203	-2,180	-1,912
261,900	8,719	6,895	-18044,777	18874,968	12484,659	7674,637	-2,429	-1,570
262,350	8,395	6,647	-16217,300	18780,369	11986,383	7538,252	-2,665	-1,272

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
262,800	8,073	6,393	-14455,630	18686,245	11319,380	7403,045	-2,889	-1,020
263,250	7,750	6,133	-12748,247	18592,592	10486,222	7269,005	-3,101	-0,815
263,700	7,428	5,865	-11105,430	18499,409	9489,457	7136,121	-3,300	-0,664
264,150	7,107	5,589	-9438,165	18406,693	8331,606	7004,387	-3,497	-0,543
264,600	6,800	5,305	-7884,059	18314,442	7015,164	6873,795	-3,667	-0,498
265,050	6,517	5,007	-6328,702	18222,653	5542,602	6744,339	-3,820	-0,488
265,500	6,148	4,697	-4820,773	18131,323	3916,366	6616,006	-3,995	-0,590
266,000	6,148	4,697	-3159,138	18040,452	2062,402	6478,341	-3,920	-0,712
266,500	6,148	4,697	-1449,280	17940,018	278,181	6338,351	-3,864	-0,784
267,000	6,148	4,697	136,911	17901,566	-1440,082	6221,065	-3,812	-0,881
267,500	6,148	4,697	1742,909	17863,196	-3099,816	6104,254	-3,775	-0,945
268,000	6,148	4,697	3226,822	17824,908	-4701,375	5987,916	-3,726	-1,035
268,500	6,148	4,697	4728,872	17786,703	-6245,109	5872,049	-3,691	-1,094
269,000	6,148	4,697	6109,892	17748,579	-7731,369	5756,653	-3,644	-1,179
269,500	6,148	4,697	7507,907	17710,537	-9160,502	5641,725	-3,611	-1,233
270,000	6,148	4,697	8785,442	17672,577	-10532,856	5527,265	-3,567	-1,313
270,500	6,148	4,697	10079,340	20301,019	-13640,280	6231,741	-3,791	-2,199
271,000	6,148	4,697	11252,819	20344,625	-15155,490	6127,284	-3,716	-2,390
271,500	6,148	4,697	12442,520	20388,325	-16618,750	6022,348	-3,654	-2,554
272,000	6,148	4,697	13511,392	20432,119	-18029,705	5916,936	-3,579	-2,746
272,500	6,148	4,697	14596,818	20476,006	-19387,997	5811,043	-3,517	-2,909
273,000	6,148	4,697	15560,554	20519,989	-20693,268	5704,669	-3,442	-3,101
273,500	6,148	4,697	16541,633	20564,065	-21945,158	5597,814	-3,380	-3,265
274,000	6,148	4,697	17399,724	20608,236	-23143,304	5490,472	-3,306	-3,457
274,500	6,148	4,697	18276,384	20652,502	-24287,343	5382,647	-3,244	-3,619
275,000	6,148	4,697	19028,345	20696,864	-25376,910	5274,332	-3,170	-3,810
275,500	6,148	4,697	19800,518	20741,320	-26411,639	5165,531	-3,109	-3,971
276,000	6,148	4,697	20445,881	20785,872	-27391,160	5056,236	-3,035	-4,161
276,500	6,148	4,697	21113,502	20830,520	-28315,106	4946,452	-2,975	-4,320
277,000	6,148	4,697	21651,824	20875,263	-29183,103	4836,170	-2,902	-4,509
277,500	6,148	4,697	22214,832	20920,103	-29994,779	4725,395	-2,843	-4,664
278,000	6,148	4,697	22645,688	20965,039	-30749,759	4614,123	-2,771	-4,851
278,500	6,148	4,697	23104,024	21010,072	-31447,668	4502,352	-2,714	-5,004
279,000	6,148	4,697	23427,011	21055,201	-32088,126	4390,081	-2,643	-5,189
279,500	6,148	4,697	23780,619	21100,427	-32670,755	4277,307	-2,588	-5,337
280,000	6,148	4,697	23995,357	21145,751	-33195,174	4164,031	-2,517	-5,519
280,500	6,148	4,697	24244,185	21191,171	-33660,998	4050,248	-2,464	-5,663
281,000	6,148	4,697	24351,977	21236,690	-34067,845	3935,960	-2,396	-5,841
281,500	6,148	4,697	24494,309	21282,306	-34415,327	3821,162	-2,345	-5,981

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efrq,0} [kN.m]	P ₀ [kN]	P ₀ x e [kN.m]	M _{PE,Hip,0} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
282,000	6,148	4,697	24497,271	21328,020	-34703,058	3705,855	-2,279	-6,154
282,500	6,148	4,697	24530,607	21373,832	-34930,646	3590,034	-2,230	-6,289
283,000	6,148	4,697	24428,692	21360,664	-35000,899	3464,121	-2,173	-6,410
283,500	6,148	4,697	24352,717	21314,881	-34956,404	3333,259	-2,136	-6,470
284,000	6,148	4,697	24145,881	21255,288	-34810,855	3200,850	-2,091	-6,540
284,500	6,148	4,697	23960,301	21195,862	-34570,481	3069,152	-2,067	-6,562
285,000	6,148	4,697	23648,503	21136,603	-34236,078	2938,165	-2,037	-6,597
285,500	6,148	4,697	23353,045	21077,509	-33808,440	2807,884	-2,028	-6,587
286,000	6,148	4,697	22936,248	21018,580	-33288,357	2678,309	-2,014	-6,588
286,500	6,148	4,697	22530,660	20959,816	-32676,612	2549,434	-2,018	-6,547
287,000	6,148	4,697	22008,829	20901,217	-31973,987	2421,258	-2,018	-6,515
287,500	6,148	4,697	21492,881	20842,781	-31181,257	2293,776	-2,036	-6,444
288,000	6,148	4,697	20865,983	20784,508	-30299,194	2166,988	-2,050	-6,382
288,500	6,148	4,697	20239,465	20726,399	-29328,565	2040,889	-2,081	-6,282
289,000	6,148	4,697	19507,473	20668,452	-28270,132	1915,476	-2,108	-6,190
289,500	6,148	4,697	18770,197	20610,667	-27124,655	1790,749	-2,151	-6,063
290,000	6,148	4,697	17933,085	20553,043	-25892,887	1666,701	-2,191	-5,942
290,500	6,148	4,697	17084,882	20495,581	-24575,579	1543,334	-2,245	-5,790
291,000	6,148	4,697	16142,628	20438,279	-23173,476	1420,639	-2,297	-5,641
291,500	6,148	4,697	15183,353	20381,137	-21687,319	1298,621	-2,362	-5,465
292,000	6,148	4,697	14135,936	20324,156	-20117,847	1177,269	-2,426	-5,290
292,500	6,148	4,697	13065,464	20267,333	-18465,792	1056,587	-2,501	-5,091
292,950	7,983	5,366	12029,570	20216,329	-16908,937	948,540	-1,902	-3,954
293,400	8,354	5,720	10951,683	20165,453	-15286,309	841,027	-1,889	-3,599
293,850	8,722	6,063	9832,916	20114,705	-13598,434	734,051	-1,876	-3,276
294,300	9,138	6,410	8639,423	20064,084	-11845,835	627,607	-1,850	-2,976
294,750	9,550	6,747	7401,690	20013,591	-10029,033	521,693	-1,827	-2,701
295,200	9,958	7,075	6075,836	19963,226	-8148,545	416,305	-1,804	-2,459
295,650	10,641	7,458	4677,869	19912,987	-6204,887	311,445	-1,731	-2,187
296,100	11,030	7,767	3208,308	19862,874	-4198,570	207,108	-1,714	-1,996
296,550	11,615	8,100	1647,904	19812,887	-2130,106	103,295	-1,666	-1,797
297,000	16,280	13,155	0,000	19763,027	0,000	0,000	-1,214	-1,214

prazo

E.2 Longo prazo

v_{inf} [m]	v_{sup} [m]	f_{ctm}	f_{ctk}
1,94	0,86	3,200	2,200

X [m]	A_c [m ²]	I_c [m ⁴]	$M_{Efreq,\infty}$ [kN.m]	P_∞ [kN]	$P_\infty \times e$ [kN.m]	$M_{PE,Hip,\infty}$ [kN.m]	σ_{sup} [MPa]	σ_{inf} [MPa]
0,000	16,290	13,155	0,000	15723,565	0,000	0,000	-0,965	-0,965
0,450	11,615	8,100	1425,306	15764,818	-1694,893	160,421	-1,346	-1,383
0,900	11,030	7,767	2789,489	15807,783	-3341,414	321,718	-1,408	-1,491
1,350	10,641	7,458	4085,187	15852,283	-4939,571	483,933	-1,447	-1,586
1,800	9,958	7,075	5327,635	15898,138	-6489,267	647,109	-1,534	-1,738
2,250	9,550	6,747	6508,768	15945,171	-7990,303	811,278	-1,584	-1,862
2,700	9,138	6,410	7616,675	15993,335	-9442,465	979,804	-1,637	-2,006
3,150	8,722	6,063	8694,812	16042,318	-10845,320	1146,603	-1,697	-2,161
3,600	8,354	5,720	9702,589	16091,992	-12198,445	1314,458	-1,749	-2,327
4,050	7,983	5,366	10683,263	16142,207	-13501,342	1483,374	-1,808	-2,505
4,500	6,148	4,697	11611,219	16192,826	-14753,464	1653,359	-2,361	-3,249
5,000	6,148	4,697	12563,322	16249,927	-16084,975	1846,942	-2,337	-3,335
5,500	6,148	4,697	13496,497	16306,750	-17351,814	2038,734	-2,320	-3,403
6,000	6,148	4,697	14341,540	16363,613	-18553,509	2231,823	-2,299	-3,479
6,500	6,148	4,697	15169,571	16420,388	-19689,149	2426,190	-2,288	-3,535
7,000	6,148	4,697	15903,560	16476,962	-20757,808	2621,814	-2,271	-3,602
7,500	6,148	4,697	16626,466	16533,238	-21758,558	2818,674	-2,266	-3,645
8,000	6,148	4,697	17249,547	16589,130	-22690,471	3016,741	-2,254	-3,700
8,500	6,148	4,697	17867,351	16644,562	-23552,626	3215,988	-2,255	-3,727
9,000	6,148	4,697	18379,691	16699,469	-24344,115	3416,388	-2,250	-3,769
9,500	6,148	4,697	18892,419	16753,797	-25064,049	3617,908	-2,258	-3,780
10,000	6,148	4,697	19294,207	16807,498	-25711,552	3820,520	-2,258	-3,806
10,500	6,148	4,697	19701,887	16860,529	-26285,773	4024,192	-2,274	-3,800
11,000	6,148	4,697	19993,333	16912,857	-26785,882	4228,893	-2,282	-3,810
11,500	6,148	4,697	20295,997	16964,451	-27211,072	4434,590	-2,305	-3,784
12,000	6,148	4,697	20477,330	17015,287	-27560,563	4641,251	-2,321	-3,776
12,500	6,148	4,697	20675,013	17065,344	-27833,599	4848,846	-2,353	-3,730
13,000	6,148	4,697	20746,486	17114,605	-28029,451	5057,342	-2,376	-3,703
13,500	6,148	4,697	20839,226	17163,058	-28147,415	5266,709	-2,418	-3,635
14,000	6,148	4,697	20801,112	17199,615	-28182,737	5473,392	-2,448	-3,586
14,500	6,148	4,697	20788,948	17235,643	-28167,721	5680,731	-2,493	-3,505
15,000	6,148	4,697	20641,541	17271,139	-28102,063	5888,710	-2,521	-3,458
15,500	6,148	4,697	20524,518	17306,105	-27985,467	6097,308	-2,565	-3,378

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
16,000	6,148	4,697	20268,133	17340,540	-27817,651	6306,510	-2,593	-3,334
16,500	6,148	4,697	20046,297	17374,448	-27598,346	6516,298	-2,636	-3,254
17,000	6,148	4,697	19683,436	17407,835	-27327,292	6726,656	-2,664	-3,210
17,500	6,148	4,697	19354,672	17440,707	-27004,243	6937,568	-2,706	-3,131
18,000	6,148	4,697	18887,048	17473,073	-26628,963	7149,022	-2,734	-3,087
18,500	6,148	4,697	18450,053	17504,945	-26201,229	7361,006	-2,776	-3,008
19,000	6,148	4,697	17877,719	17536,339	-25720,830	7573,507	-2,803	-2,964
19,500	6,148	4,697	17332,873	17567,272	-25187,565	7786,519	-2,845	-2,886
20,000	6,148	4,697	16655,885	17597,767	-24601,244	8000,036	-2,872	-2,840
20,500	6,148	4,697	16003,592	17627,849	-23961,687	8214,054	-2,914	-2,762
21,000	6,148	4,697	15222,008	17657,548	-23268,724	8428,574	-2,942	-2,714
21,500	6,148	4,697	14462,691	17686,900	-22522,193	8643,601	-2,984	-2,636
22,000	6,148	4,697	13576,573	17715,946	-21721,937	8859,143	-3,012	-2,587
22,500	6,148	4,697	12710,678	17744,733	-20867,806	9075,213	-3,054	-2,507
23,000	6,148	4,697	11720,091	17773,314	-19959,651	9291,832	-3,084	-2,456
23,500	6,148	4,697	10748,082	17801,752	-18997,326	9509,023	-3,126	-2,375
24,000	6,148	4,697	9653,095	17830,113	-17980,679	9726,821	-3,156	-2,322
24,500	6,148	4,697	8575,460	17858,477	-16909,552	9945,266	-3,200	-2,239
25,000	6,148	4,697	7376,142	17886,928	-15783,778	10164,406	-3,231	-2,184
25,500	6,148	4,697	6193,389	17915,561	-14603,173	10384,299	-3,276	-2,099
26,000	6,148	4,697	4889,816	17944,481	-13367,530	10605,015	-3,308	-2,040
26,500	6,148	4,697	3602,473	17973,801	-12076,619	10826,629	-3,354	-1,952
27,000	6,148	4,697	2194,721	18003,646	-10730,173	11049,232	-3,389	-1,890
27,500	6,148	4,697	803,340	18034,148	-9327,885	11272,926	-3,437	-1,798
28,000	6,148	4,697	-708,512	18065,449	-7869,399	11497,822	-3,473	-1,732
28,500	6,148	4,697	-2203,360	18097,697	-6354,303	11724,044	-3,523	-1,636
29,000	6,148	4,697	-3819,228	18131,049	-4782,120	11951,729	-3,563	-1,565
29,500	6,148	4,697	-5416,950	18165,666	-3152,304	12181,022	-3,616	-1,463
30,000	6,148	4,697	-7136,749	18201,713	-1464,227	12412,074	-3,658	-1,387
30,500	6,148	4,697	-8836,732	18239,354	282,823	12645,055	-3,716	-1,277
31,000	6,148	4,697	-10660,373	18259,323	2087,424	12866,438	-3,756	-1,197
31,500	6,148	4,697	-12435,781	18224,094	3936,404	13048,755	-3,797	-1,085
31,950	6,517	5,007	-14047,513	18189,935	5532,651	13186,033	-3,593	-0,981
32,400	6,800	5,305	-15662,332	18160,328	6956,132	13350,004	-3,424	-0,973
32,850	7,107	5,589	-17361,677	18076,170	8181,998	13472,712	-3,204	-1,053
33,300	7,428	5,865	-19080,762	17992,207	9229,282	13593,849	-2,971	-1,184
33,750	7,750	6,133	-20832,490	17908,162	10100,203	13713,210	-2,729	-1,368
34,200	8,073	6,393	-22580,630	17823,660	10796,860	13783,445	-2,477	-1,601
34,650	8,395	6,647	-24410,128	17738,804	11321,614	13898,339	-2,218	-1,877

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
35,100	8,719	6,895	-26293,762	17653,370	11676,645	14011,048	-1,949	-2,195
35,550	9,043	7,139	-28232,381	17567,280	11864,238	14121,493	-1,672	-2,553
36,000	13,876	11,856	-30226,832	17480,497	11886,738	14229,620	-0,962	-1,932
36,450	9,043	7,139	-28262,204	17393,022	11746,551	14132,845	-1,636	-2,571
36,900	8,719	6,895	-26353,408	17304,892	11446,148	14035,798	-1,876	-2,230
37,350	8,395	6,647	-24499,597	17216,179	10988,054	13938,535	-2,106	-1,926
37,800	8,073	6,393	-22699,922	17126,990	10374,846	13841,151	-2,326	-1,662
38,250	7,750	6,133	-20926,752	17037,471	9609,134	13743,764	-2,539	-1,431
38,700	7,428	5,865	-19260,955	16948,944	8694,130	13693,549	-2,740	-1,247
39,150	7,107	5,589	-17527,765	16859,288	7631,188	13596,169	-2,941	-1,088
39,600	6,800	5,305	-15896,433	16769,970	6423,569	13499,326	-3,119	-0,994
40,050	6,517	5,007	-14267,247	16681,297	5073,783	13403,268	-3,283	-0,929
40,500	6,148	4,697	-12680,897	16593,623	3584,223	13308,272	-3,470	-0,960
41,000	6,148	4,697	-11044,433	16506,146	1886,999	13234,902	-3,431	-1,001
41,500	6,148	4,697	-9355,305	16412,519	254,495	13132,755	-3,408	-1,004
42,000	6,148	4,697	-7776,190	16377,532	-1317,481	13077,745	-3,393	-1,018
42,500	6,148	4,697	-6065,761	16343,985	-2836,186	13023,997	-3,413	-0,956
43,000	6,148	4,697	-4483,125	16311,734	-4302,270	12971,392	-3,420	-0,924
43,500	6,148	4,697	-2876,543	16280,633	-5716,311	12919,806	-3,440	-0,861
44,000	6,148	4,697	-1396,398	16250,541	-7078,816	12869,124	-3,448	-0,828
44,500	6,148	4,697	106,263	16221,319	-8390,227	12819,228	-3,469	-0,765
45,000	6,148	4,697	1483,406	16192,836	-9650,930	12770,013	-3,476	-0,733
45,500	6,148	4,697	2882,075	16164,964	-10861,259	12721,373	-3,498	-0,671
46,000	6,148	4,697	4155,742	16120,103	-12008,482	12659,484	-3,502	-0,637
46,500	6,148	4,697	5466,275	16163,225	-13174,825	12666,695	-3,537	-0,581
47,000	6,148	4,697	6668,606	16206,689	-14301,103	12674,030	-3,559	-0,554
47,500	6,148	4,697	7891,684	16250,403	-15386,924	12681,418	-3,593	-0,501
48,000	6,148	4,697	8989,689	16294,280	-16431,876	12688,791	-3,611	-0,483
48,500	6,148	4,697	10108,595	16338,244	-17435,529	12696,087	-3,641	-0,440
49,000	6,148	4,697	11101,904	16382,223	-18397,438	12703,251	-3,655	-0,431
49,500	6,148	4,697	12116,588	16426,151	-19317,153	12710,230	-3,681	-0,396
50,000	6,148	4,697	13004,861	16469,970	-20194,216	12716,982	-3,691	-0,396
50,500	6,148	4,697	13915,277	16513,626	-21028,166	12723,465	-3,713	-0,369
51,000	6,148	4,697	14698,211	16557,072	-21818,541	12729,643	-3,720	-0,376
51,500	6,148	4,697	15504,318	16600,264	-22564,882	12735,483	-3,739	-0,356
52,000	6,148	4,697	16181,644	16643,165	-23266,734	12740,959	-3,743	-0,371
52,500	6,148	4,697	16883,407	16685,740	-23923,643	12746,047	-3,759	-0,357
53,000	6,148	4,697	17454,888	16727,959	-24535,166	12750,722	-3,759	-0,379
53,500	6,148	4,697	18052,276	16769,795	-25100,864	12754,969	-3,772	-0,371

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
54,000	6,148	4,697	18517,712	16811,225	-25620,307	12758,770	-3,770	-0,398
54,500	6,148	4,697	19010,699	16852,227	-26093,072	12762,111	-3,781	-0,395
55,000	6,148	4,697	19369,923	16892,782	-26518,748	12764,981	-3,776	-0,428
55,500	6,148	4,697	19758,488	16932,875	-26896,932	12767,369	-3,785	-0,429
56,000	6,148	4,697	20011,367	16972,492	-27227,230	12769,268	-3,777	-0,467
56,500	6,148	4,697	20295,494	17011,620	-27509,260	12770,670	-3,784	-0,472
57,000	6,148	4,697	20441,930	17050,249	-27742,650	12771,571	-3,775	-0,514
57,500	6,148	4,697	20621,607	17088,370	-27927,037	12771,964	-3,780	-0,522
58,000	6,148	4,697	20661,537	17125,974	-28062,072	12771,848	-3,769	-0,567
58,500	6,148	4,697	20736,758	17163,058	-28147,415	12771,222	-3,773	-0,578
59,000	6,148	4,697	20670,954	17199,615	-28182,737	12770,082	-3,760	-0,626
59,500	6,148	4,697	20640,916	17235,643	-28167,721	12768,432	-3,763	-0,639
60,000	6,148	4,697	20470,654	17271,139	-28102,063	12766,272	-3,749	-0,688
60,500	6,148	4,697	20334,087	17306,105	-27985,467	12763,602	-3,751	-0,704
61,000	6,148	4,697	20059,372	17340,540	-27817,651	12760,430	-3,736	-0,755
61,500	6,148	4,697	19816,321	17374,448	-27598,346	12756,757	-3,737	-0,771
62,000	6,148	4,697	19437,160	17407,835	-27327,292	12752,592	-3,722	-0,823
62,500	6,148	4,697	19087,702	17440,707	-27004,243	12747,940	-3,721	-0,841
63,000	6,148	4,697	18604,109	17473,073	-26628,963	12742,814	-3,706	-0,893
63,500	6,148	4,697	18148,357	17504,945	-26201,229	12737,221	-3,705	-0,913
64,000	6,148	4,697	17560,350	17536,339	-25720,830	12731,177	-3,689	-0,965
64,500	6,148	4,697	16998,450	17567,272	-25187,565	12724,699	-3,688	-0,984
65,000	6,148	4,697	16306,052	17597,767	-24601,244	12717,800	-3,672	-1,036
65,500	6,148	4,697	15638,185	17627,849	-23961,687	12710,504	-3,670	-1,055
66,000	6,148	4,697	14841,425	17657,548	-23268,724	12702,836	-3,655	-1,106
66,500	6,148	4,697	14067,806	17686,900	-22522,193	12694,822	-3,653	-1,126
67,000	6,148	4,697	13166,715	17715,946	-21721,937	12686,493	-3,638	-1,175
67,500	6,148	4,697	12287,594	17744,733	-20867,806	12677,884	-3,636	-1,194
68,000	6,148	4,697	11282,211	17773,314	-19959,651	12669,034	-3,622	-1,242
68,500	6,148	4,697	10297,872	17801,752	-18997,326	12659,989	-3,621	-1,260
69,000	6,148	4,697	9188,239	17830,113	-17980,679	12650,798	-3,607	-1,307
69,500	6,148	4,697	8098,999	17858,477	-16909,552	12641,515	-3,606	-1,323
70,000	6,148	4,697	6885,165	17886,928	-15783,778	12632,201	-3,593	-1,367
70,500	6,148	4,697	5691,377	17915,561	-14603,173	12622,923	-3,594	-1,381
71,000	6,148	4,697	4373,392	17944,481	-13367,530	12613,753	-3,581	-1,424
71,500	6,148	4,697	3092,210	17973,801	-12076,619	12604,770	-3,586	-1,428
72,000	6,148	4,697	1687,219	18003,646	-10730,173	12596,059	-3,579	-1,461
72,500	6,148	4,697	302,615	18034,148	-9327,885	12587,708	-3,586	-1,462
73,000	6,148	4,697	-1206,407	18065,449	-7869,399	12579,814	-3,580	-1,491

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
73,500	6,148	4,697	-2694,296	18097,697	-6354,303	12572,476	-3,589	-1,488
74,000	6,148	4,697	-4307,281	18131,049	-4782,120	12565,799	-3,586	-1,513
74,500	6,148	4,697	-5897,966	18165,666	-3152,304	12559,887	-3,597	-1,505
75,000	6,148	4,697	-7614,842	18201,713	-1464,227	12554,849	-3,597	-1,525
75,500	6,148	4,697	-9261,298	18239,354	282,823	12550,789	-3,621	-1,491
76,000	6,148	4,697	-10958,655	18259,323	2087,424	12534,474	-3,641	-1,457
76,500	6,148	4,697	-12626,394	18224,094	3936,404	12480,295	-3,658	-1,399
76,950	6,517	5,007	-14218,256	18191,132	5533,015	12412,090	-3,431	-1,347
77,400	6,800	5,305	-15813,367	18161,519	6956,588	12365,079	-3,240	-1,388
77,850	7,107	5,589	-17496,826	18077,352	8182,532	12281,093	-3,000	-1,514
78,300	7,428	5,865	-19196,372	17993,378	9229,883	12197,487	-2,749	-1,684
78,750	7,750	6,133	-20931,328	17909,324	10100,859	12114,074	-2,491	-1,905
79,200	8,073	6,393	-22658,372	17823,660	10796,860	11996,952	-2,226	-2,167
79,650	8,395	6,647	-24472,380	17738,804	11321,614	11913,830	-1,953	-2,474
80,100	8,719	6,895	-26340,524	17653,370	11676,645	11830,568	-1,671	-2,822
80,550	9,043	7,139	-28263,653	17567,280	11864,238	11747,120	-1,382	-3,207
81,000	13,876	11,856	-30242,614	17480,497	11886,738	11663,464	-0,774	-2,355
81,450	9,043	7,139	-28277,638	17393,022	11746,551	11611,575	-1,331	-3,260
81,900	8,719	6,895	-26368,494	17304,892	11446,148	11559,184	-1,565	-2,931
82,350	8,395	6,647	-24514,336	17216,179	10988,054	11506,338	-1,789	-2,640
82,800	8,073	6,393	-22711,389	17126,990	10374,846	11453,110	-2,003	-2,390
83,250	7,750	6,133	-20927,979	17037,471	9609,134	11399,594	-2,210	-2,173
83,700	7,428	5,865	-19265,116	16948,944	8694,130	11377,572	-2,400	-2,015
84,150	7,107	5,589	-17529,342	16859,288	7631,188	11323,719	-2,591	-1,877
84,600	6,800	5,305	-15897,834	16769,970	6423,569	11270,024	-2,757	-1,810
85,050	6,517	5,007	-14266,344	16681,297	5073,783	11216,699	-2,907	-1,775
85,500	6,148	4,697	-12679,351	16593,623	3584,223	11163,978	-3,078	-1,845
86,000	6,148	4,697	-11042,472	16506,146	1886,999	11128,475	-3,046	-1,870
86,500	6,148	4,697	-9353,198	16412,519	254,495	11072,233	-3,031	-1,854
87,000	6,148	4,697	-7726,120	16377,532	-1317,481	11055,496	-3,032	-1,833
87,500	6,148	4,697	-6016,370	16343,985	-2836,186	11039,704	-3,059	-1,755
88,000	6,148	4,697	-4433,039	16311,734	-4302,270	11024,760	-3,072	-1,708
88,500	6,148	4,697	-2827,160	16280,633	-5716,311	11010,569	-3,100	-1,629
89,000	6,148	4,697	-1346,553	16250,541	-7078,816	10997,033	-3,114	-1,581
89,500	6,148	4,697	155,384	16221,319	-8390,227	10984,064	-3,142	-1,503
90,000	6,148	4,697	1532,779	16192,836	-9650,930	10971,571	-3,156	-1,455
90,500	6,148	4,697	2930,705	16077,422	-10802,440	10900,119	-3,170	-1,364
91,000	6,148	4,697	4204,432	16120,103	-12008,482	10935,821	-3,195	-1,329
91,500	6,148	4,697	5529,480	16163,225	-13174,825	10971,859	-3,238	-1,255

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
92,000	6,148	4,697	6731,108	16206,689	-14301,103	11008,167	-3,266	-1,216
92,500	6,148	4,697	7952,823	16250,403	-15386,924	11044,682	-3,304	-1,152
93,000	6,148	4,697	9049,971	16294,280	-16431,876	11081,345	-3,328	-1,122
93,500	6,148	4,697	10167,503	16338,244	-17435,529	11118,105	-3,362	-1,067
94,000	6,148	4,697	11159,816	16382,223	-18397,438	11154,912	-3,382	-1,047
94,500	6,148	4,697	12173,117	16426,151	-19317,153	11191,724	-3,413	-1,000
95,000	6,148	4,697	13060,274	16469,970	-20194,216	11228,499	-3,429	-0,988
95,500	6,148	4,697	13969,300	16513,626	-21028,166	11265,200	-3,456	-0,949
96,000	6,148	4,697	14751,012	16557,072	-21818,541	11301,794	-3,468	-0,944
96,500	6,148	4,697	15555,726	16600,264	-22564,882	11338,255	-3,493	-0,912
97,000	6,148	4,697	16231,737	16643,165	-23266,734	11374,552	-3,502	-0,915
97,500	6,148	4,697	16932,105	16685,740	-23923,643	11410,664	-3,523	-0,889
98,000	6,148	4,697	17502,195	16727,959	-24535,166	11446,568	-3,529	-0,898
98,500	6,148	4,697	18098,188	16769,795	-25100,864	11482,247	-3,548	-0,878
99,000	6,148	4,697	18562,169	16811,225	-25620,307	11517,683	-3,551	-0,893
99,500	6,148	4,697	19053,763	16852,227	-26093,072	11552,862	-3,567	-0,877
100,000	6,148	4,697	19411,481	16892,782	-26518,748	11587,770	-3,568	-0,897
100,500	6,148	4,697	19798,656	16932,875	-26896,932	11622,396	-3,583	-0,886
101,000	6,148	4,697	20049,991	16972,492	-27227,230	11656,729	-3,581	-0,911
101,500	6,148	4,697	20332,733	17011,620	-27509,260	11690,761	-3,594	-0,903
102,000	6,148	4,697	20477,597	17050,249	-27742,650	11724,482	-3,590	-0,932
102,500	6,148	4,697	20655,896	17088,370	-27927,037	11757,888	-3,601	-0,926
103,000	6,148	4,697	20694,236	17125,974	-28062,072	11790,972	-3,595	-0,959
103,500	6,148	4,697	20768,088	17163,058	-28147,415	11823,729	-3,605	-0,956
104,000	6,148	4,697	20700,913	17199,615	-28182,737	11856,155	-3,598	-0,991
104,500	6,148	4,697	20669,287	17235,643	-28167,721	11888,249	-3,607	-0,990
105,000	6,148	4,697	20497,665	17271,139	-28102,063	11920,006	-3,599	-1,027
105,500	6,148	4,697	20359,513	17306,105	-27985,467	11951,428	-3,607	-1,028
106,000	6,148	4,697	20083,448	17340,540	-27817,651	11982,513	-3,598	-1,066
106,500	6,148	4,697	19838,822	17374,448	-27598,346	12013,264	-3,605	-1,069
107,000	6,148	4,697	19458,323	17407,835	-27327,292	12043,684	-3,596	-1,107
107,500	6,148	4,697	19107,309	17440,707	-27004,243	12073,776	-3,602	-1,112
108,000	6,148	4,697	18622,391	17473,073	-26628,963	12103,546	-3,592	-1,150
108,500	6,148	4,697	18165,107	17504,945	-26201,229	12133,004	-3,597	-1,155
109,000	6,148	4,697	17575,788	17536,339	-25720,830	12162,156	-3,588	-1,193
109,500	6,148	4,697	17012,387	17567,272	-25187,565	12191,017	-3,593	-1,199
110,000	6,148	4,697	16318,692	17597,767	-24601,244	12219,599	-3,583	-1,236
110,500	6,148	4,697	15649,360	17627,849	-23961,687	12247,922	-3,588	-1,242
111,000	6,148	4,697	14851,317	17657,548	-23268,724	12276,005	-3,579	-1,278

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
111,500	6,148	4,697	14076,274	17686,900	-22522,193	12303,872	-3,583	-1,283
112,000	6,148	4,697	13173,916	17715,946	-21721,937	12331,552	-3,574	-1,319
112,500	6,148	4,697	12293,415	17744,733	-20867,806	12359,077	-3,579	-1,323
113,000	6,148	4,697	11286,781	17773,314	-19959,651	12386,484	-3,571	-1,357
113,500	6,148	4,697	10301,108	17801,752	-18997,326	12413,816	-3,576	-1,360
114,000	6,148	4,697	9190,241	17830,113	-17980,679	12441,120	-3,569	-1,392
114,500	6,148	4,697	8099,716	17858,477	-16909,552	12468,450	-3,575	-1,394
115,000	6,148	4,697	6884,664	17886,928	-15783,778	12495,865	-3,568	-1,424
115,500	6,148	4,697	5689,642	17915,561	-14603,173	12523,434	-3,575	-1,423
116,000	6,148	4,697	4370,456	17944,481	-13367,530	12551,227	-3,569	-1,451
116,500	6,148	4,697	3098,558	17973,801	-12076,619	12579,327	-3,583	-1,436
117,000	6,148	4,697	1703,041	18003,646	-10730,173	12607,819	-3,584	-1,450
117,500	6,148	4,697	327,962	18034,148	-9327,885	12636,799	-3,599	-1,431
118,000	6,148	4,697	-1171,568	18065,449	-7869,399	12666,365	-3,602	-1,441
118,500	6,148	4,697	-2649,882	18097,697	-6354,303	12696,623	-3,620	-1,419
119,000	6,148	4,697	-4253,358	18131,049	-4782,120	12727,684	-3,625	-1,424
119,500	6,148	4,697	-5834,419	18165,666	-3152,304	12759,663	-3,646	-1,396
120,000	6,148	4,697	-7541,770	18201,713	-1464,227	12792,676	-3,654	-1,397
120,500	6,148	4,697	-9171,376	18239,354	282,823	12826,844	-3,688	-1,340
121,000	6,148	4,697	-10858,395	18259,323	2087,424	12848,607	-3,717	-1,286
121,500	6,148	4,697	-12515,623	18224,094	3936,404	12831,525	-3,743	-1,208
121,950	6,517	5,007	-14098,262	18191,132	5533,015	12794,787	-3,518	-1,153
122,400	6,800	5,305	-15683,881	18161,519	6956,588	12780,844	-3,328	-1,189
122,850	7,107	5,589	-17358,028	18077,352	8182,532	12728,466	-3,090	-1,310
123,300	7,428	5,865	-19048,050	17993,378	9229,883	12676,161	-2,841	-1,477
123,750	7,750	6,133	-20773,626	17909,324	10100,859	12623,737	-2,584	-1,694
124,200	8,073	6,393	-22491,815	17823,660	10796,860	12532,922	-2,321	-1,954
124,650	8,395	6,647	-24296,534	17738,804	11321,614	12479,928	-2,049	-2,257
125,100	8,719	6,895	-26155,391	17653,370	11676,645	12426,465	-1,769	-2,602
125,550	9,043	7,139	-28069,231	17567,280	11864,238	12372,477	-1,481	-2,984
126,000	13,876	11,856	-30038,905	17480,497	11886,738	12317,938	-0,837	-2,214
126,450	9,043	7,139	-28070,134	17393,022	11746,551	12256,215	-1,433	-3,029
126,900	8,719	6,895	-26155,597	17304,892	11446,148	12194,032	-1,671	-2,692
127,350	8,395	6,647	-24296,044	17216,179	10988,054	12131,439	-1,898	-2,394
127,800	8,073	6,393	-22490,627	17126,990	10374,846	12068,514	-2,115	-2,136
128,250	7,750	6,133	-20729,638	17037,471	9609,134	12005,357	-2,322	-1,918
128,700	7,428	5,865	-19067,722	16948,944	8694,130	11978,473	-2,517	-1,751
129,150	7,107	5,589	-17333,102	16859,288	7631,188	11915,035	-2,713	-1,604
129,600	6,800	5,305	-15702,944	16769,970	6423,569	11851,836	-2,883	-1,526

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
130,050	6,517	5,007	-14072,630	16681,297	5073,783	11789,097	-3,039	-1,479
130,500	6,148	4,697	-12486,950	16593,623	3584,223	11727,062	-3,216	-1,533
131,000	6,148	4,697	-10851,288	16506,146	1886,999	11683,964	-3,183	-1,562
131,500	6,148	4,697	-9163,536	16412,519	254,495	11617,611	-3,165	-1,551
132,000	6,148	4,697	-7534,043	16377,532	-1317,481	11592,772	-3,166	-1,532
132,500	6,148	4,697	-5825,887	16343,985	-2836,186	11568,950	-3,191	-1,458
133,000	6,148	4,697	-4244,039	16311,734	-4302,270	11546,049	-3,202	-1,414
133,500	6,148	4,697	-2639,756	16280,633	-5716,311	11523,960	-3,228	-1,340
134,000	6,148	4,697	-1160,650	16250,541	-7078,816	11502,589	-3,241	-1,296
134,500	6,148	4,697	339,688	16221,319	-8390,227	11481,833	-3,267	-1,221
135,000	6,148	4,697	1715,565	16192,836	-9650,930	11461,603	-3,279	-1,177
135,500	6,148	4,697	3111,891	16077,422	-10802,440	11379,842	-3,291	-1,091
136,000	6,148	4,697	4384,553	16120,103	-12008,482	11409,986	-3,315	-1,058
136,500	6,148	4,697	5707,820	16163,225	-13174,825	11440,440	-3,357	-0,988
137,000	6,148	4,697	6906,922	16206,689	-14301,103	11471,138	-3,383	-0,952
137,500	6,148	4,697	8126,057	16250,403	-15386,924	11502,012	-3,420	-0,892
138,000	6,148	4,697	9220,667	16294,280	-16431,876	11533,004	-3,442	-0,865
138,500	6,148	4,697	10335,618	16338,244	-17435,529	11564,056	-3,475	-0,814
139,000	6,148	4,697	11325,381	16382,223	-18397,438	11595,121	-3,493	-0,797
139,500	6,148	4,697	12336,100	16426,151	-19317,153	11626,149	-3,522	-0,753
140,000	6,148	4,697	13220,697	16469,970	-20194,216	11657,102	-3,536	-0,745
140,500	6,148	4,697	14127,141	16513,626	-21028,166	11687,938	-3,562	-0,709
141,000	6,148	4,697	14906,283	16557,072	-21818,541	11718,627	-3,573	-0,708
141,500	6,148	4,697	15708,415	16600,264	-22564,882	11749,137	-3,596	-0,679
142,000	6,148	4,697	16381,849	16643,165	-23266,734	11779,442	-3,603	-0,686
142,500	6,148	4,697	17079,634	16685,740	-23923,643	11809,516	-3,623	-0,663
143,000	6,148	4,697	17647,141	16727,959	-24535,166	11839,340	-3,627	-0,676
143,500	6,148	4,697	18240,551	16769,795	-25100,864	11868,891	-3,645	-0,659
144,000	6,148	4,697	18701,943	16811,225	-25620,307	11898,157	-3,646	-0,678
144,500	6,148	4,697	19190,954	16852,227	-26093,072	11927,119	-3,661	-0,666
145,000	6,148	4,697	19546,079	16892,782	-26518,748	11955,769	-3,660	-0,690
145,500	6,148	4,697	19930,671	16932,875	-26896,932	11984,089	-3,673	-0,682
146,000	6,148	4,697	20179,410	16972,492	-27227,230	12012,075	-3,670	-0,710
146,500	6,148	4,697	20459,569	17011,620	-27509,260	12039,713	-3,681	-0,706
147,000	6,148	4,697	20601,835	17050,249	-27742,650	12067,001	-3,675	-0,739
147,500	6,148	4,697	20777,552	17088,370	-27927,037	12093,928	-3,685	-0,737
148,000	6,148	4,697	20813,292	17125,974	-28062,072	12120,493	-3,678	-0,774
148,500	6,148	4,697	20884,562	17163,058	-28147,415	12146,687	-3,686	-0,775
149,000	6,148	4,697	20814,806	17199,615	-28182,737	12172,511	-3,677	-0,813

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
149,500	6,148	4,697	20780,580	17235,643	-28167,721	12197,960	-3,684	-0,817
150,000	6,148	4,697	20606,377	17271,139	-28102,063	12223,035	-3,675	-0,857
150,500	6,148	4,697	20465,626	17306,105	-27985,467	12247,733	-3,681	-0,862
151,000	6,148	4,697	20186,981	17340,540	-27817,651	12272,059	-3,670	-0,904
151,500	6,148	4,697	19939,756	17374,448	-27598,346	12296,010	-3,675	-0,911
152,000	6,148	4,697	19556,679	17407,835	-27327,292	12319,595	-3,664	-0,953
152,500	6,148	4,697	19203,068	17440,707	-27004,243	12342,814	-3,668	-0,961
153,000	6,148	4,697	18715,571	17473,073	-26628,963	12365,678	-3,657	-1,003
153,500	6,148	4,697	18255,693	17504,945	-26201,229	12388,192	-3,661	-1,012
154,000	6,148	4,697	17663,797	17536,339	-25720,830	12410,369	-3,649	-1,054
154,500	6,148	4,697	17097,805	17567,272	-25187,565	12432,220	-3,652	-1,064
155,000	6,148	4,697	16401,534	17597,767	-24601,244	12453,763	-3,641	-1,105
155,500	6,148	4,697	15729,614	17627,849	-23961,687	12475,012	-3,644	-1,115
156,000	6,148	4,697	14928,997	17657,548	-23268,724	12495,994	-3,633	-1,155
156,500	6,148	4,697	14151,369	17686,900	-22522,193	12516,729	-3,636	-1,165
157,000	6,148	4,697	13246,439	17715,946	-21721,937	12537,249	-3,625	-1,204
157,500	6,148	4,697	12363,357	17744,733	-20867,806	12557,586	-3,628	-1,212
158,000	6,148	4,697	11354,152	17773,314	-19959,651	12577,780	-3,618	-1,250
158,500	6,148	4,697	10365,903	17801,752	-18997,326	12597,870	-3,622	-1,257
159,000	6,148	4,697	9252,466	17830,113	-17980,679	12617,910	-3,612	-1,294
159,500	6,148	4,697	8159,370	17858,477	-16909,552	12637,950	-3,617	-1,299
160,000	6,148	4,697	6941,749	17886,928	-15783,778	12658,055	-3,608	-1,333
160,500	6,148	4,697	5744,161	17915,561	-14603,173	12678,287	-3,613	-1,337
161,000	6,148	4,697	4422,409	17944,481	-13367,530	12698,726	-3,606	-1,368
161,500	6,148	4,697	3151,262	17973,801	-12076,619	12719,446	-3,618	-1,357
162,000	6,148	4,697	1756,450	18003,646	-10730,173	12740,541	-3,618	-1,373
162,500	6,148	4,697	382,087	18034,148	-9327,885	12762,099	-3,632	-1,357
163,000	6,148	4,697	-1116,737	18065,449	-7869,399	12784,225	-3,634	-1,370
163,500	6,148	4,697	-2594,329	18097,697	-6354,303	12807,022	-3,650	-1,350
164,000	6,148	4,697	-4197,098	18131,049	-4782,120	12830,602	-3,654	-1,358
164,500	6,148	4,697	-5777,432	18165,666	-3152,304	12855,076	-3,673	-1,334
165,000	6,148	4,697	-7484,073	18201,713	-1464,227	12880,564	-3,681	-1,337
165,500	6,148	4,697	-9112,052	18239,354	282,823	12907,180	-3,713	-1,282
166,000	6,148	4,697	-10798,290	18259,323	2087,424	12921,293	-3,741	-1,231
166,500	6,148	4,697	-12454,710	18224,094	3936,404	12896,344	-3,766	-1,156
166,950	6,517	5,007	-14035,708	18191,132	5533,015	12852,224	-3,538	-1,106
167,400	6,800	5,305	-15620,578	18161,519	6956,588	12831,285	-3,347	-1,147
167,850	7,107	5,589	-17294,007	18077,352	8182,532	12771,806	-3,107	-1,273
168,300	7,428	5,865	-18983,276	17993,378	9229,883	12712,462	-2,856	-1,443

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
168,750	7,750	6,133	-20708,123	17909,324	10100,859	12653,065	-2,598	-1,664
169,200	8,073	6,393	-22425,170	17823,660	10796,860	12555,000	-2,333	-1,927
169,650	8,395	6,647	-24229,163	17738,804	11321,614	12495,213	-2,060	-2,233
170,100	8,719	6,895	-26087,293	17653,370	11676,645	12435,021	-1,778	-2,581
170,550	9,043	7,139	-28000,408	17567,280	11864,238	12374,366	-1,489	-2,965
171,000	13,876	11,856	-29967,755	17480,497	11886,738	12313,224	-0,841	-2,204
171,450	9,043	7,139	-28000,679	17393,022	11746,551	12245,163	-1,440	-3,013
171,900	8,719	6,895	-26089,435	17304,892	11446,148	12176,706	-1,677	-2,679
172,350	8,395	6,647	-24233,175	17216,179	10988,054	12107,905	-1,904	-2,383
172,800	8,073	6,393	-22431,052	17126,990	10374,846	12038,837	-2,119	-2,127
173,250	7,750	6,133	-20674,767	17037,471	9609,134	11969,602	-2,325	-1,912
173,700	7,428	5,865	-19017,562	16948,944	8694,130	11936,508	-2,518	-1,748
174,150	7,107	5,589	-17286,099	16859,288	7631,188	11867,073	-2,712	-1,604
174,600	6,800	5,305	-15659,131	16769,970	6423,569	11797,940	-2,882	-1,529
175,050	6,517	5,007	-14031,979	16681,297	5073,783	11729,331	-3,036	-1,486
175,500	6,148	4,697	-12449,483	16593,623	3584,223	11661,489	-3,211	-1,544
176,000	6,148	4,697	-10817,886	16506,146	1886,999	11611,720	-3,176	-1,578
176,500	6,148	4,697	-9133,630	16412,519	254,495	11539,019	-3,157	-1,571
177,000	6,148	4,697	-7506,788	16377,532	-1317,481	11507,599	-3,155	-1,556
177,500	6,148	4,697	-5802,200	16343,985	-2836,186	11477,222	-3,178	-1,486
178,000	6,148	4,697	-4223,902	16311,734	-4302,270	11447,783	-3,188	-1,447
178,500	6,148	4,697	-2623,189	16280,633	-5716,311	11419,178	-3,212	-1,376
179,000	6,148	4,697	-1147,639	16250,541	-7078,816	11391,306	-3,223	-1,336
179,500	6,148	4,697	349,128	16221,319	-8390,227	11364,071	-3,247	-1,266
180,000	6,148	4,697	1721,444	16192,836	-9650,930	11337,377	-3,258	-1,226
180,500	6,148	4,697	3114,197	16077,422	-10802,440	11249,881	-3,267	-1,144
181,000	6,148	4,697	4383,333	16120,103	-12008,482	11273,039	-3,290	-1,115
181,500	6,148	4,697	5699,755	16163,225	-13174,825	11296,471	-3,329	-1,051
182,000	6,148	4,697	6892,014	16206,689	-14301,103	11320,106	-3,352	-1,021
182,500	6,148	4,697	8104,303	16250,403	-15386,924	11343,881	-3,387	-0,966
183,000	6,148	4,697	9192,064	16294,280	-16431,876	11367,734	-3,406	-0,945
183,500	6,148	4,697	10300,168	16338,244	-17435,529	11391,612	-3,437	-0,900
184,000	6,148	4,697	11283,078	16382,223	-18397,438	11415,464	-3,452	-0,888
184,500	6,148	4,697	12286,949	16426,151	-19317,153	11439,247	-3,479	-0,851
185,000	6,148	4,697	13164,687	16469,970	-20194,216	11462,916	-3,491	-0,848
185,500	6,148	4,697	14064,281	16513,626	-21028,166	11486,438	-3,514	-0,818
186,000	6,148	4,697	14836,561	16557,072	-21818,541	11509,777	-3,522	-0,823
186,500	6,148	4,697	15631,841	16600,264	-22564,882	11532,906	-3,542	-0,800
187,000	6,148	4,697	16298,410	16643,165	-23266,734	11555,796	-3,547	-0,812

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
187,500	6,148	4,697	16989,342	16685,740	-23923,643	11578,426	-3,564	-0,796
188,000	6,148	4,697	17549,980	16727,959	-24535,166	11600,775	-3,566	-0,815
188,500	6,148	4,697	18136,535	16769,795	-25100,864	11622,824	-3,581	-0,804
189,000	6,148	4,697	18591,056	16811,225	-25620,307	11644,557	-3,579	-0,828
189,500	6,148	4,697	19073,211	16852,227	-26093,072	11665,962	-3,592	-0,822
190,000	6,148	4,697	19421,462	16892,782	-26518,748	11687,023	-3,588	-0,852
190,500	6,148	4,697	19799,198	16932,875	-26896,932	11707,733	-3,598	-0,850
191,000	6,148	4,697	20041,060	16972,492	-27227,230	11728,081	-3,592	-0,885
191,500	6,148	4,697	20314,362	17011,620	-27509,260	11748,060	-3,601	-0,887
192,000	6,148	4,697	20449,751	17050,249	-27742,650	11767,662	-3,593	-0,925
192,500	6,148	4,697	20618,610	17088,370	-27927,037	11786,882	-3,599	-0,930
193,000	6,148	4,697	20647,472	17125,974	-28062,072	11805,717	-3,590	-0,972
193,500	6,148	4,697	20711,884	17163,058	-28147,415	11824,162	-3,595	-0,979
194,000	6,148	4,697	20635,269	17199,615	-28182,737	11842,214	-3,584	-1,024
194,500	6,148	4,697	20594,166	17235,643	-28167,721	11859,873	-3,588	-1,033
195,000	6,148	4,697	20413,103	17271,139	-28102,063	11877,138	-3,576	-1,079
195,500	6,148	4,697	20265,476	17306,105	-27985,467	11894,009	-3,579	-1,091
196,000	6,148	4,697	19979,971	17340,540	-27817,651	11910,488	-3,566	-1,138
196,500	6,148	4,697	19725,873	17374,448	-27598,346	11926,577	-3,568	-1,152
197,000	6,148	4,697	19335,935	17407,835	-27327,292	11942,282	-3,555	-1,200
197,500	6,148	4,697	18975,453	17440,707	-27004,243	11957,607	-3,556	-1,214
198,000	6,148	4,697	18481,096	17473,073	-26628,963	11972,558	-3,542	-1,262
198,500	6,148	4,697	18014,352	17504,945	-26201,229	11987,147	-3,543	-1,278
199,000	6,148	4,697	17415,596	17536,339	-25720,830	12001,381	-3,529	-1,326
199,500	6,148	4,697	16842,742	17567,272	-25187,565	12015,276	-3,529	-1,341
200,000	6,148	4,697	16139,612	17597,767	-24601,244	12028,846	-3,515	-1,389
200,500	6,148	4,697	15460,837	17627,849	-23961,687	12042,110	-3,516	-1,405
201,000	6,148	4,697	14653,360	17657,548	-23268,724	12055,089	-3,502	-1,451
201,500	6,148	4,697	13868,885	17686,900	-22522,193	12067,807	-3,502	-1,467
202,000	6,148	4,697	12957,095	17715,946	-21721,937	12080,293	-3,489	-1,512
202,500	6,148	4,697	12067,175	17744,733	-20867,806	12092,580	-3,489	-1,527
203,000	6,148	4,697	11051,111	17773,314	-19959,651	12104,703	-3,476	-1,571
203,500	6,148	4,697	10056,034	17801,752	-18997,326	12116,707	-3,477	-1,584
204,000	6,148	4,697	8935,740	17830,113	-17980,679	12128,635	-3,465	-1,627
204,500	6,148	4,697	7835,828	17858,477	-16909,552	12140,543	-3,466	-1,638
205,000	6,148	4,697	6611,350	17886,928	-15783,778	12152,487	-3,455	-1,679
205,500	6,148	4,697	5406,959	17915,561	-14603,173	12164,533	-3,458	-1,688
206,000	6,148	4,697	4079,148	17944,481	-13367,530	12176,750	-3,448	-1,726
206,500	6,148	4,697	2802,657	17973,801	-12076,619	12189,216	-3,457	-1,719

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
207,000	6,148	4,697	1401,968	18003,646	-10730,173	12202,014	-3,455	-1,741
207,500	6,148	4,697	21,809	18034,148	-9327,885	12215,235	-3,466	-1,732
208,000	6,148	4,697	-1482,890	18065,449	-7869,399	12228,970	-3,465	-1,750
208,500	6,148	4,697	-2966,261	18097,697	-6354,303	12243,322	-3,479	-1,737
209,000	6,148	4,697	-4574,903	18131,049	-4782,120	12258,394	-3,480	-1,751
209,500	6,148	4,697	-6160,997	18165,666	-3152,304	12274,296	-3,497	-1,732
210,000	6,148	4,697	-7873,510	18201,713	-1464,227	12291,134	-3,501	-1,741
210,500	6,148	4,697	-9503,351	18239,354	282,823	12309,020	-3,532	-1,691
211,000	6,148	4,697	-11195,389	18259,323	2087,424	12314,956	-3,557	-1,645
211,500	6,148	4,697	-12857,454	18224,094	3936,404	12283,672	-3,580	-1,575
211,950	6,517	5,007	-14446,829	18191,132	5533,015	12236,688	-3,362	-1,504
212,400	6,800	5,305	-16036,790	18161,519	6956,588	12210,052	-3,178	-1,526
212,850	7,107	5,589	-17715,480	18077,352	8182,532	12146,781	-2,946	-1,636
213,300	7,428	5,865	-19409,816	17993,378	9229,883	12083,704	-2,701	-1,793
213,750	7,750	6,133	-21139,869	17909,324	10100,859	12020,634	-2,448	-2,000
214,200	8,073	6,393	-22889,523	17823,660	10796,860	11924,306	-2,185	-2,259
214,650	8,395	6,647	-24695,066	17738,804	11321,614	11861,034	-1,917	-2,554
215,100	8,719	6,895	-26551,822	17653,370	11676,645	11797,437	-1,641	-2,891
215,550	9,043	7,139	-28463,562	17567,280	11864,238	11733,466	-1,356	-3,265
216,000	13,876	11,856	-30431,135	17480,497	11886,738	11669,097	-0,761	-2,385
216,450	9,043	7,139	-28442,549	17393,022	11746,551	11634,985	-1,314	-3,299
216,900	8,719	6,895	-26509,797	17304,892	11446,148	11600,191	-1,553	-2,959
217,350	8,395	6,647	-24632,029	17216,179	10988,054	11564,760	-1,782	-2,658
217,800	8,073	6,393	-22808,397	17126,990	10374,846	11528,761	-2,000	-2,396
218,250	7,750	6,133	-21030,704	17037,471	9609,134	11492,291	-2,208	-2,176
218,700	7,428	5,865	-19347,175	16948,944	8694,130	11487,877	-2,404	-2,006
219,150	7,107	5,589	-17594,300	16859,288	7631,188	11450,847	-2,601	-1,856
219,600	6,800	5,305	-15946,132	16769,970	6423,569	11413,793	-2,773	-1,775
220,050	6,517	5,007	-14297,600	16681,297	5073,783	11376,929	-2,929	-1,725
220,500	6,148	4,697	-12693,876	16593,623	3584,223	11340,499	-3,107	-1,778
221,000	6,148	4,697	-11036,793	16506,146	1886,999	11323,789	-3,083	-1,787
221,500	6,148	4,697	-9329,195	16412,519	254,495	11285,352	-3,074	-1,757
222,000	6,148	4,697	-7672,498	16377,532	-1317,481	11287,036	-3,084	-1,715
222,500	6,148	4,697	-5945,381	16343,985	-2836,186	11289,604	-3,118	-1,623
223,000	6,148	4,697	-4344,455	16311,734	-4302,270	11292,965	-3,138	-1,560
223,500	6,148	4,697	-2721,229	16280,633	-5716,311	11297,023	-3,172	-1,467
224,000	6,148	4,697	-1223,098	16250,541	-7078,816	11301,687	-3,192	-1,404
224,500	6,148	4,697	296,164	16221,319	-8390,227	11306,862	-3,227	-1,312
225,000	6,148	4,697	1691,009	16192,836	-9650,930	11312,464	-3,248	-1,249

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
225,500	6,148	4,697	3106,241	16077,422	-10802,440	11257,109	-3,267	-1,144
226,000	6,148	4,697	4397,664	16120,103	-12008,482	11312,336	-3,300	-1,093
226,500	6,148	4,697	5725,890	16163,225	-13174,825	11368,010	-3,347	-1,010
227,000	6,148	4,697	6929,919	16206,689	-14301,103	11424,058	-3,378	-0,962
227,500	6,148	4,697	8153,995	16250,403	-15386,924	11480,422	-3,421	-0,889
228,000	6,148	4,697	9253,476	16294,280	-16431,876	11537,040	-3,448	-0,850
228,500	6,148	4,697	10373,350	16338,244	-17435,529	11593,858	-3,487	-0,786
229,000	6,148	4,697	11367,930	16382,223	-18397,438	11650,825	-3,511	-0,756
229,500	6,148	4,697	12383,554	16426,151	-19317,153	11707,895	-3,546	-0,700
230,000	6,148	4,697	13272,916	16469,970	-20194,216	11765,027	-3,566	-0,678
230,500	6,148	4,697	14184,248	16513,626	-21028,166	11822,181	-3,597	-0,630
231,000	6,148	4,697	14968,108	16557,072	-21818,541	11879,322	-3,614	-0,616
231,500	6,148	4,697	15775,109	16600,264	-22564,882	11936,418	-3,642	-0,574
232,000	6,148	4,697	16453,217	16643,165	-23266,734	11993,441	-3,655	-0,568
232,500	6,148	4,697	17155,856	16685,740	-23923,643	12050,366	-3,681	-0,532
233,000	6,148	4,697	17727,997	16727,959	-24535,166	12107,166	-3,691	-0,532
233,500	6,148	4,697	18326,245	16769,795	-25100,864	12163,823	-3,714	-0,502
234,000	6,148	4,697	18792,239	16811,225	-25620,307	12220,317	-3,722	-0,507
234,500	6,148	4,697	19286,072	16852,227	-26093,072	12276,630	-3,743	-0,482
235,000	6,148	4,697	19645,772	16892,782	-26518,748	12332,747	-3,747	-0,493
235,500	6,148	4,697	20035,173	16932,875	-26896,932	12388,654	-3,766	-0,472
236,000	6,148	4,697	20288,466	16972,492	-27227,230	12444,339	-3,769	-0,487
236,500	6,148	4,697	20573,422	17011,620	-27509,260	12499,791	-3,786	-0,469
237,000	6,148	4,697	20720,230	17050,249	-27742,650	12554,999	-3,786	-0,488
237,500	6,148	4,697	20900,733	17088,370	-27927,037	12609,954	-3,802	-0,473
238,000	6,148	4,697	20941,012	17125,974	-28062,072	12664,649	-3,801	-0,496
238,500	6,148	4,697	21017,057	17163,058	-28147,415	12719,078	-3,815	-0,483
239,000	6,148	4,697	20952,077	17199,615	-28182,737	12773,231	-3,812	-0,508
239,500	6,148	4,697	20922,388	17235,643	-28167,721	12827,108	-3,825	-0,498
240,000	6,148	4,697	20752,952	17271,139	-28102,063	12880,703	-3,822	-0,525
240,500	6,148	4,697	20616,757	17306,105	-27985,467	12934,013	-3,834	-0,516
241,000	6,148	4,697	20342,871	17340,540	-27817,651	12987,038	-3,830	-0,544
241,500	6,148	4,697	20100,233	17374,448	-27598,346	13039,775	-3,841	-0,537
242,000	6,148	4,697	19721,909	17407,835	-27327,292	13092,228	-3,836	-0,565
242,500	6,148	4,697	19372,927	17440,707	-27004,243	13144,399	-3,846	-0,560
243,000	6,148	4,697	18890,181	17473,073	-26628,963	13196,293	-3,841	-0,588
243,500	6,148	4,697	18434,986	17504,945	-26201,229	13247,916	-3,851	-0,583
244,000	6,148	4,697	17847,839	17536,339	-25720,830	13299,277	-3,846	-0,611
244,500	6,148	4,697	17286,599	17567,272	-25187,565	13350,389	-3,855	-0,607

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
245,000	6,148	4,697	16595,077	17597,767	-24601,244	13401,263	-3,850	-0,634
245,500	6,148	4,697	15927,992	17627,849	-23961,687	13451,921	-3,859	-0,629
246,000	6,148	4,697	15132,126	17657,548	-23268,724	13502,381	-3,854	-0,656
246,500	6,148	4,697	14359,433	17686,900	-22522,193	13552,669	-3,864	-0,651
247,000	6,148	4,697	13459,258	17715,946	-21721,937	13602,817	-3,859	-0,676
247,500	6,148	4,697	12581,226	17744,733	-20867,806	13652,856	-3,869	-0,670
248,000	6,148	4,697	11576,783	17773,314	-19959,651	13702,829	-3,865	-0,694
248,500	6,148	4,697	10593,715	17801,752	-18997,326	13752,781	-3,875	-0,686
249,000	6,148	4,697	9485,051	17830,113	-17980,679	13802,767	-3,872	-0,708
249,500	6,148	4,697	8397,286	17858,477	-16909,552	13852,842	-3,883	-0,699
250,000	6,148	4,697	7184,449	17886,928	-15783,778	13903,077	-3,880	-0,719
250,500	6,148	4,697	5992,360	17915,561	-14603,173	13953,545	-3,892	-0,707
251,000	6,148	4,697	4692,067	17944,481	-13367,530	14004,325	-3,894	-0,718
251,500	6,148	4,697	3428,642	17973,801	-12076,619	14055,514	-3,914	-0,690
252,000	6,148	4,697	2040,214	18003,646	-10730,173	14107,205	-3,920	-0,691
252,500	6,148	4,697	673,311	18034,148	-9327,885	14159,507	-3,941	-0,660
253,000	6,148	4,697	-819,108	18065,449	-7869,399	14212,535	-3,950	-0,657
253,500	6,148	4,697	-2289,012	18097,697	-6354,303	14266,408	-3,973	-0,621
254,000	6,148	4,697	-3885,353	18131,049	-4782,120	14321,257	-3,984	-0,614
254,500	6,148	4,697	-5457,748	18165,666	-3152,304	14377,213	-4,011	-0,573
255,000	6,148	4,697	-7157,935	18201,713	-1464,227	14434,412	-4,025	-0,560
255,500	6,148	4,697	-8726,810	18239,354	282,823	14492,992	-4,074	-0,468
256,000	6,148	4,697	-10405,697	18259,323	2087,424	14537,623	-4,109	-0,401
256,500	6,148	4,697	-12052,742	18224,094	3936,404	14538,284	-4,140	-0,312
256,950	6,517	5,007	-13619,198	18191,132	5533,015	14509,581	-3,895	-0,303
257,400	6,800	5,305	-15195,021	18161,519	6956,588	14511,596	-3,688	-0,377
257,850	7,107	5,589	-16861,656	18077,352	8182,532	14469,862	-3,434	-0,534
258,300	7,428	5,865	-18541,579	17993,378	9229,883	14428,045	-3,172	-0,730
258,750	7,750	6,133	-20258,917	17909,324	10100,859	14385,927	-2,904	-0,973
259,200	8,073	6,393	-21964,547	17823,660	10796,860	14290,318	-2,628	-1,260
259,650	8,395	6,647	-23754,598	17738,804	11321,614	14247,119	-2,348	-1,583
260,100	8,719	6,895	-25598,785	17653,370	11676,645	14203,218	-2,060	-1,946
260,550	9,043	7,139	-27497,957	17567,280	11864,238	14158,548	-1,765	-2,344
261,000	13,876	11,856	-29452,962	17480,497	11886,738	14113,080	-1,009	-1,825
261,450	9,043	7,139	-27468,184	17393,022	11746,551	13866,908	-1,700	-2,427
261,900	8,719	6,895	-25539,238	17304,892	11446,148	13621,985	-1,926	-2,117
262,350	8,395	6,647	-23665,278	17216,179	10988,054	13378,389	-2,141	-1,846
262,800	8,073	6,393	-21845,453	17126,990	10374,846	13136,220	-2,346	-1,616
263,250	7,750	6,133	-20071,308	17037,471	9609,134	12895,602	-2,540	-1,429

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
263,700	7,428	5,865	-18407,918	16948,944	8694,130	12703,964	-2,720	-1,293
264,150	7,107	5,589	-16655,450	16859,288	7631,188	12465,981	-2,902	-1,177
264,600	6,800	5,305	-15010,163	16769,970	6423,569	12230,060	-3,057	-1,134
265,050	6,517	5,007	-13360,733	16681,297	5073,783	11996,414	-3,197	-1,122
265,500	6,148	4,697	-11758,928	16593,623	3584,223	11765,271	-3,356	-1,216
266,000	6,148	4,697	-10022,163	16506,146	1886,999	11540,308	-3,308	-1,278
266,500	6,148	4,697	-8208,816	16412,519	254,495	11289,756	-3,280	-1,292
267,000	6,148	4,697	-6519,127	16377,532	-1317,481	11080,991	-3,258	-1,324
267,500	6,148	4,697	-4809,622	16343,985	-2836,186	10873,976	-3,249	-1,325
268,000	6,148	4,697	-3222,193	16311,734	-4302,270	10668,564	-3,229	-1,355
268,500	6,148	4,697	-1616,618	16280,633	-5716,311	10464,620	-3,221	-1,355
269,000	6,148	4,697	-132,064	16250,541	-7078,816	10262,015	-3,202	-1,383
269,500	6,148	4,697	1369,494	16221,319	-8390,227	10060,631	-3,195	-1,383
270,000	6,148	4,697	2750,581	16192,836	-9650,930	9860,355	-3,176	-1,411
270,500	6,148	4,697	4148,040	18591,687	-12491,777	11111,435	-3,531	-1,881
271,000	6,148	4,697	5425,088	18639,442	-13885,234	10929,777	-3,484	-2,012
271,500	6,148	4,697	6718,368	18687,711	-15232,561	10747,338	-3,449	-2,117
272,000	6,148	4,697	7890,828	18736,378	-16533,350	10564,036	-3,399	-2,254
272,500	6,148	4,697	9079,851	18785,336	-17787,162	10379,800	-3,362	-2,365
273,000	6,148	4,697	10147,193	18834,486	-18993,533	10194,563	-3,310	-2,507
273,500	6,148	4,697	11231,886	18883,737	-20151,978	10008,273	-3,271	-2,622
274,000	6,148	4,697	12193,602	18933,003	-21261,997	9820,881	-3,217	-2,769
274,500	6,148	4,697	13173,894	18982,209	-22323,078	9632,347	-3,176	-2,888
275,000	6,148	4,697	14029,497	19031,284	-23334,704	9442,639	-3,121	-3,039
275,500	6,148	4,697	14905,320	19080,164	-24296,352	9251,733	-3,078	-3,161
276,000	6,148	4,697	15654,343	19128,793	-25207,498	9059,605	-3,021	-3,315
276,500	6,148	4,697	16425,634	19177,117	-26067,621	8866,242	-2,977	-3,440
277,000	6,148	4,697	17067,633	19225,091	-26876,202	8671,630	-2,919	-3,597
277,500	6,148	4,697	17734,328	19272,672	-27632,728	8475,765	-2,874	-3,722
278,000	6,148	4,697	18268,879	19319,822	-28336,693	8278,643	-2,815	-3,881
278,500	6,148	4,697	18830,920	19366,508	-28987,597	8080,266	-2,770	-4,008
279,000	6,148	4,697	19257,621	19412,699	-29584,953	7880,636	-2,710	-4,168
279,500	6,148	4,697	19714,952	19458,368	-30128,280	7679,759	-2,665	-4,294
280,000	6,148	4,697	20033,422	19503,490	-30617,109	7477,644	-2,604	-4,455
280,500	6,148	4,697	20385,990	19548,045	-31050,983	7274,300	-2,559	-4,580
281,000	6,148	4,697	20597,532	19592,012	-31429,457	7069,741	-2,498	-4,741
281,500	6,148	4,697	20843,623	19635,374	-31752,097	6863,980	-2,453	-4,864
282,000	6,148	4,697	20950,352	19678,116	-32018,481	6657,032	-2,393	-5,023
282,500	6,148	4,697	21087,465	19720,224	-32228,203	6448,915	-2,349	-5,145

X [m]	A _c [m ²]	I _c [m ⁴]	M _{Efreq,∞} [kN.m]	P _∞ [kN]	P _∞ x e [kN.m]	M _{PE,Hip,∞} [kN.m]	σ _{sup} [MPa]	σ _{inf} [MPa]
283,000	6,148	4,697	21089,336	19709,679	-32295,647	6223,223	-2,294	-5,264
283,500	6,148	4,697	21117,156	19669,674	-32258,266	5988,800	-2,256	-5,327
284,000	6,148	4,697	21014,123	19616,537	-32126,991	5751,430	-2,209	-5,405
284,500	6,148	4,697	20932,356	19562,395	-31906,293	5514,973	-2,182	-5,437
285,000	6,148	4,697	20724,379	19507,269	-31596,959	5279,470	-2,149	-5,483
285,500	6,148	4,697	20532,752	19451,184	-31199,805	5044,961	-2,134	-5,486
286,000	6,148	4,697	20219,794	19394,169	-30715,682	4811,484	-2,114	-5,502
286,500	6,148	4,697	19918,055	19336,261	-30145,469	4579,078	-2,111	-5,478
287,000	6,148	4,697	19500,081	19277,497	-29490,076	4347,786	-2,103	-5,466
287,500	6,148	4,697	19088,000	19217,925	-28750,438	4117,645	-2,111	-5,416
288,000	6,148	4,697	18564,978	19157,596	-27927,518	3888,692	-2,114	-5,377
288,500	6,148	4,697	18042,344	19096,572	-27022,304	3660,966	-2,132	-5,303
289,000	6,148	4,697	17414,246	19034,920	-26035,801	3434,500	-2,146	-5,238
289,500	6,148	4,697	16780,872	18972,720	-24969,036	3209,331	-2,174	-5,142
290,000	6,148	4,697	16047,672	18910,062	-23823,047	2985,492	-2,199	-5,054
290,500	6,148	4,697	15303,389	18847,050	-22598,880	2763,013	-2,236	-4,938
291,000	6,148	4,697	14465,065	18783,800	-21297,582	2541,921	-2,270	-4,827
291,500	6,148	4,697	13609,728	18720,444	-19920,196	2322,243	-2,315	-4,692
292,000	6,148	4,697	12666,259	18657,131	-18467,744	2103,996	-2,358	-4,562
292,500	6,148	4,697	11699,744	18594,027	-16941,224	1887,196	-2,410	-4,410
292,950	7,983	5,366	10761,624	18538,287	-15505,423	1690,037	-1,833	-3,426
293,400	8,354	5,720	9776,718	18482,379	-14010,464	1497,730	-1,801	-3,140
293,850	8,722	6,063	8755,743	18427,093	-12457,534	1306,597	-1,773	-2,879
294,300	9,138	6,410	7668,902	18372,601	-10847,184	1116,631	-1,734	-2,634
294,750	9,550	6,747	6550,727	18319,083	-9179,896	927,818	-1,701	-2,407
295,200	9,958	7,075	5363,506	18265,593	-7455,609	737,383	-1,670	-2,206
295,650	10,641	7,458	4112,090	18214,682	-5675,695	551,498	-1,595	-1,975
296,100	11,030	7,767	2807,423	18165,318	-3839,745	366,670	-1,573	-1,813
296,550	11,615	8,100	1434,273	18117,703	-1947,854	182,854	-1,525	-1,639
297,000	16,280	13,155	0,000	18072,035	0,000	0,000	-1,110	-1,110

ANEXO F - ESTADO LIMITE DE DEFORMAÇÃO

Vão	x [m]	δ_{PP} [mm]	δ_{PE} [mm]	δ_{RCP} [mm]	$\delta_{SC,min}$ [mm]	$\delta_{SC,max}$ [mm]	$\delta_{VDT,min}$ [mm]	$\delta_{VDT,max}$ [mm]	δ_{max} [mm]
1	13,500	-8,014	12,652	-1,849	-5,682	2,784	-0,910	1,031	7,010
2	58,500	-9,063	8,894	-2,131	-8,901	5,137	-0,597	0,526	-11,620
3	103,500	-8,995	10,611	-2,102	-9,485	5,727	-0,039	0,035	-5,471
4	148,500	-9,020	9,995	-2,113	-9,611	5,841	-0,239	0,211	-7,814
5	193,500	-8,995	10,611	-2,102	-9,485	5,727	-0,039	0,035	-5,471
6	238,500	-9,063	8,894	-2,131	-8,901	5,137	-0,597	0,526	-11,620
7	283,500	-8,014	12,652	-1,849	-5,682	2,784	-0,910	1,031	7,010

Vão	L _{vão} [m]	δ_{adm} [mm]
1	36,000	90,000
2	45,000	112,500
3	45,000	112,500
4	45,000	112,500
5	45,000	112,500
6	45,000	112,500
7	36,000	90,000

ANEXO G - ESTADO LIMITE DE FLEXÃO DO TABULEIRO

A_p [cm ²] =	162,000	f_{cd} [MPa] =	23,300		M-	M+
f_{pyd} [MPa] =	1400,000	f_{syd} [Mpa] =	434,800	A_s [cm ²] =	58,900	117,800
E_p [Gpa] =	195,000	d [m] =	2,748	b_t [m]	0,600	1,200

Tramo	Secção	X [m]	Med [KN.m]	Fs [KN]	Fp [KN]	Zs [m]	Zp [m]	Mrd [KN.m]
1°	Encontro	0,000	0,000	5121,708	22680,000	2,499	2,372	66592,190
	Vão	18,000	41798,791	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	36,000	-41287,009	5121,708	22680,000	2,499	2,372	66592,190
2°	Apoio	36,000	-41287,009	5121,708	22680,000	2,499	2,372	66592,190
	Vão	58,500	52522,900	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	81,000	-45615,552	5121,708	22680,000	2,499	2,372	66592,190
3°	Apoio	81,000	-45615,552	5121,708	22680,000	2,499	2,372	66592,190
	Vão	103,500	53096,386	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	126,000	-45159,847	5121,708	22680,000	2,499	2,372	66592,190
4°	Apoio	126,000	-45159,847	5121,708	22680,000	2,499	2,372	66592,190
	Vão	148,500	53381,124	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	171,000	-45069,452	5121,708	22680,000	2,499	2,372	66592,190
5°	Apoio	171,000	-45069,452	5121,708	22680,000	2,499	2,372	66592,190
	Vão	193,500	52733,648	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	216,000	-45863,295	5121,708	22680,000	2,499	2,372	66592,190
6°	Apoio	216,000	-45863,295	5121,708	22680,000	2,499	2,372	66592,190
	Vão	238,500	54019,751	2560,854	22680,000	2,699	2,452	62516,987
	Apoio	261,000	-40382,132	5121,708	22680,000	2,499	2,372	66592,190
7°	Apoio	261,000	-40382,132	5121,708	22680,000	2,499	2,372	66592,190
	Vão	279,000	44396,538	2560,854	22680,000	2,699	2,452	62516,987
	Encontro	297,000	0,000	5121,708	22680,000	2,499	2,372	66592,190

ANEXO H - ESTADO LIMITE DE ESFORÇO TRANSVERSO DO TABULEIRO

d_s [m]	z [m]	θ [°]	b_w [m]	$b_{w,nom}$ [m]	α [°]	α_c	v	\varnothing_b [mm]
2,754	2,479	30,000	2,400	2,400	2,400	1,000	0,516	0,260

f_{ck} [MPa]	f_{syk} [MPa]	f_{syd} [MPa]	n° de ramos/alma,	$(A_{sw/s})$ [cm ² /m/ramo]	$(A_{sw/s})$ [cm ² /m]
35,000	500,000	434,780	4,000	7,540	60,320

Secção		x [m]	V_{Ed} [kN]	$V_{Rd,s}$ [kN]	$V_{Rd,max}$ [kN]	V_{Rd} [kN]
E1	Direita	2,250	-4129,633	11260,769	31017,635	11260,769
P1	Esquerda	33,750	7146,144	11260,769	31017,635	11260,769
	Direita	38,250	-7180,304	11260,769	31017,635	11260,769
P2	Esquerda	78,750	7192,892	11260,769	31017,635	11260,769
	Direita	83,250	-7227,071	11260,769	31017,635	11260,769
P3	Esquerda	123,750	7221,158	11260,769	31017,635	11260,769
	Direita	128,250	-7232,698	11260,769	31017,635	11260,769
P4	Esquerda	168,750	7232,698	11260,769	31017,635	11260,769
	Direita	173,250	-7221,158	11260,769	31017,635	11260,769
P5	Esquerda	213,750	7227,071	11260,769	31017,635	11260,769
	Direita	218,250	-7192,892	11260,769	31017,635	11260,769
P6	Esquerda	258,750	7180,304	11260,769	31017,635	11260,769
	Direita	263,250	-7146,144	11260,769	31017,635	11260,769
E2	Esquerda	294,750	4129,632	11260,769	31017,635	11260,769

ANEXO I - ESFORÇOS CARACTERÍSTICOS NA BASE DOS PILARES

Cargas permanentes (PP+PE+RCP)

Pilar	N_k (kN)	$V_{k,x}$ (kN)	$M_{0k,y}$ (kNm)
P1	-5366,374	55,294	1105,870
P2	-6250,162	40,288	626,620
P3	-6486,213	13,190	243,659
P4	-6152,857	5,732	78,334
P5	-5893,425	-30,346	-368,153
P6	-5048,405	-84,158	-1203,458

Sobrecargas

Pilar	N_k (kN)	$V_{k,x}$ (kN)	$M_{0k,y}$ (kNm)
P1	-1105,606	6,699	133,980
P2	-1155,534	38,455	393,439
P3	-1161,281	30,934	386,046
P4	-1163,718	43,571	452,737
P5	-1155,81	-54,68	-427,436
P6	-1104,56	-17,097	-244,489

Variação diferencial da temperatura

Pilar	N_k (kN)	$V_{k,x}$ (kN)	$M_{0k,y}$ (kNm)
P1	-63,998	-0,610	-0,244
P2	-28,314	-1,339	-38,122
P3	-2,688	-0,493	-4,413
P4	-2,604	-0,479	-12,653
P5	-28,530	-3,643	-21,688
P6	-64,143	-0,190	-0,543

Variação uniforme da temperatura

Pilar	N_k (kN)	$V_{k,x}$ (kN)	$M_{0k,y}$ (kNm)
P1	-25,926	-111,153	-444,613
P2	-0,795	-73,233	-637,089
P3	-7,775	-28,100	-301,535
P4	-20,016	-8,435	-78,066
P5	-0,100	-49,986	580,217
P6	-13,476	-170,934	-488,873

Ação sísmica (E2)

Pilar	N_k (kN)	$V_{k,x}$ (kN)	$V_{k,y}$ (kN)	$M_{0k,x}$ (kNm)	$M_{0k,y}$ (kNm)
P1	-60,864	274,710	164,614	3176,717	5314,355
P2	-1723,402	278,289	321,571	4951,591	4275,162
P3	-1458,192	197,908	258,815	4440,360	3360,808
P4	-1830,756	311,996	346,901	5191,265	4611,192
P5	-1706,575	-512,700	-373,374	-4669,622	-6447,412
P6	-93,066	-714,449	-213,883	-3017,711	-10126,066

ANEXO J - EFEITOS DE SEGUNDA ORDEM NOS PILARES

Imperfeições geométricas

Pilar	Tipo de ligação	L(m)	$L_{0,x}$	$L_{0,y}$	$e_{i,x}$	$e_{i,y}$
P1	Rotulado	20,000	40,000	40,000	0,067	0,067
P2	Monolítico	31,000	31,000	31,000	0,052	0,052
P3	Monolítico	36,000	36,000	36,000	0,060	0,060
P4	Monolítico	30,000	30,000	30,000	0,050	0,050
P5	Monolítico	24,700	24,700	24,700	0,041	0,041
P6	Rotulado	14,300	28,600	28,600	0,048	0,048

J.1 Ação variável base: Sismo

J.1.1 DIREÇÃO X

Momentos de primeira ordem afetados das imperfeições geométricas

Pilar	$M_{0Ed,yy}$ [kNm]	N_{Ed} [kN]	$M_{0Ed,i,y}$ [kNm]	$M_{0Eqp,yy}$ [kNm]	N_{Eqp} [kN]	$M_{0Eqp,i,y}$ [kNm]
P1	9077,403	-5457,670	9441,247	1105,870	-5366,374	357,758
P2	7039,362	-8835,265	7495,851	626,620	-6250,162	322,925
P3	5284,870	-8673,501	5805,280	243,659	-6486,213	389,173
P4	6995,123	-8898,991	7440,072	78,334	-6152,857	307,643
P5	-10039,271	-8453,288	-10387,265	-368,153	-5893,425	-242,613
P6	-16392,556	-5188,004	-16639,851	-1203,458	-5048,405	-240,641

Verificação da dispensa de efeitos de segunda ordem

Pilar	$\varphi_{ef,x}$	A_x	$A_{s,x}$	ω	B	C_x	η_k	$\lambda_{lim,x}$	λ_x
P1	0,363	0,932	0,045	0,373	1,322	0,700	0,103	53,691	94,118
P2	0,297	0,944	0,045	0,373	1,322	0,700	0,167	42,728	72,941
P3	0,256	0,951	0,045	0,373	1,322	0,700	0,164	43,464	84,706
P4	0,122	0,976	0,045	0,373	1,322	0,700	0,168	44,032	70,588
P5	0,138	0,973	0,045	0,373	1,322	0,700	0,160	45,035	58,118
P6	0,203	0,961	0,045	0,373	1,322	0,700	0,098	56,762	67,294

Momento de cálculo total

Pilar	EI_y [kPa]	$k_{c,x}$	$N_{B,x}$ [kN]	$M_{Ed,y}$ [kNm]
P1	2949011,047	0,254	18190,983	13487,893
P2	3034330,780	0,261	31163,001	10462,019
P3	3090043,086	0,266	23532,024	9194,049
P4	3285100,957	0,283	36025,163	9880,857
P5	3260169,188	0,281	52740,711	-12369,917
P6	3163102,524	0,272	38166,378	-19257,555

J.1.2 DIREÇÃO Y**Momentos de primeira ordem afetados das imperfeições geométricas**

Pilar	$M_{0Ed,xx}$ [kNm]	N_{Ed} [kN]	$M_{0Ed,i,x}$ [kNm]	$M_{0Eqp,xx}$ [kNm]	N_{Eqp} [kN]	$M_{0Eqp,i,x}$ [kNm]
P1	4765,076	-5457,670	5128,920	0,000	-5366,374	357,758
P2	7427,387	-8835,265	7883,876	0,000	-6250,162	322,925
P3	6660,540	-8673,501	7180,950	0,000	-6486,213	389,173
P4	7786,897	-8898,991	8231,847	0,000	-6152,857	307,643
P5	-7004,433	-8453,288	-7352,427	0,000	-5893,425	-242,613
P6	-4526,566	-5188,004	-4773,861	0,000	-5048,405	-240,641

Verificação da dispensa de efeitos de segunda ordem

Pilar	$\varphi_{ef,y}$	A_y	$A_{s,y}$	ω	B	C_y	η_k	$\lambda_{lim,y}$	λ_y
P1	0,164	1,033	0,045	0,373	1,322	0,700	0,103	59,477	94,118
P2	0,096	1,019	0,045	0,373	1,322	0,700	0,167	46,135	72,941
P3	0,127	1,025	0,045	0,373	1,322	0,700	0,164	46,846	84,706
P4	0,088	1,018	0,045	0,373	1,322	0,700	0,168	45,893	70,588
P5	0,077	1,015	0,045	0,373	1,322	0,700	0,160	46,993	58,118
P6	0,118	1,024	0,045	0,373	1,322	0,700	0,098	60,467	67,294

Momento de cálculo total

Pilar	EI_x [kPa]	$k_{c,y}$	$N_{B,y}$ [kN]	$M_{Ed,x}$ [kNm]
P1	3221476,417	0,277	19871,686	7070,916
P2	3325213,775	0,286	34150,411	10635,435
P3	3276712,213	0,282	24953,590	11006,726
P4	3338610,596	0,287	36611,962	10875,198
P5	3355091,757	0,289	54276,301	-8708,780
P6	3290445,847	0,283	39702,918	-5491,429

J.2 Ação variável base: Sobrecarga

Momentos de primeira ordem afetados das imperfeições geométricas

Pilar	$M_{0Ed,yy}$ [kNm]	N_{Ed} [kN]	$M_{0Ed,i,y}$ [kNm]	$M_{0Eqp,yy}$ [kNm]	N_{Eqp} [kN]	$M_{0Eqp,i,y}$ [kNm]
P1	1306,840	-7024,783	1775,158	1132,666	-5587,495	1505,166
P2	1216,778	-7983,463	1629,257	705,308	-6481,269	1040,173
P3	822,728	-8228,135	1316,416	320,868	-6718,469	723,976
P4	757,439	-7898,434	1152,361	168,881	-6385,601	488,161
P5	-1009,307	-7627,145	-1323,291	-453,640	-6124,588	-705,769
P6	-1570,191	-6705,241	-1889,808	-1252,356	-5269,316	-1503,526

Verificação da dispensa de efeitos de segunda ordem

Pilar	$\varphi_{ef,x}$	A_x	$A_{s,x}$	ω	B	C_x	η_k	$\lambda_{lim,x}$	λ_x
P1	1,988	1,398	0,045	0,373	1,322	0,700	0,133	70,945	94,118
P2	1,497	1,299	0,045	0,373	1,322	0,700	0,151	61,872	72,941
P3	1,289	1,258	0,045	0,373	1,322	0,700	0,156	59,000	84,706
P4	0,993	1,199	0,045	0,373	1,322	0,700	0,149	57,383	70,588
P5	1,250	1,250	0,045	0,373	1,322	0,700	0,144	60,901	58,118
P6	1,865	1,373	0,045	0,373	1,322	0,700	0,127	71,341	67,294

Momento de cálculo total

Pilar	EI_y [kPa]	$k_{c,x}$	$N_{B,x}$ [kN]	$M_{Ed,y}$ [kNm]
P1	1747830,234	0,150	10781,496	5094,577
P2	1993282,270	0,172	20471,288	2670,840
P3	2118967,620	0,182	16136,861	2685,998
P4	2328642,644	0,200	25536,424	1668,397
P5	2144361,344	0,185	34689,961	-1696,236
P6	1803280,280	0,155	21758,598	-2731,588

ANEXO K - ESFORÇOS DE CÁLCULO NA BASE DOS PILARES

K.1 Ação variável base: Sismo

Pilar	N_{Ed} [kN]	V_{Ed,x} [kN]	V_{Ed,y} [kN]	M_{Ed,y} [kNm]	M_{Ed,x} [kNm]
P1	-5457,670	467,359	246,921	13487,893	7070,916
P2	-8835,265	457,722	482,357	10462,019	10635,435
P3	-8673,501	310,052	388,223	9194,049	11006,726
P4	-8898,991	473,726	520,352	9880,857	10875,198
P5	-8453,288	-799,396	-560,061	-12369,917	-8708,780
P6	-5188,004	-1155,832	-320,825	-19257,555	-5491,429

K.2 Ação variável base: Sobrecarga

Pilar	N_{Ed} [kN]	V_{Ed,x} [kN]	M_{Ed,y} [kNm]
P1	-7024,783	10,049	5094,577
P2	-7983,463	57,683	2670,840
P3	-8228,135	46,401	2685,998
P4	-7898,434	65,357	1668,397
P5	-7627,145	-82,020	-1696,236
P6	-6705,241	-25,646	-2731,588

ANEXO L - ESFORÇOS CARACTERÍSTICOS NOS ENCONTROS

Cargas permanentes (CP=PP+PE+RCP)

Encontro	F_{v,k} [kN]
E1	849,552
E2	-852,804

Sobrecargas

Encontro	F_{v,k,max} [kN]	F_{v,k,min} [kN]
E1	170,539	-1028,708
E2	1039,395	-169,682

Varição diferencial da temperatura

Encontro	F_{v,k,max} [kN]	F_{v,k,min} [kN]
E1	104,956	-209,854
E2	210,038	-105,048

Varição uniforme da temperatura

Encontro	F_{v,k,max} [kN]	F_{v,k,min} [kN]
E1	16,409	-16,409
E2	8,604	-8,604

Ação sísmica

Encontro	F_{v,k,max} [kN]	F_{v,k,min} [kN]	F_{HL,k,max} [kN]	F_{HL,k,min} [kN]	F_{HT,k,max} [kN]	F_{HT,k,min} [kN]
E1	31,239	-31,239	19,723	-19,723	407,587	-407,587
E2	54,905	-54,905	19,47	-19,47	308,325	-308,325

ANEXO M - ESTADO LIMITE DE DERRUBAMENTO DOS ENCONTROS (EQU)

Encontro	φ'_d [°]	$\gamma_{h,d}$ [kN/m ³]	δ'_d [°]	i [°]	φ_i [°]	θ_1 [°]	θ_2 [°]
E1	24,7913	19,000	16,528	1,146	0,000	8,637	9,593
E2	24,791	19,000	16,528	-1,146	0,000	8,637	9,593

Encontro	$K_{0,d}$	$K_{a,d}$	$K_{s1,d}$	$K_{s2,d}$
E1	0,5807	0,3637	0,4626	0,4757
E2	0,5807	0,3637	0,4626	0,4757

M.1 Encontro E1

Designação	Impulso/Força [kN]			Braço	Momento [kNm]	
	E_k	γ	E_d		Derrubante (M_{dst})	Estabilizante (M_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	7,600	2122,579	-
$I_{0,H1,CP}$	445,922	1,000	445,922	7,600	3389,007	-
$I_{a,H2,CP}$	225,209	1,000	225,209	4,465	1005,560	-
$I_{0,H2,CP}$	359,580	1,000	359,580	4,465	1605,523	-
$I_{a,H3,CP}$	105,935	1,000	105,935	3,854	408,274	-
$I_{0,H3,CP}$	169,141	1,000	169,141	3,854	651,869	-
$I_{a,H4,SC}$	75,381	1,000	75,381	8,250	621,894	-
$I_{0,H4,SC}$	120,357	1,000	120,357	8,250	992,944	-
$I_{a,H5,SC}$	30,393	1,000	30,393	4,465	135,703	-
$I_{0,H5,SC}$	48,526	1,000	48,526	4,465	216,670	-
$I_{a,H6,E}$	161,822	1,000	161,822	8,250	1335,033	-
$I_{a,H7,E}$	86,005	1,000	86,005	8,900	765,447	-
$I_{a,H8,E}$	32,622	1,000	32,622	5,077	165,623	-
$F_{H,esp+viga\ est}$	129,387	1,000	129,387	7,580	980,753	-
$F_{V,esp+viga\ est}$	808,668	1,000	808,668	3,680	-	2975,898
$F_{H,gigante}$	98,899	1,000	98,899	3,750	370,872	-
$F_{V,gigante}$	618,120	1,000	618,120	3,020	-	1866,722
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	0,000	-
$F_{V,Sapata}$	688,560	1,000	688,560	3,020	-	2079,451
$F_{H,solo1}$	157,642	1,000	157,642	5,690	896,984	-
$F_{V,solo1}$	985,264	1,000	985,264	5,540	-	5458,363
$F_{H,solo2}$	48,723	1,000	48,723	2,630	128,141	-
$F_{V,solo2}$	304,517	1,000	304,517	0,500	-	152,258

Designação	Impulso/Força [kN]			Braço	Momento [kNm]	
	E_k	Υ	E_d		Derrubante (M_{dst})	Estabilizante (M_{stb})
$F_{Ed,H,tab,E}$	-	-	49,068	7,580	371,938	-
$F_{Ed,V,tab,E}$	-	-	981,366	3,680	-	3611,426
$F_{Ed,H,tab,SC,max}$	-	-	63,130	7,580	478,529	-
$F_{Ed,V,tab,SC,max}$	-	-	1262,609	3,680	-	4646,403
$F_{Ed,H,tab,SC,min}$	-	-	46,725	7,580	354,178	-
$F_{Ed,V,tab,SC,min}$	-	-	934,507	3,680	-	3438,986
(i) Somatório					9308,801	16144,119
(ii) Somatório					9415,393	17026,837
(iii) Somatório					9291,041843	15819,4209

M.2 Encontro E2

Designação	Impulso/Força [kN]			Braço	Momento [kNm]	
	E_k	Υ	E_d		Derrubante (M_{dst})	Estabilizante (M_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	5,600	1564,006	-
$I_{0,H1,CP}$	445,922	1,000	445,922	5,600	2497,163	-
$I_{a,H2,CP}$	133,198	1,000	133,198	3,215	428,233	-
$I_{0,H2,CP}$	212,670	1,000	212,670	3,215	683,736	-
$I_{a,H3,CP}$	37,056	1,000	37,056	2,853	105,722	-
$I_{0,H3,CP}$	59,166	1,000	59,166	2,853	168,801	-
$I_{a,H4,SC}$	75,381	1,000	75,381	6,250	471,132	-
$I_{0,H4,SC}$	120,357	1,000	120,357	6,250	752,230	-
$I_{a,H5,SC}$	17,975	1,000	17,975	3,215	57,791	-
$I_{0,H5,SC}$	28,700	1,000	28,700	3,215	92,272	-
$I_{a,H6,E}$	95,708	1,000	95,708	6,250	598,178	-
$I_{a,H7,E}$	86,005	1,000	86,005	6,900	593,436	-
$I_{a,H8,E}$	11,411	1,000	11,411	3,577	40,819	-
$F_{H,esp+viga est}$	129,387	1,000	129,387	5,580	721,979	-
$F_{V,esp+viga est}$	808,668	1,000	808,668	3,680	-	2975,898
$F_{H,gigante}$	60,115	1,000	60,115	2,750	165,317	-
$F_{V,gigante}$	375,720	1,000	375,720	3,020	-	1134,674
$F_{H,Sapata}$	0,000	1,000	0,000	0,600	0,000	-
$F_{V,Sapata}$	688,560	1,000	688,560	3,020	-	2079,451
$F_{H,solo1}$	123,066	1,000	123,066	4,690	577,182	-
$F_{V,solo1}$	769,166	1,000	769,166	5,540	-	4261,177
$F_{H,solo2}$	31,682	1,000	31,682	2,130	67,482	-
$F_{V,solo2}$	198,010	1,000	198,010	0,500	-	99,005
$F_{Ed,H,tab,E}$	-	-	51,022	5,580	284,703	-

Designação	Impulso/Força [kN]			Braço	Momento [kNm]	
	E_k	Υ	E_d		Derrubante (M_{dst})	Estabilizante (M_{stb})
$F_{Ed,V,tab,E}$	-	-	1020,442	3,680		3755,226
$F_{Ed,H,tab,SC,max}$	-	-	62,617	5,580	349,401	
$F_{Ed,V,tab,SC,max}$	-	-	1252,335	3,680		4608,593
$F_{Ed,H,tab,SC,min}$	-	-	44,972	5,580	250,944	-
$F_{Ed,V,tab,SC,min}$	-	-	899,442	3,680		3309,947
(i) Somatório					5675,979	14305,433
(ii) Somatório					5740,677	15059,794
(iii) Somatório					5642,219548	13761,14782

ANEXO N - ESTADO LIMITE DE DESLIZAMENTO DOS ENCONTROS (GEO E STR)

Encontro	φ'_d [°]	$\gamma_{h,d}$ [kN/m ³]	δ'_d [°]	i [°]	φ_i [°]	θ_1 [°]	θ_2 [°]
E1	24,7913	19,000	16,528	1,146	0,000	8,637	9,593
E2	24,791	19,000	16,528	-1,146	0,000	8,637	9,593

Encontro	$K_{0,d}$	$K_{a,d}$	$K_{s1,d}$	$K_{s2,d}$
E1	0,5807	0,3637	0,4626	0,4757
E2	0,5807	0,3637	0,4626	0,4757

N.1 Encontro E1

N.1.1 ABORDAGEM DE CÁLCULO 1 (GEO E STR): COMBINAÇÃO 1

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	γ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	279,287	-
$I_{a,V1,CP}$	93,292	1,350	125,944	-	47,733
$I_{0,H1,CP}$	445,922	1,000	445,922	445,922	-
$I_{0,V1,CP}$	148,954	1,350	201,088	-	76,212
$I_{a,H2,CP}$	225,209	1,000	225,209	225,209	-
$I_{a,V2,CP}$	75,228	1,350	101,558	-	38,490
$I_{0,H2,CP}$	359,580	1,000	359,580	359,580	-
$I_{0,V2,CP}$	120,113	1,350	162,152	-	61,456
$I_{a,H3,CP}$	105,935	1,000	105,935	105,935	-
$I_{a,V3,CP}$	35,386	1,350	47,771	-	18,105
$I_{0,H3,CP}$	169,141	1,000	169,141	169,141	-
$I_{0,V3,CP}$	56,499	1,350	76,274	-	28,908
$I_{a,H4,SC}$	75,381	0,000	0,000	0,000	-
$I_{a,V4,SC}$	25,180	1,500	37,770	-	14,315
$I_{0,H4,SC}$	120,357	0,000	0,000	0,000	-
$I_{0,V4,SC}$	40,203	1,500	60,305	-	22,856
$I_{a,H5,SC}$	30,393	0,000	0,000	0,000	-
$I_{a,V5,SC}$	10,152	1,500	15,228	-	5,772
$I_{0,H5,SC}$	48,526	0,000	0,000	0,000	-

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	Υ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{0,V5,SC}$	16,210	1,500	24,314	-	9,215
$I_{a,H6,E}$	161,822	0,000	0,000	0,000	-
$I_{a,V6,E}$	54,054	0,000	0,000	-	0,000
$I_{a,H7,E}$	86,005	0,000	0,000	0,000	-
$I_{a,V7,E}$	28,729	0,000	0,000	-	0,000
$I_{a,H8,E}$	32,622	0,000	0,000	0,000	-
$I_{a,V8,E}$	10,897	0,000	0,000	-	0,000
$F_{H,esp+viga\ est}$	129,387	1,000	129,387	129,387	-
$F_{V,esp+viga\ est}$	808,668	1,350	1091,702	-	413,755
$F_{H,gigante}$	98,899	1,000	98,899	98,899	-
$F_{V,gigante}$	618,120	1,350	834,462	-	316,261
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	-
$F_{V,Sapata}$	688,560	1,350	929,556	-	352,302
$F_{H,solo1}$	157,642	1,000	157,642	157,642	-
$F_{V,solo1}$	985,264	1,350	1330,106	-	504,110
$F_{H,solo2}$	48,723	1,000	48,723	48,723	-
$F_{V,solo2}$	304,517	1,350	411,098	-	155,806
$F_{Ed,H,tab,E}$	-	-	59,688	59,688	-
$F_{Ed,V,tab,E}$	-	-	1193,754	-	452,433
$F_{Ed,H,tab,SC,max}$	-	-	73,750	73,750	-
$F_{Ed,V,tab,SC,max}$	-	-	1474,997	-	559,024
$F_{Ed,H,tab,SC,min}$	-	-	57,345	57,345	-
$F_{Ed,V,tab,SC,min}$	-	-	1146,895	-	434,673
(i) Somatório				1104,770	2319,082
(ii) Somatório				1118,832	2425,673
(iii) Somatório				1102,427	2301,322
(iv) Somatório				1483,043	2499,905

N.1.2 ABORDAGEM DE CÁLCULO 1 (GEO E STR): COMBINAÇÃO 2

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	Υ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	279,287	-
$I_{a,V1,CP}$	93,292	1,000	93,292	-	35,358
$I_{0,H1,CP}$	445,922	1,000	445,922	445,922	-
$I_{0,V1,CP}$	148,954	1,000	148,954	-	56,454
$I_{a,H2,CP}$	225,209	1,000	225,209	225,209	-
$I_{a,V2,CP}$	75,228	1,000	75,228	-	28,511
$I_{0,H2,CP}$	359,580	1,000	359,580	359,580	-
$I_{0,V2,CP}$	120,113	1,000	120,113	-	45,523
$I_{a,H3,CP}$	105,935	1,000	105,935	105,935	-
$I_{a,V3,CP}$	35,386	1,000	35,386	-	13,411
$I_{0,H3,CP}$	169,141	1,000	169,141	169,141	-
$I_{0,V3,CP}$	56,499	1,000	56,499	-	21,413
$I_{a,H4,SC}$	75,381	0,000	0,000	0,000	-
$I_{a,V4,SC}$	25,180	1,300	32,734	-	12,406
$I_{0,H4,SC}$	120,357	0,000	0,000	0,000	-
$I_{0,V4,SC}$	40,203	1,300	52,265	-	19,808
$I_{a,H5,SC}$	30,393	0,000	0,000	0,000	-
$I_{a,V5,SC}$	10,152	1,300	13,198	-	5,002
$I_{0,H5,SC}$	48,526	0,000	0,000	0,000	-
$I_{0,V5,SC}$	16,210	1,300	21,072	-	7,986
$I_{a,H6,E}$	161,822	0,000	0,000	0,000	-
$I_{a,V6,E}$	54,054	0,000	0,000	-	0,000
$I_{a,H7,E}$	86,005	0,000	0,000	0,000	-
$I_{a,V7,E}$	28,729	0,000	0,000	-	0,000
$I_{a,H8,E}$	32,622	0,000	0,000	0,000	-
$I_{a,V8,E}$	10,897	0,000	0,000	-	0,000
$F_{H,esp+viga\ est}$	129,387	1,000	129,387	129,387	-
$F_{V,esp+viga\ est}$	808,668	1,000	808,668	-	306,485
$F_{H,gigante}$	98,899	1,000	98,899	98,899	-
$F_{V,gigante}$	618,120	1,000	618,120	-	234,267
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	-
$F_{V,Sapata}$	688,560	1,000	688,560	-	260,964
$F_{H,solo1}$	157,642	1,000	157,642	157,642	-
$F_{V,solo1}$	985,264	1,000	985,264	-	373,415

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	Υ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$F_{H,solo2}$	48,723	1,000	48,723	48,723	-
$F_{V,solo2}$	304,517	1,000	304,517	-	115,412
$F_{Ed,H,tab,E}$	-	-	44,821	44,821	-
$F_{Ed,V,tab,E}$	-	-	896,411	-	339,740
$F_{Ed,H,tab,SC,max}$	-	-	56,695	56,695	-
$F_{Ed,V,tab,SC,max}$	-	-	1133,907	-	429,751
$F_{Ed,H,tab,SC,min}$	-	-	42,478	42,478	-
$F_{Ed,V,tab,SC,min}$	-	-	849,552	-	321,980
(i) Somatório				1089,903	1724,972
(ii) Somatório				1101,778	1814,983
(iii) Somatório				1087,560	1707,213
(iv) Somatório				1465,989	1871,479

N.2 Encontro E2

N.2.1 ABORDAGEM DE CÁLCULO 1 (GEO E STR): COMBINAÇÃO 1

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	Υ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	279,287	-
$I_{a,V1,CP}$	93,292	1,350	125,944	-	47,733
$I_{0,H1,CP}$	445,922	1,000	445,922	445,922	-
$I_{0,V1,CP}$	148,954	1,350	201,088	-	76,212
$I_{a,H2,CP}$	133,198	1,000	133,198	133,198	-
$I_{a,V2,CP}$	44,493	1,350	60,066	-	22,765
$I_{0,H2,CP}$	212,670	1,000	212,670	212,670	-
$I_{0,V2,CP}$	71,040	1,350	95,903	-	36,347
$I_{a,H3,CP}$	37,056	1,000	37,056	37,056	-
$I_{a,V3,CP}$	12,378	1,350	16,711	-	6,333
$I_{0,H3,CP}$	59,166	1,000	59,166	59,166	-
$I_{0,V3,CP}$	19,764	1,350	26,681	-	10,112
$I_{a,H4,SC}$	75,381	0,000	0,000	0,000	-
$I_{a,V4,SC}$	25,180	1,500	37,770	-	14,315
$I_{0,H4,SC}$	120,357	0,000	0,000	0,000	-
$I_{0,V4,SC}$	40,203	1,500	60,305	-	22,856
$I_{a,H5,SC}$	17,975	0,000	0,000	0,000	-

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	γ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{a,V5,SC}$	6,004	1,500	9,007	-	3,414
$I_{0,H5,SC}$	28,700	0,000	0,000	0,000	-
$I_{0,V5,SC}$	9,587	1,500	14,380	-	5,450
$I_{a,H6,E}$	95,708	0,000	0,000	0,000	-
$I_{a,V6,E}$	31,970	0,000	0,000	-	0,000
$I_{a,H7,E}$	86,005	0,000	0,000	0,000	-
$I_{a,V7,E}$	28,729	0,000	0,000	-	0,000
$I_{a,H8,E}$	11,411	0,000	0,000	0,000	-
$I_{a,V8,E}$	3,812	0,000	0,000	-	0,000
$F_{H,esp+viga\ est}$	129,387	1,000	129,387	129,387	
$F_{V,esp+viga\ est}$	808,668	1,350	1091,702	-	413,755
$F_{H,gigante}$	60,115	1,000	60,115	60,115	-
$F_{V,gigante}$	375,720	1,350	507,222	-	192,237
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	-
$F_{V,Sapata}$	688,560	1,350	929,556	-	352,302
$F_{H,solo1}$	123,066	1,000	123,066	123,066	-
$F_{V,solo1}$	769,166	1,350	1038,374	-	393,544
$F_{H,solo2}$	31,682	1,000	31,682	31,682	-
$F_{V,solo2}$	198,010	1,350	267,314	-	101,312
$F_{Ed,H,tab,E}$	-	-	61,682	61,682	-
$F_{Ed,V,tab,E}$	-	-	1233,643	-	467,551
$F_{Ed,H,tab,SC,max}$	-	-	73,277	73,277	
$F_{Ed,V,tab,SC,max}$	-	-	1465,536	-	555,438
$F_{Ed,H,tab,SC,min}$	-	-	40,708	40,708	-
$F_{Ed,V,tab,SC,min}$	-	-	814,162	-	308,567
(i) Somatório				855,474	2015,259
(ii) Somatório				867,069	2103,147
(iii) Somatório				834,500	1856,276
(iv) Somatório				1135,286	2159,565

N.2.2 ABORDAGEM DE CÁLCULO 1 (GEO E STR): COMBINAÇÃO 2

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	γ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$I_{a,H1,CP}$	279,287	1,000	279,287	279,287	-
$I_{a,V1,CP}$	93,292	1,000	93,292	-	35,358
$I_{0,H1,CP}$	445,922	1,000	445,922	445,922	-
$I_{0,V1,CP}$	148,954	1,000	148,954	-	56,454
$I_{a,H2,CP}$	133,198	1,000	133,198	133,198	-
$I_{a,V2,CP}$	44,493	1,000	44,493	-	16,863
$I_{0,H2,CP}$	212,670	1,000	212,670	212,670	-
$I_{0,V2,CP}$	71,040	1,000	71,040	-	26,924
$I_{a,H3,CP}$	37,056	1,000	37,056	37,056	-
$I_{a,V3,CP}$	12,378	1,000	12,378	-	4,691
$I_{0,H3,CP}$	59,166	1,000	59,166	59,166	-
$I_{0,V3,CP}$	19,764	1,000	19,764	-	7,490
$I_{a,H4,SC}$	75,381	0,000	0,000	0,000	-
$I_{a,V4,SC}$	25,180	1,300	32,734	-	12,406
$I_{0,H4,SC}$	120,357	0,000	0,000	0,000	-
$I_{0,V4,SC}$	40,203	1,300	52,265	-	19,808
$I_{a,H5,SC}$	17,975	0,000	0,000	0,000	-
$I_{a,V5,SC}$	6,004	1,300	7,806	-	2,958
$I_{0,H5,SC}$	28,700	0,000	0,000	0,000	-
$I_{0,V5,SC}$	9,587	1,300	12,463	-	4,724
$I_{a,H6,E}$	95,708	0,000	0,000	0,000	-
$I_{a,V6,E}$	31,970	0,000	0,000	-	0,000
$I_{a,H7,E}$	86,005	0,000	0,000	0,000	-
$I_{a,V7,E}$	28,729	0,000	0,000	-	0,000
$I_{a,H8,E}$	11,411	0,000	0,000	0,000	-
$I_{a,V8,E}$	3,812	0,000	0,000	-	0,000
$F_{H,esp+viga\ est}$	129,387	1,000	129,387	129,387	-
$F_{V,esp+viga\ est}$	808,668	1,000	808,668	-	306,485
$F_{H,gigante}$	60,115	1,000	60,115	60,115	-
$F_{V,gigante}$	375,720	1,000	375,720	-	142,398
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	-
$F_{V,Sapata}$	688,560	1,000	688,560	-	260,964
$F_{H,solo1}$	123,066	1,000	123,066	123,066	-
$F_{V,solo1}$	769,166	1,000	769,166	-	291,514

Designação	Impulso/Força [kN]			Força [kN]	
	E_k	γ	E_d	Derrubante (F_{dst})	Estabilizante (F_{stb})
$F_{H,solo2}$	31,682	1,000	31,682	31,682	-
$F_{V,solo2}$	198,010	1,000	198,010	-	75,046
$F_{Ed,H,tab,E}$	-	-	46,758	46,758	-
$F_{Ed,V,tab,E}$	-	-	935,162	-	354,426
$F_{Ed,H,tab,SC,max}$	-	-	56,258	56,258	
$F_{Ed,V,tab,SC,max}$	-	-	1125,155	-	426,434
$F_{Ed,H,tab,SC,min}$	-	-	29,595	29,595	-
$F_{Ed,V,tab,SC,min}$	-	-	591,900	-	224,330
(i) Somatório				840,550	1503,110
(ii) Somatório				850,049	1575,117
(iii) Somatório				823,387	1373,013
(iv) Somatório				1118,266	1618,240

ANEXO O - ESTADO LIMITE DE ROTURA DO TERRENO DE FUNDAÇÃO DOS ENCONTROS (GEO E STR)

Encontro	φ'_d [°]	$\gamma_{h,d}$ [kN/m ³]	δ'_d [°]	i [°]	φ_i [°]	θ_1 [°]	θ_2 [°]
E1	24,7913	19,000	16,528	1,146	0,000	8,637	9,593
E2	24,791	19,000	16,528	-1,146	0,000	8,637	9,593

Encontro	$K_{0,d}$	$K_{a,d}$	$K_{s1,d}$	$K_{s2,d}$
E1	0,5807	0,3637	0,4626	0,4757
E2	0,5807	0,3637	0,4626	0,4757

O.1 Encontro E1

Designação	Impulso/Força [kN]			Horizontal			Vertical		
	E_k	γ	E_d	$F_{ed,Hi}$ [kN]	b_{rHi}	$F_{ed,Hi} \times b_{rHi}$ [kNm]	$F_{ed,Vi}$ [kN]	b_{rVi}	$F_{ed,Vi} \times b_{rVi}$ [kNm]
$l_{a,H1,CP}$	279,287	1,000	279,287	279,287	7,600	2122,579	-	-	-
$l_{a,V1,CP}$	93,292	1,000	93,292	-	-	-	93,292	3,000	279,875
$l_{0,H1,CP}$	445,922	1,000	445,922	445,922	7,600	3389,007	-	-	-
$l_{0,V1,CP}$	148,954	1,000	148,954	-	-	-	148,954	3,000	446,862
$l_{a,H2,CP}$	225,209	1,000	225,209	225,209	4,466	1005,673	-	-	-
$l_{a,V2,CP}$	75,228	1,000	75,228	-	-	-	75,228	3,000	225,684
$l_{0,H2,CP}$	359,580	1,000	359,580	359,580	4,466	1605,703	-	-	-
$l_{0,V2,CP}$	120,113	1,000	120,113	-	-	-	120,113	3,000	360,338
$l_{a,H3,CP}$	105,935	1,000	105,935	105,935	3,854	408,274	-	-	-
$l_{a,V3,CP}$	35,386	1,000	35,386	-	-	-	35,386	3,000	106,158
$l_{0,H3,CP}$	169,141	1,000	169,141	169,141	3,854	651,869	-	-	-
$l_{0,V3,CP}$	56,499	1,000	56,499	-	-	-	56,499	3,000	169,497
$l_{a,H4,SC}$	75,381	0,000	0,000	0,000	8,250	0,000	-	-	-
$l_{a,V4,SC}$	25,180	1,300	32,734	-	-	-	32,734	3,000	98,202
$l_{0,H4,SC}$	120,357	0,000	0,000	0,000	8,250	0,000	-	-	-
$l_{0,V4,SC}$	40,203	1,300	52,265	-	-	-	52,265	3,000	156,794
$l_{a,H5,SC}$	30,393	0,000	0,000	0,000	4,466	0,000	-	-	-
$l_{a,V5,SC}$	10,152	1,300	13,198	-	-	-	13,198	3,000	39,594
$l_{0,H5,SC}$	48,526	0,000	0,000	0,000	4,466	0,000	-	-	-
$l_{0,V5,SC}$	16,210	1,300	21,072	-	-	-	21,072	3,000	63,217

Designação	Impulso/Força [kN]			Horizontal			Vertical		
	E_k	γ	E_d	$F_{ed,Hi}$ [kN]	b_{rHi}	$F_{ed,Hi} \times b_{rHi}$ [kNm]	$F_{ed,Vi}$ [kN]	b_{rVi}	$F_{ed,Vi} \times b_{rVi}$ [kNm]
I _{a,H6,E}	161,822	0,000	0,000	0,000	8,250	0,000	-	-	-
I _{a,V6,E}	54,054	0,000	0,000	-	-	-	0,000	3,000	0,000
I _{a,H7,E}	86,005	0,000	0,000	0,000	8,900	0,000	-	-	-
I _{a,V7,E}	28,729	0,000	0,000	-	-	-	0,000	3,000	0,000
I _{a,H8,E}	32,622	0,000	0,000	0,000	5,007	0,000	-	-	-
I _{a,V8,E}	10,897	0,000	0,000	-	-	-	0,000	3,000	0,000
F _{H,esp+viga est}	129,387	1,000	129,387	129,387	7,580	980,753	-	-	-
F _{V,esp+viga est}	808,668	1,000	808,668	-	-	-	808,668	0,664	537,198
F _{H,gigante}	98,899	1,000	98,899	98,899	3,750	370,872	-	-	-
F _{V,gigante}	618,120	1,000	618,120	-	-	-	618,120	0,000	0,000
F _{H,Sapata}	0,000	1,000	0,000	0,000	0,600	0,000	-	-	-
F _{V,Sapata}	688,560	1,000	688,560	-	-	-	688,560	0,000	0,000
F _{H,solo1}	157,642	1,000	157,642	157,642	5,690	896,984	-	-	-
F _{V,solo1}	985,264	1,000	985,264	-	-	-	985,264	2,520	2482,865
F _{H,solo2}	48,723	1,000	48,723	48,723	2,630	128,141	-	-	-
F _{V,solo2}	304,517	1,000	304,517	-	-	-	304,517	-2,520	-767,382
F _{Ed,H,tab,E}	-	-	44,821	44,821	7,100	318,226	-	-	-
F _{Ed,V,tab,E}	-	-	896,411	-	-	-	896,411	-0,980	-878,482
F _{Ed,H,tab,SC,max}	-	-	56,695	56,695	7,100	402,537	-	-	-
F _{Ed,V,tab,SC,max}	-	-	1133,907	-	-	-	1133,907	-0,980	-1111,229
(i) Somatório				1089,903	b_{rHi}	6231,501	4551,377	b_{rVi}	2123,712
				5,717			0,467		
(ii) Somatório				1101,778	b_{rHi}	6315,813	4788,874	b_{rVi}	1890,965
				5,732			0,395		
(iv) Somatório				1465,989	b_{rHi}	8425,866	4937,938	b_{rVi}	2338,159
				5,748			0,474		

O.2 Encontro E2

Designação	Impulso/Força [kN]			Horizontal			Vertical		
	E_k	γ	E_d	$F_{ed,Hi}$ [kN]	b_{rHi}	$F_{ed,Hi} \times b_{rHi}$ [kNm]	$F_{ed,Vi}$ [kN]	b_{rVi}	$F_{ed,Vi} \times b_{rVi}$ [kNm]
$I_{a,H1,CP}$	279,287	1,000	279,287	279,287	5,600	1564,006	-	-	-
$I_{a,V1,CP}$	93,292	1,000	93,292	-	-	-	93,292	3,000	279,875
$I_{0,H1,CP}$	445,922	1,000	445,922	445,922	5,600	2497,163	-	-	-
$I_{0,V1,CP}$	148,954	1,000	148,954	-	-	-	148,954	3,000	446,862
$I_{a,H2,CP}$	133,198	1,000	133,198	133,198	3,215	428,233	-	-	-
$I_{a,V2,CP}$	44,493	1,000	44,493	-	-	-	44,493	3,000	133,479
$I_{0,H2,CP}$	212,670	1,000	212,670	212,670	3,215	683,736	-	-	-
$I_{0,V2,CP}$	71,040	1,000	71,040	-	-	-	71,040	3,000	213,119
$I_{a,H3,CP}$	37,056	1,000	37,056	37,056	2,856	105,833	-	-	-
$I_{a,V3,CP}$	12,378	1,000	12,378	-	-	-	12,378	3,000	37,135
$I_{0,H3,CP}$	59,166	1,000	59,166	59,166	2,856	168,978	-	-	-
$I_{0,V3,CP}$	19,764	1,000	19,764	-	-	-	19,764	3,000	59,291
$I_{a,H4,SC}$	75,381	0,000	0,000	0,000	6,250	0,000	-	-	-
$I_{a,V4,SC}$	25,180	1,300	32,734	-	-	-	32,734	3,000	98,202
$I_{0,H4,SC}$	120,357	0,000	0,000	0,000	6,250	0,000	-	-	-
$I_{0,V4,SC}$	40,203	1,300	52,265	-	-	-	52,265	3,000	156,794
$I_{a,H5,SC}$	17,975	0,000	0,000	0,000	3,251	0,000	-	-	-
$I_{a,V5,SC}$	6,004	1,300	7,806	-	-	-	7,806	3,000	23,417
$I_{0,H5,SC}$	28,700	0,000	0,000	0,000	3,251	0,000	-	-	-
$I_{0,V5,SC}$	9,587	1,300	12,463	-	-	-	12,463	3,000	37,389
$I_{a,H6,E}$	95,708	0,000	0,000	0,000	6,250	0,000	-	-	-
$I_{a,V6,E}$	31,970	0,000	0,000	-	-	-	0,000	3,000	0,000
$I_{a,H7,E}$	86,005	0,000	0,000	0,000	6,250	0,000	-	-	-
$I_{a,V7,E}$	28,729	0,000	0,000	-	-	-	0,000	3,000	0,000
$I_{a,H8,E}$	11,411	0,000	0,000	0,000	5,007	0,000	-	-	-
$I_{a,V8,E}$	3,812	0,000	0,000	-	-	-	0,000	3,000	0,000
$F_{H,esp+viga est}$	129,387	1,000	129,387	129,387	7,580	980,753	-	-	-
$F_{V,esp+viga est}$	808,668	1,000	808,668	-	-	-	808,668	0,664	537,198
$F_{H,gigante}$	60,115	1,000	60,115	60,115	3,750	225,432	-	-	-
$F_{V,gigante}$	375,720	1,000	375,720	-	-	-	375,720	0,000	0,000
$F_{H,Sapata}$	0,000	1,000	0,000	0,000	0,600	0,000	-	-	-
$F_{V,Sapata}$	688,560	1,000	688,560	-	-	-	688,560	0,000	0,000
$F_{H,solo1}$	123,066	1,000	123,066	123,066	3,577	440,209	-	-	-

Designação	Impulso/Força [kN]			Horizontal			Vertical		
	E_k	γ	E_d	$F_{ed,Hi}$ [kN]	b_{rHi}	$F_{ed,Hi} \times b_{rHi}$ [kNm]	$F_{ed,Vi}$ [kN]	b_{rVi}	$F_{ed,Vi} \times b_{rVi}$ [kNm]
$F_{V,solo1}$	769,166	1,000	769,166	-	-	-	769,166	2,520	1938,297
$F_{H,solo2}$	31,682	1,000	31,682	31,682	3,577	113,325	-	-	-
$F_{V,solo2}$	198,010	1,000	198,010	-	-	-	198,010	-2,520	-498,986
$F_{Ed,H,tab,E}$	-	-	44,821	44,821	7,100	318,226	-	-	-
$F_{Ed,V,tab,E}$	-	-	896,411	-	-	-	896,411	-0,980	-878,482
$F_{Ed,H,tab,SC,max}$	-	-	56,695	56,695	7,100	402,537	-	-	-
$F_{Ed,V,tab,SC,max}$	-	-	1133,907	-	-	-	1133,907	-0,980	-1111,229
(i) Somatório				838,612	b_{rHi}	4176,016	3927,237	b_{rVi}	1670,135
				4,980			0,425		
(ii) Somatório				850,487	b_{rHi}	4260,327	4164,734	b_{rVi}	1437,388
				5,732			0,395		
(iv) Somatório				1118,704	b_{rHi}	5512,133	4278,516	b_{rVi}	1778,734
				4,927			0,416		

ANEXO P - ESFORÇOS PARA O DIMENSIONAMENTO ESTRUTURAL DOS GIGANTES E SAPATAS DOS ENCONTROS

Encontro	$\varphi'_d [^\circ]$	$\gamma_{h,d} [\text{kN/m}^3]$	$\delta'_d [^\circ]$	$i [^\circ]$	$\varphi_l [^\circ]$	$\theta_1 [^\circ]$	$\theta_2 [^\circ]$
E1	24,7913	19,000	16,528	1,146	0,000	8,637	9,593
E2	24,791	19,000	16,528	-1,146	0,000	8,637	9,593

Encontro	$K_{0,d}$	$K_{a,d}$	$K_{s1,d}$	$K_{s2,d}$
E1	0,5807	0,3637	0,4626	0,4757
E2	0,5807	0,3637	0,4626	0,4757

P.1 Encontro E1

P.1.1 ESFORÇOS DEVIDO AOS IMPULSOS E ÀS FORÇAS HORIZONTAIS LONGITUDINAIS

Designação	γ	Impulso/Força [kN]		braço [m]	Momento [kNm]
		E_k	E_d		
$l_{a1,CP}$	1,350	279,287	377,037	7,600	2865,482
$l_{01,CP}$	1,350	445,922	601,995	7,600	4575,160
$l_{a2,CP}$	1,350	225,209	304,033	4,465	1357,506
$l_{02,CP}$	1,350	359,580	485,433	4,465	2167,457
$l_{a3,CP}$	1,350	105,935	143,012	3,854	551,170
$l_{03,CP}$	1,350	169,141	228,340	3,854	880,023
$l_{a4,SC}$	1,500	75,381	75,381	8,250	621,894
$l_{04,SC}$	1,500	120,357	120,357	8,250	992,944
$l_{a5,SC}$	1,500	30,393	30,393	4,465	135,703
$l_{05,SC}$	1,500	48,526	48,526	4,465	216,670
$l_{a6,E}$	1,000	161,822	161,822	8,250	1335,033
$l_{06,E}$	1,000	-170,636	-170,636	8,250	-1407,745
$l_{a7,E}$	1,000	86,005	86,005	8,900	765,447
$l_{07,E}$	1,000	-90,689	-90,689	8,900	-807,136
$l_{a7,E}$	1,000	32,622	32,622	5,077	165,623
$l_{0E,E}$	1,000	-34,399	-34,399	5,077	-174,644
$F_{H,esp+viga\ est}$	1,350	129,387	174,672	7,580	1324,016
$F_{H,gigante}$	1,350	98,899	133,514	3,750	500,677
$F_{H,solo1}$	1,350	157,642	212,817	5,690	1210,929

Designação	γ	Impulso/Força [kN]		braço [m]	Momento [kNm]
		E_k	E_d		
$F_{H,solo2}$	1,350	48,723	65,776	2,630	172,990
$F_{Ed,HL,tab,E}$	1,500	49,068	49,068	7,580	371,938
(i) Somatório		$F_{Ed,HL}[kN]=$	2760,422	$M_{Ed,HL}[kNm]=$	15853,925
(iv) Somatório		$F_{Ed,HL}[kN]=$	3001,285	$M_{Ed,HL}[kNm]=$	17572,619

P.1.2 ESFORÇOS DEVIDO ÀS FORÇAS VERTICAIS

Designação	γ	Impulso/Força [kN]		braço [m]	Momento [kNm]
		E_k	E_d		
$F_{Ed,V,tab,CP}$	1,350	849,552	1146,895	1,900	2179,101
$F_{Ed,V,tab,SC}$	1,500	170,539	255,809	1,900	486,036
$F_{Ed,V,tab,E}$	1,500	31,239	46,859	1,900	89,031
$F_{V,esp+viga est}$	1,350	808,668	1091,702	0,782	853,711
$F_{V,gigante}$	1,350	618,120	834,462	0,845	705,120
$F_{V,solo1}$	1,350	985,264	1330,106	-5,40	-7368,789
$F_{V,solo2}$	1,350	304,517	411,098	0,500	205,549
			$F_{Ed,V} [kN]$	$b_{rV} [m]$	$M_{Ed,V,y} [kNm]$
			5116,930	0,263	-2850,241

P.2 Encontro E2

P.2.1 ESFORÇOS DEVIDO AOS IMPULSOS E ÀS FORÇAS HORIZONTAIS LONGITUDINAIS

Designação	γ	Impulso/Força [kN]		braço [m]	Momento [kNm]
		E_k	E_d		
$I_{a1,CP}$	1,350	279,287	377,037	5,600	2111,408
$I_{o1,CP}$	1,350	445,922	601,995	5,600	3371,170
$I_{a2,CP}$	1,350	133,198	179,818	3,215	578,114
$I_{o2,CP}$	1,350	212,670	287,105	3,215	923,043
$I_{a3,CP}$	1,350	37,056	50,026	2,853	142,725
$I_{o3,CP}$	1,350	59,166	79,874	2,853	227,881
$I_{a4,SC}$	1,500	75,381	113,072	6,250	706,697
$I_{o4,SC}$	1,500	120,357	180,535	6,250	1128,345
$I_{a5,SC}$	1,500	17,975	26,963	3,215	86,687
$I_{o5,SC}$	1,500	28,700	43,051	3,215	138,408
$I_{a6,E}$	1,000	95,708	95,708	6,250	598,178
$I_{o6,E}$	1,000	-100,921	-100,921	6,250	-630,757
$I_{a7,E}$	1,000	86,005	86,005	6,900	593,436
$I_{o7,E}$	1,000	-90,689	-90,689	6,900	-625,757
$I_{a7,E}$	1,000	11,411	11,411	3,577	40,819
$I_{oE,E}$	1,000	-12,033	-12,033	3,577	-43,042
$F_{H,esp+viga\ est}$	1,350	129,387	174,672	5,580	974,671
$F_{H,gigante}$	1,350	60,115	81,156	2,750	223,178
$F_{H,solo1}$	1,350	123,066	166,140	4,690	779,196
$F_{H,solo2}$	1,350	31,682	42,770	2,130	91,101
$F_{Ed,HL,tab,E}$	1,500	46,725	70,088	5,580	391,091
(i) Somatório		$F_{Ed,HL}[KN]=$	2100,162	$M_{Ed,HL}[kNm]=$	9746,454
(iv) Somatório		$F_{Ed,HL}[KN]=$	2404,214	$M_{Ed,HL}[kNm]=$	11482,623

P.2.2 ESFORÇOS DEVIDO ÀS FORÇAS VERTICAIS

Designação	γ	Impulso/Força [kN]		braço [m]	Momento [kNm]
		E_k	E_d		
$F_{Ed,V,tab,CP}$	1,350	-852,804	-1151,285	3,680	-2187,442
$F_{Ed,V,tab,SC}$	1,500	1039,395	1559,093	3,680	2962,276
$F_{Ed,V,tab,E}$	1,500	54,905	82,358	3,680	156,479
$F_{V,esp+viga\ est}$	1,350	808,668	1091,702	3,680	853,711
$F_{V,gigante}$	1,350	375,720	507,222	3,020	428,603
$F_{V,solo1}$	1,350	769,166	1038,374	-5,540	-5752,590
$F_{V,solo2}$	1,350	198,010	267,314	0,500	133,657
			$F_{Ed,V}$ [kN]	b_{rV} [m]	$M_{Ed,V,y}$ [kNm]
			3394,776	0,256	-3405,306

ANEXO Q - DESLOCAMENTO LONGITUDINAL DEVIDO AOS EFEITOS DIFERIDOS DE FLUÊNCIA E RETRAÇÃO DO BETÃO

O deslocamento longitudinal devido aos efeitos diferidos de fluência e retração do betão obtêm-se a partir da seguinte expressão:

$$\delta_{C+S} = \alpha \cdot \Delta T \cdot L \quad [Q.1]$$

Etapas de resolução da expressão [Q.1]:

$$\Delta T = \frac{\varepsilon_{cc}(t) + \varepsilon_{cs}(t, t_0)}{\alpha} \quad [Q.2]$$

$$\varepsilon_{cc} = \varphi(t, t_0) \cdot \frac{\sigma_c}{E_c} \quad [Q.3]$$

$$E_c = 1,05 \cdot E_{cm} \quad [Q.4]$$

$$L = |x_{CR} - x_i| \quad [Q.5]$$

$$x_{CR} = \frac{\sum_{j=1}^n (x_j \cdot k_j)}{\sum_{j=1}^n (k_j)} \quad [Q.6]$$

Q.1 Centro de rigidez do viaduto

Aparelhode apoio	x [m]	L [m]	E _{cm} [GPa]	I _c [m4]	K [kN/m]	x _j *K _j [kN]	xCR[m]
P1	36,000	20,000	34,000	0,410	5227,280	188182,082	180,000
P2	81,000	31,000	34,000	0,410	5614,882	454805,476	
P3	126,000	36,000	34,000	0,410	3585,240	451740,252	
P4	171,000	30,000	34,000	0,410	6195,295	1059395,426	
P5	216,000	24,700	34,000	0,410	11100,304	2397665,745	
P6	261,000	14,300	34,000	0,410	14300,711	3732485,686	
Somatório					46023,713	8284274,668	

Q.2 Varição de temperatura equivalente

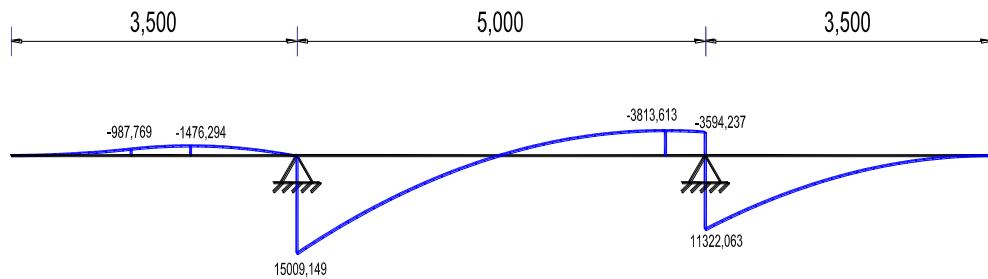
Aparelho de apoio	ϵ_{cs} [t]	$\varphi(t, t_0)$	σ_c [MPa]	ϵ_{cc} [t]	α [°C ⁻¹]	ΔT_i [°C]	ΔT [°C]
E1	-0,0003	2,344	-2,783	-1,83E-04	0,000	-48,700	-50,372
P1	-0,0003	2,344	-3,085	-2,03E-04	0,000	-50,682	
P6	-0,0003	2,344	-3,085	-2,03E-04	0,000	-50,682	
E2	-0,0003	2,344	-3,198	-2,10E-04	0,000	-51,424	

Q.3 Deslocamento devido aos efeitos diferidos de fluência e retração do betão

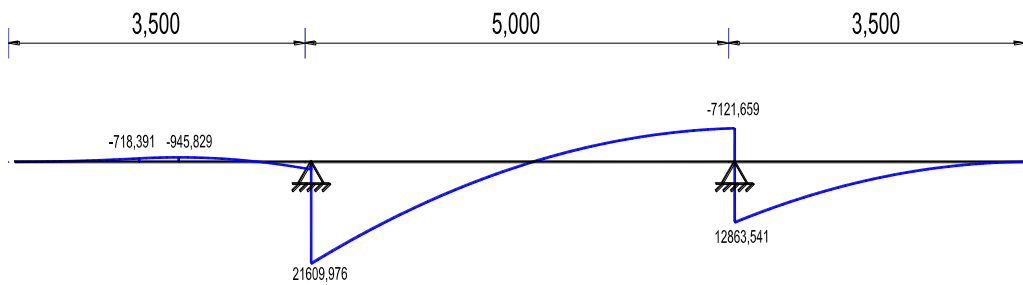
Aparelho de apoio	α [°C ⁻¹]	ΔT_i [°C]	L [m]	δ_{c+s} [mm]
E1	1,000E-05	-50,372	180,000	-90,670
P1	1,000E-05	-50,372	144,000	-72,536
P6	1,000E-05	-50,372	81,000	-40,801
E2	1,000E-05	-50,372	117,000	-58,935

ANEXO R - DIAGRAMAS DE MOMENTOS FLETORES PARA A VERIFICAÇÃO ESTRUTURAL DAS SAPATAS

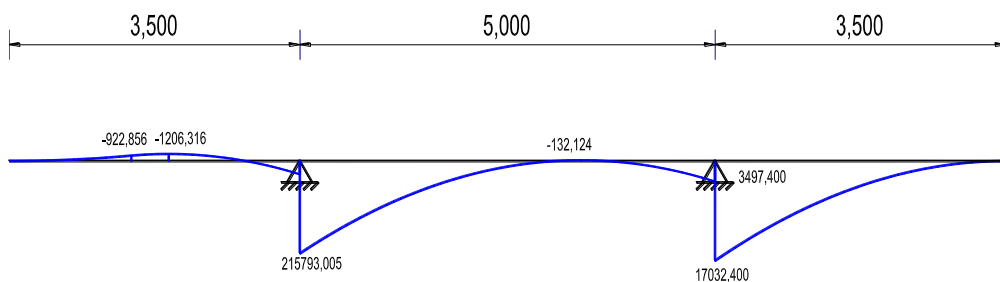
R.1 Diagrama de momento fletor da sapata S1



R.2 Diagrama de momento fletor da sapata S5



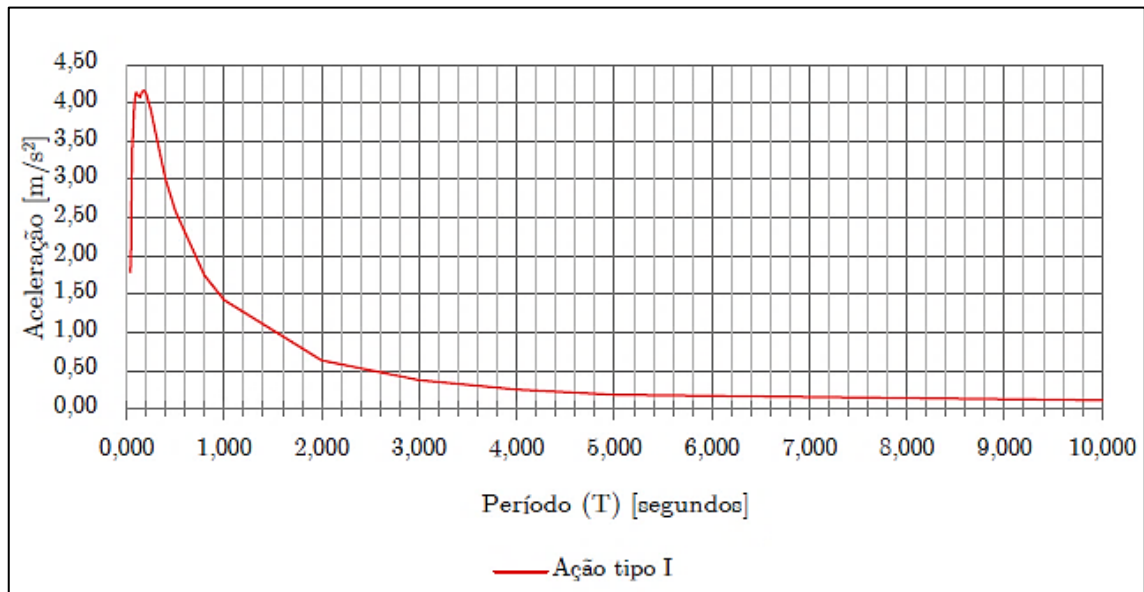
R.3 Diagrama de momento fletor da sapata S6



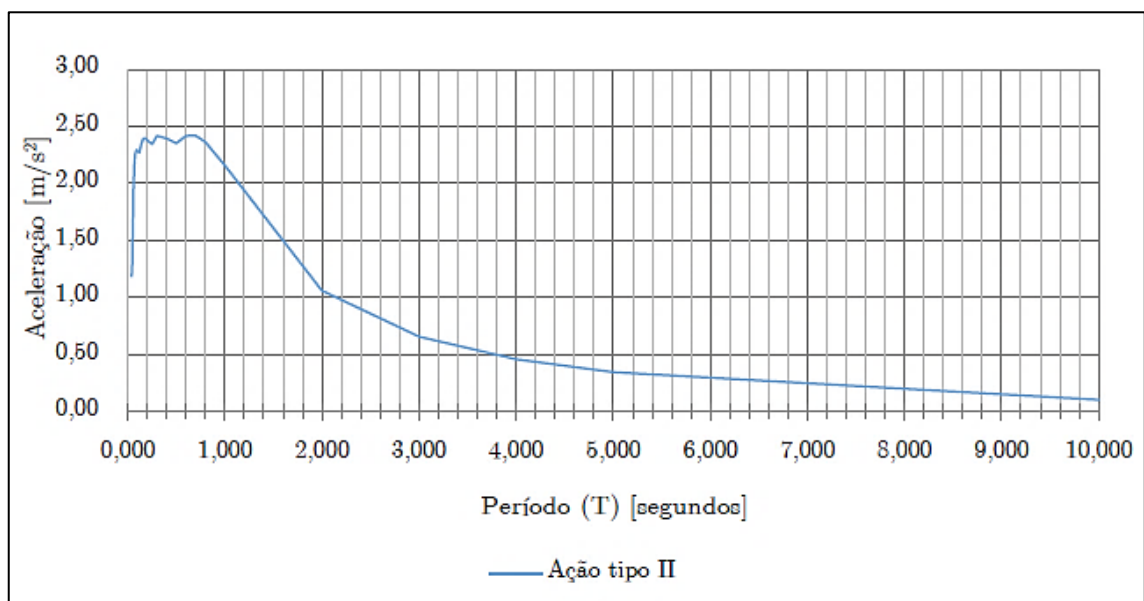
ANEXO S - ESPECTROS DE RESPOSTA DO RSA

Zona sísmica	Coefficiente de amortecimento (ξ) [%]
A	5

S.1 Ação tipo 1 – Terreno tipo II



S.2 Ação tipo 2 – Terreno tipo II



S.3 Valores dos espectros de resposta do RSA

Ação tipo 1 – Terreno tipo II

T [seg.]	Aceleração [m/s ²]
0,04	1,791
0,045	2,056
0,05	2,609
0,055	3,146
0,06	3,404
0,07	3,683
0,08	3,948
0,09	4,091
0,1	4,138
0,12	4,101
0,14	4,075
0,16	4,146
0,18	4,165
0,2	4,124
0,25	3,900
0,3	3,589
0,4	3,002
0,5	2,59
0,8	1,746
1	1,426
2	0,635
3	0,377
4	0,255
5	0,186
10	0,115

Ação tipo 2 – Terreno tipo II

T [seg.]	Aceleração [m/s ²]
0,04	1,185
0,045	1,275
0,05	1,471
0,055	1,729
0,06	1,944
0,07	2,182
0,08	2,267
0,09	2,291
0,1	2,287
0,12	2,27
0,14	2,339
0,16	2,391
0,18	2,397
0,2	2,377
0,25	2,346
0,3	2,417
0,4	2,394
0,5	2,351
0,6	2,416
0,7	2,419
0,8	2,363
1	2,156
2	1,06
3	0,655
4	0,459
5	0,345
10	0,103

ANEXO T - COEFICIENTE DE FLUÊNCIA

T.1 Coeficiente de fluência dos pilares

Dados para o cálculo do coeficiente de fluência dos pilares

Perímetro	5,341	m
Área	2,270	m ²
HR	70,000	%
T	20,000	°C
Betão	C35/45	Cimento da classe CEM 42,5 N
E_{cm}	34,000	GPa
f_{cm}	43,000	MPa
f_{ctm}	3,200	Mpa
t₀	3,000	dias
t_∞	10000,000	dias
h₀	850,001	mm

Cálculo do coeficiente de fluência dos Pilares segundo o EC2

β_H	1555,778
β(f_{cm})	2,562
β(t₀)	0,743
β_c(t,t₀)	0,963
α₁	0,866
α₂	0,960
α₃	0,902
φ_{RH}	1,223
φ₀	2,329
φ(t,t₀)	2,242

