



Input dimensions							
Floater	D0 [m]	D1 [m]	L0 [m]	L1 [m]	L2 [m]	thickness [m]	
6.78-140x4-10	6.78	4	140	10	10	0.025	
7.47-115x4-10	7.47	4	115	10	10	0.025	
8.45-90x4-10	8.45	4	90	10	10	0.025	
9.94-65x4-10	9.94	4	65	10	10	0.025	
12.67-40x4-10	12.67	4	40	10	10	0.025	
20.69-15x4-10	20.69	4	15	10	10	0.025	

Metacentric height calculations															
Floater	Mass_0 [kg]	KG_0 [m]	Displ_0 [kg]	KB_0 [m]	Mass_BP [kg]	KG_BP [m]	Mass_MP [kg]	KG_MP [m]	Mass_1 [kg]	Mass_2 [kg]	KG_1+2 [m]	Mass_TP [kg]	KG_TP [m]	Displ_1 [kg]	KB_1 [m]
6.78-140x4-10	583059.569	70	5180851.81	70	6981.19349	0.0125	4515.04326	139.9875	24507.36794	24507.37	150	2404.8818	159.9875	128805.299	145
7.47-115x4-10	527864.044	57.5	5165980.84	57.5	8486.08461	0.0125	6019.934373	114.9875	24507.36794	24507.37	125	2404.8818	134.9875	128805.299	120
8.45-90x4-10	467489.604	45	5173323.95	45	10875.7225	0.0125	8409.572295	89.9875	24507.36794	24507.37	100	2404.8818	109.9875	128805.299	95
9.94-65x4-10	397343.043	32.5	5170111.06	32.5	15076.2083	0.0125	12610.05809	64.9875	24507.36794	24507.37	75	2404.8818	84.9875	128805.299	70
12.67-40x4-10	311844.697	20	5169243.23	20	24548.1211	0.0125	22081.97084	39.9875	24507.36794	24507.37	50	2404.8818	59.9875	128805.299	45
20.69-15x4-10	191111.23	7.5	5169231.56	7.5	65662.7296	0.0125	63196.57941	14.9875	24507.36794	24507.37	25	2404.8818	34.9875	128805.299	20

Metacentric height calculations																
Floater	Mass_floater	KG_floater [m]	Mass_rotor [kg]	KG_rotor [m]	Mass_GG [kg]	KG_GG [m]	Displacement [kg]	Mass_f,r,g	Mass_ball [kg]	h_ball [m]	KG_ball [m]	M_tot [kg]	KG [m]	BM [m]	KB [m]	GM [m]
6.78-140x4-10	645975.423	76.1379866	398587.741	218.91	82000	150	5309657.109	1126563	4183093.945	35.63393	17.84196278	5309657.1	42.06914164	0.00242587	71.81940137	29.7526856
7.47-115x4-10	593789.681	63.1468986	398587.741	193.91	82000	125	5294786.135	1074377	4220408.713	29.57623	14.81311719	5294786.1	35.42230597	0.00243268	59.02042613	23.60055284
8.45-90x4-10	538194.516	50.0932362	398587.741	168.91	82000	100	5302129.244	1018782	4283346.987	23.42183	11.73591607	5302129.2	28.81000331	0.00242931	46.21465635	17.40708235
9.94-65x4-10	476448.927	36.9689647	398587.741	143.91	82000	75	5298916.357	957036.7	4341879.689	17.127	8.588501638	5298916.4	22.34698913	0.00243079	33.41154462	11.06698628
12.67-40x4-10	409894.407	23.7017219	398587.741	118.91	82000	50	5298048.531	890482.1	4407566.384	10.67767	5.363832989	5298048.5	16.01584451	0.00243118	20.60779596	4.594382627
20.69-15x4-10	371390.156	9.93785882	398587.741	93.91	82000	25	5298036.858	851977.9	4446058.961	4.026725	2.038362683	5298036.9	9.85928935	0.00243119	7.803898647	-2.05295951

Floater	Added mass			Natural periods calculations			Static heel calculations			
	Surge [kg]	Heave [kg]	Pitch [kgm^2]	R_gyrx [m]	Heave [s]	Pitch [s]	M_inc.wave [N]	M_inc.win	EC1 [deg]	EC 2 [deg]
6.78-140x4-10	5309657.11	83633.7506	1.387E+10	59.7125303	41.0492684	28.90656329	78944311.59	29694546	2.695669354	15.70105
7.47-115x4-10	5294786.13	111854.715	9133834828	52.555867	41.1000415	27.66120417	41553391.68	22878714	3.008748545	17.4995
8.45-90x4-10	5302129.24	161905.879	5413388895	45.5093203	41.3176147	26.73670518	33613572.69	20897631	3.445396311	20.33345
9.94-65x4-10	5298916.36	263543.097	2646829416	38.7718027	41.6880834	26.9863882	23649705.89	18916115	4.231628663	26.20258
12.67-40x4-10	5298048.53	545785.931	880566684	32.4131721	42.7294647	32.64712021	23527662.87	17681110	6.848073756	44.13832
20.69-15x4-10	5298036.86	2376697.8	140015251	26.7954381	48.967754	N/A	N/A	N/A	N/A	N/A