

M/Y RAVEN



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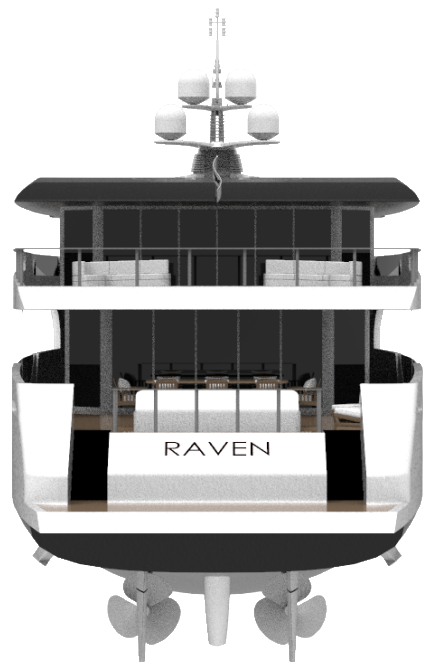
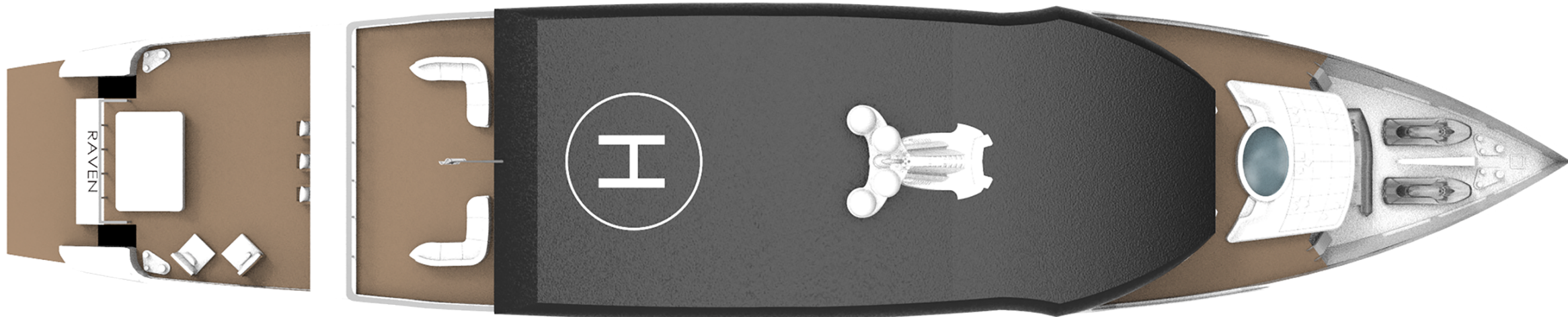
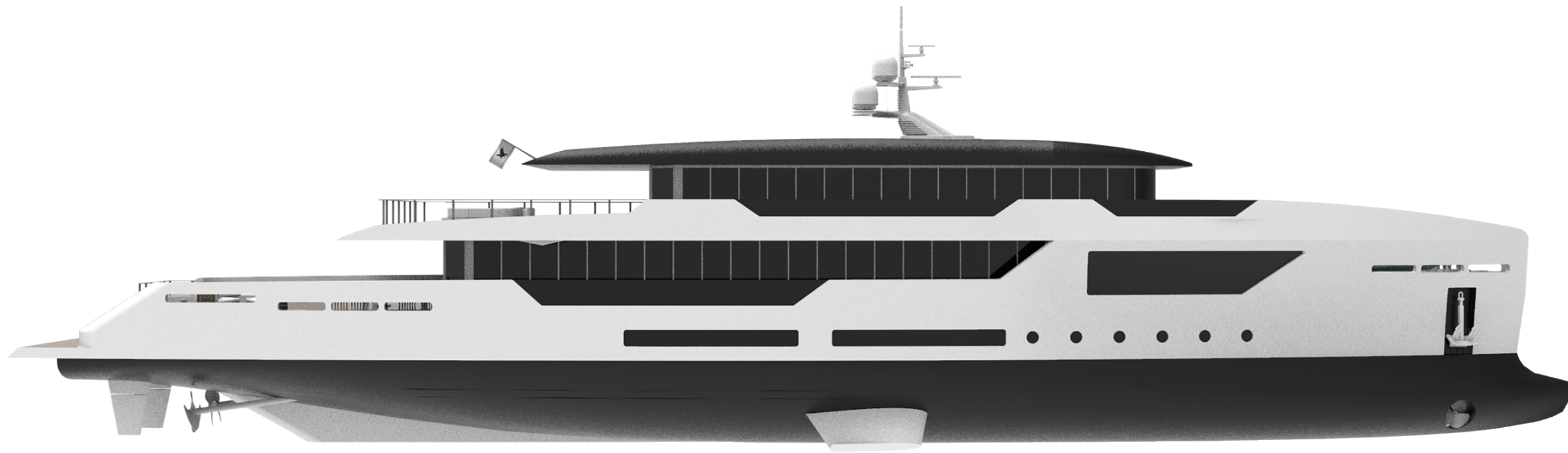
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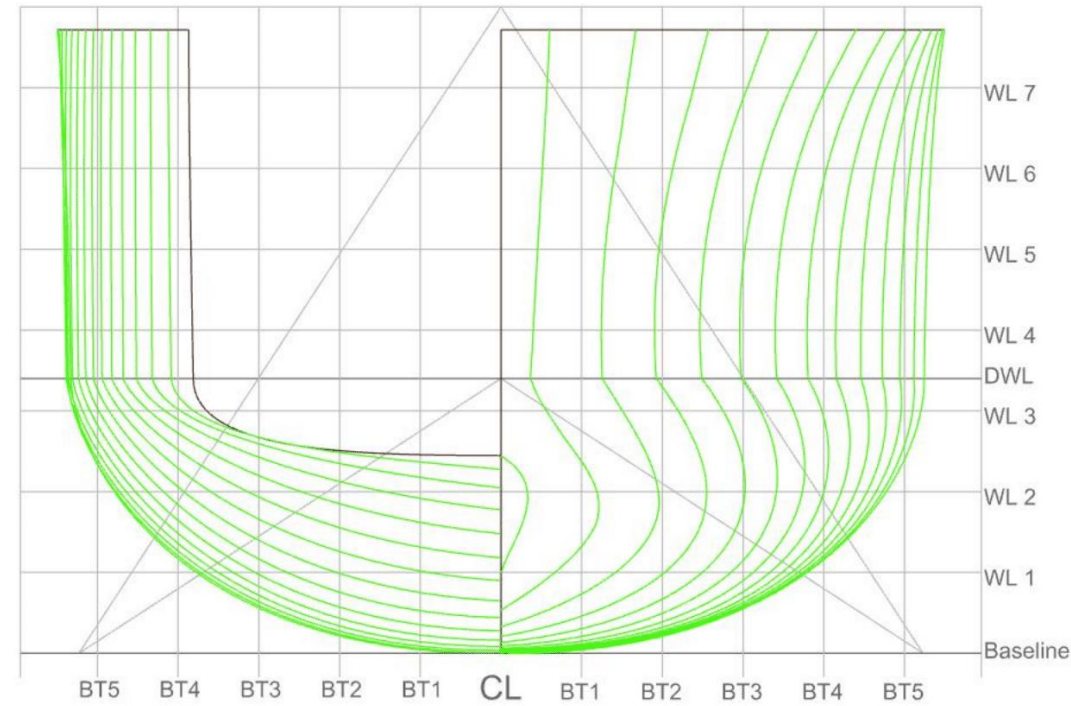
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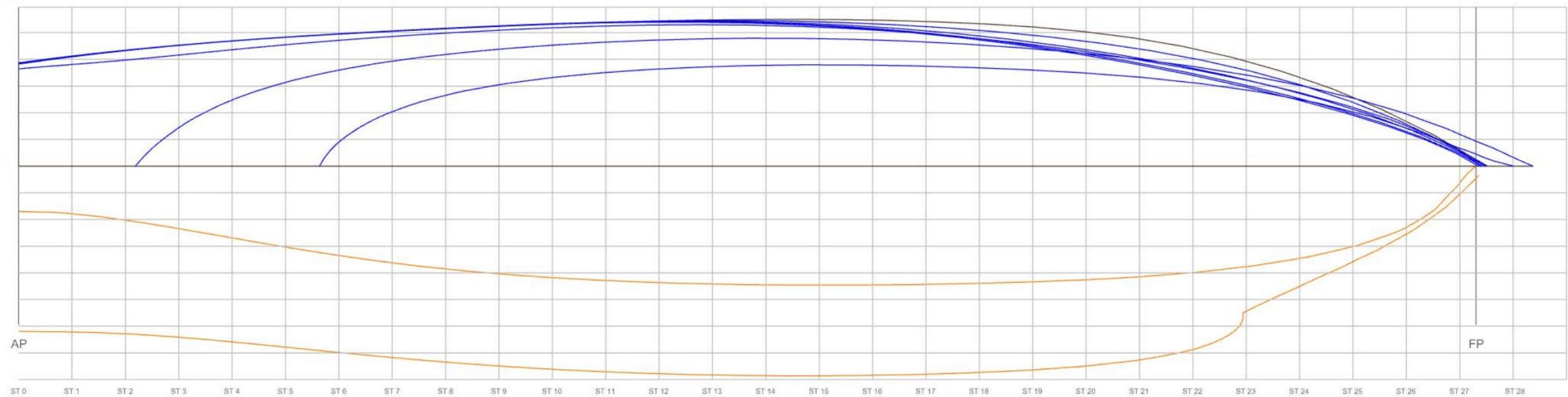
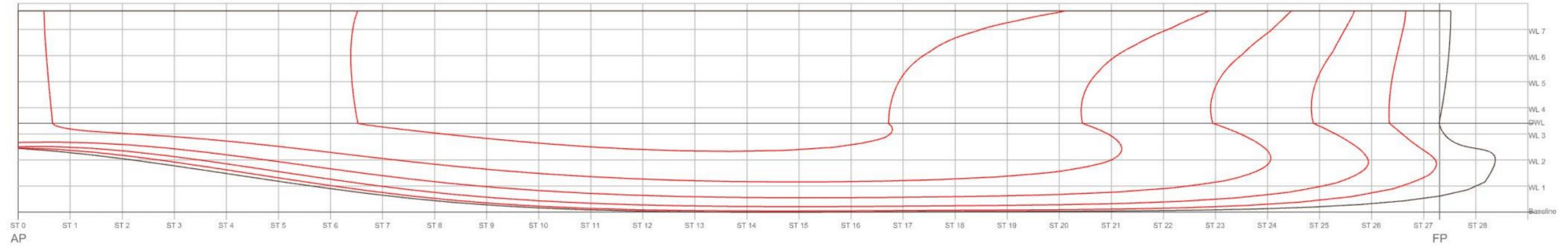
M/Y RAVEN



57m Explorer M/Y RAVEN

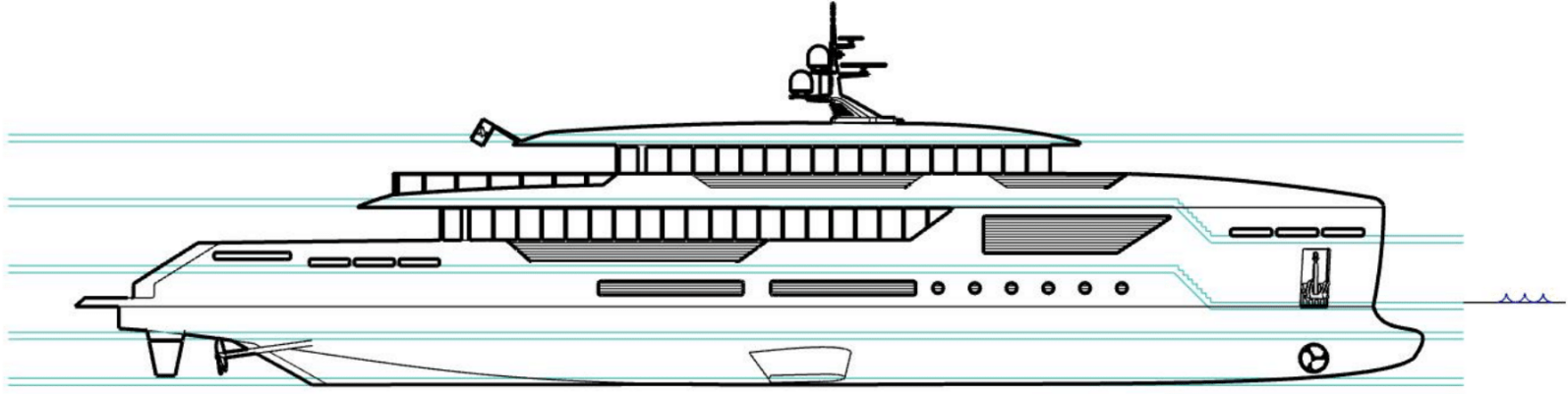
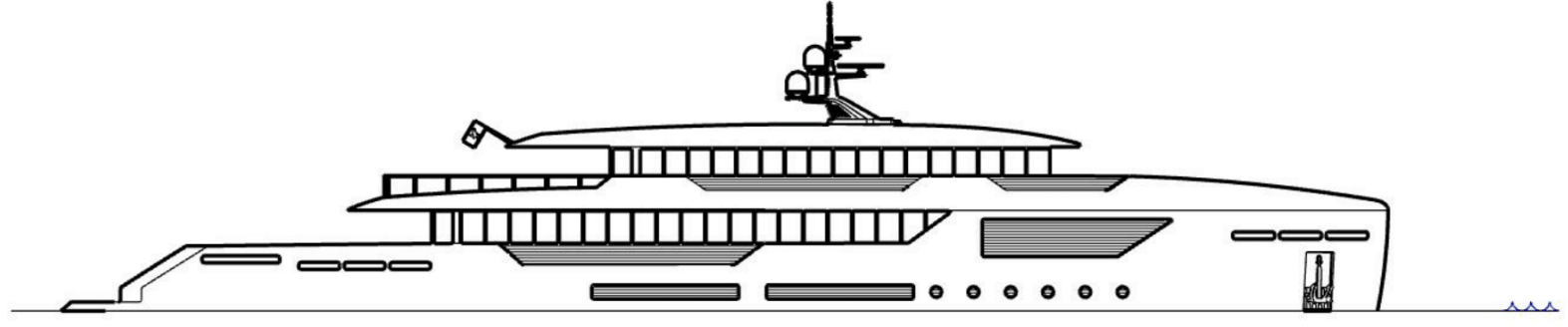


Hydrostatic Calculations			
	Measurements	Values	Unit
1	Displacement	1117	t
2	Volume (displaced)	1089,917	m^3
3	Draft Amidships	3,4	m
4	Immersed depth	3,404	m
5	WL Length	54,591	m
6	Beam max extents on WL	10,768	m
7	Wetted Area	656,805	m^2
8	Max sect. area	28,416	m^2
9	Waterpl. Area	465,081	m^2
10	Prismatic coeff. (Cp)	0,703	
11	Block coeff. (Cb)	0,545	
12	Max Sect. area coeff. (Cm)	0,781	
13	Waterpl. area coeff. (Cwp)	0,791	
14	LCB length	28,53	from zero pt. (+ve fwd) m
15	LCF length	24,307	from zero pt. (+ve fwd) m
16	LCB %	52,261	from zero pt. (+ve fwd) % Lwl
17	LCF %	44,525	from zero pt. (+ve fwd) % Lwl
18	KB	2,068	m
19	KG fluid	0	m
20	BMT	3,169	m
21	BML	80,7	m
22	GMt corrected	5,237	m
23	GML	82,769	m
24	KMt	5,237	m
25	KML	82,769	m
26	Immersion (TPc)	4,767	tonne/cm
27	MTc	16,933	tonne.m
28	RM at 1deg = GMt.Disp.sin(1)	102,105	tonne.m
29	Length:Beam ratio	5,07	
30	Beam:Draft ratio	3,164	
31	Length:Vol^0.333 ratio	5,305	

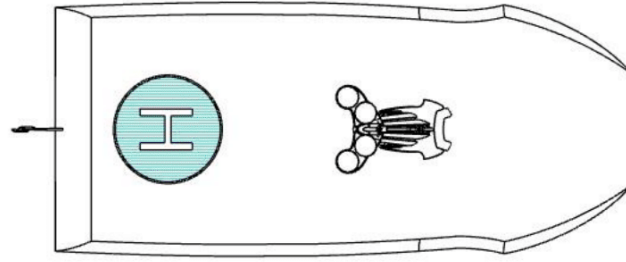


57 m EXPLORER MOTOR YACHT			
HULL LINES PLAN			
PROJECT	M/Y RAVEN	DATE	26.10.2019
DRAWN	Y.Emre KOÇAK	FOR	YTU-NAV.ARCH
CONTROL	Dr.Öğr.Üyesi Özgür DEMİR	SCALE	A3 - 1:600

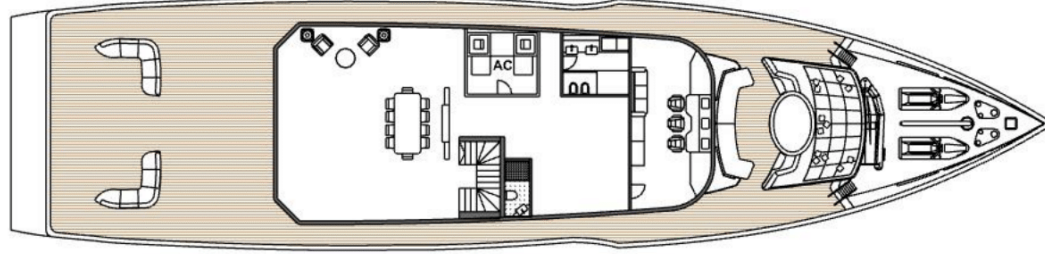
Weight Table									
Item Name		Quantity	Unit Mass	Total Mass	Unit	Total	Long. Arm	Trans. Arm	Vert.
Structures									
Steel Hull		1,000	550,000	550,000			43,000	0,000	7,000
Super Structure		1,000	300,000	300,000			43,000	0,000	12,000
Fin		2,000	5,000	10,000			40,000	0,000	2,000
Propeller		2,000	5,000	10,000			12,000	0,000	0,000
Engine Room									
Diesel Generator		2,000	10,000	100,000			29,500	0,000	6,000
Auxiliary Machinery		2,000	10,000	60,000			28,500	0,000	4,000
Outfitting									
Equipment		1,000	0,100	0,200			30,000	0,000	13,000
Doors		20,000	0,020	0,800			30,000	0,000	13,000
Lights		1,000	0,150	0,300			30,000	0,000	13,000
Sun Deck									
Touch&Go		2,000	0,050	0,200			33,000	0,000	13,500
Radar		2,000	0,050	0,200			33,000	0,000	13,500
Upper Deck									
Wheelhouse									
	Chair	3,000	0,010	0,060			39,000	0,000	8,500
	Couch	2,000	0,100	0,400			39,000	0,000	8,500
	Table	1,000	0,100	0,200			39,000	0,000	8,500
	Cabinet	2,000	0,080	0,320			37,000	0,000	8,500
	Computer	2,000	0,015	0,060			39,000	0,000	8,500
	Controller	1,000	0,020	0,040			38,500	0,000	8,500
Ships Office									
	Table	2,000	0,100	0,400			34,000	-3,000	8,500
	Chair	2,000	0,008	0,032			35,000	-3,000	8,500
	Cabinet	2,000	0,080	0,320			35,000	-1,200	8,500
	AC	2,000	1,000	4,000			31,000	-3,500	8,500
Upper Saloon									
	Corner Couch	2,000	0,120	0,480			22,000	0,000	8,500
	Couch	1,000	0,100	0,200			24,000	0,000	8,500
	Table	2,000	0,100	0,400			27,000	0,000	8,500
	Mini Table	1,000	0,050	0,100			30,000	0,000	8,500
	TV	1,000	0,040	0,080			29,000	0,000	8,500
Open Deck									
	Corner Couch	2,000	0,120	0,480			15,000	0,000	8,500
	Table	2,000	0,100	0,400			20,000	0,000	8,500
	Couch	1,000	0,100	0,200			42,000	0,000	8,500
	Pool	1,000	0,100	0,200			44,000	0,000	8,500
	Sun Pad	1,000	0,100	0,200			45,000	0,000	8,500
	Jetski	2,000	0,200	0,800			50,000	0,000	7,000
	Crane	1,000	0,200	0,400			50,000	0,000	7,000
	Boat	1,000	0,100	0,200			47,000	0,000	7,000
Lobby									
	Stair	3,000	1,000	6,000			30,000	1,000	8,500
	Lift	1,000	2,000	4,000			30,000	1,000	8,500
	Dayhead	1,000	0,100	0,200			32,000	3,500	8,500
Main Deck									
Open Deck									
	Couch	2,000	0,100	0,400			7,000	0,000	6,000
	Sunpad	1,000	0,050	0,100			4,000	0,000	6,000
	Table	1,000	0,050	0,100			12,000	0,000	6,000
	Chair	6,000	0,100	1,200			12,000	0,000	6,000
Main Saloon									
	Couch	3,000	0,120	0,720			16,000	1,000	6,000
	TV	1,000	0,040	0,080			20,000	0,000	6,000
	Table	1,000	0,100	0,200			22,000	0,000	6,000
	Chair	10,000	0,020	0,400			17,000	0,000	6,000
	Mini Table	2,000	0,040	0,160			18,000	4,200	6,000
Kitchen		1,000	10,000	20,000			26,000	-2,000	6,000
Owner Office									
	Table	1,000	0,100	0,200			34,000	-2,000	6,000
	Chair	2,000	0,020	0,080			34,000	-2,000	6,000
	Couch	1,000	0,050	0,100			35,000	-2,000	6,000
	Toilet	1,000	0,100	0,200			35,000	-2,000	6,000
Owner Suite									
	Bed	1,000	0,100	0,200			42,000	0,000	6,000
	TV	1,000	0,100	0,200			40,000	0,000	6,000
	Couch	2,000	0,100	0,400			39,000	0,000	6,000
	Toilet	1,000	0,100	0,200			45,000	-1,000	6,000
	Wardrobe	1,000	0,100	0,200			45,000	1,000	6,000
HVAC		1,000	1,000	2,000			50,000	0,000	5,000
EMG GENSET		1,000	1,000	2,000			50,000	0,000	5,000
Mooring Area		1,000	1,000	2,000			52,000	0,000	5,000
Bosun Store		1,000	1,000	2,000			54,000	0,000	5,000
Lower Deck									
Guest Cabin		1,000	2,000	4,000			20,000	-3,000	4,500
Guest Cabin		1,000	2,000	4,000			20,000	3,000	4,500
Guest Cabin		1,000	2,000	4,000			25,000	-3,000	4,500
Guest Cabin		1,000	2,000	4,000			25,000	3,000	4,500
Guest Cabin		1,000	2,000	4,000			32,000	-3,000	4,500
Guest Cabin		1,000	2,000	4,000			32,000	3,000	4,500
Crew Mass		1,000	2,000	4,000			36,000	-3,000	4,500
Crew Cabin		1,000	2,000	4,000			36,000	3,000	4,500
Crew Cabin		1,000	2,000	4,000			41,000	-3,000	4,500
Crew Cabin		1,000	2,000	4,000			41,000	3,000	4,500
Crew Cabin		1,000	2,000	4,000			45,000	-3,000	4,500
Crew Cabin		1,000	2,000	4,000			45,000	3,000	4,500



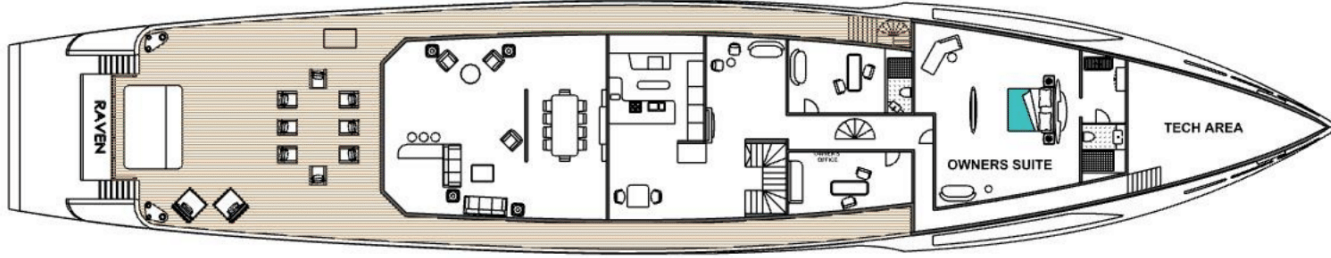
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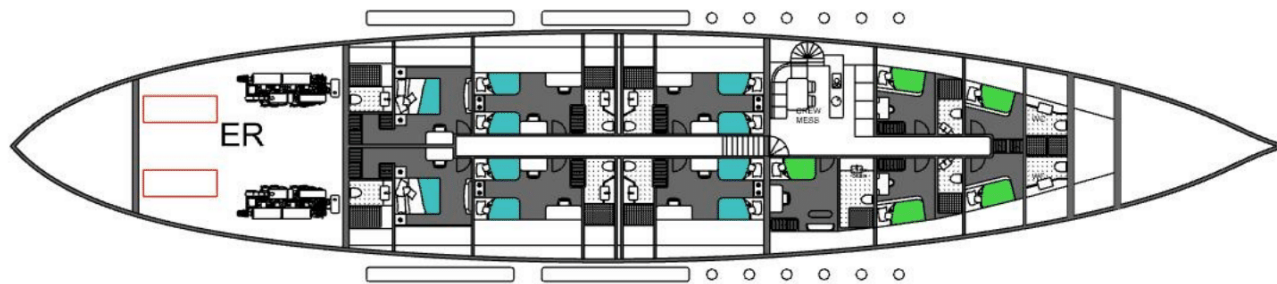
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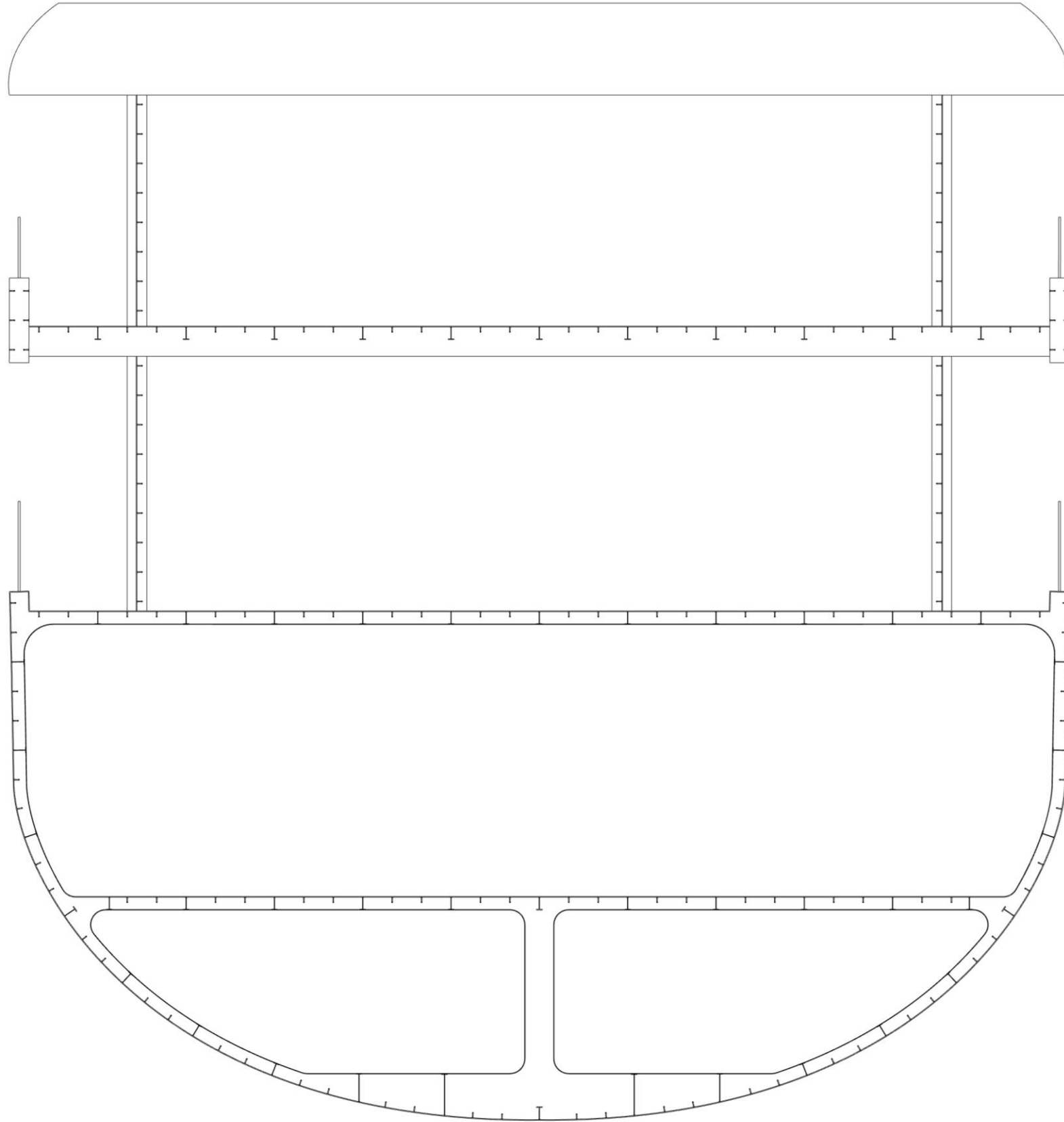


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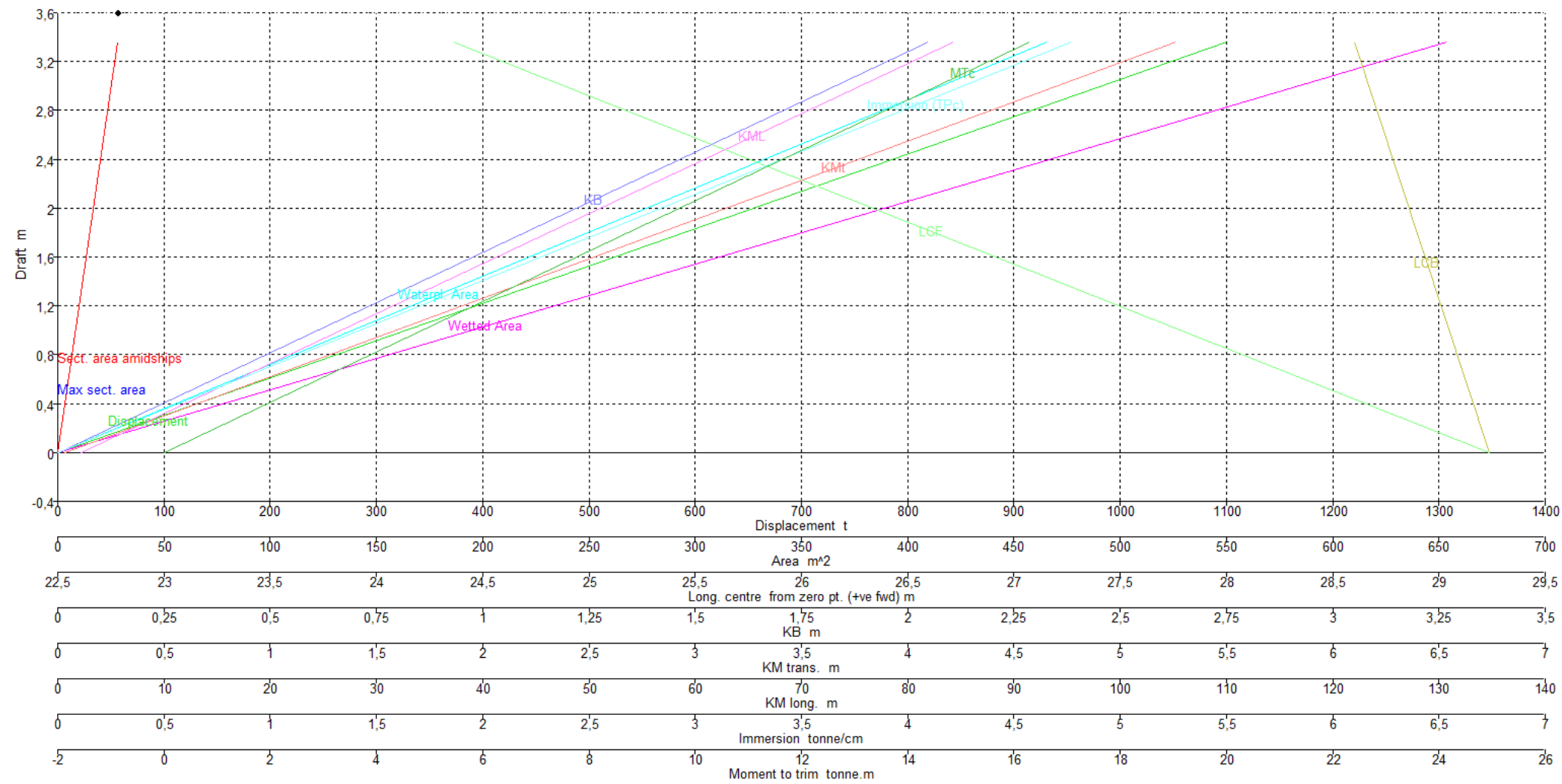
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57 m EXPLORER MOTOR YACHT GENERAL ARRANGEMENT PLAN			
PROJECT	M/Y RAVEN	DATE	26.10.2019
DRAWN	Y.Emre KOÇAK	FOR	YTU-NAV.ARCH
CONTROL	Dr.Öğr.Üyesi Özgür DEMİR	SCALE	A3 - 1:300

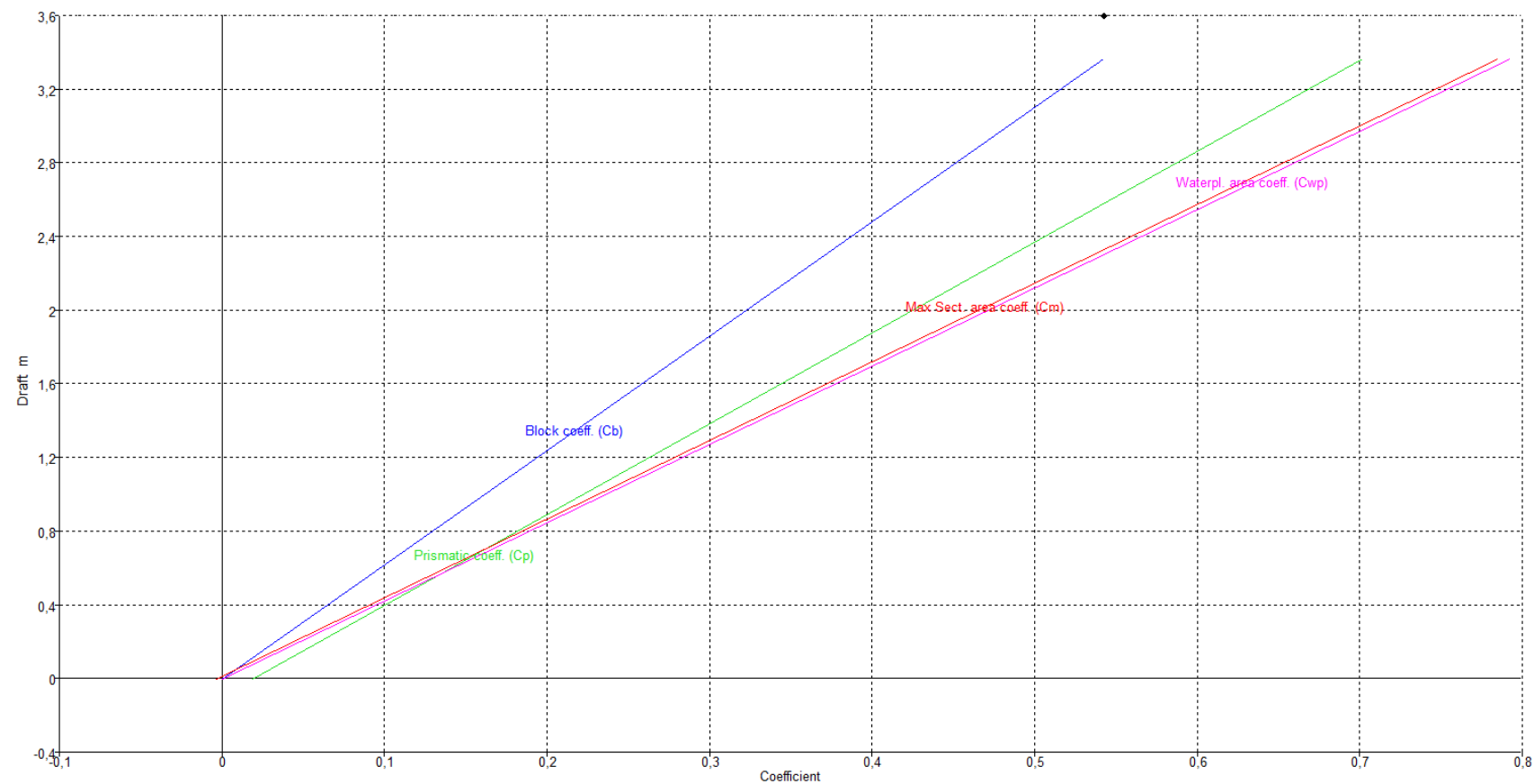


- CONSTRUCTION MATERIAL : STEEL
- Grade : 4140 H111
 - Min Yield Stress : 315 N/mm²
 - Min Tensile Stress : 440 N/mm²
 - FRAME SPACING : 750 mm
 - SEC. STIFF. SPACING : 300 / 333mm
 - PLATING
 - Bottom Plating : 8 mm
 - Side Plating : 7 mm
 - Main deck Plating : 6 mm
 - Superstr. Plating : 6 mm
 - Bulkheads : 6 mm
 - BOTTOM
 - Secondary Stiff. : 50x8FB
 - Floors : Web t:5mm + 60x8FB
 - Center CL Girders : Web t:6mm + 80x8FB
 - Engine CL+350 Girders : Web t:6mm + 80x10FB
 - SIDE
 - Secondary Stiff. : 50x8FB
 - Frames : 125x5mm + 60x8FB
 - DECK
 - Secondary Stiff. : 50x8FB
 - Deck CL Girder : Web t:5mm
 - Deck CL+1250 Girder : Web t:5mm
 - Deck CL+2250 Girder : 125x5mm + 60x8FB
 - Deck CL+3150 Girder : 125x5mm + 60x8FB
 - BULKHEADS
 - Primary Stiffeners : 125x5mm+ 60x8 FB
 - Secondary Stiffeners : 60x8FB
 - BRACKETS
 - Sec. Stiffener Brackets : 75x75x5mm
 - Prim. Stiffener Brackets : 125x125x5mm

57 m EXPLORER MOTOR YACHT			
GENERAL ARRANGEMENT PLAN			
PROJECT	M/Y RAVEN	DATE	26.10.2019
DRAWN	Y.Emre KOÇAK	FOR	YTU-NAV.ARCH
CONTROL	Dr.Öğr.Üyesi Özgür DEMİR	SCALE	A3 - 1:200

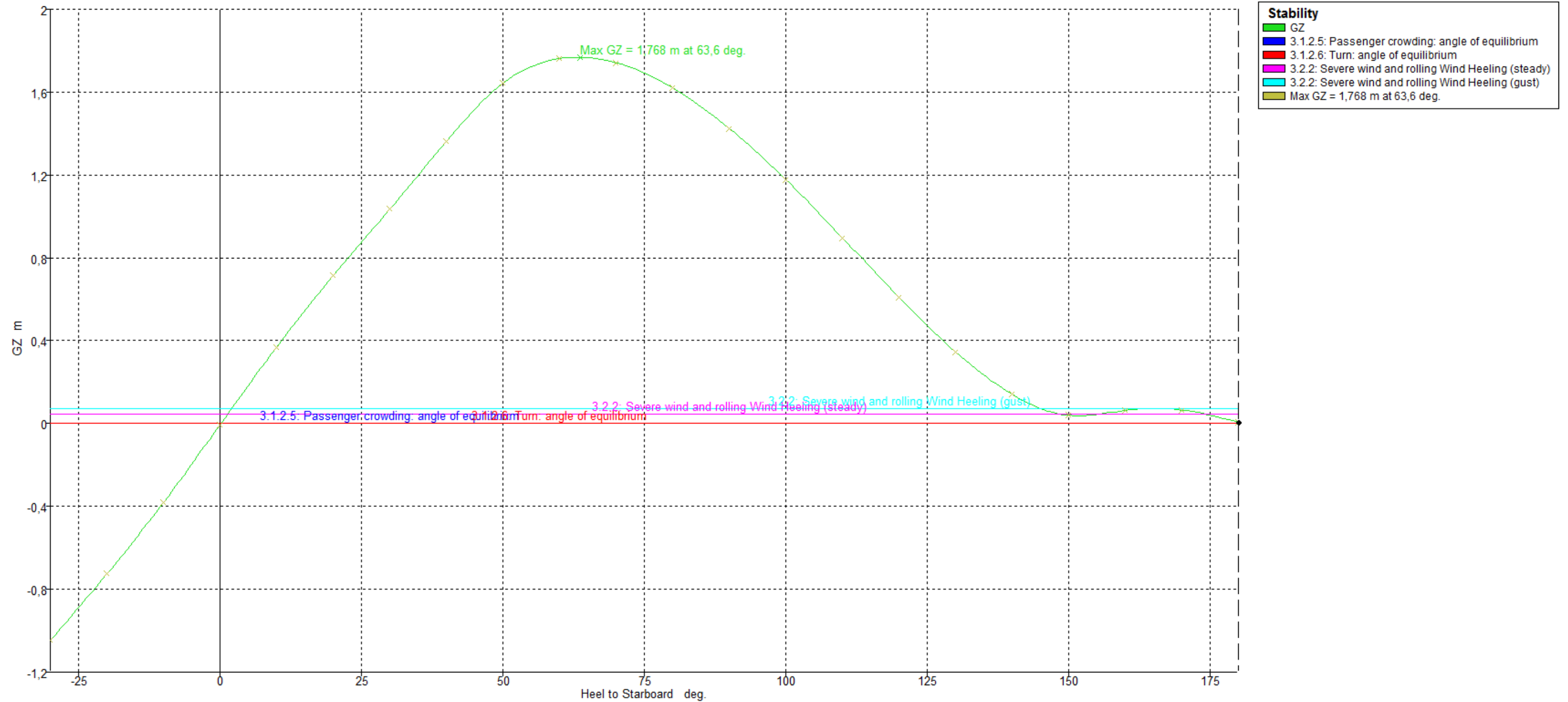


Draft = 3,600 m Max sect. area = 28,022 m²



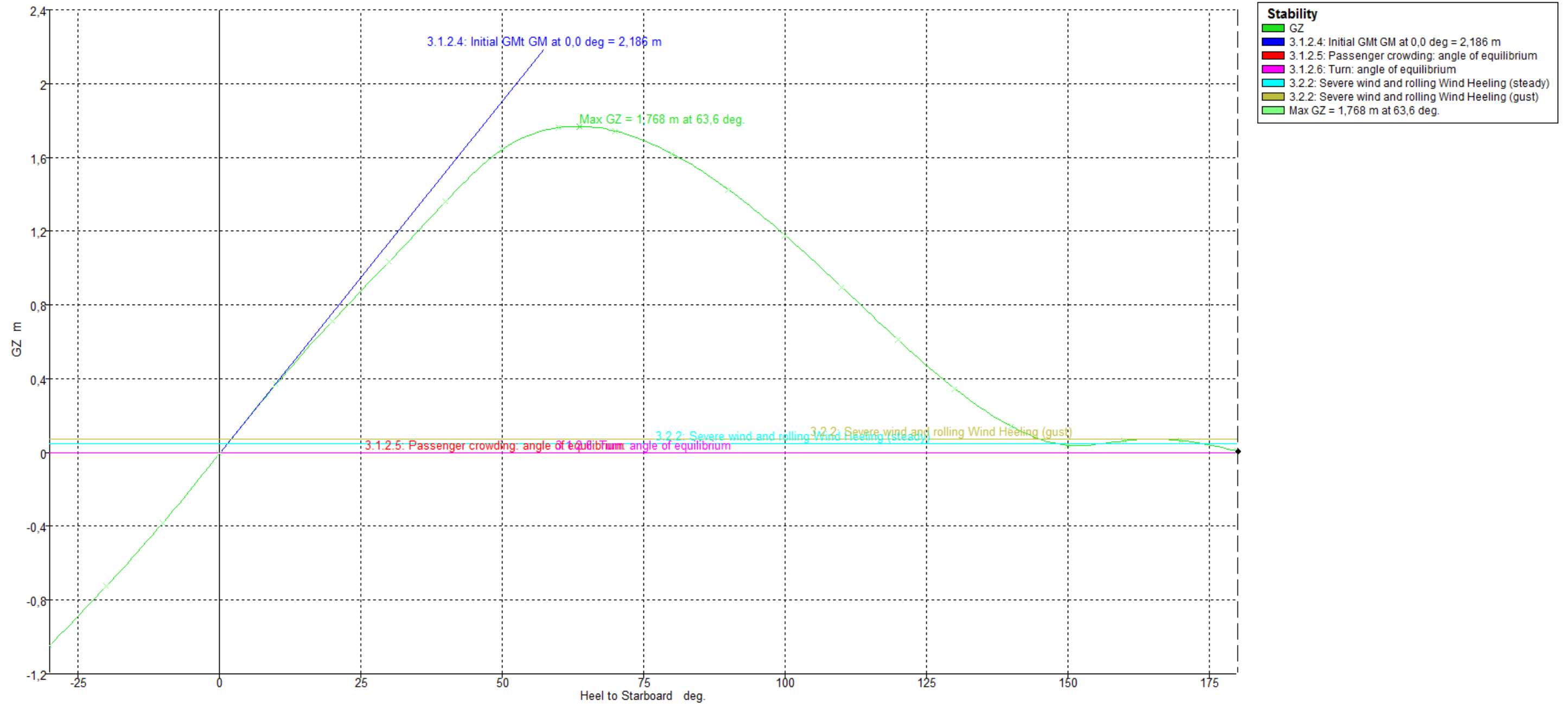
Draft = 3,600 m Block coeff. (Cb) = 0,543

	Draft Amidships m	3,400
1	Displacement t	1118,000
2	Heel deg	0,000
3	Draft at FP m	3,400
4	Draft at AP m	3,400
5	Draft at LCF m	3,400
6	Trim (+ve by stern) m	0,000
7	WL Length m	54,591
8	Beam max extents on WL m	10,769
9	Wetted Area m ²	658,422
10	Waterpl. Area m ²	465,236
11	Prismatic coeff. (Cp)	0,703
12	Block coeff. (Cb)	0,545
13	Max Sect. area coeff. (Cm)	0,781
14	Waterpl. area coeff. (Cwp)	0,791
15	LCB from zero pt. (+ve fwd) m	28,534
16	LCF from zero pt. (+ve fwd) m	24,311
17	KB m	2,068
18	KG m	3,400
19	BMt m	3,168
20	BML m	80,716
21	GMt m	1,836
22	GML m	79,385
23	KMt m	5,236
24	KML m	82,785
25	Immersion (TPC) tonne/cm	4,769
26	MTc tonne.m	16,248
27	RM at 1deg = GMt.Disp.sin(1) tonne.m	35,815
28	Max deck inclination deg	0,000
29	Trim angle (+ve by stern) deg	0,000



GZ = 0,007 m Heel to Starboard = 180,000 deg. Area (from zero heel) = 150,5 m. deg.

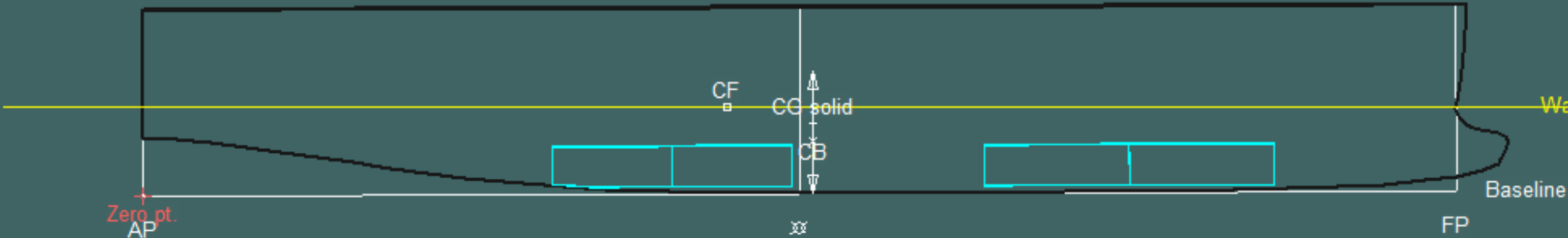
	Heel to Starboard deg	-30,0	-20,0	-10,0	0,0	10,0	20,0	30,0	40,0	50,0	60,0	70,0	80,0	90,0	100,0	110,0	120,0	130,0	140,0	150,0	160,0	170,0	180,0
1	GZ m	-1,08	-0,733	-0,368	0,014	0,397	0,76	1,105	1,458	1,737	1,851	1,83	1,707	1,512	1,263	0,98	0,689	0,421	0,211	0,108	0,122	0,083	-0,014
2	Area under GZ curve from zero heel m.deg	16,3782	7,304	1,7788	0,026	2,0626	7,8666	17,188	30,0141	46,1014	64,1798	82,6812	100,4393	116,588	130,5012	141,7356	150,0781	155,5953	158,6894	160,173	161,2973	162,3933	162,7618
3	Displacement t	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228
4	Draft at FP m	3,603	3,553	3,514	3,505	3,514	3,553	3,603	3,606	3,572	3,556	3,539	3,499	n/a	-3,686	-3,667	-3,684	-3,726	-3,797	-3,896	-3,954	-3,964	-3,967
5	Draft at AP m	3,391	3,624	3,721	3,734	3,721	3,625	3,391	2,961	2,271	1,195	-0,809	-6,59	n/a	-15,966	-10,209	-8,251	-7,257	-6,671	-6,338	-6,25	-6,251	-6,252
6	WL Length m	54,631	54,621	54,614	54,612	54,614	54,621	54,63	54,633	54,631	54,772	55,472	56,065	56,647	56,258	55,533	54,693	54,7	54,71	54,724	54,736	54,741	54,743
7	Beam max extents on WL m	10,905	10,75	10,753	10,777	10,753	10,75	10,905	11,012	9,71	8,811	8,202	7,836	7,683	7,717	7,944	8,367	9,006	9,917	11,266	11,507	11	10,832
8	Wetted Area m^2	675,876	677,509	682,631	684,956	682,632	677,508	675,872	684,488	699,61	708,243	712,062	713,998	715,462	716,634	718,955	723,634	732,689	748,805	776,523	803,119	803,164	803,359
9	Waterpl. Area m^2	473,673	466,959	467,14	465,261	467,138	466,96	473,676	491,062	464,785	432,787	409,216	395,678	392,182	387,367	391,423	404,172	425,58	455,309	490,219	500,736	473,797	465,841
10	Prismatic coeff. (Cp)	0,705	0,71	0,712	0,713	0,712	0,71	0,705	0,698	0,7	0,705	0,702	0,702	0,7	0,711	0,727	0,745	0,751	0,755	0,751	0,741	0,739	0,739
11	Block coeff. (Cb)	0,492	0,524	0,55	0,562	0,55	0,524	0,492	0,471	0,523	0,566	0,594	0,616	0,591	0,528	0,482	0,447	0,414	0,389	0,369	0,407	0,495	0,537
12	LCB from zero pt. (+ve fwd) m	27,851	27,847	27,845	27,845	27,845	27,847	27,85	27,858	27,871	27,888	27,907	27,928	27,944	27,965	27,979	27,987	27,989	27,987	27,982	27,987	27,994	27,996
13	LCF from zero pt. (+ve fwd) m	25,946	25,282	24,618	24,299	24,618	25,282	25,946	26,594	26,976	27,488	28,048	28,522	28,981	28,732	28,463	28,137	27,685	27,012	25,989	24,609	24,471	24,449
14	Max deck inclination deg	30,0006	20,0001	10,0023	0,2401	10,0023	20,0001	30,0006	40,0028	50,0056	60,0077	70,0077	80,0052	90	99,9923	109,9825	119,9711	129,9585	139,9446	149,9257	159,8777	169,7275	177,6041
15	Trim angle (+ve by stern) deg	-0,2229	0,0753	0,2175	0,2401	0,2172	0,0755	-0,222	-0,6765	-1,3641	-2,4748	-4,5527	-10,4677	-90	-12,6746	-6,8316	-4,7804	-3,6994	-3,012	-2,5605	-2,4073	-2,3988	-2,3959



GZ = 0,007 m Heel to Starboard = 180,000 deg. Area (from zero heel) = 150,5 m. deg.

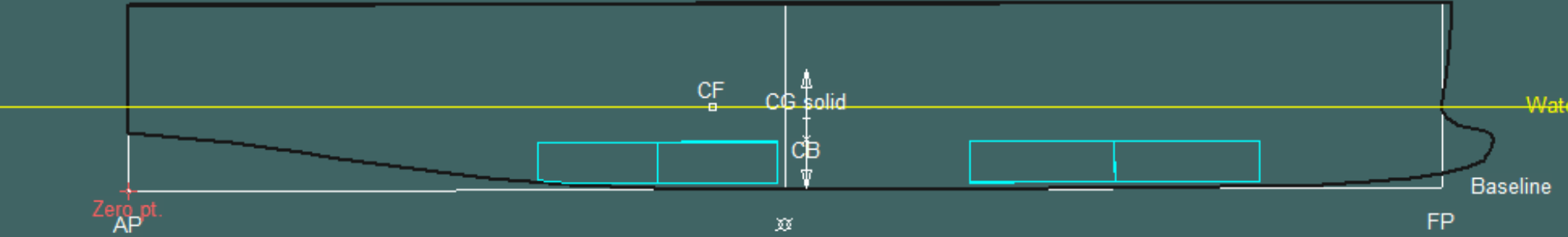
	Heel to Starboard deg	-30,0	-20,0	-10,0	0,0	10,0	20,0	30,0	40,0	50,0	60,0	70,0	80,0	90,0	100,0	110,0	120,0	130,0	140,0	150,0	160,0	170,0	180,0
1	GZ m	-1,046	-0,726	-0,382	-0,007	0,369	0,714	1,035	1,362	1,643	1,761	1,742	1,62	1,425	1,177	0,897	0,61	0,346	0,141	0,039	0,063	0,065	0,007
2	Area under GZ curve from zero heel m.deg	16,3961	7,5222	1,9568	-0,012	1,8253	7,2654	16,0137	27,9967	43,1154	60,2778	77,8924	94,7749	110,0509	123,0999	133,489	141,018	145,7648	148,1352	148,923	149,3878	150,0862	150,4761
3	Displacement t	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158
4	Draft at FP m	3,528	3,469	3,42	3,404	3,42	3,469	3,528	3,541	3,487	3,446	3,388	3,217	n/a	-3,958	-3,809	-3,785	-3,809	-3,872	-3,972	-4,051	-4,066	-4,07
5	Draft at AP m	3,135	3,401	3,524	3,548	3,524	3,402	3,135	2,663	1,897	0,665	-1,663	-8,385	n/a	-17,83	-11,131	-8,85	-7,686	-6,992	-6,582	-6,436	-6,435	-6,435
6	WL Length m	54,617	54,605	54,595	54,592	54,595	54,605	54,617	54,623	54,618	54,924	55,583	56,165	56,737	56,167	55,43	54,722	54,724	54,731	54,743	54,756	54,762	54,764
7	Beam max extents on WL m	10,755	10,64	10,683	10,772	10,683	10,64	10,755	11,111	9,764	8,837	8,21	7,834	7,669	7,695	7,911	8,314	8,922	9,783	11,059	11,533	11,005	10,837
8	Wetted Area m^2	655,538	657,719	663,95	667,864	663,95	657,718	655,534	662,898	677,602	686,017	689,668	691,468	692,696	693,725	696,078	700,773	709,73	725,464	752,338	783,618	786,026	786,254
9	Waterpl. Area m^2	464,605	460,163	463,449	465,281	463,445	460,166	464,598	483,244	463,031	432,952	408,569	394,574	390,035	384,771	387,949	399,429	419,242	446,501	479,202	497,543	474,12	466,129
10	Prismatic coeff. (Cp)	0,699	0,704	0,707	0,708	0,707	0,704	0,699	0,691	0,69	0,692	0,69	0,689	0,688	0,701	0,717	0,733	0,739	0,744	0,742	0,731	0,729	0,729
11	Block coeff. (Cb)	0,486	0,518	0,542	0,552	0,542	0,518	0,486	0,453	0,506	0,548	0,58	0,603	0,576	0,514	0,469	0,434	0,403	0,379	0,362	0,392	0,48	0,52
12	LCB from zero pt. (+ve fwd) m	28,189	28,186	28,183	28,183	28,183	28,185	28,191	28,201	28,214	28,235	28,257	28,279	28,298	28,32	28,333	28,34	28,34	28,334	28,326	28,328	28,335	28,337
13	LCF from zero pt. (+ve fwd) m	26,122	25,471	24,771	24,308	24,771	25,471	26,122	26,772	27,084	27,511	28,071	28,57	29,025	28,813	28,563	28,25	27,827	27,204	26,254	24,745	24,5	24,477
14	Max deck inclination deg	30,0019	20,0001	10,0006	0,1507	10,0006	20,0001	30,0019	40,0052	50,0084	60,0107	70,0104	80,0069	90	99,9902	109,9781	119,9645	129,95	139,9347	149,9152	159,868	169,708	177,5198
15	Trim angle (+ve by stern) deg	-0,4121	-0,0712	0,1098	0,1507	0,1094	-0,0708	-0,4132	-0,9208	-1,6676	-2,9153	-5,2846	-11,9949	-90	-14,2543	-7,6379	-5,2994	-4,0618	-3,2702	-2,7364	-2,5006	-2,4843	-2,4802

LOADCASE-1 (DEPARTURE)



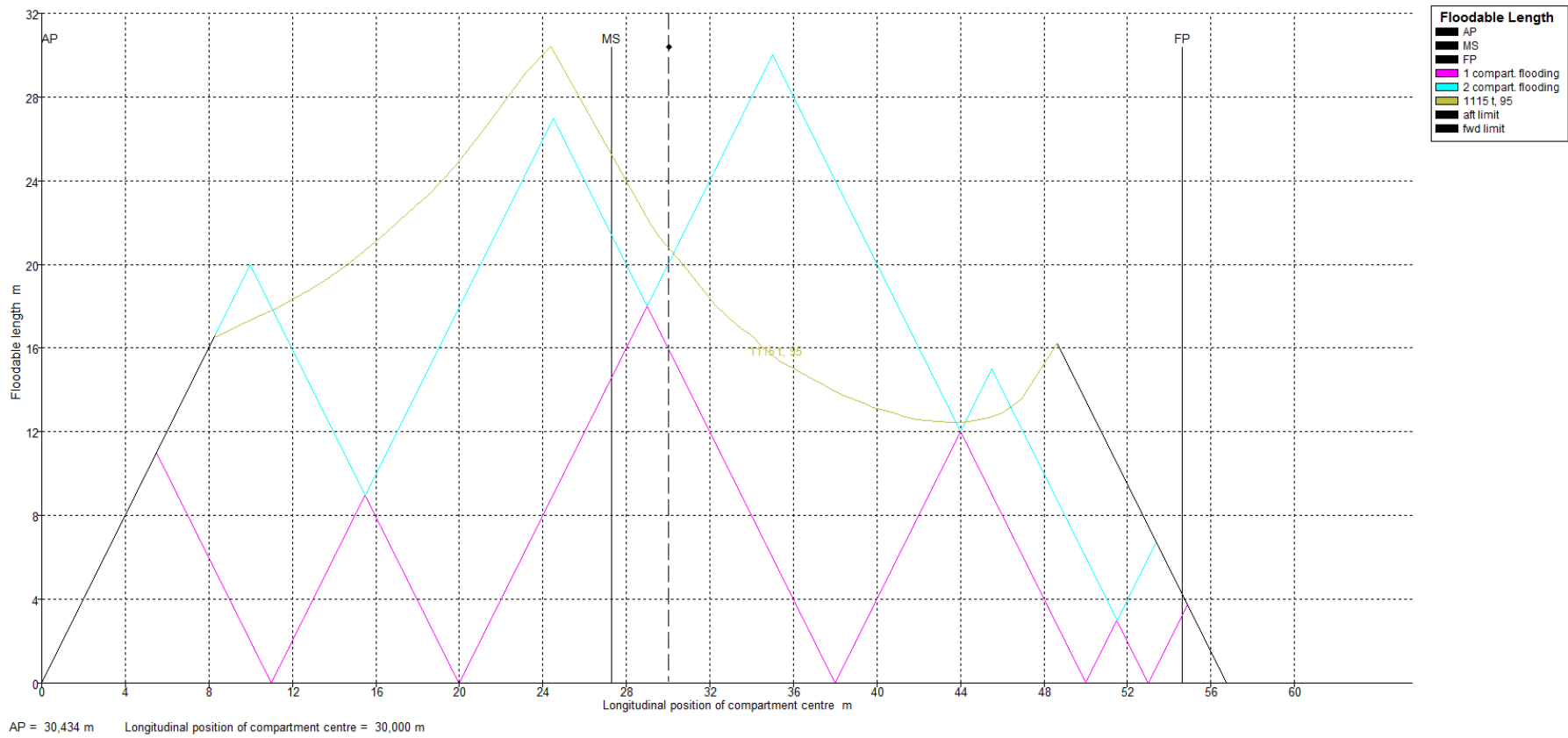
DISP:1228 T, TAMID:3.62 M TRIM:0.23 M, HEEL: -0.4 DEG (STBD)

LOADCASE-2 (ARRIVAL)

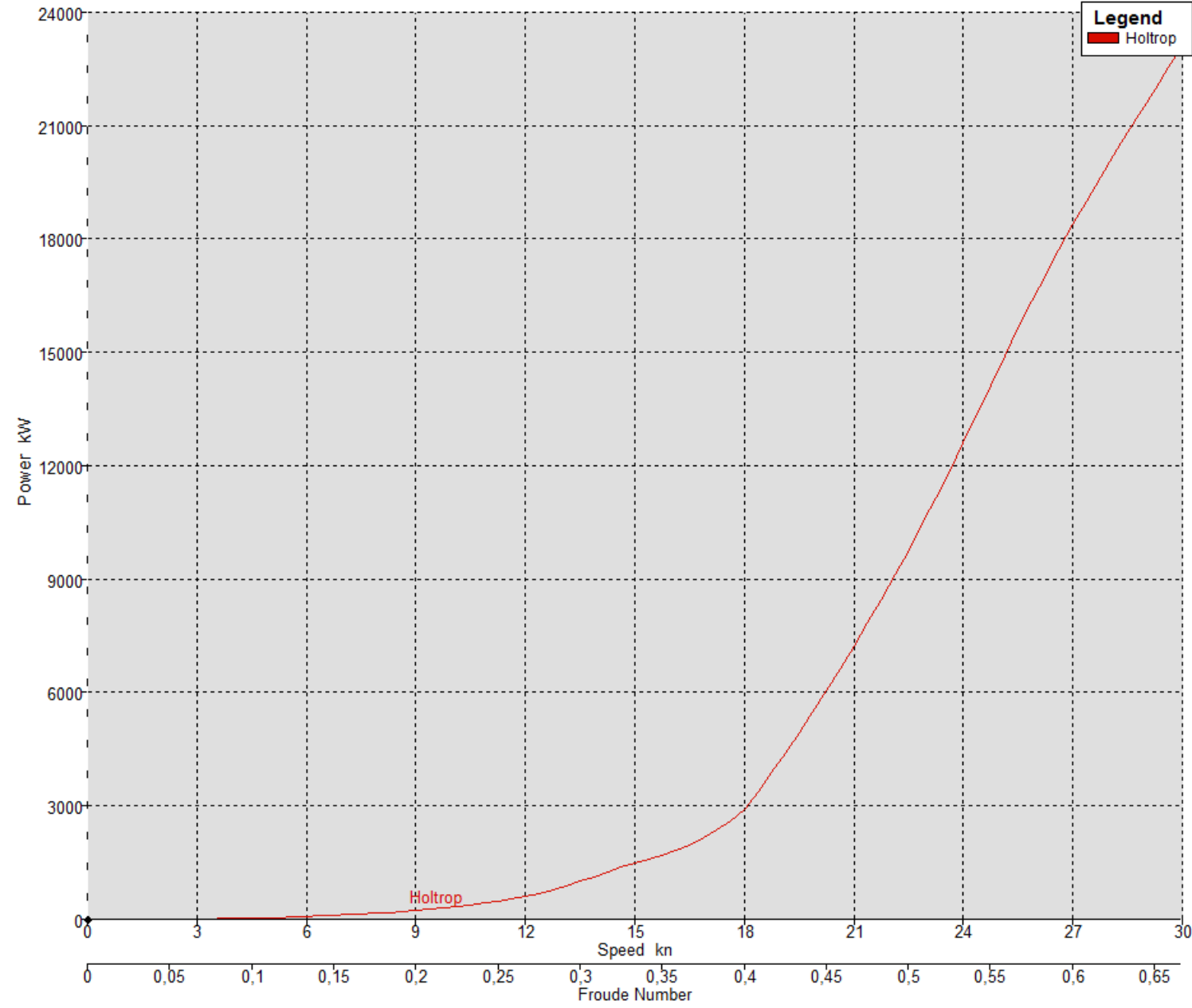


DISP:1158 T, TAMID:3.476 M, TRIM:0.144 M, HEEL: 0.2 DEG (STBD)

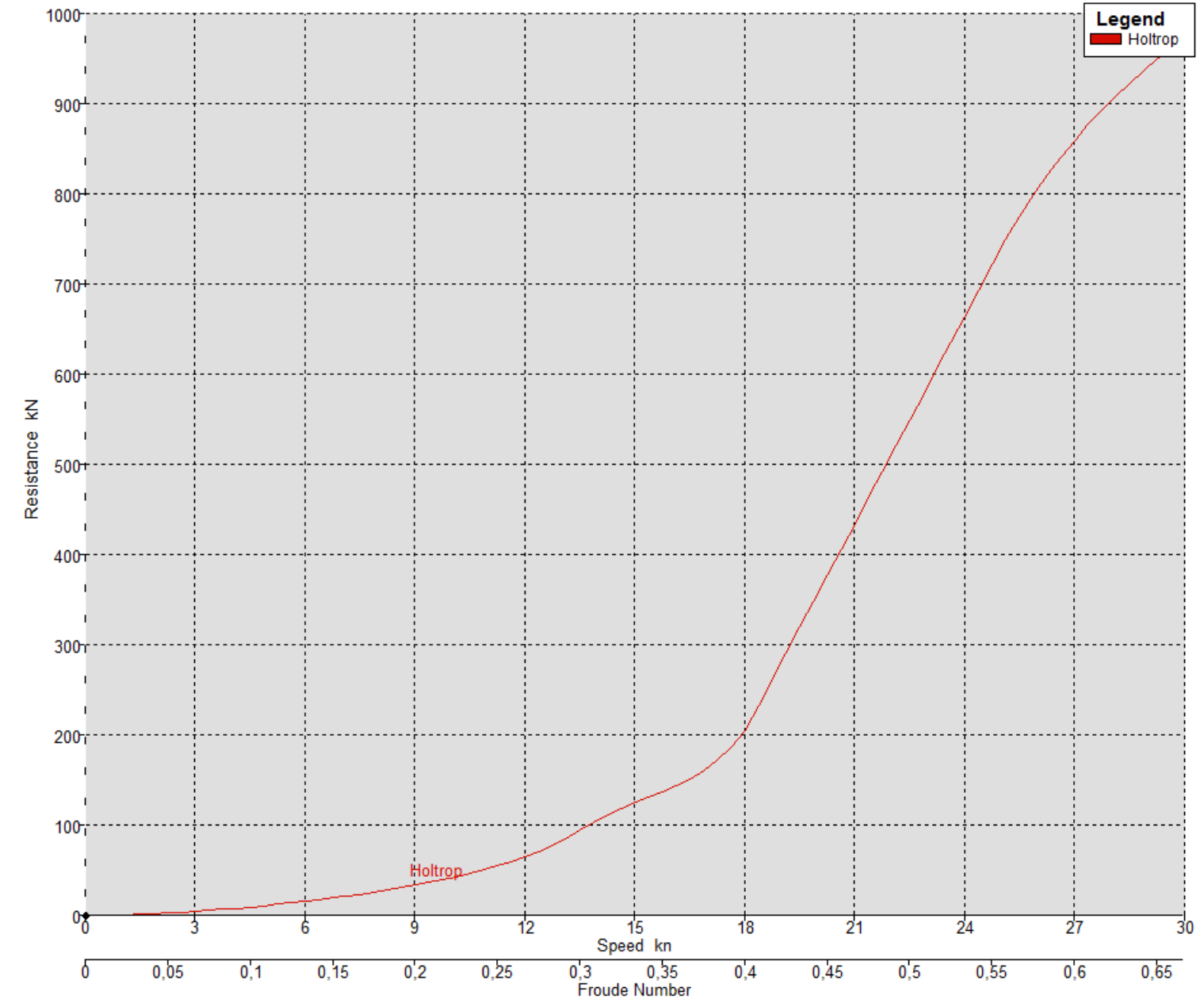
	LOADCASE 1		LOADCASE 2	
1	Draft Amidships m	3,62	Draft Amidships m	3,476
2	Displacement t	1228	Displacement t	1158
3	Heel deg	-0,4	Heel deg	0,2
4	Draft at FP m	3,505	Draft at FP m	3,404
5	Draft at AP m	3,734	Draft at AP m	3,548
6	Draft at LCF m	3,632	Draft at LCF m	3,484
7	Trim (+ve by stern) m	0,23	Trim (+ve by stern) m	0,144
8	WL Length m	54,612	WL Length m	54,592
9	Beam max extents on WL m	10,777	Beam max extents on WL m	10,772
10	Wetted Area m^2	684,954	Wetted Area m^2	667,862
11	Waterpl. Area m^2	465,274	Waterpl. Area m^2	465,283
12	Prismatic coeff. (Cp)	0,713	Prismatic coeff. (Cp)	0,708
13	Block coeff. (Cb)	0,563	Block coeff. (Cb)	0,552
14	Max Sect. area coeff. (Cm)	0,793	Max Sect. area coeff. (Cm)	0,785
15	Waterpl. area coeff. (Cwp)	0,791	Waterpl. area coeff. (Cwp)	0,791
16	LCB from zero pt. (+ve fwd) m	27,844	LCB from zero pt. (+ve fwd) m	28,182
17	LCF from zero pt. (+ve fwd) m	24,3	LCF from zero pt. (+ve fwd) m	24,308
18	KB m	2,199	KB m	2,116
19	KG solid m	2,893	KG solid m	2,99
20	BMt m	2,885	BMt m	3,06
21	BML m	73,405	BML m	77,923
22	GMt corrected m	2,192	GMt corrected m	2,186
23	GML m	72,712	GML m	77,049
24	KMt m	5,085	KMt m	5,176
25	KML m	75,603	KML m	80,039
26	Immersion (TPc) tonne/cm	4,769	Immersion (TPc) tonne/cm	4,769
27	MTc tonne.m	16,356	MTc tonne.m	16,335
28	RM at 1deg = GMt.Disp.sin(1) tonne.m	46,99	RM at 1deg = GMt.Disp.sin(1) tonne.m	44,165
29	Max deck inclination deg	0,4448	Max deck inclination deg	0,2296
30	Trim angle (+ve by stern) deg	0,2409	Trim angle (+ve by stern) deg	0,1513



Code	Criteria	Value	Units	Actual	Status	Margin %
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.1: Area 0 to 30				Pass	
	from the greater of					
	spec. heel angle	0	deg	0		
	to the lesser of					
	spec. heel angle	30	deg	30		
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.1: Area 0 to 40				Pass	
	from the greater of					
	spec. heel angle	0	deg	0		
	to the lesser of					
	spec. heel angle	40	deg	40		
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.1: Area 30 to 40				Pass	
	from the greater of					
	spec. heel angle	30	deg	30		
	to the lesser of					
	spec. heel angle	40	deg	40		
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.2: Max GZ at 30 or greater				Pass	
	in the range from the greater of					
	spec. heel angle	30	deg	30		
	to the lesser of					
	spec. heel angle	90	deg			
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.3: Angle of maximum GZ				Pass	
	angle of max. GZ	62,7	deg	62,7		
	shall not be less than (>=)	0,2	m	1,857	Pass	828,5
	Intermediate values					
	angle at which this GZ occurs		deg	62,7		
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.4: Initial GMt				Pass	
	spec. heel angle	0	deg			
	shall not be less than (>=)	0,15	m	2,192	Pass	1361,33
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.5: Passenger crowding: angle of equilibrium				Pass	
	Pass. crowding arm = nPass M / disp. D cos^n(phi)					
	number of passengers: nPass =	0				
	passenger mass: M =	0,075	tonne			
	distance from centre line: D =	0	m			
A.749(18) Ch3 - Design criteria applicable to all ships	3.1.2.6: Turn: angle of equilibrium				Pass	
	Turn arm: a v^2 / (R g) h cos^n(phi)					
	constant: a =	0,9996				
	vessel speed: v =	0	kn			
	turn radius, R, as percentage of Lwl	510	%			
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Wind arm: a P A (h - H) / (g disp.) cos^n(phi)					
	constant: a =	0,99966				
	wind pressure: P =	504	Pa			
	area centroid height (from zero point): h =	6	m			
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	additional area: A =	50	m^2			
	H = vert. centre of projected lat. u'water area	1,981	m			
	cosine power: n =	0				
	gust ratio	1,5				
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Area2 integrated to the lesser of					
	roll back angle from equilibrium (with steady heel arm)	25,0 (-24,2	deg	-24,2		
	Area 1 upper integration range, to the lesser of:					
	spec. heel angle	50	deg	50		
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	first downflooding angle	n/a	deg			
	angle of vanishing stability (with gust heel arm)	172,2	deg			
	Angle for GZ(max) in GZ ratio, the lesser of:					
	angle of max. GZ	62,7	deg	62,7		
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Select required angle for angle of steady heel ratio:	DeckEdgeImmersionAngle				
	Criteria:				Pass	
	Angle of steady heel shall not be greater than (<=)	16	deg	0,8	Pass	95,3
	Angle of steady heel	80	%	1,96	Pass	97,55
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Area1 / Area2 shall not be less than (>=)	100	%	347,44	Pass	247,44
	Intermediate values					
	Model windage area		m^2	226,586		
	Model windage area centroid height (from zero point)		m	5,664		
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Total windage area		m^2	276,586		
	Total windage area centroid height (from zero point)		m	5,725		
	Heel arm amplitude		m	0,043		
	Equilibrium angle with steady heel arm		deg	0,8		
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Equilibrium angle with gust heel arm		deg	1,3		
	Deck edge immersion angle		deg	38,4		
	Area1 (under GZ), from 1,1 to 50,0 deg.		m.deg	46,0494		
	Area1 (under HA), from 1,1 to 50,0 deg.		m.deg	3,1627		
A.749(18) Ch3 - Design criteria applicable to all ships	3.2.2: Severe wind and rolling				Pass	
	Area1, from 1,1 to 50,0 deg.		m.deg	42,8867		
	Area2 (under GZ), from -24,2 to 1,1 deg.		m.deg	-10,6831		
	Area2 (under HA), from -24,2 to 1,1 deg.		m.deg	1,6605		
	Area2, from -24,2 to 1,1 deg.		m.deg	12,3436		



Holtrop = 0,024 kW Speed = 0,000 kn



Holtrop = 0,081 kN Speed = 0,000 kn