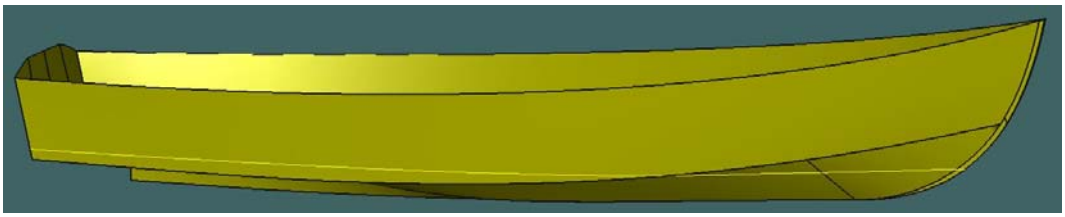
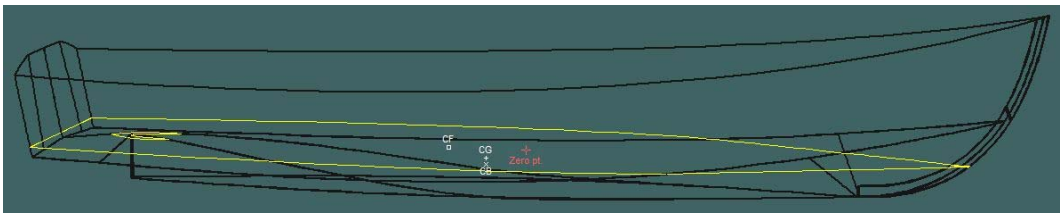
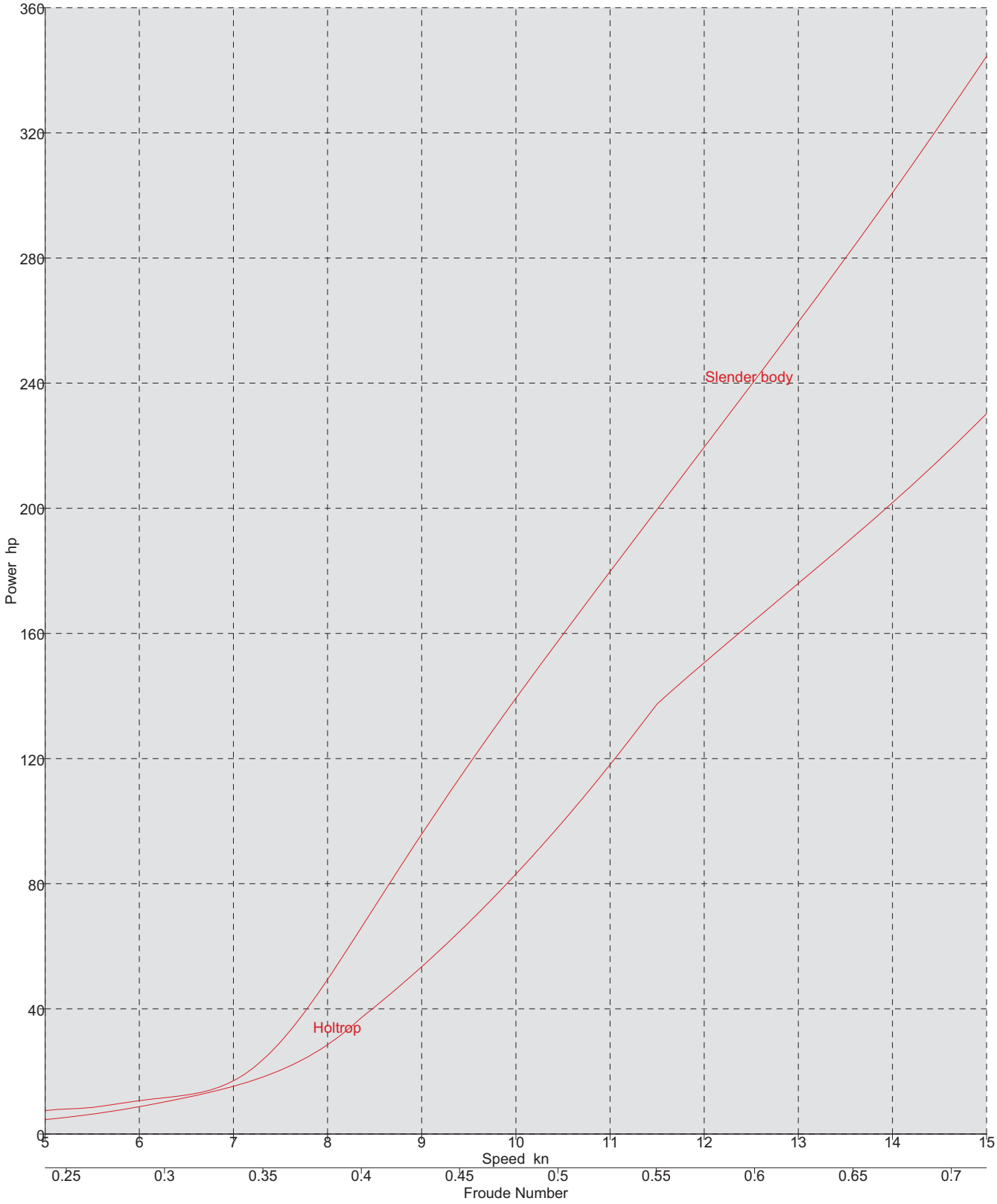
POWERING ANALYSIS



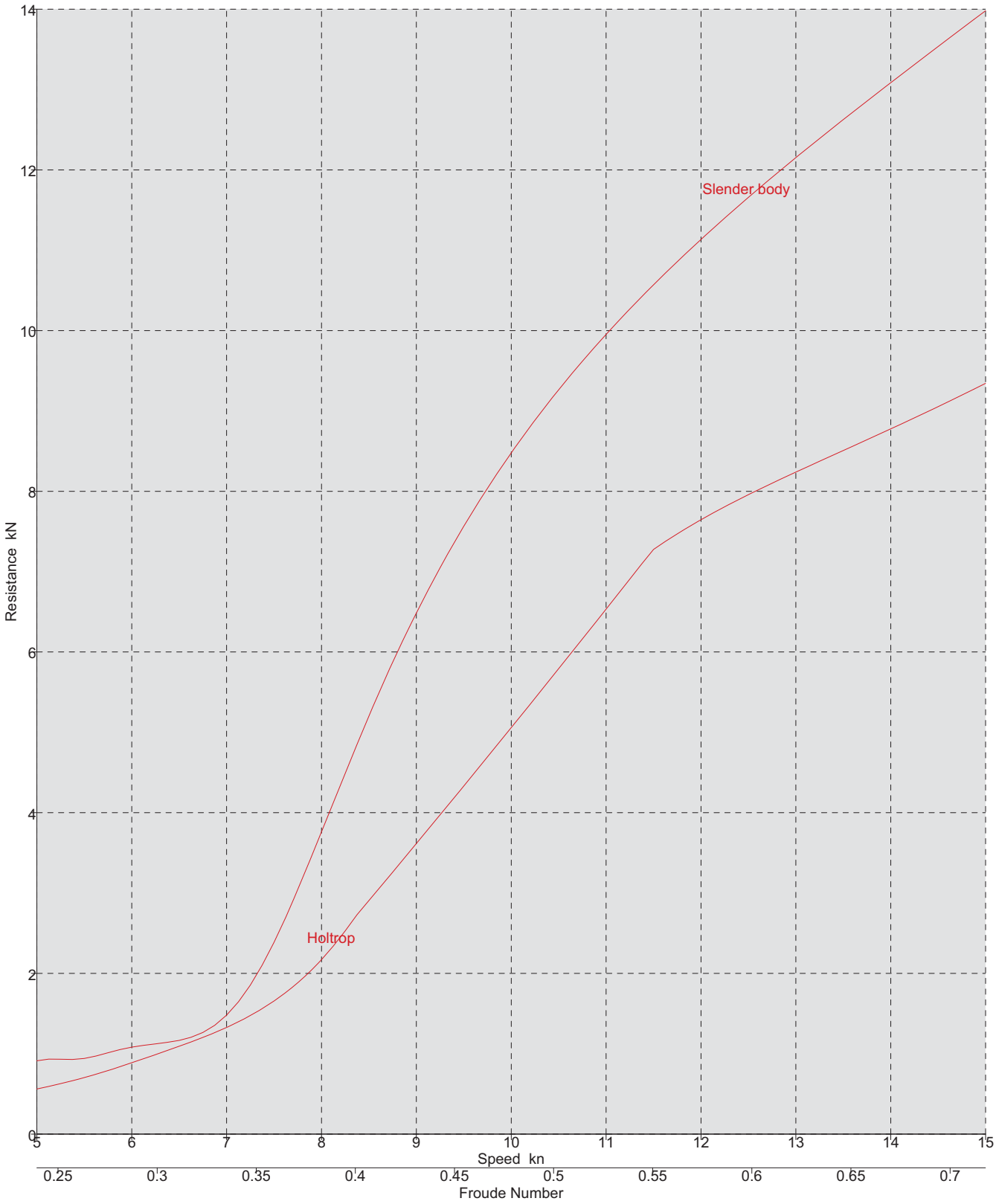


IMO NO	TBD	DATE	07.12.2020
HULL NO	TBD	BOAT TYPE	YACHT
CALCULATED BY	BADRUL ALAM	NAME OF CALCULATION	
CHECKED BY		POWERING ANALYSIS	
		DOCUMENT NO.	430CC-01
		REV:	A

DATA			
	Item	**Value**	**Units**
1	LWL	11.781	m
2	Beam	3.558	m
3	Draft	0.55	m
4	Displaced volume	9.536	m^3
5	Wetted area	37.512	m^2
6	Prismatic coeff. (Cp)	0.565	
7	Waterpl. area coeff. (Cwp)	0.761	
8	1/2 angle of entrance	22.1	deg.
9	LCG from midships(+ve for'd)	-0.525	m
10	Transom area	0	m^2
11	Transom wl beam	0	m
12	Transom draft	0	m
13	Max sectional area	1.433	m^2
14	Bulb transverse area	0	m^2
15	Bulb height from keel	0	m
16	Draft at FP	0.55	m
17	Deadrise at 50% LWL	5	deg.
18	Hard chine or Round bilge	Round bilge	
19	Frontal Area	0	m^2
20	Headwind	0	kn
21	Drag Coefficient	0	
22	Air density	0.001	tonne/m^3
23	Appendage Area	0	m^2
24	Nominal App. length	0	m
25	Appendage Factor	1	
26	Correlation allow.	0.0004	
27	Kinematic viscosity	1.1883E-06	m^2/s
28	Water Density	1.026	tonne/m^3


360
320
280
240
200
160
120
80
40
0
Power hp
Slender body
Holtrop
5
6
7
8
9
10
11
12
13
14
15
Speed kn
0.25
0.3
0.35
0.4
0.45
0.5
0.55
0.6
0.65
0.7
Froude Number

Graph View


Slender body
Holtrop
Resistance kN
0
2
4
6
8
10
12
14
5
6
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11
12
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14
15
Speed kn
0.25
0.3
0.35
0.4
0.45
0.5
0.55
0.6
0.65
0.7
Froude Number

Graph View

RESULTS					
	Speed (kn)	Froude No. LWL	Froude No. Vol.	Holtrop resist. (kN)	Holtrop Power (HP)
1	5	0.239	0.564	0.6	4.613
2	5.25	0.251	0.592	0.6	5.411
3	5.5	0.263	0.62	0.7	6.354
4	5.75	0.275	0.649	0.8	7.467
5	6	0.287	0.677	0.9	8.744
6	6.25	0.299	0.705	1	10.149
7	6.5	0.311	0.733	1.1	11.668
8	6.75	0.323	0.761	1.2	13.342
9	7	0.335	0.79	1.3	15.265
10	7.25	0.347	0.818	1.5	17.566
11	7.5	0.359	0.846	1.7	20.411
12	7.75	0.371	0.874	1.9	23.993
13	8	0.383	0.902	2.2	28.534
14	8.25	0.395	0.931	2.5	34.263
15	8.5	0.407	0.959	2.9	40.577
16	8.75	0.419	0.987	3.3	46.851
17	9	0.431	1.015	3.6	53.445
18	9.25	0.443	1.044	4	60.363
19	9.5	0.455	1.072	4.3	67.606
20	9.75	0.467	1.1	4.7	75.178
21	10	0.479	1.128	5.1	83.08
22	10.25	0.491	1.156	5.4	91.315
23	10.5	0.503	1.185	5.8	99.886
24	10.75	0.515	1.213	6.2	108.795
25	11	0.526	1.241	6.5	118.044
26	11.25	0.538	1.269	6.9	127.636
27	11.5	0.55	1.297	7.3	137.461
28	11.75	0.562	1.326	7.5	144.183
29	12	0.574	1.354	7.6	150.708
30	12.25	0.586	1.382	7.8	157.094
31	12.5	0.598	1.41	8	163.393
32	12.75	0.61	1.438	8.1	169.655
33	13	0.622	1.467	8.2	175.926
34	13.25	0.634	1.495	8.4	182.246
35	13.5	0.646	1.523	8.5	188.65
36	13.75	0.658	1.551	8.6	195.167
37	14	0.67	1.579	8.8	201.823
38	14.25	0.682	1.608	8.9	208.64
39	14.5	0.694	1.636	9.1	215.635
40	14.75	0.706	1.664	9.2	222.823
41	15	0.718	1.692	9.3	230.217