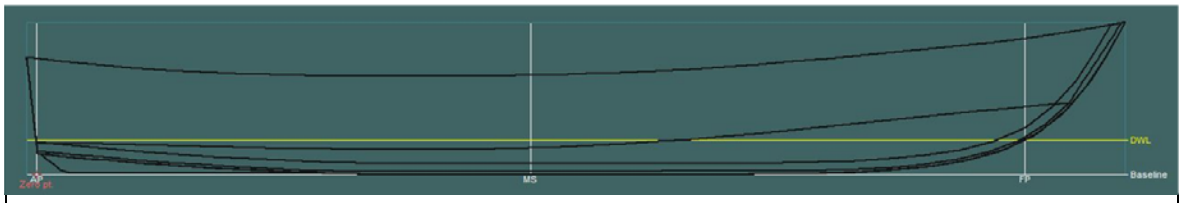
POWERING ANALYSIS
OF ROOSTERFISH BOAT-230CP

REV.	DATE	REVISION MEMORANDUM
A		
0	24.12.2020	Issued based on 9.5" Draft and 1 x 90 HP Engine (Outboard).

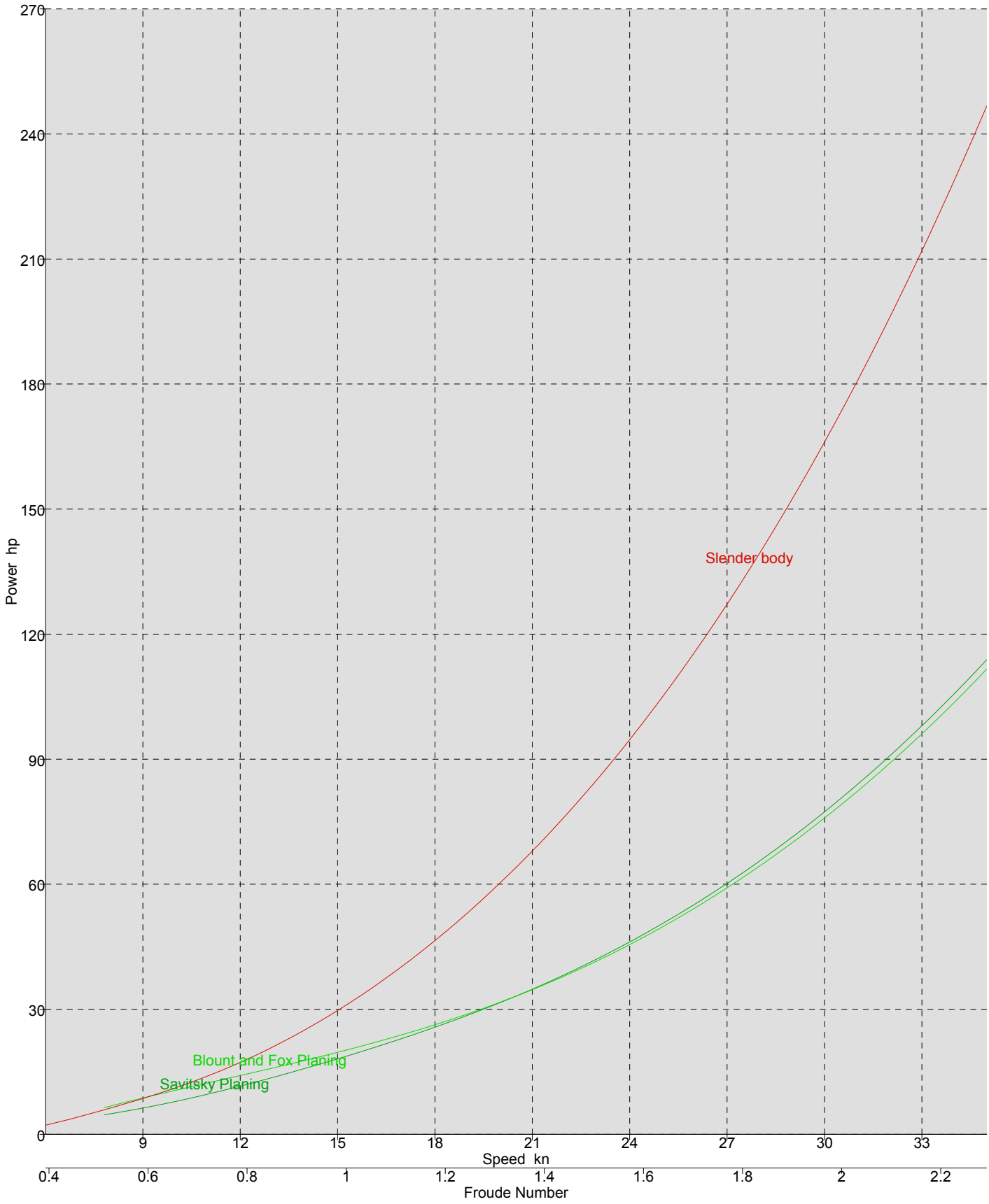
IMO NO	TBD	DATE	24.12.2020
HULL NO	TBD	BOAT TYPE	COASTAL PANGA
CALCULATED BY	BADRUL	NAME OF CALCULATION	
CHECKED BY	SHAWN	POWERING ANALYSIS	
RoosterFish 3D Engineered Boat Kits Green | Easy to Build | Global Delivery		DOCUMENT NO.	230CP -01.A
		REV:	0

Resistance and Power Prediction from Maxsurf 20 V8i

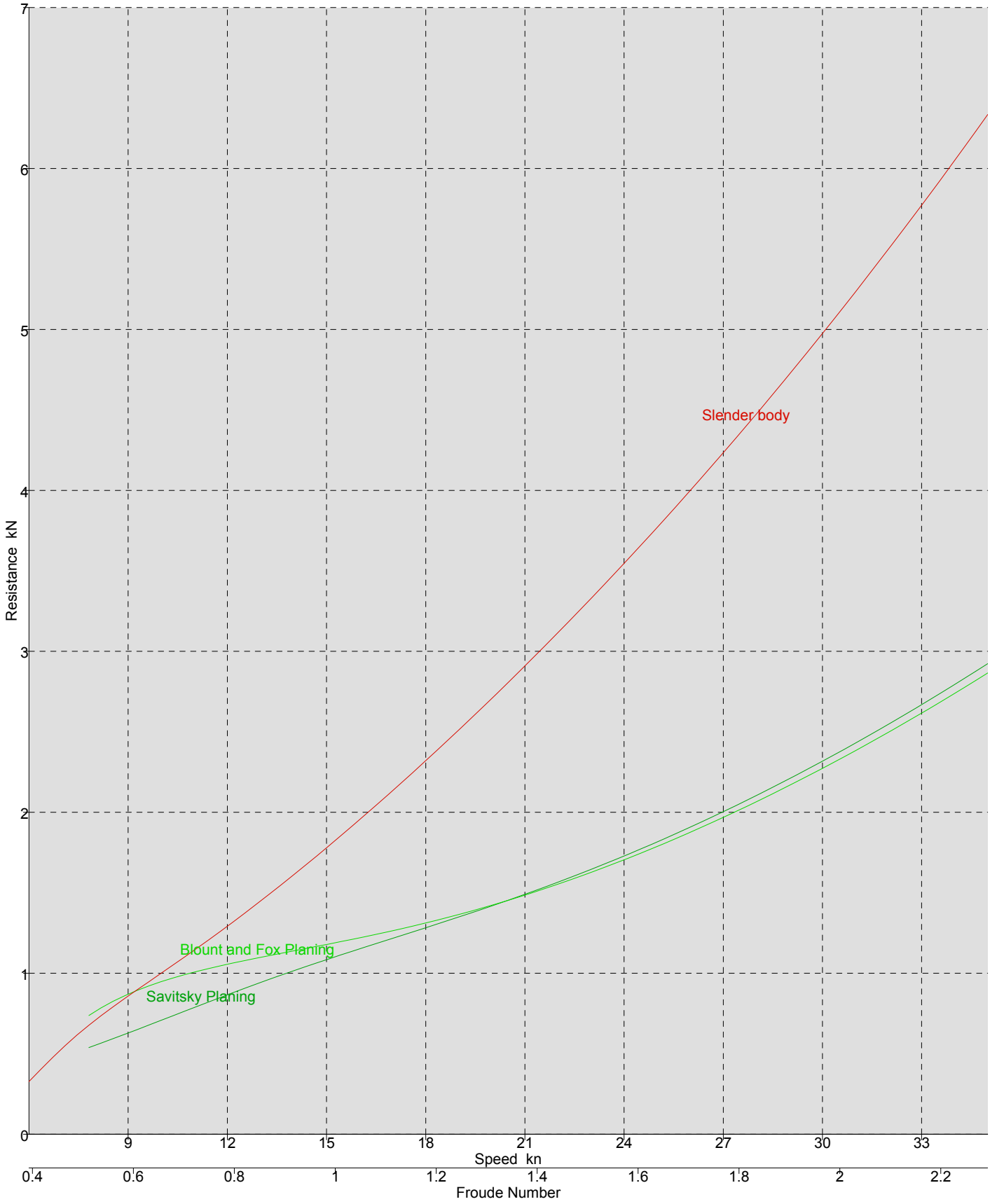


DATA

	Item	Value	Units	Savitsky Planing	Blount and Fox Planing
1	LWL	247.53	in	247.53	247.53
2	Beam	64.06	in	64.06	64.06
3	Displacement	1893	lb	--	--
4	Volume (displaced)	51116.15	in^3	50948.56	50948.56
5	Draft Amidships	9.5	in		
6	Wetted area	15487.57	in^2	--	--
7	Prismatic coeff. (Cp)	0.594		--	--
8	Block coeff. (Cb)	0.34			
9	Waterpl. area coeff. (Cwp)	0.713		--	--
10	1/2 angle of entrance	6.9	deg.	--	--
11	LCG from midships(+ve for'd)	-19.81	in	-19.81	-19.81
12	Transom area	0.02	in^2	--	--
13	Transom wl beam	47.45	in	--	--
14	Transom draft	0	in	--	--
15	Max sectional area	346.57	in^2	--	--
16	Bulb transverse area	0	in^2	--	--
17	Bulb height from keel	0	in	--	--
18	Draft at FP	9.5	in	--	--
19	Deadrise at 50% LWL	12.8	deg.	12.8	12.8
20	Kinematic viscosity	0.001841884	in^2/s		
21	Water Density	0.04	lb/in^3		
22	KB	6.73	in		
23	BMt	58.04	in		
24	BML	725.05	in		
25	GMt corrected	64.76	in		
26	GML	731.78	in		
27	KMt	64.76	in		
28	KML	731.78	in		
29	Immersion (TPi)	0.188	Long Ton/in		


270
240
210
180
150
120
90
60
30
0
Power hp
Slender body
Blount and Fox Planing
Savitsky Planing
9
12
15
18
21
24
27
30
33
Speed kn
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Froude Number

Graph View


Resistance kN
0
1
2
3
4
5
6
7
Slender body
Blount and Fox Planing
Savitsky Planing
9
12
15
18
21
24
27
30
33
Speed kn
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
Froude Number

Graph View

Resistance and Power Prediction from Maxsurf 20 V8i

RESULTS							
	Speed (kn)	Froude No. LWL	Froude No. Vol.	Savitsky Planing resist. (kN)	Savitsky Planing Power (HP)	Blount and Fox Planing resist. (kN)	Blount and Fox Planing Power (HP)
1	6	0.393	1.016	--	--	--	--
2	6.725	0.441	1.138	--	--	--	--
3	7.45	0.488	1.261	--	--	--	--
4	8.175	0.536	1.384	0.6	5.145	0.8	7.131
5	8.9	0.583	1.507	0.6	6.151	0.9	8.528
6	9.625	0.631	1.629	0.7	7.262	0.9	9.87
7	10.35	0.678	1.752	0.7	8.473	1	11.177
8	11.075	0.726	1.875	0.8	9.777	1	12.463
9	11.8	0.773	1.998	0.9	11.167	1	13.746
10	12.525	0.821	2.12	0.9	12.633	1.1	15.038
11	13.25	0.868	2.243	1	14.166	1.1	16.351
12	13.975	0.916	2.366	1	15.758	1.1	17.697
13	14.7	0.963	2.489	1.1	17.405	1.2	19.087
14	15.425	1.011	2.611	1.1	19.109	1.2	20.532
15	16.15	1.058	2.734	1.2	20.872	1.2	22.044
16	16.875	1.106	2.857	1.2	22.702	1.3	23.635
17	17.6	1.153	2.98	1.3	24.607	1.3	25.317
18	18.325	1.201	3.102	1.3	26.597	1.3	27.101
19	19.05	1.248	3.225	1.4	28.681	1.4	28.997
20	19.775	1.296	3.348	1.4	30.87	1.4	31.012
21	20.5	1.343	3.471	1.5	33.174	1.5	33.157
22	21.225	1.391	3.593	1.5	35.6	1.5	35.437
23	21.95	1.438	3.716	1.6	38.157	1.6	37.859
24	22.675	1.486	3.839	1.6	40.853	1.6	40.429
25	23.4	1.533	3.961	1.7	43.696	1.7	43.153
26	24.125	1.581	4.084	1.7	46.692	1.7	46.036
27	24.85	1.628	4.207	1.8	49.847	1.8	49.084
28	25.575	1.676	4.33	1.9	53.168	1.8	52.301
29	26.3	1.723	4.452	1.9	56.661	1.9	55.692
30	27.025	1.771	4.575	2	60.331	2	59.262
31	27.75	1.818	4.698	2.1	64.184	2	63.015
32	28.475	1.866	4.821	2.2	68.225	2.1	66.956
33	29.2	1.913	4.943	2.2	72.459	2.2	71.09
34	29.925	1.961	5.066	2.3	76.892	2.3	75.42
35	30.65	2.008	5.189	2.4	81.527	2.3	79.952
36	31.375	2.056	5.312	2.5	86.37	2.4	84.689
37	32.1	2.103	5.434	2.6	91.427	2.5	89.636
38	32.825	2.151	5.557	2.6	96.7	2.6	94.797
39	33.55	2.198	5.68	2.7	102.195	2.7	100.177
40	34.275	2.246	5.803	2.8	107.917	2.8	105.78
41	35	2.293	5.925	2.9	113.87	2.9	111.61

FOR ENGINE POWER OF 90 HP, THE BOAT SPEED WILL BE APPROX. 32 KNOTS