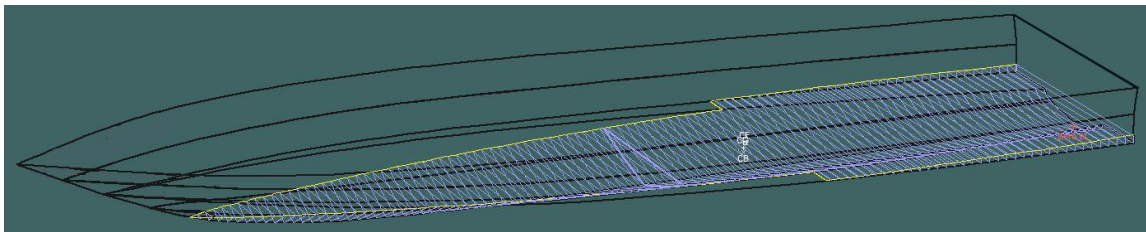
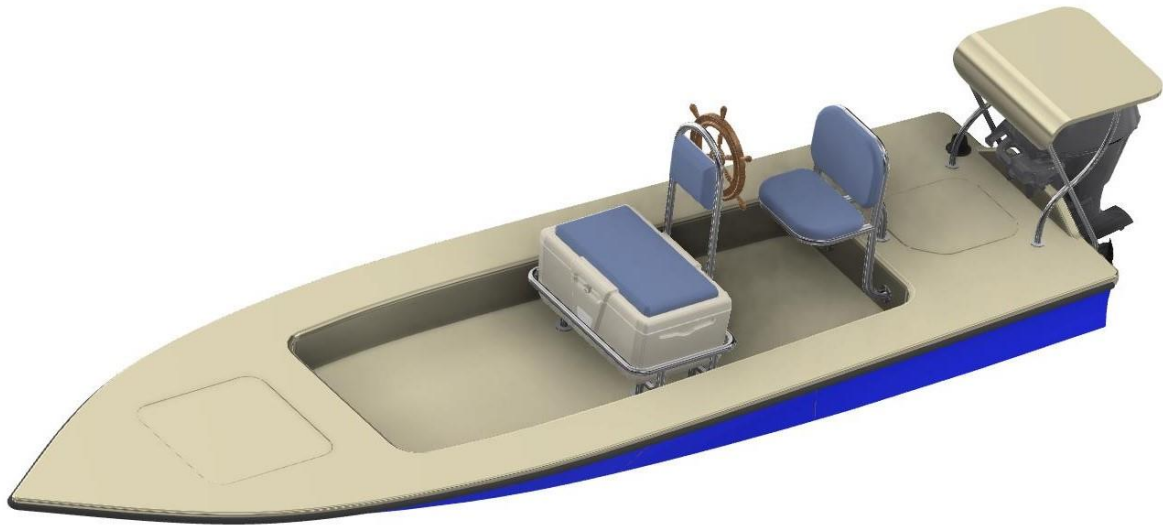



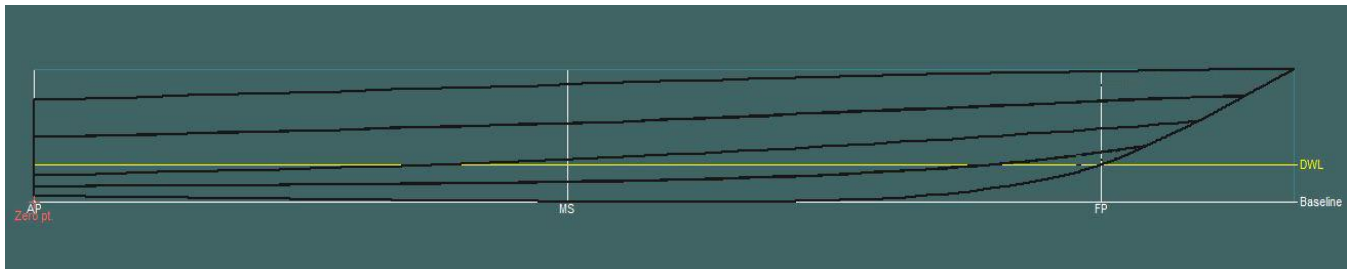
**POWERING ANALYSIS  
OF ROOSTERFISH BOAT-162TS**



A		
0	19.12.2020	Issued based on 5" Draft and 25 HP Engine Power.
<b>REV.</b>	<b>DATE</b>	<b>REVISION MEMORANDUM</b>

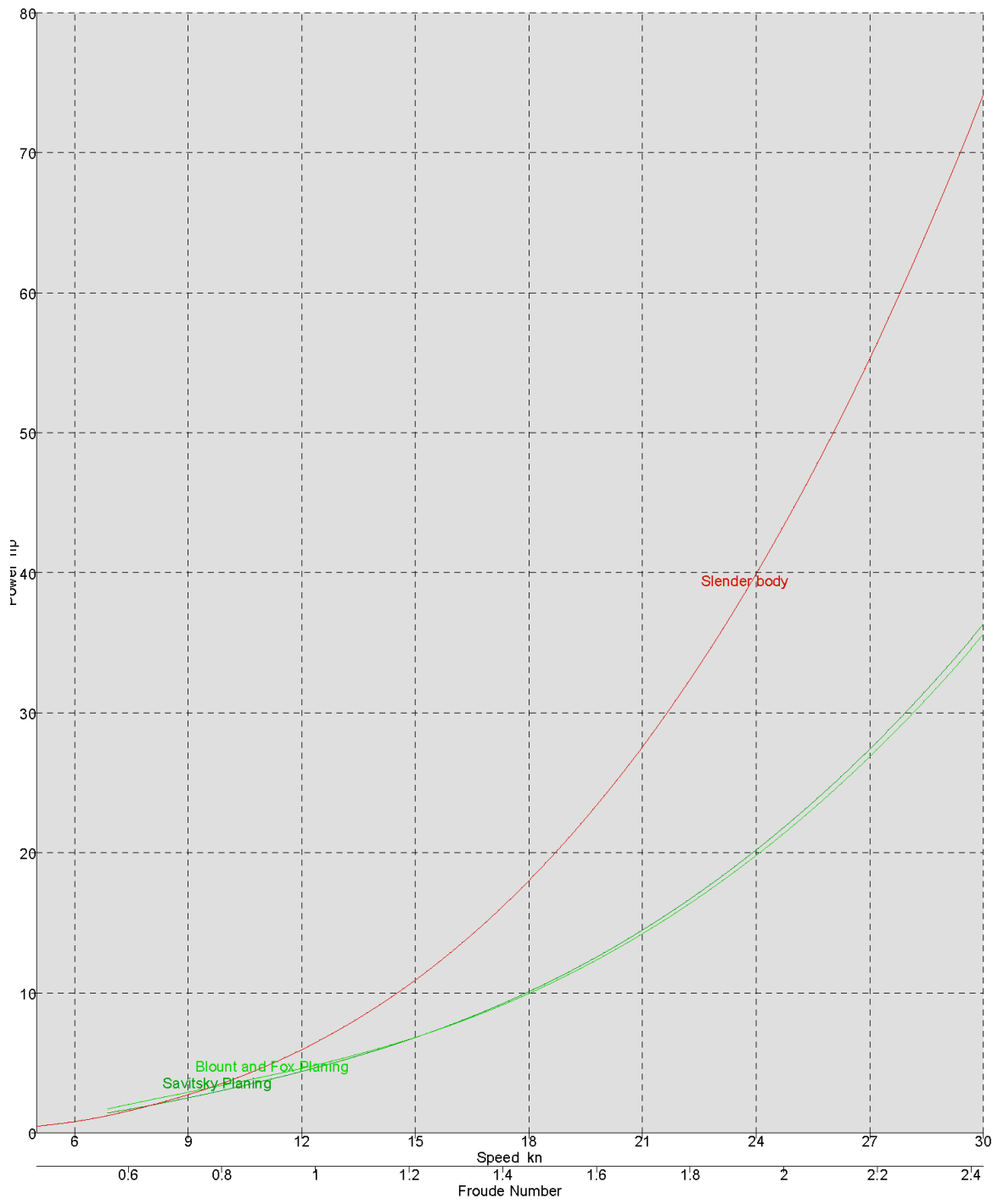
IMO NO	TBD	DATE	19.12.2020
HULL NO	TBD	SHIP TYPE	SPEED BOAT
CALCULATED BY	BADRUL	NAME OF CALCULATION <b>POWERING ANALYSIS</b>	
CHECKED BY	SHAWN		
 <b>RoosterFish</b> 3D Engineered Boat Kits Green   Easy to Build   Global Delivery		DOCUMENT NO.	162TS -01
		REV:	0

### Resistance and Power Prediction from Maxsurf 20 V8i

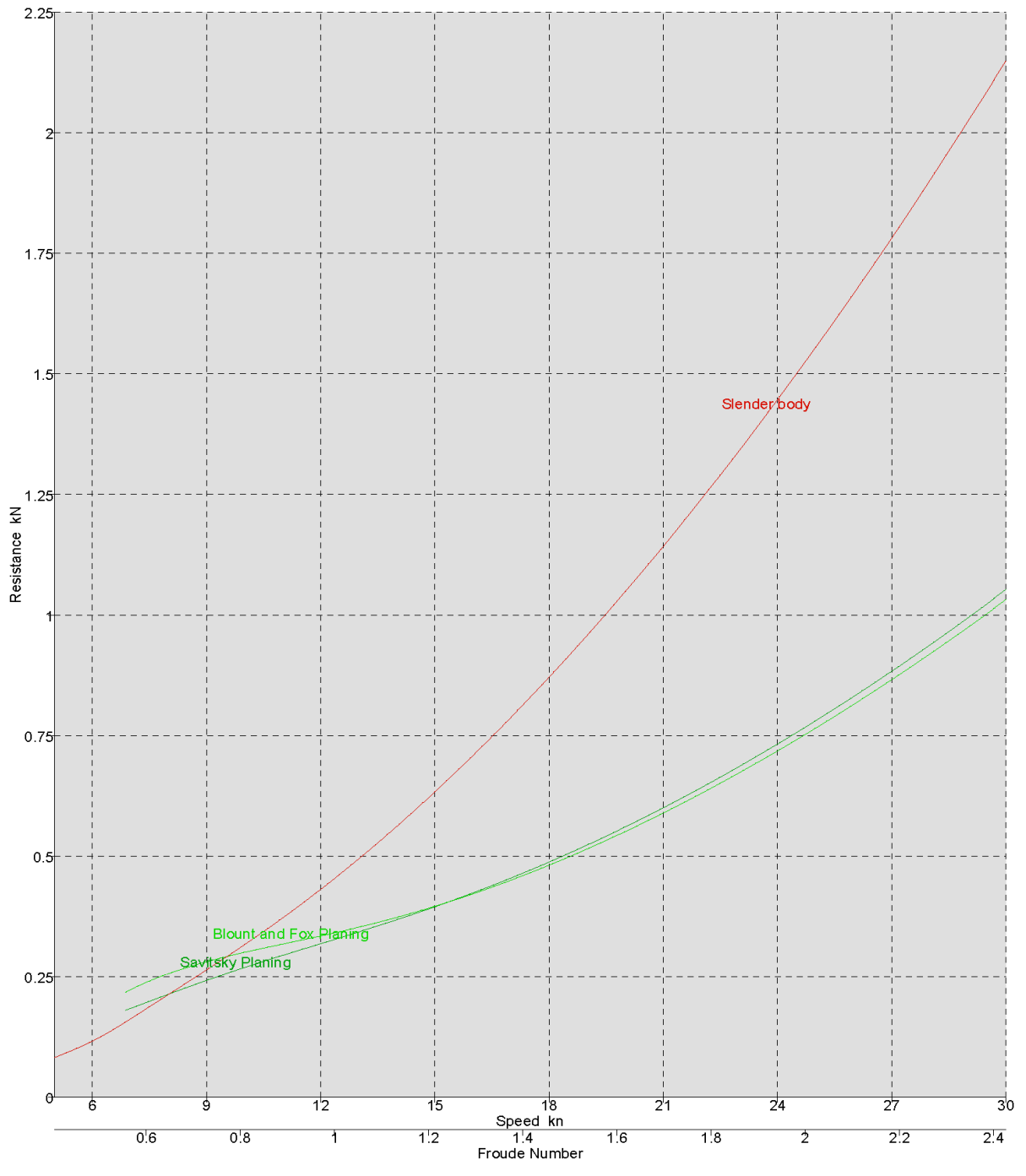


DATA					
	Item	Value	Units	Savitsky Planing	Blount and Fox Planing
1	LWL	162.42	in	162.42	162.42
2	Beam max extents on WL	49.43	in	49.43	49.43
3	Draft	5	in	--	--
4	Displacement	471.8	lb		
5	Volume (displaced)	12742.12	in <sup>3</sup>		
6	Displaced volume	12746.37	in <sup>3</sup>	12746.37	12746.37
7	Wetted area	5724.85	in <sup>2</sup>	--	--
8	Prismatic coeff. (Cp)	0.723		--	--
9	Block coeff. (Cb)	0.318			
10	Waterpl. area coeff. (Cwp)	0.676		--	--
11	1/2 angle of entrance	18	deg.	--	--
12	LCG from midships(+ve for'd)	-18.38	in	-18.38	-18.38
13	Transom area	0	in <sup>2</sup>	--	--
14	Transom wl beam	0	in	--	--
15	Transom draft	1.37	in	--	--
16	Max sectional area	108.54	in <sup>2</sup>	--	--
17	Bulb transverse area	0	in <sup>2</sup>	--	--
18	Bulb height from keel	0	in	--	--
19	Draft at FP	5	in	--	--
20	Deadrise at 50% LWL	15.4	deg.	15.4	15.4
21	Hard chine or Round bilge	Hard chine		--	--
22	Frontal Area	0	in <sup>2</sup>		
23	Headwind	0	kn		
24	Drag Coefficient	0			
25	Air density	0	lb/in <sup>3</sup>		
26	Appendage Area	0	in <sup>2</sup>		
27	Nominal App. length	0	in		
28	Appendage Factor	1			

29	Correlation allow.	0.0004		Varies with speed	Varies with speed
30	Kinematic viscosity	0.001841884	in <sup>2</sup> /s		
31	Water Density	0.04	lb/in <sup>3</sup>		
32	KB	3.42	in		
33	KG fluid	0	in		
34	BMt	59.69	in		
35	BML	694.14	in		
36	GMt corrected	63.11	in		
37	GML	697.56	in		
38	KMt	63.11	in		
39	KML	697.56	in		
40	Immersion (TPi)	0.09	Long Ton/in		



Graph View



Graph View

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	5	0.404	1.066	--	--	--	--
2	5.625	0.455	1.2	--	--	--	--
3	6.25	0.505	1.333	--	--	--	--
4	6.875	0.556	1.466	0.2	1.428	0.2	1.721
5	7.5	0.607	1.6	0.2	1.717	0.2	2.078
6	8.125	0.657	1.733	0.2	2.032	0.3	2.428
7	8.75	0.708	1.866	0.2	2.369	0.3	2.772
8	9.375	0.758	1.999	0.3	2.724	0.3	3.114
9	10	0.809	2.133	0.3	3.096	0.3	3.456
10	10.625	0.859	2.266	0.3	3.483	0.3	3.804
11	11.25	0.91	2.399	0.3	3.886	0.3	4.163
12	11.875	0.96	2.533	0.3	4.309	0.3	4.539
13	12.5	1.011	2.666	0.3	4.753	0.3	4.936
14	13.125	1.062	2.799	0.3	5.222	0.4	5.36
15	13.75	1.112	2.932	0.4	5.72	0.4	5.815
16	14.375	1.163	3.066	0.4	6.251	0.4	6.305
17	15	1.213	3.199	0.4	6.816	0.4	6.833
18	15.625	1.264	3.332	0.4	7.419	0.4	7.401
19	16.25	1.314	3.466	0.4	8.062	0.4	8.011
20	16.875	1.365	3.599	0.5	8.749	0.4	8.667
21	17.5	1.415	3.732	0.5	9.48	0.5	9.368
22	18.125	1.466	3.866	0.5	10.258	0.5	10.119
23	18.75	1.516	3.999	0.5	11.086	0.5	10.919
24	19.375	1.567	4.132	0.5	11.965	0.5	11.771
25	20	1.618	4.265	0.6	12.896	0.6	12.676
26	20.625	1.668	4.399	0.6	13.882	0.6	13.635
27	21.25	1.719	4.532	0.6	14.924	0.6	14.651
28	21.875	1.769	4.665	0.6	16.024	0.6	15.725
29	22.5	1.82	4.799	0.7	17.184	0.7	16.858
30	23.125	1.87	4.932	0.7	18.405	0.7	18.051
31	23.75	1.921	5.065	0.7	19.688	0.7	19.306
32	24.375	1.971	5.198	0.8	21.036	0.7	20.625
33	25	2.022	5.332	0.8	22.45	0.8	22.009
34	25.625	2.073	5.465	0.8	23.931	0.8	23.459
35	26.25	2.123	5.598	0.8	25.481	0.8	24.976

36	26.875	2.174	5.732	0.9	27.101	0.9	26.563
37	27.5	2.224	5.865	0.9	28.793	0.9	28.221
38	28.125	2.275	5.998	0.9	30.558	0.9	29.95
39	28.75	2.325	6.132	1	32.399	1	31.753
40	29.375	2.376	6.265	1	34.315	1	33.631
41	30	2.426	6.398	1.1	36.309	1	35.585

**FOR ENGINE POWER OF 25 HP, THE BOAT SPEED WILL BE APPROX. 25 KNOTS**