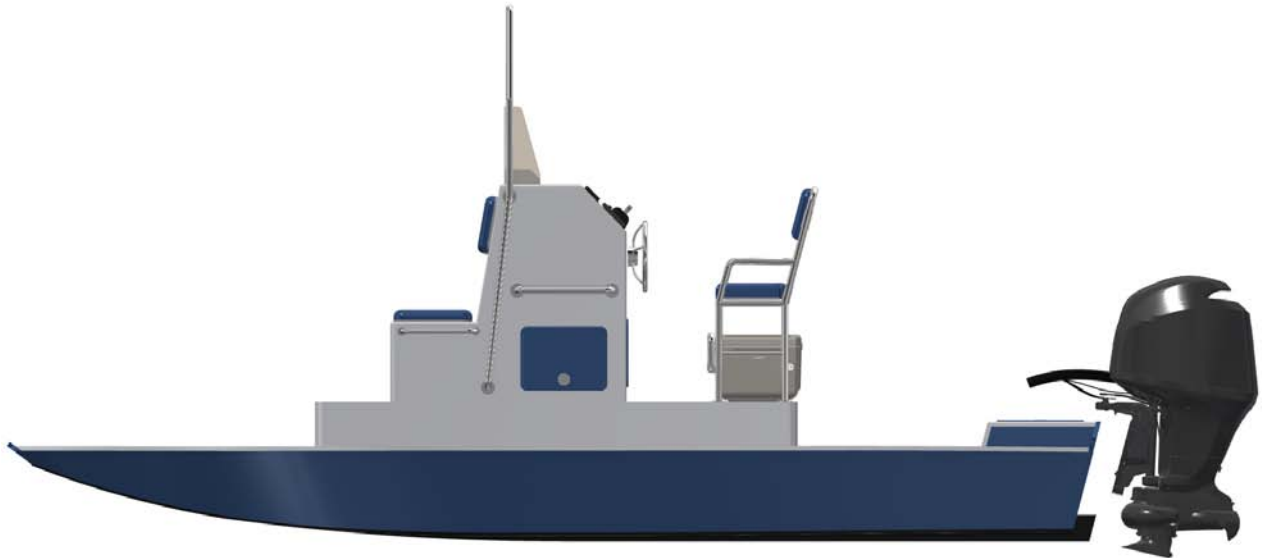



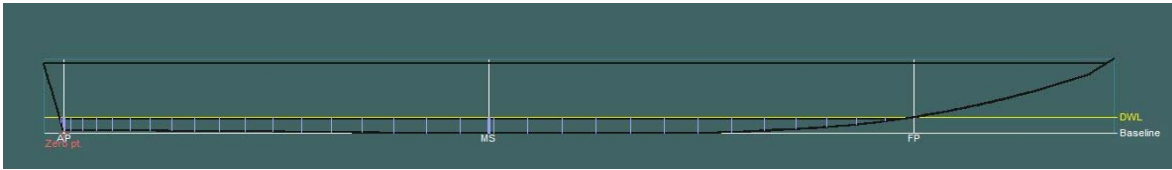
# POWERING ANALYSIS OF ROOSTERFISH BOAT-RF-190FB



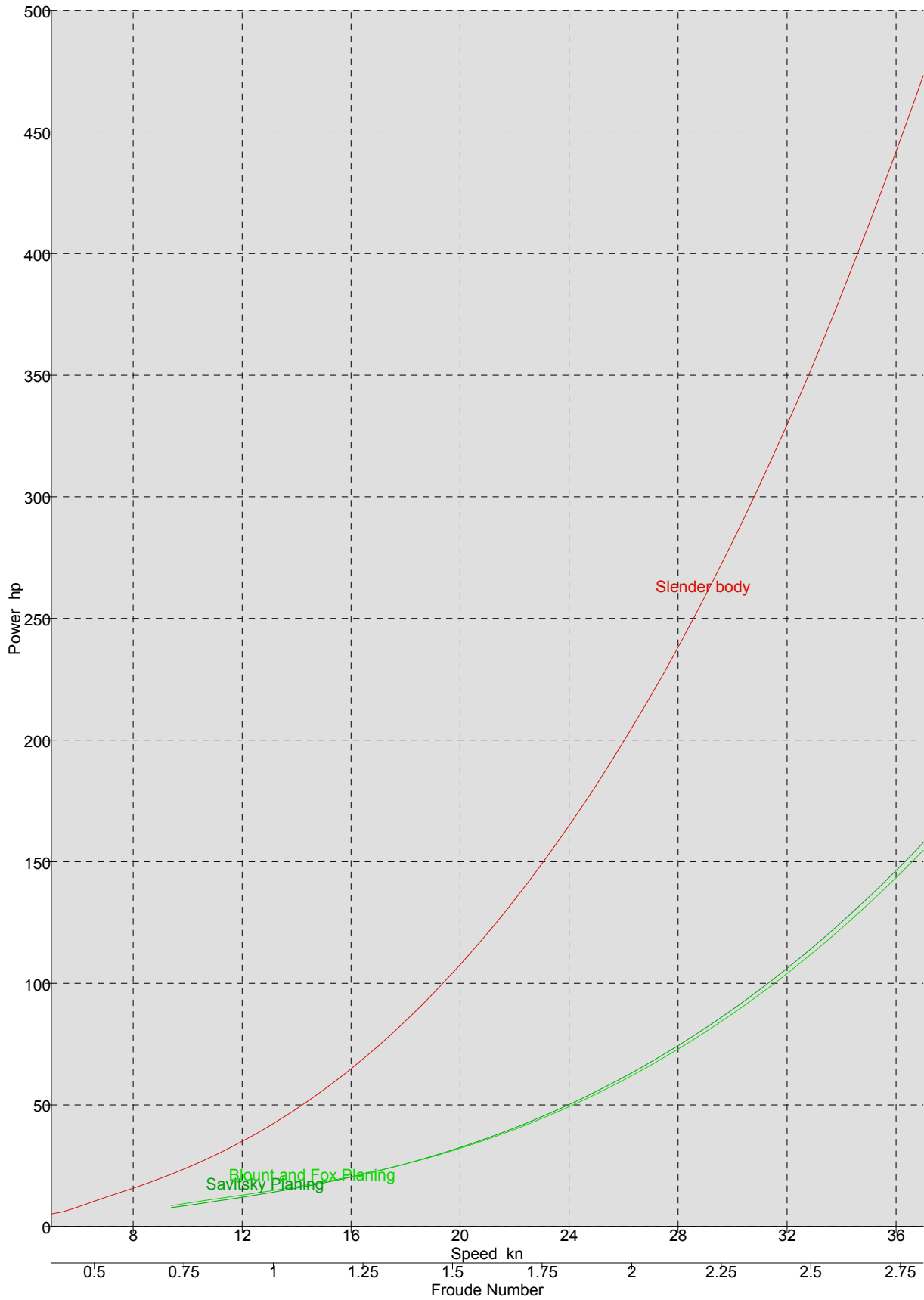
A		
0	31.05.2021	Issued based on 4" Draft and 115 & 150 HP Jet Power.
<b>REV.</b>	<b>DATE</b>	<b>REVISION MEMORANDUM</b>

IMO NO	TBD	DATE	31.05.2021
HULL NO	TBD	PROJECT	19 FOOT FLAT BOTTOM
CALCULATED BY	BADRUL ALAM	NAME OF CALCULATION  <b>POWERING ANALYSIS</b>	
CHECKED BY	SHAWN GRAY		
 <b>3D Engineered Boat Kits</b> <i>Green   Easy to Build   Global Delivery</i>		DOCUMENT NO.	RF-190FB -C01
		REV:	0

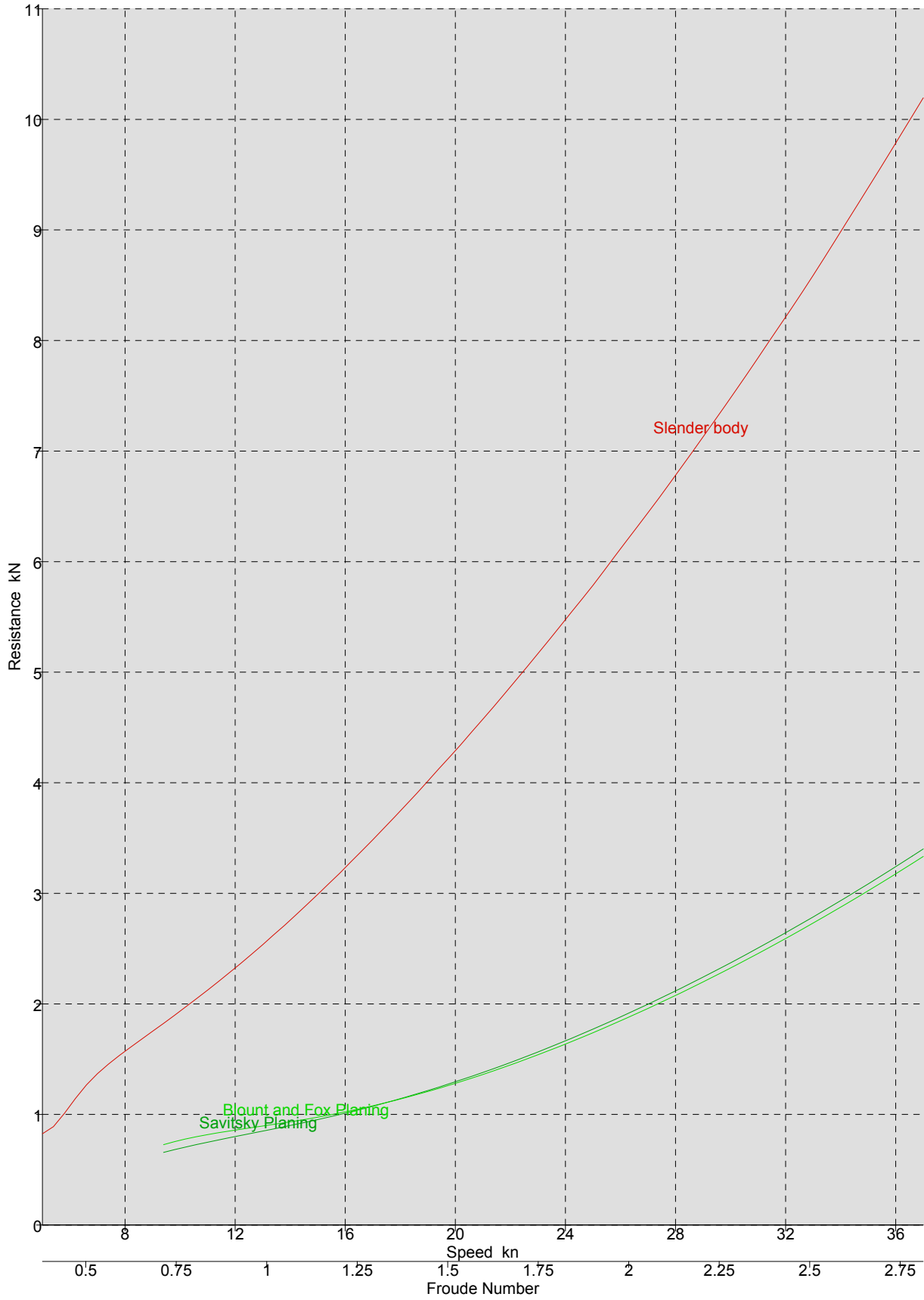
### Resistance and Power Prediction from Maxsurf 20 V8i



DATA					
	Item	Value	Units	Savitsky Planing	Blount and Fox Planing
1	LWL	183.69	in	183.69	183.69
2	Beam	87.49	in	87.49	87.49
3	Draft	4	in	--	--
4	Displacement	1625	lb		
5	Volume (displaced)	43872.88	in <sup>3</sup>		
6	Water Density	0.04	lb/in <sup>3</sup>		
7	Wetted area	17105.1	in <sup>2</sup>	--	--
8	Prismatic coeff. (Cp)	0.806		--	--
9	Waterpl. area coeff. (Cwp)	0.936		--	--
10	1/2 angle of entrance	29.1	deg.	--	--
11	LCG from midships(+ve for'd)	-5.58	in	-5.58	-5.58
12	Transom area	0.01	in <sup>2</sup>	--	--
13	Transom wl beam	75.28	in	--	--
14	Transom draft	0	in	--	--
15	Max sectional area	296.58	in <sup>2</sup>	--	--
16	Bulb transverse area	0	in <sup>2</sup>	--	--
17	Bulb height from keel	0	in	--	--
18	Draft at FP	4	in	--	--
19	Deadrise at 50% LWL	0	deg.	0	0
20	KB	2.24	in		
21	KG fluid	0	in		
22	BMt	194.1	in		
23	BML	906.62	in		
24	GMt corrected	196.34	in		
25	GML	908.86	in		
26	KMt	196.34	in		
27	KML	908.86	in		
28	Immersion (TPI)	0.248	Long Ton/in		



Graph View



Graph View

**Resistance and Power Prediction from Maxsurf 20 V8i**

<b>RESULTS</b>							
	<b>Speed (kn)</b>	<b>Froude No. LWL</b>	<b>Froude No. Vol.</b>	<b>Savitsky Planing resist. (kN)</b>	<b>Savitsky Planing Power (HP)</b>	<b>Blount and Fox Planing resist. (kN)</b>	<b>Blount and Fox Planing Power (HP)</b>
1	5	0.38	0.868	--	--	--	--
2	5.8	0.441	1.007	--	--	--	--
3	6.6	0.502	1.145	--	--	--	--
4	7.4	0.563	1.284	--	--	--	--
5	8.2	0.624	1.423	--	--	--	--
6	9	0.684	1.562	--	--	--	--
7	9.8	0.745	1.701	0.7	8.377	0.8	9.273
8	10.6	0.806	1.839	0.7	9.67	0.8	10.626
9	11.4	0.867	1.978	0.8	11.005	0.8	11.94
10	12.2	0.928	2.117	0.8	12.392	0.9	13.251
11	13	0.989	2.256	0.8	13.848	0.9	14.599
12	13.8	1.05	2.395	0.9	15.396	0.9	16.02
13	14.6	1.11	2.534	0.9	17.057	1	17.546
14	15.4	1.171	2.672	1	18.851	1	19.203
15	16.2	1.232	2.811	1	20.794	1	21.013
16	17	1.293	2.95	1.1	22.902	1.1	22.993
17	17.8	1.354	3.089	1.1	25.189	1.1	25.156
18	18.6	1.415	3.228	1.2	27.667	1.2	27.515
19	19.4	1.475	3.367	1.2	30.346	1.2	30.08
20	20.2	1.536	3.505	1.3	33.238	1.3	32.861
21	21	1.597	3.644	1.4	36.352	1.4	35.866
22	21.8	1.658	3.783	1.5	39.696	1.4	39.105
23	22.6	1.719	3.922	1.5	43.281	1.5	42.584
24	23.4	1.78	4.061	1.6	47.113	1.6	46.312
25	24.2	1.84	4.2	1.7	51.203	1.7	50.296
26	25	1.901	4.338	1.8	55.557	1.7	54.542
27	25.8	1.962	4.477	1.9	60.183	1.8	59.06
28	26.6	2.023	4.616	2	65.09	1.9	63.855
29	27.4	2.084	4.755	2	70.286	2	68.934
30	28.2	2.145	4.894	2.1	75.777	2.1	74.306
31	29	2.206	5.033	2.2	81.572	2.2	79.976
32	29.8	2.266	5.171	2.3	87.677	2.3	85.953
33	30.6	2.327	5.31	2.5	94.101	2.4	92.243
34	31.4	2.388	5.449	2.6	100.851	2.5	98.854
35	32.2	2.449	5.588	2.7	107.935	2.6	105.792
36	33	2.51	5.727	2.8	115.359	2.7	113.065
37	33.8	2.571	5.865	2.9	123.132	2.8	120.679
38	34.6	2.631	6.004	3	131.259	3	128.643
39	35.4	2.692	6.143	3.1	139.75	3.1	136.962
40	36.2	2.753	6.282	3.3	148.611	3.2	145.644
41	37	2.814	6.421	3.4	157.849	3.3	154.697

**FOR JET POWER OF 115 HP, THE BOAT SPEED WILL BE APPROX. 33 KNOTS  
FOR JET POWER OF 150 HP, THE BOAT SPEED WILL BE APPROX. 36 KNOTS**