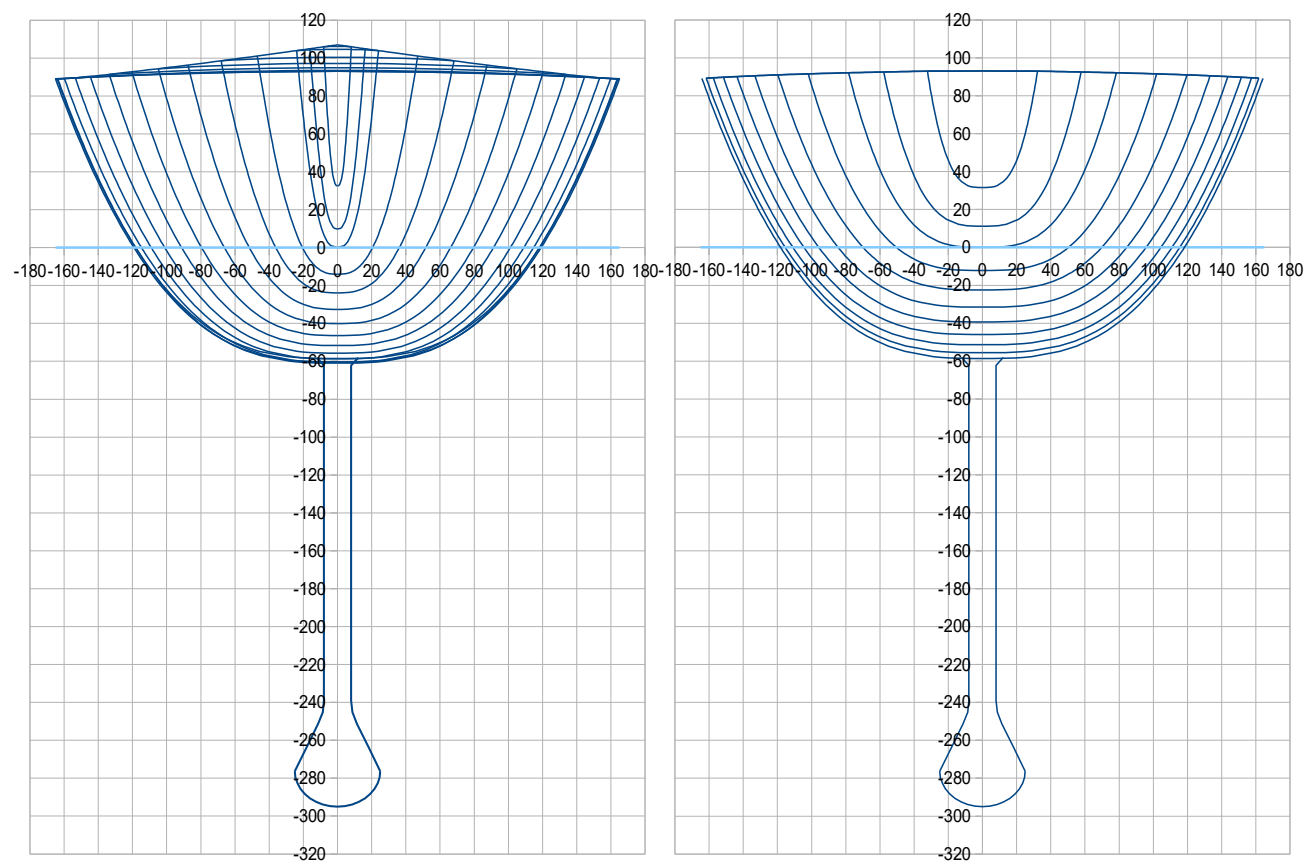
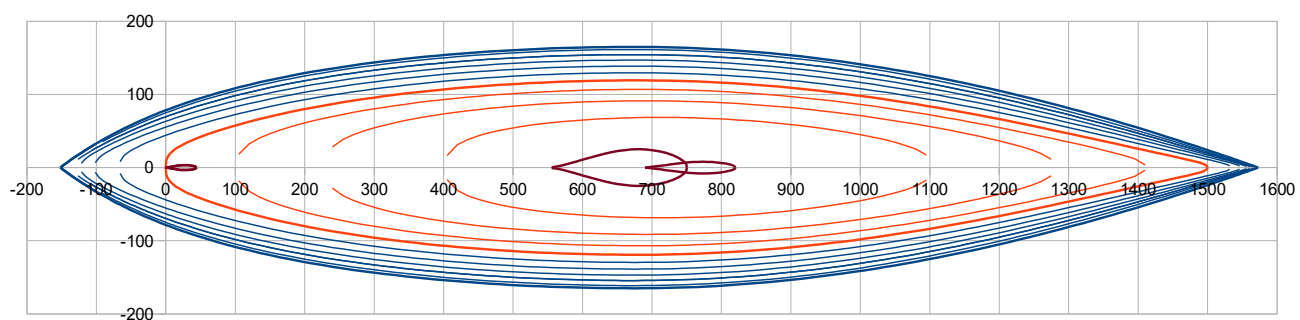
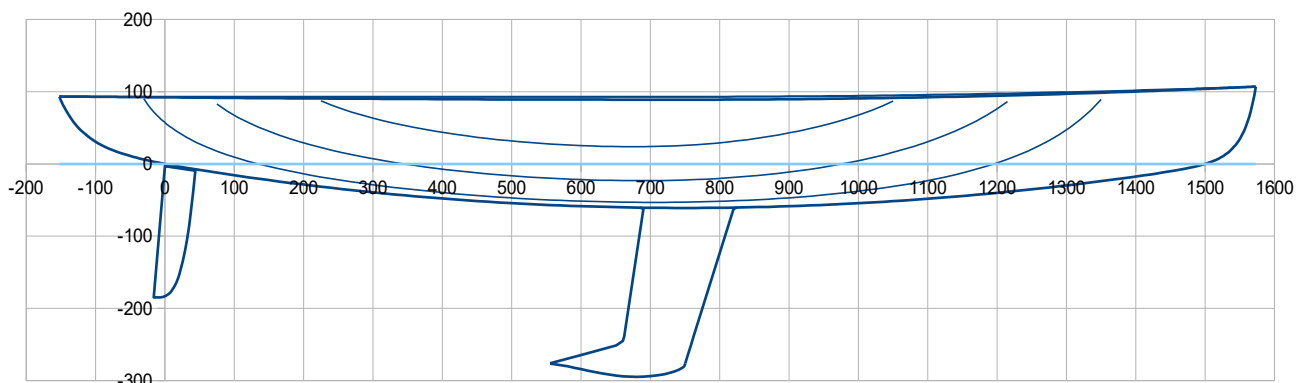


**mcm project approach with L/B 5, by « Gene-Hull VE double-ended »**

>>> 2D views (unity : cm, Origin at waterline rear perpendicular) :



>>> Hydrostatics and other output :

**2.1 Hull**

Loa (m)	17,25	Lwl (m)	15,00	> Lwl/D^(1/3)	7,26				
>> ft	56,59		49,21						
B (m)	3,30	at X (% Lwl)	45,0						
>> ft	10,83								
Bwl (m)	2,38	at X (% Lwl)	45,0	> Bwl / B	0,722				
>> ft	7,82								
Tc (m)	0,61	at X (%Lwl)	50			Freeboards (m) >	Aft	Midship	Fore
>> ft	2,00					>> ft	0,93	0,89	1,07
							3,05	2,92	3,51
Displacement at H0 (m3)	8,82912	at Xc (m)	7,144	Xc (%Lwl)	47,63		Zc (m)	-0,22	
>> lbs	19951	w. seawater	1025	kg/m3			>> ft	-0,72	
Displacement at H-3cm (m3)	8,09309	at Xc (m)	7,161	Xc (%Lwl)	47,74		Zc (m)	-0,21	
Displacement at H+3cm (m3)	9,59267	at Xc (m)	7,124	Xc (%Lwl)	47,49		Zc (m)	-0,23	
Cp (%)	55,34								
Sf (m2)	25,09	at Xf (m)	6,918	Xf (%Lwl)	46,12	>>> Xc – Xf (%Lwl)			1,51
>> ft2	270,09	>> ft	22,70						
Angle immersed sheer li (°)	28,5	at section C4 (40% Lwl)							
Sw (m2)	29,25	>Sw/D^(2/3)	6,85						
>> ft2	314,89								
Shull (m2)	63,72	at X (m)	706,54	Z (m)	0,08				
>> ft2	685,92	>> ft	2318,04	>> ft	0,26				
Sdeck (m2)	39,15	at X (m)	674,41						
>> ft2	421,39	>> ft	2212,63						

**2.2 Keel Bulb**

Vol. Keel (m3)	0,21023	at X (m)	7,444	X (%Lwl)	49,63	Z (m)	-1,45	
Mass keel(kg)	1650,3	>> ft	24,42			>> ft	-4,75	
>> lbs	3638							
Vol. Bulb(m3)	0,17336	at X (m)	6,872	X (%Lwl)	45,81	Z (m)	-2,72	
Mass bulb(kg)	1967,7	>> ft	22,54			>> ft	-8,92	
>> lbs	4338							
Draft oa (m)	2,95	Sw (m2)	7,56	Sxz (m2)	2,59			
>> ft	9,68	>> ft2	81,36	>> ft2	27,84			
LCR (m)	7,68	method : keel profile extended to the waterline, 25% c at 45% draft oa						
>> ft	25,18							

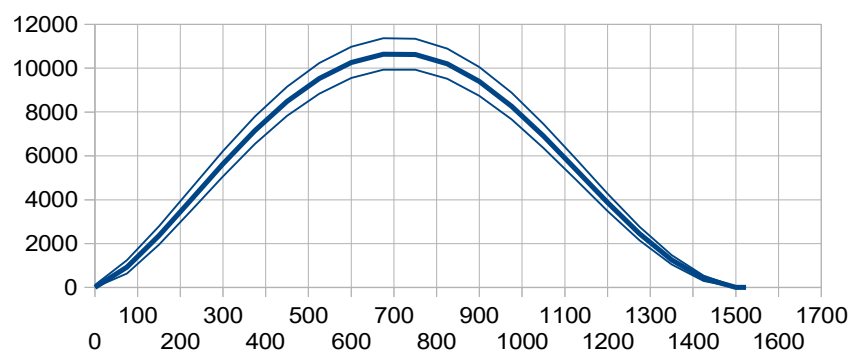
**2.3 Rudder(s)**

Number	1							
Volume (m3)	0,02671	at X (m)	0,168	X (%Lwl)	1,12	Z (m)	-0,82	
Sw (m2)	1,45					Sxz (m2)	0,70	per rudder
>> ft2	15,60					>> ft2	7,50	

**2.4 Hull + Keel Bulb + Rudder(s)**

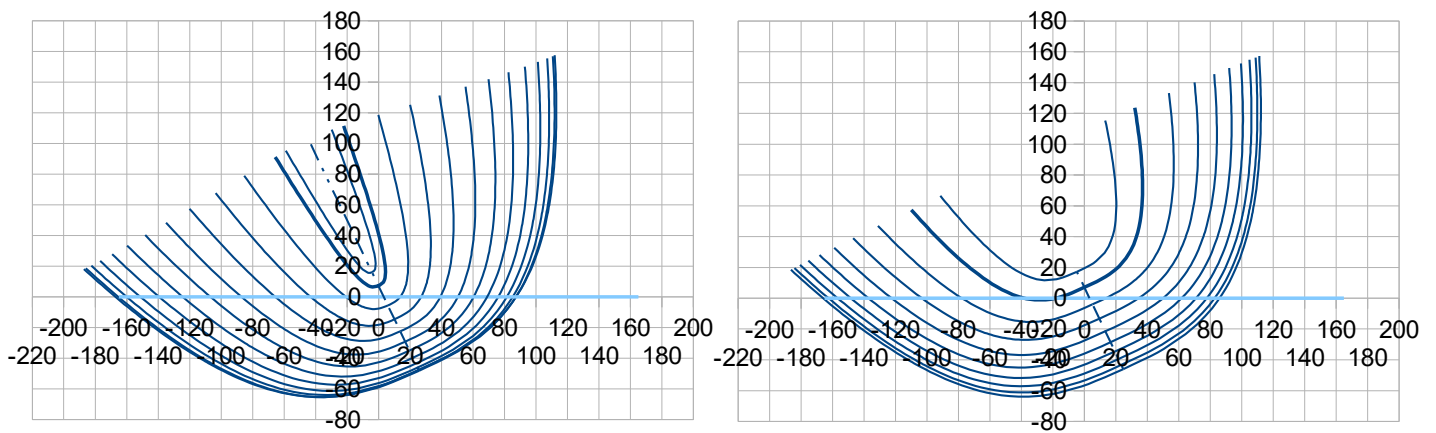
Displacement at H0 (m3)	9,23943	at Xc (m)	7,125	Xc (%Lwl)	47,50	Zc (m)	-0,30	
(kg)	9470	>> ft	23,38			>> ft	-0,97	
>> lbs	20878							
Ballast (kg)	3618	at Xg (m)	7,133	Xg (%Lwl)	47,55	Zg (m)	-2,14	
>> lbs	7976	>> ft	23,40			>> ft	-7,02	
>> % Ballast	38,2							
Sw (m2)	33,65	>Sw/D^(2/3)	7,64					
>> ft2	362,25							

Aeras of sections at design waterline H0, at H0-3cm and H0+3cm



>>> Hydrostatic of the hull with 25° heel (at constant displacement, and fixed trim 0°) :

Data to enter		Results						
Heel (°)	25,0	Disp. Heel 0°	8,82912					
Height (cm)	7,8073	> Disp. (m3)	8,82913	Mom (m4)	2,840	Mom (kN.m)	28,55	
		Xc (m)	7,02	/ Xc Heel 0°	7,14	>>> Xc 0° - Xc 20° (% Lwl)		0,80
		Yc (m)	-0,32	/ Yc Heel 0°	0,00			
		Zc (m)	-0,22	/ Zc Heel 0°	-0,22			
		Sw (m2)	29,89	/ Sw Heel 0°	29,25			



Righting Moment (m4) per volumes inter sections

