

BOAT Name CREMISE Sail Nr ESP-5158	GPH 709,5	HULL Length Overall 9,800m Maximum Beam 2,974m Displacement 5.346kg Draft 1,683m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,566% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class RANGER 32 Designer GARY MULL Builder RANGER YACHTS Series 04/1977 Age 04/1977 Age Allowance 0,487% Offset File CREM1.OFF - 11/03/2002 15:48:00 Measurement by TMONTANER - 12/04/2005		IMSL 8,299m VCGD 0,096m Sink 14,75kg/mm RL 6,439m VCGM 0,019m WS 20,96m² LSM0 8,379m Displacement/Length ratio 9,0877



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	688,7			766,7		
Time on Time	0,8713			0,8804		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	814,2	628,0	563,4	1040,7	773,0	670,6
Time on Time	0,8290	1,0748	1,1980	0,6486	0,8732	1,0066

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1194,3	1005,7	897,0	832,2	806,0	794,2	793,5
52°	788,7	674,0	601,2	570,6	557,6	552,4	549,8
60°	751,9	642,0	580,4	555,8	543,2	537,3	533,7
75°	725,5	618,0	566,6	543,8	529,8	519,5	509,5
90°	732,6	620,3	559,1	538,2	525,7	512,3	491,0
110°	728,6	602,1	548,3	523,4	504,3	491,0	475,7
120°	745,8	615,1	553,8	526,3	504,8	484,6	457,9
135°	809,6	668,5	578,6	541,5	518,7	497,5	457,7
150°	944,8	755,7	644,5	573,0	541,0	519,9	480,6
Run VMG	1091,0	871,8	742,6	651,2	588,1	550,5	509,0

Certificate
Number **515801**
ORC Ref **ESP00027418**
Issued On **24/01/2018**
VPP Ver. **2018 1.00**
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Crew Weight

Default	535kg
Maximum	480kg
Minimum*	360kg
*when applied by the NoR and SI	
Non Manual Pwr	No

Special Scoring

	ToD	ToT
Double H.GPH	711,8	0,8429
Double H.OSN	692,4	0,8665
Non Spin GPH	742,3	0,8083
Non Spin OSN	718,4	0,8352

Selected Courses							
Windward / Leeward	1142,6	938,8	819,8	741,7	697,0	672,3	651,3
Circular Random	975,4	788,6	688,4	630,4	595,6	573,9	549,5
Coastal / Long Distance	1137,5	882,7	738,0	649,4	605,3	573,1	524,4
Non Spinnaker	1034,0	830,3	719,5	654,3	614,4	589,3	560,7

Sails Limitations

Headsails	5	Spinnakers	3
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Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42,6°	41,0°	41,5°	41,5°	40,8°	40,5°	40,9°
Beat VMG	3,01	3,58	4,01	4,33	4,47	4,53	4,54
52°	4,56	5,34	5,99	6,31	6,46	6,52	6,55
60°	4,79	5,61	6,20	6,48	6,63	6,70	6,75
75°	4,96	5,83	6,35	6,62	6,79	6,93	7,07
90°	4,91	5,80	6,44	6,69	6,85	7,03	7,33
110°	4,94	5,98	6,57	6,88	7,14	7,33	7,57
120°	4,83	5,85	6,50	6,84	7,13	7,43	7,86
135°	4,45	5,38	6,22	6,65	6,94	7,24	7,87
150°	3,81	4,76	5,59	6,28	6,65	6,92	7,49
Run VMG	3,30	4,13	4,85	5,53	6,12	6,54	7,07
Gybe Angles	147,6°	151,8°	152,0°	157,8°	180,0°	180,0°	180,0°

Class Division Length
CDL = **7,369**

Storm Sails Areas


Heavy Weather Jib	21,60
Storm Jib (JL=8,22)	8,00
Storm Triesail	5,86

Owner

BOAT	
Name CREMISE	Sail Nr ESP-5158
File E5158	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining		Flotation date 04/10/2010 SG 1,0250	
FFM 1,110	FF 1,115	SFFP 0,540	
FAM 0,930	FA 0,930	SAFP 9,080	
W1 49,5	PD1 416,2	WD 10,270	
W2 49,5	PD2 415,2	GSA 1,0	
W3 49,5	PD3 4117,4	RSA 1,0	
W4 49,5	PD4 418,0	PLM 9000,0	
LCF from stem on CL / on sheer		5,605 / 5,770	
Maximum beam station from stem		5,960	
RM Measured		74,5kg·m	
RM Default		79,1kg·m	
Limit of positive stability / Stab.Index		117,7° / 123,4	
Freeboard at mast at 4,190		1,017	

RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 11,190	E 2,990	MDT1 0,127	MW 0,153
IG 12,650	J 4,060	MDL1 0,198	GO 0,153
ISP 12,610	SFJ 0,130	MDT2 0,120	BD 0,150
BAS 1,250	SPL 4,060	MDL2 0,153	MWT
FSP 0,060	TPS 4,060	TL 3,430	MCG



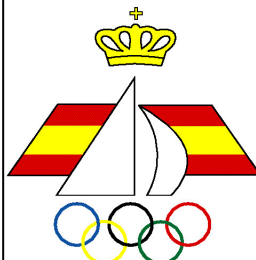
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IMS Measurement Certificate

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0,380		
Type Folding 2 blades	PBW		
Twin Screw No	PIPA 0,0047		
PSA 19,400	PHL 0,130	ST3 0,085	ESL 0,680
PSD 0,025	ST1 0,100	ST4 0,045	
PHD 0,070	ST2 0,080	ST5 0,190	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0,070	0,63	1,15	1,96	2,53	20,13 20,39 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	74,66 SL · (SFL + 4·SHW) / 6
	12,92	12,92	12,92	6,98	6,75	
Asymmetric	Not Available					

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0,11	0,74	1,41	2,82	4,33	5,92	12,40	35,94			18/10/2012		

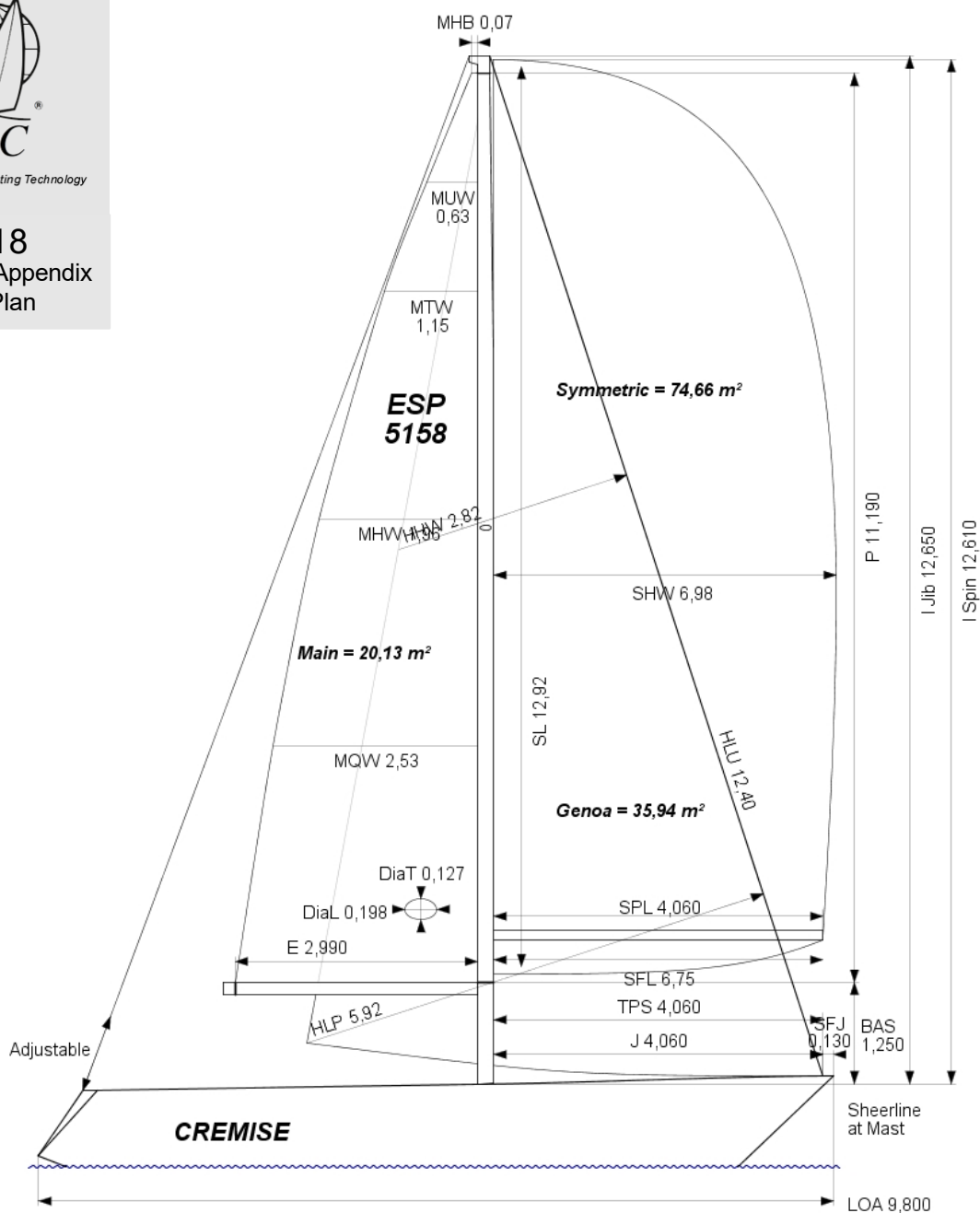
MEASUREMENT INVENTORY				
Measurer JJBELTRAN				
Date 04/10/2010				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Anchor	47,0	4,08	ANCLA-
4	Chain	3,0	4,08	CADENA
4	Tools	7,0	5,90	
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	BUOKH	DU2011	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
1	Battery	44,0	6,81	2 BATERIAS



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,070	0,63	1,15	1,96	2,53	20,09	jjbeltran	18/10/2012			

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,11	0,74	1,41	2,82	4,33	5,92	12,40	146%	35,94			jjbeltran	18/10/2012			

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	12,92	12,92	12,92	6,98	6,75	74,66					* Copied from legacy *

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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