

BOAT Name SHAMAL Sail Nr ESP-7815	GPH 614,4	HULL Length Overall 11,310m Maximum Beam 3,672m Displacement 7.452kg Draft 2,340m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,201% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class GRAND SOLEIL 37 BC Designer BOTIN/CARKEEK Builder DEL PARDO Series 01/2005 Age 01/2007 Age Allowance 0,455% Offset File GS37BC.OFF - 17/05/2005 13:06:00 Measurement by - 11/09/2015		IMSL 10,452m VCGD 0,334m Sink 22,40kg/mm RL 9,099m VCGM 0,234m WS 28,82m² LSM0 10,311m Displacement/Length ratio 6,7978



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	597,1			664,1		
Time on Time	1,0049			1,0164		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	703,9	544,3	486,9	907,7	668,4	576,9
Time on Time	0,9590	1,2402	1,3863	0,7436	1,0098	1,1700

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1017,3	848,6	750,0	700,0	682,6	675,1	659,0
52°	671,3	570,7	515,3	494,1	486,7	483,3	477,6
60°	636,9	545,1	501,2	482,8	474,7	471,0	466,9
75°	610,7	526,7	491,1	473,0	461,2	453,3	447,0
90°	617,2	526,8	484,4	468,7	455,5	442,5	423,5
110°	626,5	520,9	479,0	456,9	438,2	425,5	408,2
120°	646,9	533,8	484,7	460,7	440,3	420,2	392,3
135°	717,3	586,4	511,3	477,3	455,9	435,3	394,9
150°	851,4	677,4	574,9	510,2	478,4	458,0	419,1
Run VMG	983,1	782,2	663,2	582,8	526,9	488,7	447,6

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Number **781501**
ORC Ref **ESP00002210**
Issued On **14/01/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight
Default **719kg**
Maximum **715kg**
Minimum* **536kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	623,1	0,9630
Double H.OSN	607,0	0,9884
Non Spin GPH	643,4	0,9325
Non Spin OSN	624,0	0,9615

Selected Courses							
Windward / Leeward	1000,2	815,4	706,6	641,4	604,8	581,9	553,3
Circular Random	844,5	682,7	596,1	546,2	515,7	495,9	470,6
Coastal / Long Distance	998,5	766,5	637,3	562,4	525,3	497,2	452,1
Non Spinnaker	897,5	719,8	623,4	566,9	532,2	509,8	481,7

Sails Limitations

Headsails	Spinnakers
5	3

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	42,2°	40,4°	40,0°	38,9°	38,0°	37,7°	37,2°
Beat VMG	3,54	4,24	4,80	5,14	5,27	5,33	5,46
52°	5,36	6,31	6,99	7,29	7,40	7,45	7,54
60°	5,65	6,60	7,18	7,46	7,58	7,64	7,71
75°	5,89	6,84	7,33	7,61	7,81	7,94	8,05
90°	5,83	6,83	7,43	7,68	7,90	8,14	8,50
110°	5,75	6,91	7,52	7,88	8,22	8,46	8,82
120°	5,56	6,74	7,43	7,82	8,18	8,57	9,18
135°	5,02	6,14	7,04	7,54	7,90	8,27	9,12
150°	4,23	5,31	6,26	7,06	7,53	7,86	8,59
Run VMG	3,66	4,60	5,43	6,18	6,83	7,37	8,04
Gybe Angles	144,6°	149,6°	151,7°	156,2°	173,8°	180,0°	180,0°

Class Division Length
CDL = **9,776**

Storm Sails Areas

Heavy Weather Jib	30,93
Storm Jib (JL=9,84)	11,46
Storm Trysail	13,92

Owner

BOAT	
Name SHAMAL	Sail Nr ESP-7815
File E7815	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
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 15,150	E 5,250 MDT1 0,111 MW 0,201
IG 15,065	J 4,100 MDL1 0,201 GO 0,220
ISP 15,165	SFJ 0,245 MDT2 0,110 BD 0,161
BAS 1,580	SPL 4,265 MDL2 0,160 MWT
FSP 0,066	TPS TL 0,650 MCG

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 08/06/2015		SG 1,0270
FFM 1,345	FF 1,344	SFFP 0,254
FAM 1,081	FA 1,081	SAFP 10,708
W1 93,0	PD1 561,2	WD 11,430
W2 93,0	PD2 562,5	GSA 1,0
W3 93,0	PD3 562,7	RSA 1,0
W4 93,0	PD4 561,7	PLM 9000,0
LCF from stem on CL / on sheer		6,245 / 6,501
Maximum beam station from stem		7,326
RM Measured		148,9kg-m
RM Default		179,9kg-m
Limit of positive stability / Stab.Index		104,8° / 108,9
Freeboard at mast at 4,345		1,164



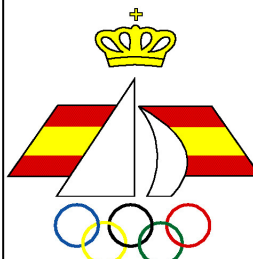
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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,400	
Type Folding 2 blades	PBW	
Twin Screw	PIPA 0,0035	
ST1 0,042	ST3 0,180	ST5 0,300
ST2 0,180	ST4 0,112	EDL 2,400

COMMENTS

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0,190	1,12	1,96	3,32	4,36	46,90 47,79 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	Area Formula
	15,29	15,29	15,29	7,30	7,20	92,76 SL · (SFL + 4·SHW) / 6
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
0,12	0,73	1,33	2,40	3,40	4,31	15,10	35,02	Y		02/06/2016	Unknow	

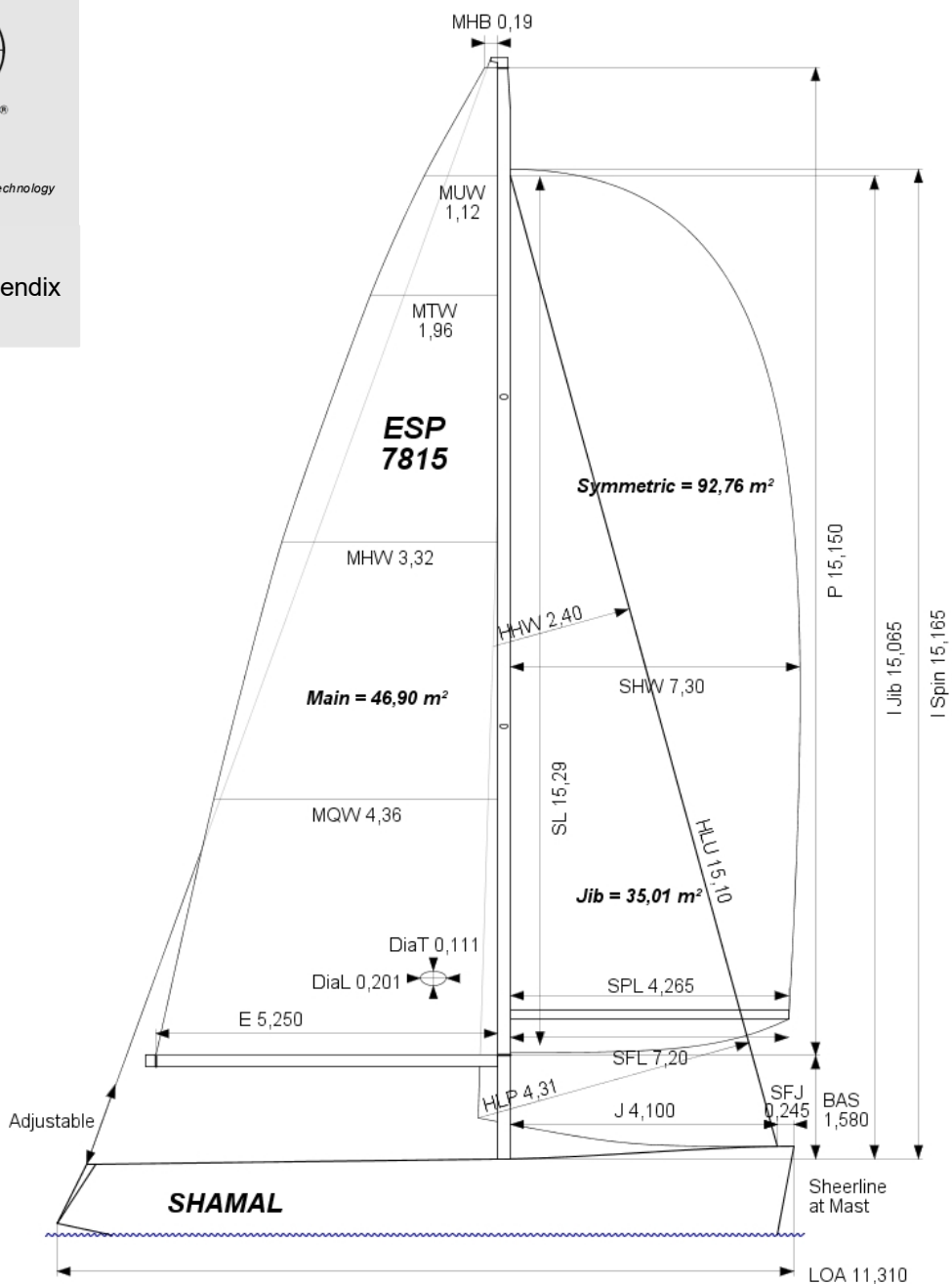
MEASUREMENT INVENTORY				
Measurer ESP 24				
Date 08/06/2015				
Comment RCRC calma-tangones				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,19	1,12	1,96	3,32	4,36	46,90		02/06/2016		Unknown	

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,12	0,73	1,33	2,40	3,40	4,31	15,10	105%	35,02	Y			02/06/2016		Unknown	

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	15,29	15,29	15,29	7,30	7,20	92,76		02/06/2016		Unknown	

ASYMMETRIC SPINNAKERS (0)

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