



World Leader in Rating Technology

2016 ORC Club Certificate

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας

Certificate
 Number **000930**
 Issued On **2/5/2016**
 ORC Ref **GRE01005755**
 VPP Ver. **2016 1.01**
 Valid until **28/2/2017**

Crew Weight
 Declared **400kg**
 Default* **500kg**
 Non Manual Pwr **No**

Special Scoring

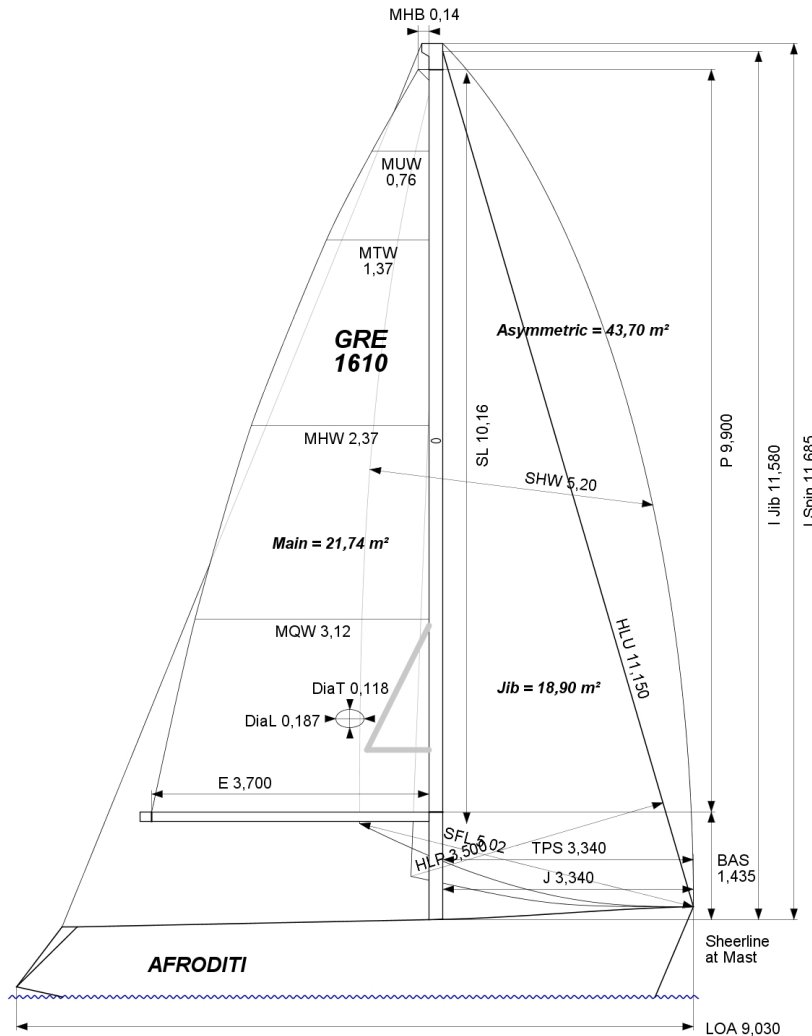
	ToD	ToT
Non Spin GPH	796,1	0,7537
Non Spin OSN	766,4	0,7829
N/S Perf. Line	-22,6	0,457

Sails Limitations
 Headsails **5** Spinnakers **3**
Dacron Sails
 Spinnaker configuration
 Symmetric: **No**
 Asymmetric: **Yes 46,27**
 Flying H/S: **No**
 Spin. Pole: **No**

Class Division Length
 CDL = **6,688**

Stability
 LPS (Estimated): **109,7°**
 Stability Index: **108,8**
 OSR Category: **N/A**

Owner



BOAT		GPH		HULL		
Name	AFRODITI		765,1	Data File	GR1610.dxt LOA 9,030m	
Sail Nr	GRE-1610			Offset File	DU30CLAS.off MB 3,040m	
				Displacement	3.497kg Draft 1,556m	
CLASS				IMS Division	Cruiser/Racer Dynamic All. 0,360%	
Class	DUFOUR 30 CLASSIC			Fwd Accom.	Yes Construction Solid	
Designer	J&J DESIGN			Fiber Rigging	No Aramid Core No	
Builder	DUFOUR			Crew Arm Ex	Carbon Rudder No	
Series	01/1996			Light Stanchions No		
Age Date	01/1998			IMSL	8,103m VCGD 0,086m Sink 14,46kg/mm	
Age Allowance	0,488%			RL	5,271m VCGM 0,127m WS 18,55m²	
COMMENTS				LSM0	7,994m Displacement/Length ratio 6,8455	
				Water Ballast	0 Trim Tab No	
PROPELLER				CENTERBOARD		
Installation	Strut	PRD	0,370	N/A		
Type	Solid 3 blades	PIPA	0,0166			
SCORING OPTIONS						
Time On Distance	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Time	742,1			840,6		
Performance Line	0,8085			0,8030		
Triple Number	PLT	PLD		PLT	PLD	
	0,492	-7,4		0,574	110,9	
Triple Number	Low	Medium	High	Low	Medium	High
	0,7397	1,0079	1,1741	0,5633	0,7899	0,9566

BOAT	
Name AFRODITI	Sail Nr GRE-1610
File GR1610.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Club Estimated VCG		
Flotation date 22/05/2014		SG
FFM 1,176	FF 1,174	SFFP 0,787
FAM 0,938	FA 0,945	SAFP 8,221
LCF from stem on CL / on sheer		4,905 / 5,135
Maximum beam station from stem		5,183
RM Measured		75,4kg·m
RM Default		74,0kg·m
Limit of positive stability / Stab.Index		109,7° / 108,8
Freeboard at mast at 3,340		1,034

RIG				
Forestay Tension Fixed	Spreaders 1			
Inner Stay None Fitted	Runners 0			
Carbon Mast No	Jumper Struts None			
Taper Hollows No	Jib Furler Yes			
Fiber Rigging No	Main Furler Yes			
Lenticular Rigging No	Without Backstay No			
Articulated Bowsprit No				
P 9,900	E 3,700	MDT1 0,118	MW	
IG 11,580	J 3,340	MDL1 0,187	GO	
ISP 11,685	SFJ	MDT2	BD	
BAS 1,435	SPL	MDL2	MWT	
FSP -3,000	TPS 3,340	TL -3,000	MCG	



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2016
Measurements
Datasheet

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,370	
Type Solid 3 blades	PBW	
Twin Screw No	PIPA 0,0166	
ST1	ST3	ST5
ST2	ST4	EDL

COMMENTS

MOVEABLE BALLAST		
N/A		

CENTERBOARD		
N/A		

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,144	0,76	1,37	2,37	3,12	21,74	22,23	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area (r)		AS · (SFL + 4·SHW) / 6	
	10,38	9,93	10,15	5,20	5,02	43,70 46,27			

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
0,05	0,40	0,79	1,64	2,56	3,50	11,15	18,90			12/09/2012	Dacron	

MEASUREMENT INVENTORY				
Measurer THEODOSIS GRE-33				
Date 22/05/2014				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	YANMAR	2GM20FC	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condn</i>	<i>Description</i>
1	Tank	WATER	PLASTIC	180,0	2,00			
2	Tank	FUEL	PLASTIC	80,0	6,50		40,0	
3	Tank	HOLDING	METAL	80,0	6,50			
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery	28,0	6,50	100Ah				
2	Battery	23,0	6,50	70 Ah				
1	Misc	12,0	0,80	WINDLASS				
2	Misc	26,5	8,60	CALORIFIER				
3	Misc	5,0	7,00	BATTERY CHARGER				
4	Misc	10,0	5,00	REFRIGERATOR				



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ORC Club Certificate Appendix

BOAT

Name **AFRODITI** Certificate Number **000930**
 Sail Nr **GRE-1610** Issued On **2/5/2016**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1448,6	1171,7	1022,3	919,7	847,8	820,9	819,4
52°	915,1	749,9	656,7	595,6	563,8	550,8	547,3
60°	843,9	698,8	613,0	567,4	544,3	531,8	525,9
75°	787,1	655,4	581,4	548,1	528,6	512,8	492,5
90°	777,8	634,9	562,7	531,7	512,1	503,8	478,8
110°	773,9	632,7	561,9	530,9	506,9	482,6	448,4
120°	805,8	655,6	573,2	537,7	513,4	489,4	444,7
135°	899,6	719,3	614,0	558,6	530,5	507,8	463,8
150°	1054,5	827,2	702,3	622,1	574,8	546,1	507,8
Run VMG	1217,7	955,1	811,0	718,4	651,2	591,1	532,7

Selected Courses

Windward / Leeward	1333,1	1063,4	916,6	819,1	749,5	706,0	676,0
Circular Random	1086,1	863,7	740,6	666,4	619,7	589,6	555,8
Ocean for PCS	1341,5	1020,9	836,8	721,9	646,4	594,3	525,7
Non Spinnaker	1148,1	905,1	769,3	687,0	635,0	601,9	565,7

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	46,5°	45,3°	44,6°	44,6°	43,4°	42,5°	42,8°
Beat VMG	2,49	3,07	3,52	3,91	4,25	4,39	4,39
52°	3,93	4,80	5,48	6,04	6,39	6,54	6,58
60°	4,27	5,15	5,87	6,34	6,61	6,77	6,84
75°	4,57	5,49	6,19	6,57	6,81	7,02	7,31
90°	4,63	5,67	6,40	6,77	7,03	7,15	7,52
110°	4,65	5,69	6,41	6,78	7,10	7,46	8,03
120°	4,47	5,49	6,28	6,70	7,01	7,36	8,09
135°	4,00	5,01	5,86	6,45	6,79	7,09	7,76
150°	3,41	4,35	5,13	5,79	6,26	6,59	7,09
Run VMG	2,96	3,77	4,44	5,01	5,53	6,09	6,76
Gybe Angles	145,2°	146,0°	145,7°	146,5°	179,9°	179,9°	180,0°