

BOAT Name VELOS Sail Nr GRE-440	GPH 544.6	HULL Length Overall 12.795m Maximum Beam 3.196m Displacement 6,391kg Draft 2.854m Plan Review IMS Reg. Division Performance Dynamic Allowance 0.000% Hull Construction Light Carbon Rudder Yes Crew Arm Extension
GENERAL Class IMS 43 Designer FARR Builder COOKSON Series 05/2002 Age 05/2002 Age Allowance 0.487% Offset File ATALAN14.OFF - 03/05/2002 10:23:34 Measurement by - 17/09/2003		IMSLS 11.605m VCGD -0.408m Sink 21.50kg/mm RL 11.122m VCGM -0.439m WS 30.14m² LSM0 11.344m Displacement/Length ratio 4.3779



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC International
Certificate

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



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	531.9			595.8		
Time on Time	1.1281			1.1329		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	612.6	486.2	434.4	793.7	600.1	525.0
Time on Time	1.1018	1.3882	1.5537	0.8505	1.1248	1.2857

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	851.7	708.8	655.0	633.2	622.0	612.6	606.2
52°	563.1	481.3	458.0	449.3	444.8	442.6	435.5
60°	534.1	465.9	445.4	436.9	431.9	428.7	420.2
75°	512.9	456.4	433.8	419.0	410.4	404.7	399.0
90°	518.9	458.4	433.1	412.2	394.6	382.3	370.4
110°	557.4	465.7	431.2	406.0	390.6	376.0	347.5
120°	577.6	475.2	437.1	408.2	380.2	361.3	334.9
135°	650.1	520.9	459.0	429.9	401.9	373.9	316.1
150°	778.0	619.8	519.7	462.3	433.5	407.5	354.8
Run VMG	898.4	715.7	600.1	528.2	482.1	447.3	397.8

Certificate
Number **01328**
ORC Ref **03420000NKL**
Issued On **02/08/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight
Default **824kg**
Maximum **850kg**
Minimum* **638kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	567.5	1.0573
Non Spin OSN	554.9	1.0812

Selected Courses							
Windward / Leeward	875.0	712.2	627.6	580.7	552.0	530.0	502.0
Circular Random	740.5	602.1	529.2	487.2	460.8	442.4	416.2
Coastal / Long Distance	877.3	670.8	567.0	506.5	472.2	443.7	398.7
Non Spinnaker	781.8	631.3	550.8	503.7	474.0	453.6	425.7

Sails Limitations

Headsails	Spinnakers
6	4

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	42.0°	40.5°	38.6°	37.9°	37.7°	37.1°	37.5°
Beat VMG	4.23	5.08	5.50	5.69	5.79	5.88	5.94
52°	6.39	7.48	7.86	8.01	8.09	8.13	8.27
60°	6.74	7.73	8.08	8.24	8.34	8.40	8.57
75°	7.02	7.89	8.30	8.59	8.77	8.90	9.02
90°	6.94	7.85	8.31	8.73	9.12	9.42	9.72
110°	6.46	7.73	8.35	8.87	9.22	9.58	10.36
120°	6.23	7.58	8.24	8.82	9.47	9.96	10.75
135°	5.54	6.91	7.84	8.37	8.96	9.63	11.39
150°	4.63	5.81	6.93	7.79	8.30	8.83	10.15
Run VMG	4.01	5.03	6.00	6.82	7.47	8.05	9.05
Gybe Angles	141.5°	145.0°	148.0°	155.5°	168.0°	180.0°	180.0°

Class Division Length
CDL = **11.353**

Storm Sails Areas

Heavy Weather Jib	33.83
Storm Jib (JL=10.29)	12.53
Storm Trysail	18.57

Owner

BOAT	
Name VELOS	Sail Nr GRE-440
File GR44	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Boom Inclining	LCFD	5.770
Flotation date 03/07/2020	SG	1.0270
FFM 1.434	FF 1.432	SFFP 0.450
FAM 1.163	FA 1.166	SAFP 12.560
W1 91.7	PD1 249.9	WD 6.120
W2 91.7	PD2 247.9	GSA 1.0
W3 91.7	PD3 248.8	RSA 1.0
W4 91.7	PD4 248.0	PLM 9000.0
LCF from stem on CL / on sheer	6.994 / 7.156	
Maximum beam station from stem	8.500	
RM Measured	177.7kg-m	
RM Default	177.9kg-m	
Limit of positive stability / Stab.Index	144.6° / 151.7	
Freeboard at mast at 4.870	1.294	



ORC
Offshore Racing Congress
World leader in rating technology

2020
IMS Measurement
Certificate


RIG	
Forestay Tension Aft	Spreaders 3
Inner Stay None Fitted	Runners/Checkstays 2
Carbon Mast Yes	Jib Furler No
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 16.930	E 6.265 MDT1 0.142 MW 0.243
IG 15.793	J 4.520 MDL1 0.244 GO 0.253
ISP 15.843	SFJ 0.350 MDT2 0.094 BD 0.305
BAS 1.995	SPL 4.696 MDL2 0.122 MWT 203.20
FSD 0.032	TPS TL 3.340 MCG 5.022

MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD	0.410
Type Folding 2 blades	PBW	0.118
Twin Screw No	PIPA	0.0036
ST1 0.048	ST3 0.178	ST5 0.250
ST2 0.178	ST4 0.112	EDL 0.675

Certificate

Number **01328**
ORC Ref **03420000NKL**
Issued On **02/08/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**



COMMENTS	
ex "ATALANTI XIV"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.23	1.36	2.37	3.96	5.18	62.59 63.96 P/8 · (E + 2 · MQW + 2 · MHW + 1.5 · MTW + MUW + 0.5 · MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	Area Formula
	15.94	15.94	15.94	8.39	8.30	111.21 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	Flying	Meas.Date	Material	Comment
0.12	0.73	1.38	2.77	4.26	5.76	15.95	45.29	N	No	25/07/2020	Carbon	L

MEASUREMENT INVENTORY				
Measurer GRE-21				
Date 03/07/2020				
Comment				
Internal Ballast total = 766.0				
<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	40 HP	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

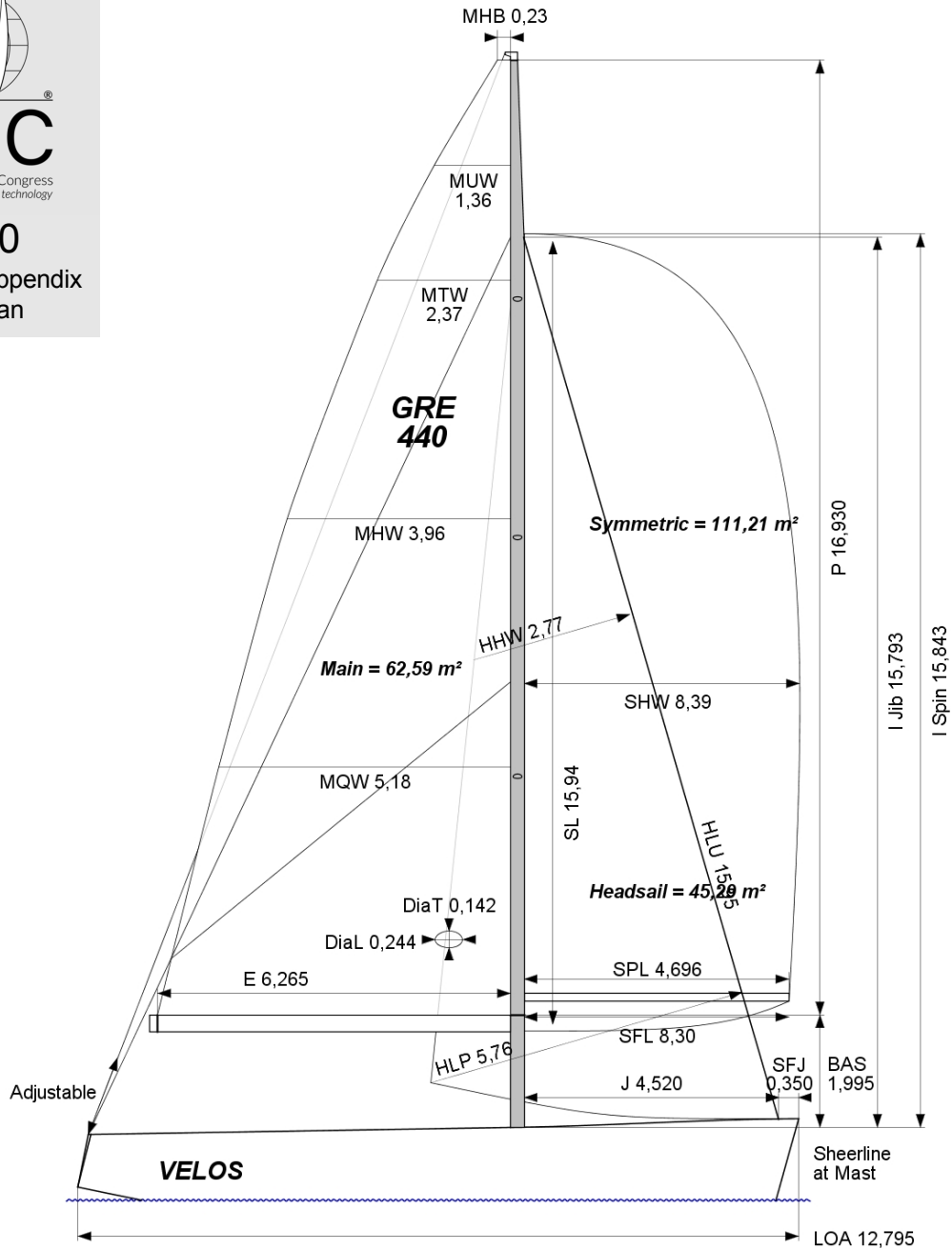
MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	FUEL	INOX	60.0	9.40		30.0	
2	Tank	WATER	BLADDER	30.0	6.30		0.0	
3	Tank	WATER	BLADDER	30.0	6.30		0.0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Ballast	40.0	6.30	LEAD BARS (2x20 P+S)				
2	Ballast	163.0	6.50	LEAD BARS (2x81.5 P+S)				
3	Ballast	216.0	9.60	LEAD BARS (2x108 P+S)				
4	Ballast	86.0	7.20	LEAD BARS (2x43 P+S)				
5	Ballast	85.0	8.00	LEAD BARS (2x42.5 P+S)				
6	Ballast	50.0	8.20	LEAD PIGS (C)				
1	Battery		7.00	2 x ~100 Ah (P & S)				
2	Battery		7.40	2 x ~100 Ah (P & S)				



ORC

Offshore Racing Congress
World leader in rating technology

2020
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
4	0.23	1.36	2.37	3.96	5.18	62.59		27/07/2020	NORTH	Carbon						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.12	0.73	1.38	2.77	4.26	5.76	15.95	127%	45.29	N	No		25/07/2020	NORTH	Carbon	L
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
3	15.92	15.95	15.94	8.39	8.30	111.18		02/08/2020	NORTH	Nylon	S2 (2002)					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				