

BOAT Name VELOS Sail Nr GRE-440	GPH 538.3	HULL Length Overall 12.795m Maximum Beam 3.196m Displacement 5,921kg Draft 2.832m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation No 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		IMSL 11.457m VCGD -0.450m Sink 20.88kg/mm RL 11.250m VCGM -0.459m WS 29.34m² LSM0 11.176m Displacement/Length ratio 4.2417



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	526.3			590.0		
Time on Time	1.1400			1.1440		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	602.6	481.8	429.8	780.6	595.3	521.1
Time on Time	1.1201	1.4009	1.5704	0.8647	1.1339	1.2953

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	831.2	696.7	650.0	629.6	619.9	606.3	603.5
52°	549.1	475.0	455.9	447.9	443.4	440.1	433.6
60°	520.5	460.5	443.1	435.0	430.0	426.9	417.5
75°	501.0	451.0	429.1	415.4	407.1	401.8	393.7
90°	506.5	452.7	427.3	405.1	388.3	378.2	367.5
110°	549.0	461.1	426.8	401.5	385.1	371.7	338.4
120°	569.7	470.3	433.0	402.0	373.5	355.8	327.0
135°	642.1	514.2	455.4	425.6	395.8	366.6	304.7
150°	768.5	612.4	514.1	458.9	429.8	402.1	346.2
Run VMG	887.4	707.2	593.7	523.7	478.4	444.4	392.7

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Number **01328P**
ORC Ref **GRE01015784**
Issued On **01/06/2019**
VPP Ver. **2019 1.01**
Valid until **28/02/2020**

Crew Weight
Default **807kg**
Maximum **890kg**
Minimum* **668kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **560.4 1.0707**
Non Spin OSN **549.0 1.0929**

Selected Courses							
Windward / Leeward	859.3	702.0	621.8	576.6	549.2	525.4	498.1
Circular Random	729.1	594.2	523.3	482.3	456.2	437.7	411.0
Coastal / Long Distance	862.1	661.4	561.8	502.3	468.4	439.3	393.9
Non Spinnaker	768.6	622.4	544.3	498.4	469.3	449.3	422.5

Sails Limitations
Headsails **6** Spinnakers **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	41.8°	40.3°	38.5°	38.0°	37.6°	36.9°	37.3°
Beat VMG	4.33	5.17	5.54	5.72	5.81	5.94	5.96
52°	6.56	7.58	7.90	8.04	8.12	8.18	8.30
60°	6.92	7.82	8.12	8.28	8.37	8.43	8.62
75°	7.18	7.98	8.39	8.67	8.84	8.96	9.14
90°	7.11	7.95	8.43	8.89	9.27	9.52	9.80
110°	6.56	7.81	8.44	8.97	9.35	9.69	10.64
120°	6.32	7.66	8.31	8.96	9.64	10.12	11.01
135°	5.61	7.00	7.91	8.46	9.10	9.82	11.81
150°	4.68	5.88	7.00	7.85	8.38	8.95	10.40
Run VMG	4.06	5.09	6.06	6.87	7.52	8.10	9.17
Gybe Angles	141.3°	141.3°	148.1°	155.5°	169.1°	180.0°	180.0°

Class Division Length
CDL = **11.354**

Storm Sails Areas
Heavy Weather Jib **33.83**
Storm Jib (JL=10.29) **12.53**
Storm Trysail **18.79**

Owner

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

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 25/04/2019	SG 1.0270	
FFM 1.445	FF 1.442	SFFP 0.450
FAM 1.195	FA 1.199	SAFP 12.560
W1 92.7	PD1 469.6	WD 11.060
W2 92.7	PD2 464.7	GSA 1.0
W3 92.7	PD3 469.9	RSA 1.0
W4 92.7	PD4 471.4	PLM 9000.0
LCF from stem on CL / on sheer		6.940 / 7.091
Maximum beam station from stem		8.500
RM Measured		172.2kg-m
RM Default		174.7kg-m
Limit of positive stability / Stab.Index		145.3° / 151.3
Freeboard at mast at 4.870		1.313



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RIG	
Forestay Tension Aft	Spreaders 3
Inner Stay None Fitted	Runners 2
Carbon Mast Yes	Jumper Struts Yes
Taper Hollows No	Jib Furler No
Fiber Rigging No	Main Furler No
Lenticular Rigging No	Without Backstay No
Articulated Bowsprit No	
P 17.138	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
FSP 0.064	TPS TL 3.340 MCG 5.022

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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

COMMENTS	
ex "ATALANTI XIV"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

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SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	
	0.220	1.39	2.42	4.03	5.21	
	Area	Area (r)	Formula			
	64.00	65.46	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)			
Symmetric	SLU	SLE	SL	SHW	SFL	
	16.03	16.03	16.03	8.47	8.04	
	Area	Formula				
	112.00	SL · (SFL + 4·SHW) / 6				
Asymmetric						
Not Available						

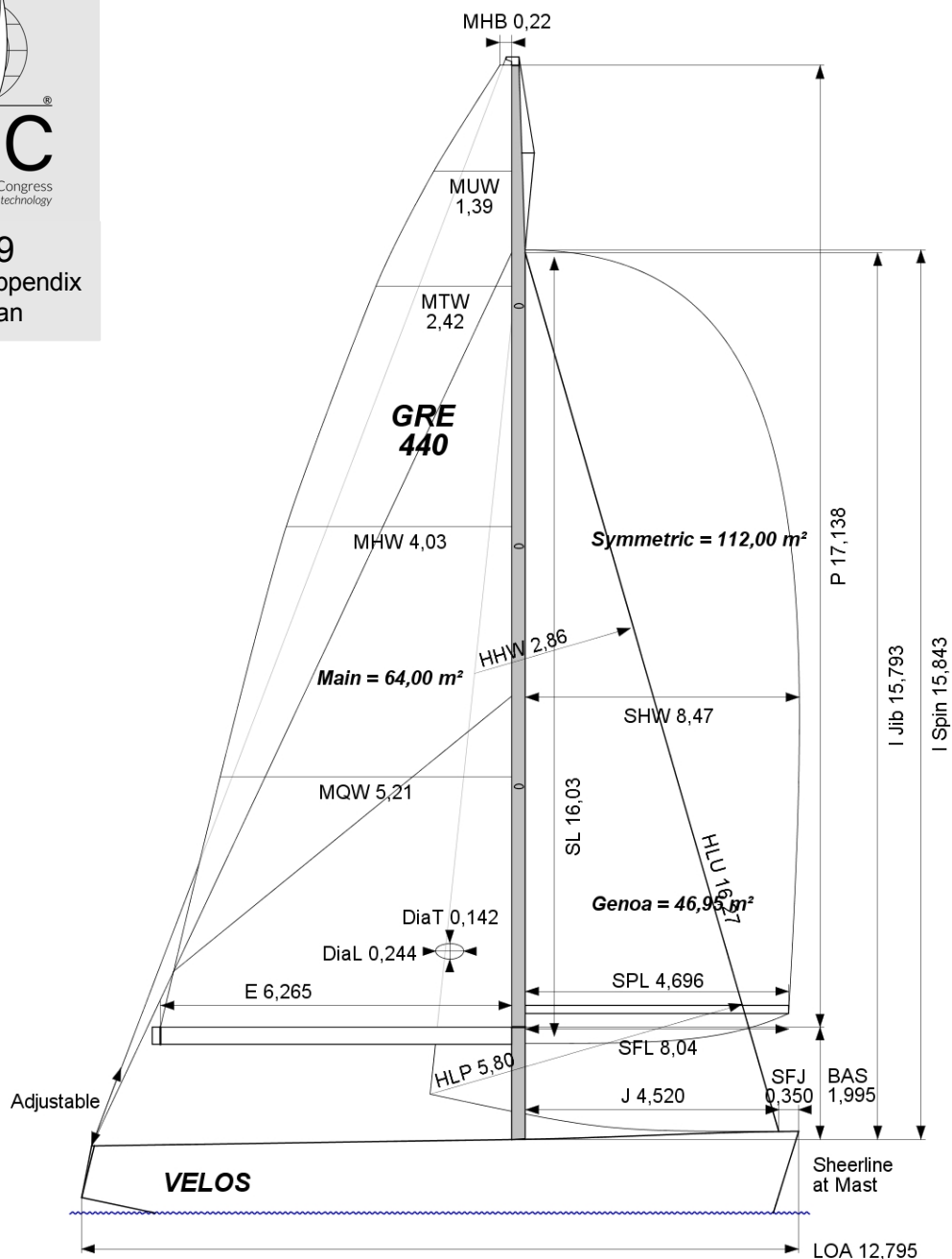
HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.08	0.75	1.43	2.86	4.31	5.80	16.27	46.96	Y		18/03/2019	Carbon	(North measurement sheet)
0.08	0.72	1.40	2.81	4.29	5.80	16.27	46.57	Y		18/03/2019	Carbon	(North measurement sheet)
0.12	0.74	1.43	2.87	4.31	5.74	15.81	45.53	Y		14/03/2019	Kevlar	

MEASUREMENT INVENTORY				
Measurer GRE-21				
Date 25/04/2019				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	YANMAR	40 HP	
Id	Item	Weight Description		

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
1	Tank	FUEL	INOX	60.0	9.40		33-0
2	Tank	WATER	BLADDER	30.0	6.30		0-0
3	Tank	WATER	BLADDER	30.0	6.30		0-0
Id	Item	Weight	Distance	VCG Description			
1	Ballast	216.0	7.00	LEAD PIGS (equal P & S)			
2	Ballast	50.0	8.10	LEAD PIGS (C)			
1	Battery		7.00	2 x ~100 Ah (P & S)			
2	Battery		7.40	2 x ~100 Ah (P & S)			



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Sail Plan



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,22	1,39	2,42	4,03	5,21	64,00			NORTH	Carbon	(North specs)
2	0,22	1,38	2,40	3,99	5,18	63,62		14/03/2019	NORTH	Kevlar	

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2	0,08	0,75	1,43	2,86	4,31	5,80	16,27	128%	46,96	Y			18/03/2019	NORTH	Carbon	(North measurement)
3	0,08	0,72	1,40	2,81	4,29	5,80	16,27	128%	46,57	Y			18/03/2019	NORTH	Carbon	(North measurement)
1	0,12	0,74	1,43	2,87	4,31	5,74	15,81	127%	45,53	Y			14/03/2019	NORTH	Kevlar	

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
4	16,03	16,03	16,03	8,47	8,04	112,00		21/01/2004	NORTH	Nylon	S2 (2004)

ASYMMETRIC SPINNAKERS (0)

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