



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

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

Certificate
Number **01259**
Issued On **03/09/2020**
ORC Ref **03420000PNN**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default	759kg
Maximum	320kg
Minimum*	235kg

*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH	705.6 0.8503
Non Spin OSN	681.4 0.8805

Sails Limitations

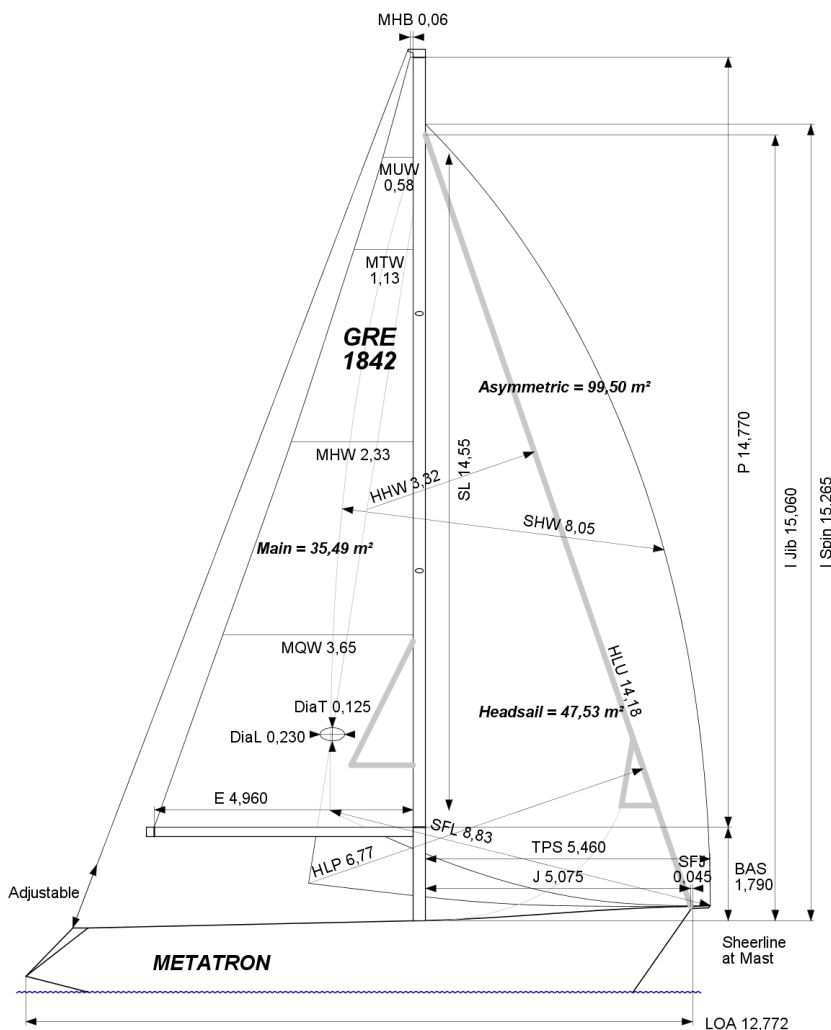
Headsails **1** Spinnakers **4**
Woven Polyester
Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 99.50**
Flying H/S: **No**
Spin. Pole: **No**

Class Division Length
CDL = 8.822

Stability (Estimated)
Limit Positive Stab.: **120.6°**
Stability Index: **124.3**

Owner



BOAT
Name **METATRON**
Sail Nr **GRE-1842**

GPH
670.1

HULL
Data File **GR1842** LOA **12.772m**
Offset File **BAV42.off** MB **3.954m**
Displacement **8,572kg** Draft **1.886m**

CLASS
Class **BAVARIA 42**
Designer **J&J DESIGN**
Builder **BAVARIA**
Series **01/1998**
Age Date **01/2001**
Age Allowance **0.487%**

IMS Division **Cruiser/Racer** Dynamic All. **0.375%**
Plan Review Construction **Solid**
Fiber Rigging **No** Aramid Core **No**
Crew Arm Ex Carbon Rudder **No**
Light Stanchions **No**

IMSL **10.725m** VCGD **-0.007m** Sink **23.38kg/mm**
RL **6.918m** VCGM **0.037m** WS **32.09m²**
LSM0 **10.714m** Displacement/Length ratio **6.9699**

COMMENTS
Builder's displacement.

Water Ballast **0** Trim Tab **No**
BLR Index **0.0000**

PROPELLER
Installation **Strut** PRD **0.426**
Type **Solid 3 blades** PBW **0.168**
PIPA **0.0224**

CENTERBOARD
N/A

SCORING OPTIONS

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Low	Medium	High	Low	Medium	High
Time on Distance	649.4			741.0		
Time on Time	0.9240			0.9110		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	792.3	586.3	516.8	1035.8	746.3	640.6
Time on Time	0.8519	1.1512	1.3061	0.6517	0.9045	1.0537

BOAT	
Name METATRON	Sail Nr GRE-1842
File GR1842	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners/Checkstays 0
Carbon Mast No	Jib Furler Yes
Fiber Rigging No	Main Furler Yes
Non-Circular Rigging No	
Articulated Bowsprit No	
P 14.770	E 4.960 MDT1 0.125 MW
IG 15.060	J 5.075 MDL1 0.230 GO
ISP 15.265	SFJ 0.045 MDT2
BAS 1.790	SPL MDL2
FSD -3.000	TPS 5.460 TL -3.000 MCG

INCLINING TEST AND FREEBOARDS	
Inclining Test Club Estimated VCG	
Flotation date 21/03/2018	SG 1.0255
FFM 1.622	FF 1.622 SFFP 0.745
FAM 1.181	FA 1.181 SAFF 11.577
LCF from stem on CL / on sheer	6.942 / 7.204
Maximum beam station from stem	7.792
RM Measured	187.2kg-m
RM Default	184.6kg-m
Limit of positive stability / Stab.Index	120.6° / 124.3
Freeboard at mast at 5.120	1.367



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2020
Measurements
Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Installation Strut	PRD 0.426
Type Solid 3 blades	PBW 0.168
Twin Screw No	PIPA 0.0224
ST1 0.048	ST3 0.172 ST5 0.258
ST2 0.172	ST4 0.097 EDL 2.665

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COMMENTS	
Builder's displacement.	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.06	0.58	1.13	2.33	3.65	35.50		16/03/2018		Dacron						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	OvrI/p	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.06	0.82	1.63	3.32	5.04	6.77	14.18	133%	47.53		No		20/06/2019	KAKITSIS	Dacron	
1	0.03	0.77	1.55	3.17	4.94	6.74	14.43	133%	47.19		No		16/03/2018		Dacron	
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	15.61	13.49	14.55	8.05	8.83	99.50	asym		20/06/2019	QUANTUM	Nylon					

2020

ORC Club Certificate Appendix

BOAT			
Name	METATRON	Certificate Number	01259
Sail Nr	GRE-1842	Issued On	03/09/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1235.6	999.7	876.2	802.8	764.6	751.0	756.5
52°	782.4	647.5	570.9	524.6	503.5	496.0	495.0
60°	725.6	608.5	537.2	500.5	483.7	476.1	473.2
75°	684.9	577.1	512.9	483.5	468.2	458.0	448.0
90°	690.3	570.2	500.1	471.2	460.2	450.7	430.7
110°	680.0	555.2	489.7	462.0	443.1	426.2	407.3
120°	702.5	572.4	498.2	466.0	445.5	426.4	393.0
135°	783.8	628.1	535.1	484.6	459.5	440.0	402.9
150°	926.6	725.5	614.3	540.2	499.7	475.4	444.1
Run VMG	1070.0	837.7	709.4	623.7	577.0	540.3	474.5
Selected Courses							
Windward / Leeward	1152.8	918.7	792.8	713.3	670.8	645.6	615.5
Circular Random	943.9	752.8	648.5	587.5	550.6	527.8	502.4
Coastal / Long Distance	1144.5	858.8	704.2	607.5	558.3	523.6	470.2
Non Spinnaker	1011.3	799.7	682.1	611.6	567.9	540.4	511.2

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°	44.3°	43.1°	43.5°	43.9°	43.5°	44.3°
Beat VMG	2.91	3.60	4.11	4.48	4.71	4.79	4.76
52°	4.60	5.56	6.31	6.86	7.15	7.26	7.27
60°	4.96	5.92	6.70	7.19	7.44	7.56	7.61
75°	5.26	6.24	7.02	7.45	7.69	7.86	8.04
90°	5.22	6.31	7.20	7.64	7.82	7.99	8.36
110°	5.29	6.48	7.35	7.79	8.13	8.45	8.84
120°	5.12	6.29	7.23	7.72	8.08	8.44	9.16
135°	4.59	5.73	6.73	7.43	7.83	8.18	8.94
150°	3.88	4.96	5.86	6.66	7.20	7.57	8.11
Run VMG	3.36	4.30	5.07	5.77	6.24	6.66	7.59
Gybe Angles	145.0°	147.0°	146.5°	146.9°	148.5°	172.0°	178.0°