

BOAT
Name MELGES 24 Sail Nr Aut 251

GPH
623,9

HULL			
Length Overall	7,509m		
Maximum Beam	2,490m		
Displacement	821kg		
Draft	1,522m		
IMS Reg. Division	Sportboat		
Dynamic Allowance	0,000%		
Fwd Accommodation	No		
Hull Construction	Cored		
Carbon Rudder	Yes		
Crew Arm Extension	0,50		
IMSL	7,249m	VCGD	0,050m Sink 8,71kg/mm
RL	7,864m	VCGM	0,030m WS 10,47m ²
LSMO	6,753m Displacement/Length ratio		2,6660



World Leader in Rating Technology

2018
ORC International
One Design Certificate

GENERAL
Class MELGES 24 OD
Designer REICHEL/PUGH
Builder ROWEN
Series 12.1992
Age
Age Allowance 0,487%
Offset File melg24.OD - 01.02.2018 14:20:40
Measurement by ONE DESIGN - 19.03.1996

Rating Office
Austrian Sailing Federation
Seestraße 17B
7100 Neusiedl am See
Austria



AUSTRIAN SAILING FEDERATION
ORC Rating Office

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	605,3			690,1		
Time on Time	0,9912			0,9781		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	716,8	556,2	471,5	921,3	696,6	591,2
Time on Time	0,9417	1,2136	1,4315	0,7327	0,9690	1,1417

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1071,4	877,0	782,0	753,0	744,6	742,0	735,6
52°	700,1	595,2	554,8	534,5	525,1	520,5	505,6
60°	660,8	578,2	536,8	507,0	495,2	488,9	470,9
75°	633,0	565,9	519,8	472,5	449,9	438,9	422,3
90°	624,5	546,4	510,7	469,2	420,0	394,9	374,3
110°	614,5	535,4	469,8	434,1	404,1	378,5	322,8
120°	629,5	545,2	478,9	416,5	382,1	356,2	300,8
135°	707,3	580,5	518,0	456,9	397,2	345,7	259,0
150°	839,1	664,7	577,8	522,9	466,0	412,3	298,3
Run VMG	968,9	767,5	667,4	603,8	538,1	476,1	344,4

Certificate
Number 052/1
ORC Ref AUT00002355
Issued On 21.08.2018
VPP Ver. 2018 1.00
Valid until 31.12.2018

Selected Courses							
Windward / Leeward	1020,1	822,3	724,7	678,4	641,3	609,0	540,0
Circular Random	861,2	696,6	606,7	551,3	512,9	483,0	434,0
Coastal / Long Distance	1015,0	774,5	654,9	580,3	529,3	486,1	405,6
Non Spinnaker	941,4	754,3	651,8	589,7	548,6	518,5	472,5

Crew Weight	
Default	393kg
Maximum	375kg
Minimum*	281kg
<small>*when applied by the NoR and SI</small>	
Non Manual Pwr	No

Special Scoring		
	ToD	ToT
Double H.GPH	647,6	0,9265
Double H.OSN	634,7	0,9453
Non Spin GPH	672,0	0,8929
Non Spin OSN	650,7	0,9220

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	43,7°	41,5°	38,8°	37,2°	36,9°	36,9°	37,3°
Beat VMG	3,36	4,10	4,60	4,78	4,83	4,85	4,89
52°	5,14	6,05	6,49	6,74	6,86	6,92	7,12
60°	5,45	6,23	6,71	7,10	7,27	7,36	7,64
75°	5,69	6,36	6,93	7,62	8,00	8,20	8,52
90°	5,76	6,59	7,05	7,67	8,57	9,12	9,62
110°	5,86	6,72	7,66	8,29	8,91	9,51	11,15
120°	5,72	6,60	7,52	8,64	9,42	10,11	11,97
135°	5,09	6,20	6,95	7,88	9,06	10,41	13,90
150°	4,29	5,42	6,23	6,88	7,72	8,73	12,07
Run VMG	3,72	4,69	5,39	5,96	6,69	7,56	10,45
Gybe Angles	143,5°	147,3°	150,5°	148,3°	144,7°	144,5°	139,9°

Sails Limitations	
Headsails	5
Spinnakers	3

Class Division Length
CDL = 7,558

Storm Sails Areas	
Heavy Weather Jib	10,03
Storm Jib (JL=5,60)	3,72
Storm Trysail	5,86

Owner
Hackl Josef Austria
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT	
Name MELGES 24	Sail Nr Aut 251
File Hackl	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Enter VCG directly			
Flotation date 27.01.2016		SG 1,0250	
VCGDe 0,050			
FFM 0,876	FF 0,876	SFFP 0,130	
FAM 0,587	FA 0,587	SAFP 7,370	
LCF from stem on CL / on sheer		4,188 / 4,325	
Maximum beam station from stem		4,470	
RM Measured		25,3kg·m	
RM Default		27,0kg·m	
Limit of positive stability / Stab.Index		103,2° / 94,7	
Freeboard at mast at 2,706		0,799	

RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	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 8,818	E 3,800	MDT1 0,076	MW 0,114
IG 8,620	J 2,506	MDL1 0,120	GO 0,114
ISP 9,777	SFJ 0,200	MDT2 0,062	BD 0,103
BAS 1,000	SPL	MDL2 0,075	MWT 28,00
FSP 0,000	TPS 4,050	TL 1,578	MCG 3,150


MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

COMMENTS	
LIFELINE TENSION ACC CLASSRULE	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	




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IMS Measurement Certificate

Certificate

Number **052/1**
 ORC Ref **AUT00002355**
 Issued On **21.08.2018**
 VPP Ver. **2018 1.00**
 Valid until **31.12.2018**



AUSTRIAN SAILING FEDERATION
 ORC Rating Office

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,175	0,93	1,68	2,70	3,33	21,38	22,33	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	Formula		
	11,59	11,08	11,34	5,86	6,30	56,18	AS · (SFL + 4·SHW) / 6		

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	0,76	1,42	2,09	2,78	8,56	12,13					CLASS RULES

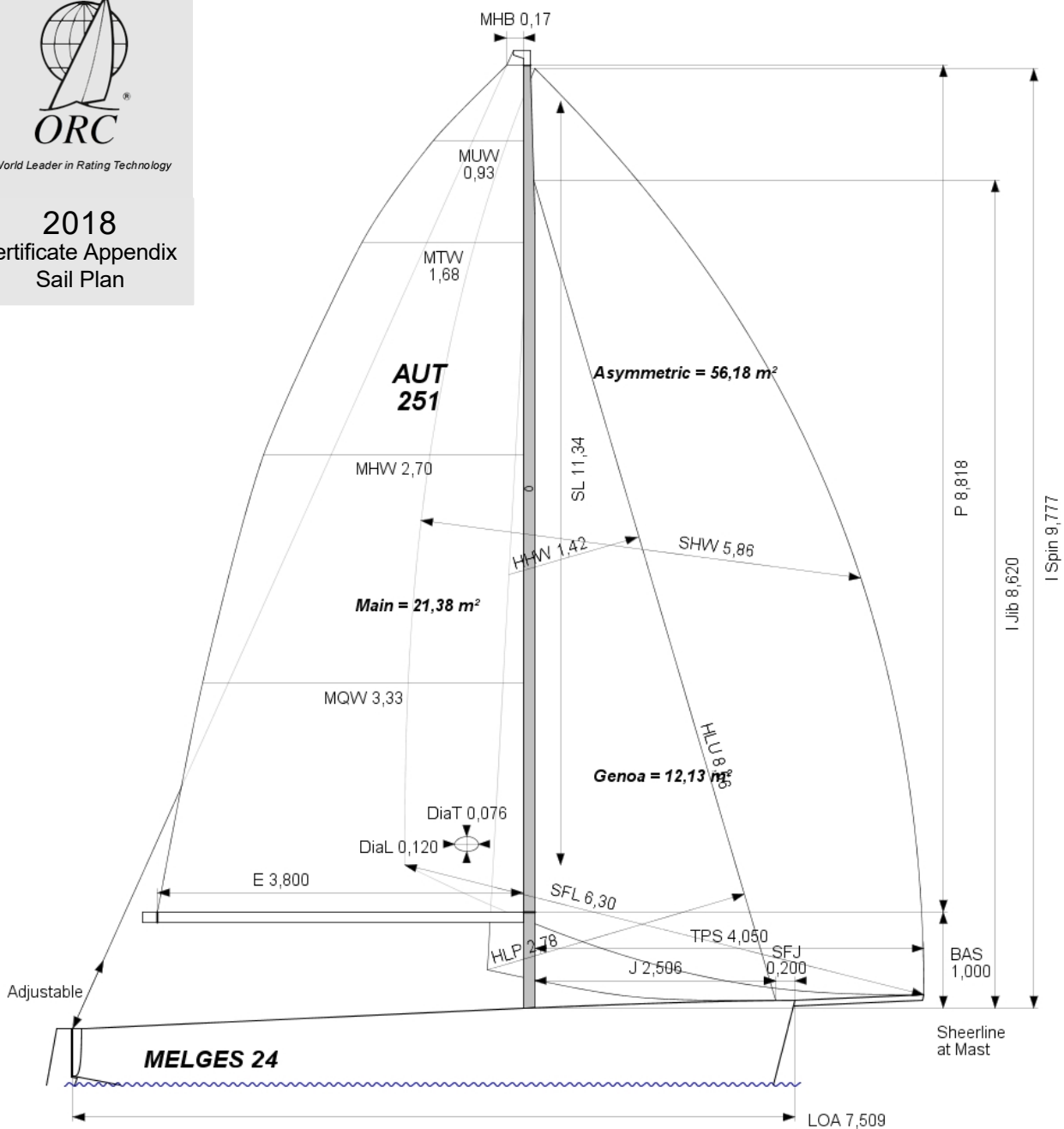
MEASUREMENT INVENTORY				
Measurer	Date	Comment		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	MIN 12kg	OUTBOARD	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

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



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M	0,175	0,93	1,68	2,70	3,33	21,38	OD				CLASS RULES &

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
H	0,05	0,40	0,76	1,42	2,09	2,78	8,56	111%	12,13			OD				CLASS RULES

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A	11,59	11,08	11,34	5,86	6,30	56,18	asym	OD				CLASS RULES & MEAS