

BOAT
Name MEREPÄRL
Sail Nr EST 406

GPH
622,6

HULL
Length Overall 10,640 m
Maximum Beam 3,450 m
Displacement 5 758 kg
Draft 2,231 m
IMS Reg. Division Cruiser/Racer
Dynamic Allowance 0,342%
Fwd Accommodation Yes
Hull Construction Solid
Carbon Rudder No
Trim Tab No
IMS L 9,800 VCGD 0,137 VCGM 0,117
Sink 19,57 kg/mm Wetted Area 25,43 m²



2009
ORC International
Certificate

GENERAL
Class First 36.7
Designer B.Farr
Builder Beneteau S.A.
Series 01.2001
Age 05.2006
Age Allowance 0,520%
Offset File F196.BOF - 5.09.2002 9:35:34
Measurement by A.Tetsmann - 07.07.2008

SCORING OPTIONS		
	OFFSHORE	INSHORE
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time On Distance	622,6	691,3
Time On Time	0,9637	0,9765
Performance Line	PLT 0,857 PLD 110,8	PLT 1,021 PLD 302,7
Triple Number	Low 0,9432 Medium 1,2248 High 1,3799	Low 0,7179 Medium 0,9902 High 1,1517

Rating Office
Estonian Yachting Union
Veiko Rosme
Regati 1, 11911, Tallinn
Estonia

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1056,0	860,0	758,8	715,0	689,7	673,9	660,7
52°	682,3	569,6	522,9	497,1	486,3	479,9	474,1
60°	635,9	547,2	505,9	481,0	471,0	465,1	459,1
75°	598,8	530,5	486,3	470,5	453,5	442,6	433,6
90°	584,9	512,9	476,1	454,0	444,0	436,6	413,8
110°	599,8	525,4	486,2	461,8	437,7	416,2	396,4
120°	643,5	544,0	498,4	471,0	448,9	425,7	382,1
135°	746,2	594,6	530,6	492,4	468,4	447,8	407,0
150°	894,7	702,9	587,1	530,9	494,5	470,8	431,3
Run VMG	1033,1	811,7	677,1	596,0	543,9	506,9	462,0

Certificate
Number EST406
ORC Ref EST00000151
Issued On 16.05.2009
VPP Ver. 1.11
Valid until 31.12.2009

Crew Weight
Declared 800 kg
Default* 684 kg

Special Scoring
ToD ToT
Double 625,3 0,9596
Non Spinnaker 663,0 0,9049

Selected Courses							
Windward / Leeward	1063,4	848,4	730,3	664,2	624,0	597,0	567,3
Circular Random	858,9	693,0	604,0	552,2	520,1	498,9	471,4
Ocean for PCS	918,1	724,8	617,6	552,4	509,9	479,7	436,0
Non Spinnaker	934,4	745,2	641,9	580,9	542,9	518,0	487,6

Sails Limitations
Genoa 3 Jibs 2 Spinnakers 3
Spinnaker configuration Symmetric

Storm Sails Areas
Heavy Weather Jib 27,04
Storm Jib (JL=9,20) 10,02
Storm Trysail 11,51

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	43,9°	43,7°	39,9°	38,2°	37,3°	36,7°	36,3°
Beat VMG	3,41	4,19	4,74	5,03	5,22	5,34	5,45
52°	5,28	6,32	6,88	7,24	7,40	7,50	7,59
60°	5,66	6,58	7,12	7,48	7,64	7,74	7,84
75°	6,01	6,79	7,40	7,65	7,94	8,13	8,30
90°	6,15	7,02	7,56	7,93	8,11	8,24	8,70
110°	6,00	6,85	7,40	7,80	8,22	8,65	9,08
120°	5,59	6,62	7,22	7,64	8,02	8,46	9,42
135°	4,82	6,05	6,78	7,31	7,69	8,04	8,84
150°	4,02	5,12	6,13	6,78	7,28	7,65	8,35
Run VMG	3,48	4,44	5,32	6,04	6,62	7,10	7,79
Gybe Angles	142,4°	146,7°	151,9°	163,9°	169,5°	172,4°	175,1°

Owner
HANSA LIISING AS/OÜ
ROTA
Papiniidu 31 C
Pärnu, Estonia
Pärnu JK
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT	
Name MEREPÄRL	Sail Nr EST 406
File Est0406.dxt	Data in meters/kilograms

RIG			
Forestay Tension Aft	Spreaders 3		
Inner Forestay None Fitted	Runners 0		
Carbon Mast No	Jumpers None		
Taper Hollows No	w/o Backstay No		
P 13,850	E 4,750	MDT1 0,102	TL 0,720
IG 14,090	J 4,000	MDL1 0,189	MWT 149,50
ISP 14,120	SFJ 0,000	MDT2 0,102	MCG 5,110
SPS 3,550	SPL 4,000	MDL2 0,150	CPW 2,260
BAS 1,575	TPS 0,066	MW 0,189	BD 0,160
BAL 0,152	FSP 0,066	GO 0,207	BWT

HEAVY ITEMS			
Bow Thruster No	Generator No	Air Condition No	
Windlass No	Jib Furler No	Desalinator No	
Heavy Deck No	Main Furler No		
Headliners No	Water Heater No		
Anchor Weight	Heavy Items Adjustment	0,0000	
Anchor LCG	Total Gyradius Adjustment	0,0392	

MIZZEN RIG AND SAILS	
N/A	

COMMENTS

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 14.06.2006	SG 1,0020	
FFM 1,348	FF 1,356	SFFP 0,367
FAM 1,028	FA 1,034	SAFP 10,162
W1 76,500	PD1 213,0	WD 10,700
W2 76,500	PD2 214,0	GSA 12,6
W3 76,500	PD3 212,0	RSA 4298,7
W4 76,500	PD4 214,0	PLM 2005,
Maximum beam station from stem	7,091	
RM Measured / Default	134,3 / 140,2	
Limit of positive stability	113,1°	
Stability Index	115,4	
Freeboard at mast at 4,000	1,194	

PROPELLER		
Installation Strut Drive	PRD 0,410	
Type Folding	PBW 0,130	
Twin Screw No	PIPA 0,0027	
ST1 0,042	ST3	ST5 0,280
ST2	ST4 0,090	EDL 2,470

WATER BALLAST	
N/A	

CENTERBOARD
N/A



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2009
IMS Measurement
Certificate

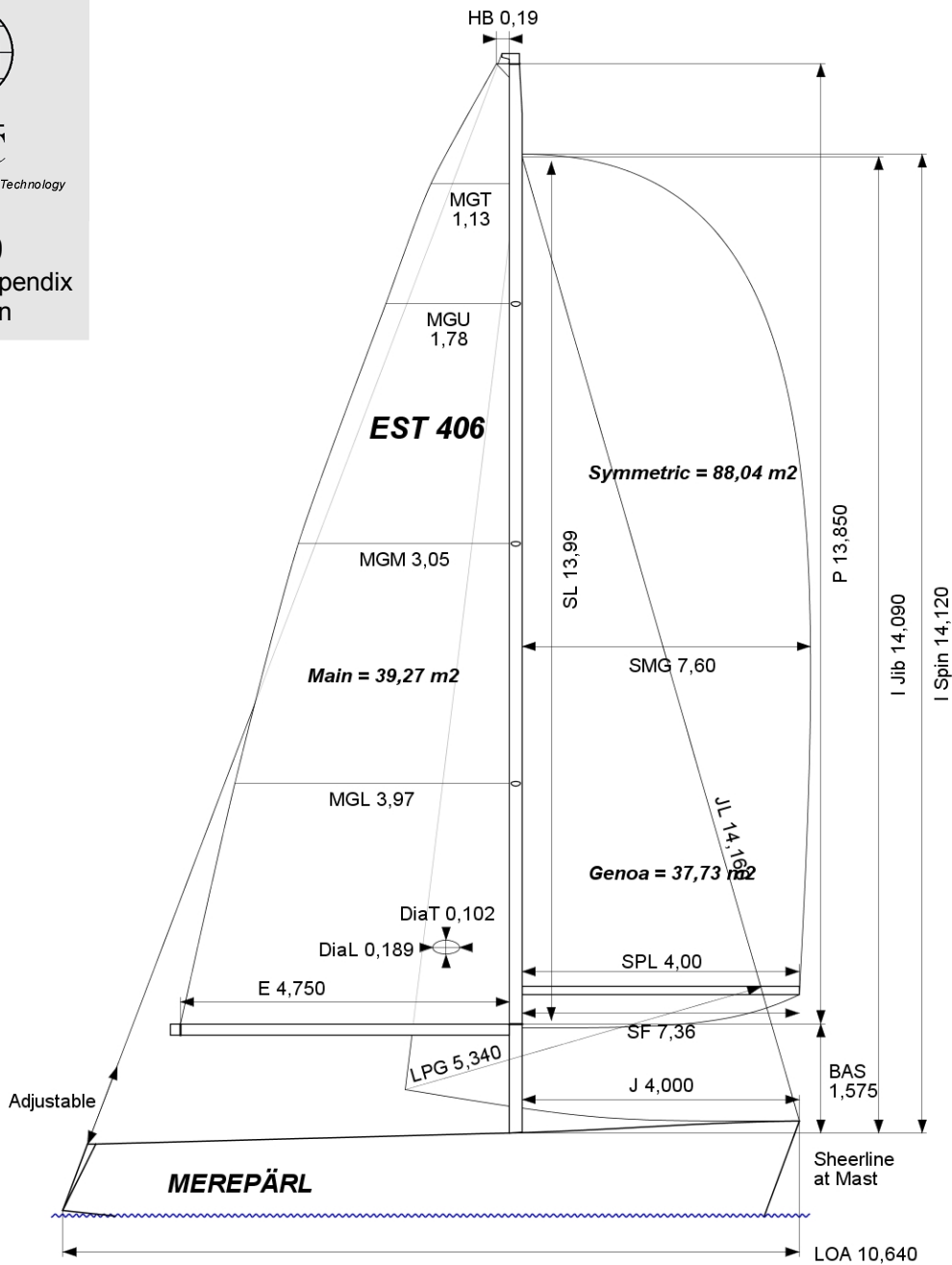
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Number EST406	
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SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Formula	
	0,190	1,13	1,78	3,05	3,97	20,00	39,27	P/8 · (E + 2·MGL+ 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0,09	0,69	1,33	2,65	3,97	14,16	5,34	0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)	
Symmetric	SL	SMG	SF						
	13,99	7,60	7,36				88,04	SL · (SF + 4·SMG) / 6	



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2009
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	0,190	1,13	1,78	3,05	3,97	20,00	39,27				Unknown	

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measure	Meas.Dat	Manufacturer	Material	Comment
1	0,08	0,64	1,23	2,45	3,80	5,21	13,85	130%	35,13				Unknown	
2	0,09	0,69	1,33	2,65	3,97	5,34	14,16	134%	37,73				Unknown	

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
ORC	13,99	7,60	7,36	88,04					* Copied from legacy *

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Dat	Manufacturer	Material	Comment
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