

BOAT
Name BRIGITTA-X Sail Nr EST 606

GPH
637,0

HULL	
Length Overall	10,360 m
Maximum Beam	3,383 m
Displacement	5 651 kg
Draft	1,921 m
IMS Reg. Division	Cruiser/Racer
Dynamic Allowance	0,795%
Fwd Accommodation	Yes
Hull Construction	Cored
Carbon Rudder	No
Trim Tab	No
IMS L	9,646 VCGD 0,074 VCGM 0,045
Sink	18,23 kg/mm Wetted Area 24,66 m²



2009
ORC International
Certificate

GENERAL
Class X-34
Designer JEPPESEN
Builder X YACHTS
Series 11.2007
Age 04.2009
Age Allowance 0,130%
Offset File X34.OFF - 18.10.2007 13:24:02
Measurement by A.Tetsmann - 10.08.2009

SCORING OPTIONS						
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	637,0			712,3		
Time On Time	0,9420			0,9476		
Performance Line	PLT 0,822	PLD 100,5		PLT 0,962	PLD 286,2	
Triple Number	Low 0,9177	Medium 1,1985	High 1,3538	Low 0,6965	Medium 0,9606	High 1,1189

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	1105,1	913,4	796,0	747,3	720,9	704,7	692,3
52°	715,2	592,5	538,9	508,4	496,5	489,4	483,3
60°	669,0	564,7	518,5	490,0	477,5	471,3	465,2
75°	629,2	535,2	488,2	472,7	460,0	445,5	436,0
90°	590,8	515,9	478,1	455,2	444,7	437,1	416,3
110°	609,7	530,0	490,1	464,7	439,7	416,7	394,7
120°	654,8	550,0	502,8	474,8	452,4	428,4	380,8
135°	751,9	605,0	536,2	496,9	472,3	451,9	410,5
150°	898,0	710,9	595,2	535,7	498,5	474,4	435,1
Run VMG	1036,9	820,9	686,6	601,4	547,5	509,9	465,0

Certificate
Number EST606 ORC Ref EST00000509 Issued On 12.08.2009 VPP Ver. 1.11 Valid until 31.12.2009

Crew Weight
Declared 700 kg Default* 646 kg

Special Scoring
ToD ToT Double 639,2 0,9387 Non Spinnaker 682,1 0,8796

Selected Courses							
Windward / Leeward	1091,6	877,7	754,1	683,6	641,7	614,2	584,8
Circular Random	880,4	709,9	617,9	564,1	530,7	508,7	480,6
Ocean for PCS	940,9	742,5	631,6	563,6	519,0	487,1	441,5
Non Spinnaker	963,9	767,8	660,3	596,4	556,5	530,4	498,6

Sails Limitations		
Genoa 0	Jibs 4	Spinnakers 3
Spinnaker configuration Symmetric		

Storm Sails Areas	
Heavy Weather Jib	27,88
Storm Jib (JL=9,34)	10,32
Storm Trysail	11,57

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°	43,3°	41,3°	39,7°	38,8°	38,4°	38,2°
Beat VMG	3,26	3,94	4,52	4,82	4,99	5,11	5,20
52°	5,03	6,08	6,68	7,08	7,25	7,36	7,45
60°	5,38	6,38	6,94	7,35	7,54	7,64	7,74
75°	5,72	6,73	7,37	7,62	7,83	8,08	8,26
90°	6,09	6,98	7,53	7,91	8,09	8,24	8,65
110°	5,90	6,79	7,35	7,75	8,19	8,64	9,12
120°	5,50	6,55	7,16	7,58	7,96	8,40	9,45
135°	4,79	5,95	6,71	7,24	7,62	7,97	8,77
150°	4,01	5,06	6,05	6,72	7,22	7,59	8,27
Run VMG	3,47	4,39	5,24	5,99	6,58	7,06	7,74
Gybe Angles	142,9°	149,3°	151,6°	164,0°	169,5°	172,7°	175,2°

Owner
Jakari Marine OÜ Regati 1, Tallinn Estonia ESS Kalev JK
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT		
Name	BRIGITTA-X	Sail Nr EST 606
File	Est0606.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 10.08.2009		SG 1,0020
FFM 1,315	FF 1,324	SFFP 0,325
FAM 0,990	FA 0,996	SAFP 10,060
W1 64,600	PD1 563,7	WD 12,805
W2 64,600	PD2 565,4	GSA 1,0
W3 64,600	PD3 563,5	RSA 1,0
W4 64,600	PD4 565,2	PLM 9000,
Maximum beam station from stem		7,087
RM Measured / Default		115,4 / 126,2
Limit of positive stability		117,4°
Stability Index		120,0
Freeboard at mast at 3,940		1,126



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RIG			
Forestay Tension	Aft	Spreaders	2
Inner Forestay	None Fitted	Runners	0
Carbon Mast	No	Jumpers	None
Taper Hollows	No	w/o Backstay	No
P 14,050	E 4,705	MDT1 0,130	TL 1,300
IG 14,300	J 3,710	MDL1 0,182	MWT 159,50
ISP 14,310	SFJ 0,230	MDT2 0,124	MCG 4,600
SPS	SPL 3,710	MDL2 0,134	CPW
BAS 1,735	TPS	MW 0,182	BD
BAL	FSP 0,064	GO 0,200	BWT 32,00

HEAVY ITEMS			
Bow Thruster	No	Generator	No
Windlass	No	Jib Furler	No
Heavy Deck	No	Main Furler	No
Headliners	Yes	Water Heater	No
Anchor Weight		Heavy Items Adjustment	0,0015
Anchor LCG		Total Gyradius Adjustment	0,0367

PROPELLER		
Installation	Strut Drive	PRD 0,430
Type	Folding	PBW 0,125
Twin Screw	No	PIPA 0,0032
ST1 0,060	ST3 0,180	ST5 0,325
ST2 0,180	ST4 0,092	EDL 1,800

Certificate	
Number	EST606
ORC Ref	EST00000509
Issued On	12.08.2009
VPP Ver.	1.11
Valid until	31.12.2009

MIZZEN RIG AND SAILS	
N/A	

WATER BALLAST	
N/A	

COMMENTS	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)								
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Formula
	0,180	1,03	1,77	2,99	3,91	15,50	39,13	$P/8 \cdot (E + 2 \cdot MGL + 2 \cdot MGM + 1.5 \cdot MGU + MGT + 0.5 \cdot HB)$
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG	
	0,12	0,63	1,18	2,08	2,96	14,17	3,96	$0.1125 \cdot JL \cdot (1.445 \cdot LPG + 2 \cdot JGL + 2 \cdot JGM + 1.5 \cdot JGU + JGT + 0.5 \cdot JH)$
Symmetric	SL	SMG	SF					
	14,00	7,13	6,65					$SL \cdot (SF + 4 \cdot SMG) / 6$

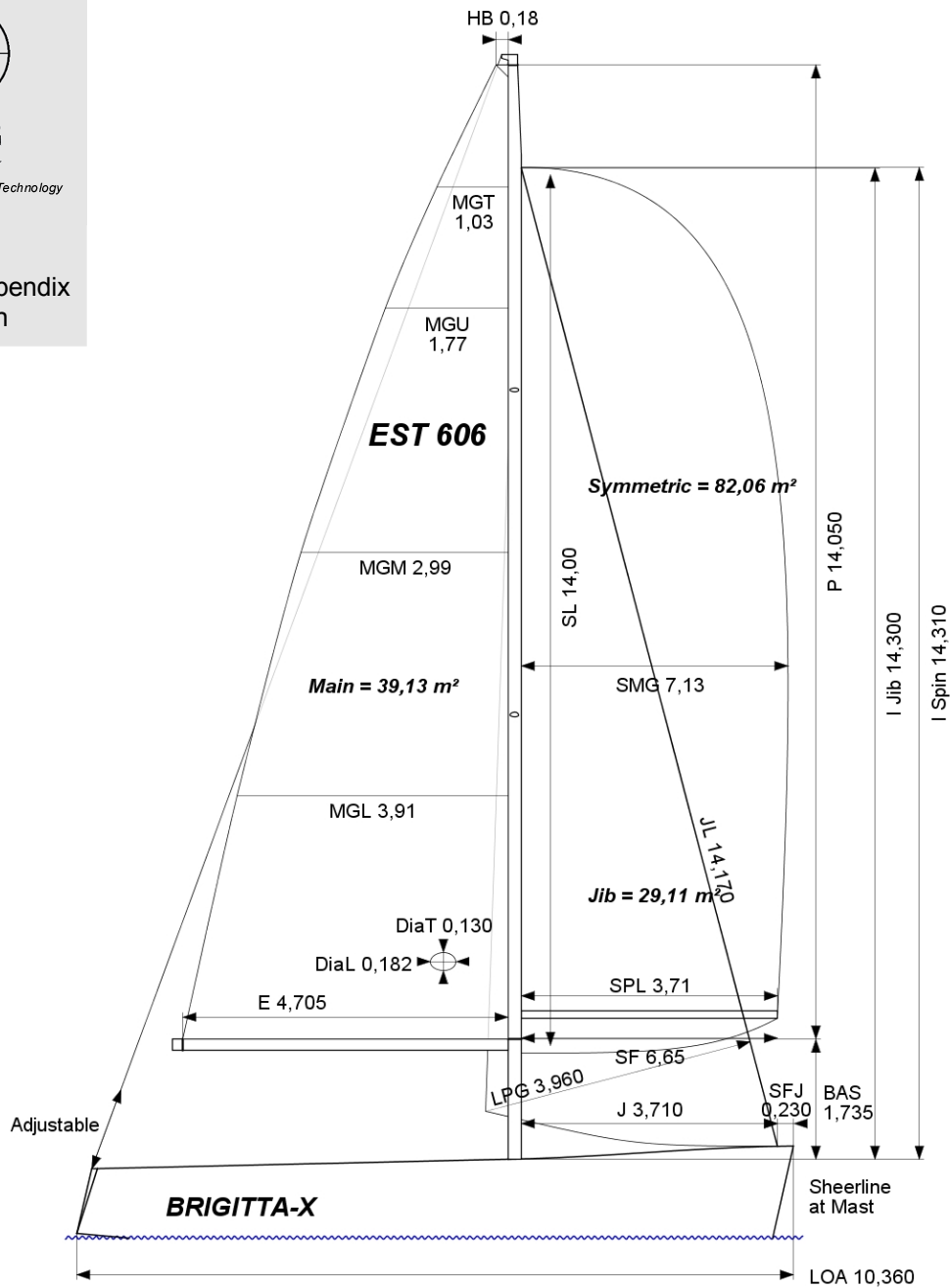
MEASUREMENT INVENTORY			
Measurer V.Rosme EST 2			
Date 10.08.2009			
Comment			
Id	Item	Weight	Distanc Description
1	Anchor	10,0	2,80 Anchor
1	Tools	3,0	6,20 Toolbox
Id	Item	Maker	Model
1	Engine	Yanmar	20YM
Id	Item	Weight	Description

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capct	Dist.	Condt Description
1	Liquid Tank	Septic	Plastic	40,0	8,20	0,0
2	Liquid Tank	Fuel	Alum	90,0	4,85	5,0 starboard
3	Liquid Tank	Water	Plastic	210,0	4,40	0,0 portside
Id	Item	Weight	Distanc	Description		
1	Battery	4,00	180 Ah	starboard		
2	Battery	7,80	70 Ah			
1	Miscellaneous	4,90	Boiler Isotherm			



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Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	0,180	1,03	1,77	2,99	3,91	15,50	39,13				Unknown	
2	0,150	0,89	1,59	2,77	3,75	26,40	37,05				Unknown	

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	0,12	0,63	1,18	2,08	2,96	3,96	14,17	107%	29,11				Unknown	
2	0,12	0,64	1,18	2,06	2,93	3,93	14,17	106%	28,90				Unknown	
3	0,09	0,47	0,90	1,76	2,65	3,60	14,00	97%	25,03				Unknown	

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	14,00	7,13	6,65	82,06				Unknown	
2	14,00	7,00	6,62	80,78				Unknown	

ASYMMETRIC SPINNAKERS

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