

BOAT
Name VENUS
Sail Nr EST 319

GPH
645,0

HULL
Length Overall 10,546 m
Maximum Beam 3,553 m
Displacement 6 578 kg
Draft 2,031 m
IMS Reg. Division Cruiser/Racer
Dynamic Allowance 0,755%
Fwd Accommodation Yes
Hull Construction Cored
Carbon Rudder No
Trim Tab No
IMS L 9,786 VCGD 0,140 VCGM 0,063
Sink 19,51 kg/mm Wetted Area 26,45 m²



2009
ORC International
Certificate

GENERAL
Class RIDAS 35
Designer LÖNNGREN
Builder RIDAS JAHT
Series 06.1997
Age 05.2002
Age Allowance 0,780%
Offset File est220.bof - 11.06.1999 3:00:00
Measurement by A.TETSMANN - 06.07.2009

SCORING OPTIONS		
	OFFSHORE	INSHORE
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time On Distance	645,0	721,4
Time On Time	0,9302	0,9357
Performance Line	PLT 0,814 PLD 103,3	PLT 0,934 PLD 269,1
Triple Number	Low 0,9069 Medium 1,1846 High 1,3345	Low 0,6824 Medium 0,9540 High 1,1191

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	1128,5	906,6	795,4	743,2	713,9	695,4	676,9
52°	720,2	595,0	544,4	515,0	500,5	493,0	485,7
60°	639,7	548,2	510,6	492,3	483,5	478,4	472,7
75°	587,1	523,6	489,3	474,3	465,7	459,5	449,8
90°	581,8	525,6	489,6	472,0	461,2	445,0	427,9
110°	625,4	541,9	499,7	476,9	458,0	438,1	418,3
120°	668,6	560,6	513,9	484,7	466,6	445,2	409,2
135°	781,6	618,4	546,9	506,8	482,6	465,8	426,7
150°	936,9	727,4	608,4	546,8	509,1	484,7	450,0
Run VMG	1081,9	839,9	701,9	614,2	558,1	520,6	476,0

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Crew Weight
Declared 500 kg
Default* 655 kg

Special Scoring
ToD ToT
Double 646,2 0,9285
Non Spinnaker 693,9 0,8646

Selected Courses							
Windward / Leeward	1123,5	887,7	760,6	688,0	643,7	614,9	582,3
Circular Random	893,4	719,0	625,4	571,1	537,7	515,8	488,3
Ocean for PCS	958,1	753,5	640,1	571,4	526,8	495,5	451,9
Non Spinnaker	987,2	783,0	671,1	604,9	563,8	537,1	504,6

Sails Limitations
Genoa 3 Jibs 2 Spinnakers 3
Spinnaker configuration Symmetric + Code 0

Storm Sails Areas
Heavy Weather Jib 26,46
Storm Jib (JL=9,10) 9,80
Storm Trysail 10,34

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	44,5°	43,1°	40,8°	38,9°	37,4°	36,5°	35,8°
Beat VMG	3,19	3,97	4,53	4,84	5,04	5,18	5,32
52°	5,00	6,05	6,61	6,99	7,19	7,30	7,41
60°	5,63	6,57	7,05	7,31	7,45	7,52	7,62
75°	6,13	6,88	7,36	7,59	7,73	7,84	8,00
90°	6,19	6,85	7,35	7,63	7,81	8,09	8,41
110°	5,76	6,64	7,20	7,55	7,86	8,22	8,61
120°	5,38	6,42	7,01	7,43	7,72	8,09	8,80
135°	4,61	5,82	6,58	7,10	7,46	7,73	8,44
150°	3,84	4,95	5,92	6,58	7,07	7,43	8,00
Run VMG	3,33	4,29	5,13	5,86	6,45	6,91	7,56
Gybe Angles	143,1°	145,9°	152,1°	163,2°	172,1°	173,6°	177,5°

Owner
MTÜ VENUS
Papli 5, Lagedi
Estonia
ESS Kalev JK
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT	
Name VENUS	Sail Nr EST 319
File Est0319.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 20.05.2009		SG 1,0020
FFM 1,125	FF 1,135	SFFP 0,550
FAM 0,918	FA 0,925	SAFP 9,246
W1 63,000	PD1 479,7	WD 11,995
W2 63,000	PD2 477,9	GSA 1,0
W3 63,000	PD3 479,7	RSA 1,0
W4 63,000	PD4 477,0	PLM 9000,
Maximum beam station from stem		6,698
RM Measured / Default		124,3 / 124,0
Limit of positive stability		111,2°
Stability Index		114,4
Freeboard at mast at 4,430		1,032



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 13,900	E 4,250	MDT1 0,112	TL
IG 13,930	J 4,430	MDL1 0,183	MWT 149,00
ISP 13,930	SFJ 0,000	MDT2 0,098	MCG 4,900
SPS 3,020	SPL 4,300	MDL2 0,175	CPW 2,080
BAS 1,440	TPS 4,430	MW 0,183	BD 0,168
BAL 0,152	FSP 0,066	GO 0,205	BWT 26,00

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 37,0	Heavy Items Adjustment	0,0025	
Anchor LCG 0,60	Total Gyradius Adjustment	0,0341	

PROPELLER		
Installation Strut Drive	PRD	0,400
Type Folding	PBW	0,118
Twin Screw No	PIPA	0,0030
ST1 0,058	ST3 0,118	ST5 0,213
ST2 0,118	ST4 0,098	EDL 1,900

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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	
	0,170	0,87	1,58	2,68	3,54	17,50	34,78	P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG	Formula	
	0,09	0,69	1,31	2,57	3,92	13,67	5,24	0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)	
Symmetric	SL	SMG	SF				Area	Formula	
	13,20	7,70	7,97				85,30	SL · (SF + 4·SMG) / 6	
Code Zero	SLU	SLE	ASL	AMG	ASF			Area	Formula
	13,15	12,50	12,83	4,77	7,28			56,34	ASL · (ASF + 4·AMG) / 6

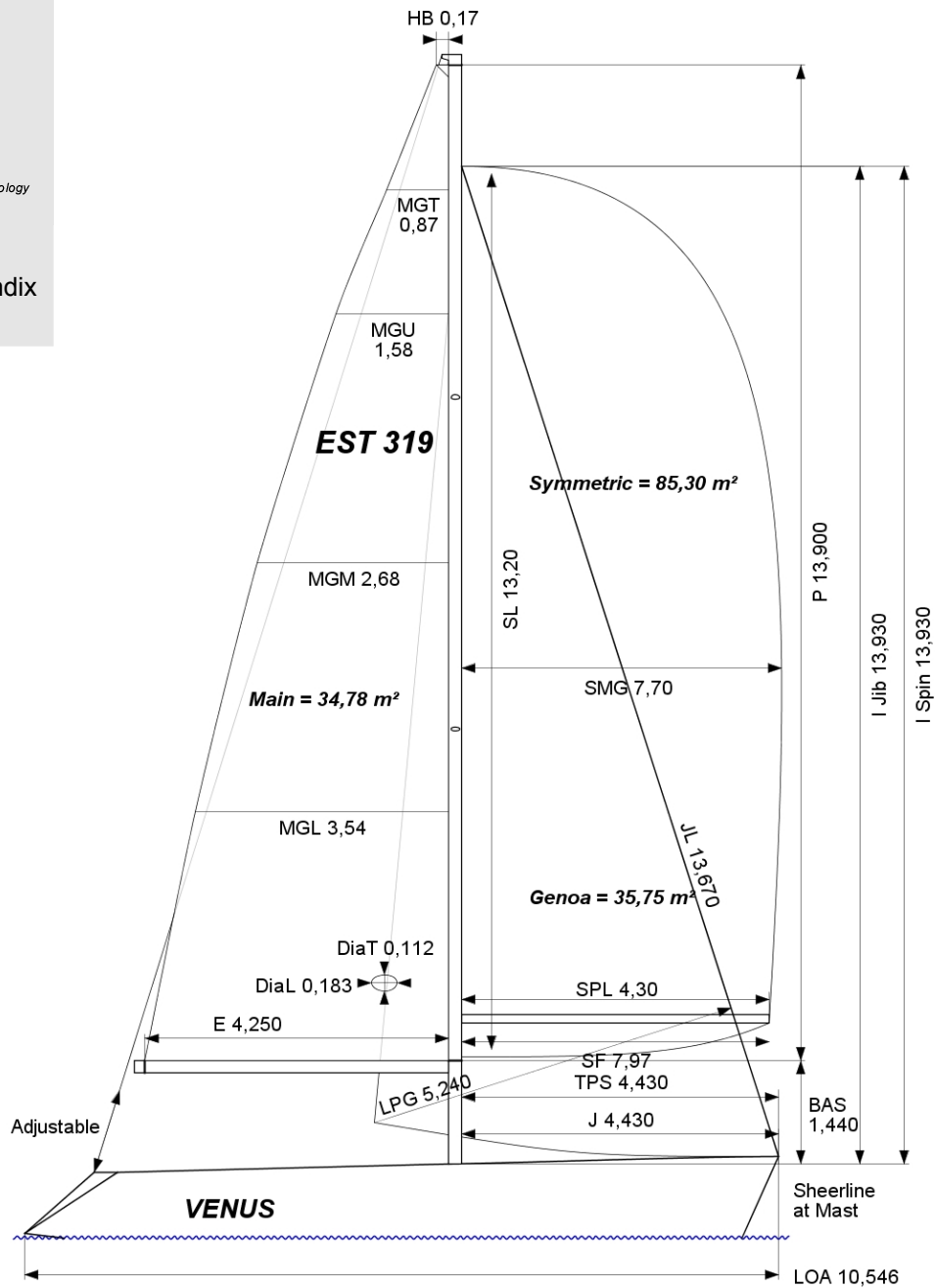
MEASUREMENT INVENTORY			
Measurer Veiko Rosme			
Date 20.05.2009			
Comment			
Id	Item	Weight	Distanc Description
1	Anchor	15,0	0,60 Anchor
2	Anchor	7,0	0,60 Anchor
1	Chain	15,0	0,60 Anchor chain
Id	Item	Maker	Model
1	Engine	Yanmar	3GM30
Id	Item	Weight	Description

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capct	Dist.	Condt Description
1	Liquid Tank	Diesel	Steel	70,0	7,40	5,0 Fuel Tank
2	Liquid Tank	Water	Steel	200,0	4,00	0,0 Fresh Water
Id	Item	Weight	Distanc	Description		
1	Battery		4,60	2 batteries 100 Ah		



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
ORC	0,170	0,87	1,58	2,68	3,54	17,50	34,78					* Copied from legacy *

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measure	Meas.Dat	Manufacturer	Material	Comment
1	0,09	0,69	1,31	2,57	3,92	5,24	13,67	118%	35,76				Unknown	

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Dat	Manufacturer	Material	Comment
ORC	13,20	7,70	0,00	85,30					* Copied from legacy *

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Dat	Manufacturer	Material	Comment
1	13,15	12,50	12,83	4,77	7,28	56,34	code0				Unknown	