

GPH = 610.6 **CDL = 9.103**

BOAT

Class **X-35 mod**
Designer **JEPPESEN**
Builder **X YACHTS**
Age Date **01/2006**
Series Date **09/2005**
Offset File **X35-EST50.off**

HULL

Length Overall **10.600 m**
Maximum Beam **3.250 m**
Draft **2.036 m**
Displacement **4,569 kg**
DLR **5.6967**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.000%**
Age Allowance **0.487%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.420m**

CREW

Maximum weight **745 kg**
Minimum weight **559 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	39.91	40.76
Headsail Luffed	32.46	32.46
Headsail Flying		
Symmetric	94.15	94.15
Asymmetric		

SAIL LIMITATIONS

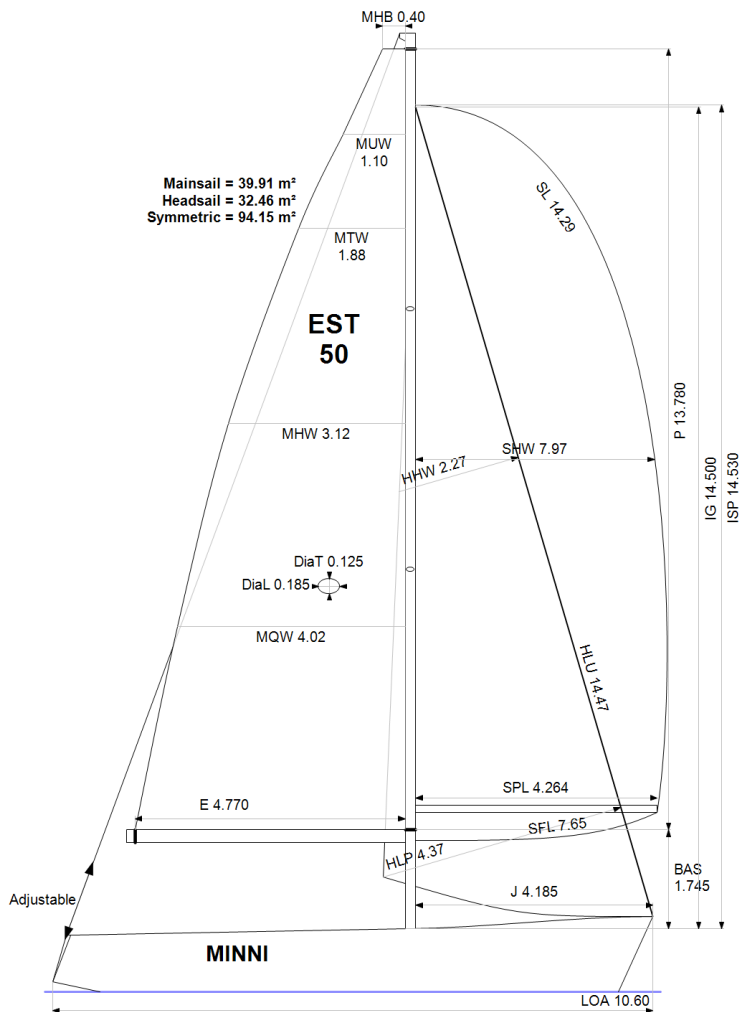
Headsails **5**
Spinnakers **4**

STABILITY

Righting Moment **115.3 kg·m**
Stability Index **120.4**

OWNER

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.



Mainsail = 39.91 m²
Headsail = 32.46 m²
Symmetric = 94.15 m²

**EST
50**

MINNI

Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	41.3°	40.1°	39.0°	39.0°	39.0°	39.4°
Beat VMG	3.54	4.30	4.84	5.04	5.12	5.16	5.21
52°	5.43	6.43	6.98	7.17	7.25	7.28	7.38
60°	5.76	6.69	7.15	7.37	7.46	7.50	7.63
75°	6.02	6.88	7.29	7.58	7.80	7.92	8.01
90°	5.95	6.87	7.34	7.63	7.97	8.28	8.62
110°	5.87	6.97	7.50	7.96	8.30	8.57	9.03
120°	5.71	6.86	7.43	7.92	8.44	8.93	9.57
135°	5.16	6.35	7.12	7.58	8.06	8.59	9.95
150°	4.35	5.46	6.44	7.12	7.55	8.00	9.01
Run VMG	3.77	4.73	5.58	6.29	6.91	7.37	8.22
Gybe Angles	142.0°	148.0°	151.0°	158.5°	180.0°	180.0°	180.0°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1015.8	838.1	744.5	713.6	702.8	697.5	690.7
52°	662.5	559.9	516.0	501.9	496.8	494.6	487.7
60°	625.4	538.1	503.4	488.6	482.7	479.7	472.1
75°	597.8	523.6	494.0	474.8	461.3	454.5	449.2
90°	605.1	523.8	490.2	471.8	451.7	434.9	417.6
110°	612.9	516.3	479.7	452.5	433.6	420.2	398.5
120°	630.4	525.1	484.8	454.8	426.5	403.4	376.1
135°	697.4	566.8	505.8	475.2	446.4	419.0	361.8
150°	827.5	659.8	558.9	505.4	476.8	450.2	399.5
Run VMG	955.5	761.8	644.7	572.0	520.9	488.5	438.1
Selected Courses							
Windward / Leeward	985.7	800.0	694.6	642.8	611.8	593.0	564.4
All purpose	757.0	627.0	561.7	529.3	507.5	493.0	469.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	670.9	0.8943
All purpose	546.0	1.0990

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	594.7	1.0089
Triple Number Coastal/Long Distance Low	692.0	0.8671
Triple Number Coastal/Long Distance Medium	542.8	1.1054
Triple Number Coastal/Long Distance High	487.8	1.2299
Triple Number Windward/Leeward Low	892.9	0.6720
Triple Number Windward/Leeward Medium	665.4	0.9017
Triple Number Windward/Leeward High	587.0	1.0222

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	982.7	752.3	629.3	564.4	527.9	497.7	448.4



Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	X-35 mod	LOA	10.600	VCGD	-0.001
Measurement	19/06/2019	Max. Beam	3.250	VCGM	-0.014
Measurer		Draft	2.036	RM Measured (kg·m)	115.3
HIN		Displacement	4.569	RM Default (kg·m)	121.3
Plan review		Wetted area	23.50	Limit of positive stability(°)	119.5
Hull construction	Cored	IMS L	9.466	Stability Index	120.4
Carbon Rudder	No	LSM0	9.291		
Light stanchions		Acc. length	10.563		
Trim tab	No	Sink (kg/mm)	17.68		

PROPELLER

Propeller Type	Folding 2 blades	PRD	0.420	EDL	2.390	ST3	0.182
Installation	Strut	PBW	0.128	ST1	0.042	ST4	0.112
Twin screw	No			ST2	0.178	ST5	0.255
PIPA	0.0033						

RIG

Forestay tension	Aft	P	13.780	E	4.770
Inner stay	None Fitted	IG	14.500	J	4.185
Carbon mast	No	ISP	14.530	BAS	1.745
Headsail furler	No	MDT1	0.125	FSD	0.034
Mainsail furler	No	MDL1	0.185	SFJ	
Articulated bowsprit	No	MDT2	0.125	SPL	4.264
Non-circular rigging	No	MDL2	0.177	TPS	
Fiber rigging	No	TL	0.760	BD	0.220
Runners/Checkstays	0	MW	0.184	MWT	156.00
Spreaders	2	GO	0.204	MCG	4.600

FLOTATION AND STABILITY

Inclining Test	Poles Inclining	SFFP	0.075	SAFP	10.275	W1	70.0	PD1	544.2	WD	11.400
Flotation Date	19/06/2019	FFM	1.313	FAM	0.969	W2	70.0	PD2	544.9	PLM	9000.00
Measurer		FF	1.324	FA	0.978	W3	70.0	PD3	545.0	GSA	1.0
Comment	Pirita	LCFcl	5.978	LCFsh	6.174	W4	70.0	PD4	545.1	RSA	1.0
		SG	1.0000	HBI	1.110						

MEASUREMENT INVENTORY

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
1	Fuel St.stl	60.0	6.15		60.0	Fuel
2	H2O PVC	120.0	5.52			Water
Id	Item Description	Weight	LCG	VCG		
1	Battery 170 Ah gel - services	44.3	4.85			
2	Battery 55 Ah - engine	17.4	5.18			
1	Miscellaneous Table	20.0	5.52			
2	Miscellaneous Boiler	15.0	7.60			
3	Miscellaneous Autopilot	7.0	9.60			



MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
4a	0.40	1.10	1.88	3.12	4.02	39.91		10/06/2020		Carbon	3di 2019
3	0.36	1.09	1.80	2.97	3.85	38.55		04/05/2018	OneSails	Unknown	P13,25;E4,60

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
9a	0.10	0.64	1.20	2.27	3.30	4.37	14.47	No	No		32.46		10/06/2020		Carbon	3di 2019 Light
10a	0.10	0.62	1.18	2.23	3.31	4.34	14.51	No	No		32.30		10/06/2020		Carbon	3di 2019 Medium
6a	0.10	0.63	1.20	2.27	3.30	4.36	14.31	No	No		32.07		04/05/2018		Spectra	Medium 2016
8	0.14	0.59	1.11	2.16	3.28	4.44	13.42	No	No		29.62		01/06/2017	OneSails	Technora	OS 2017 Heavy
11	0.10	0.51	0.90	1.69	2.50	3.37	12.47	No	No		21.26		19/06/2019		Unknown	Staysail 2019

SYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Maker	Material	Comment
11	14.29	14.29	14.29	7.97	7.65	94.15		25/05/2021	North Sails	Unknown	
12	14.30	14.30	14.30	7.92	7.70	93.86		23/05/2021	North Sails	Unknown	
10	14.30	14.30	14.30	7.94	7.39	93.31		04/05/2018		Unknown	S2
9	14.14	14.14	14.14	7.92	7.80	93.04		04/05/2018		Unknown	S1
3	14.20	14.20	14.20	7.70	7.40	90.41		01/07/2015		Unknown	S4 0,75oz
8	14.07	14.07	14.07	6.54	6.78	77.24		01/06/2017		Unknown	R