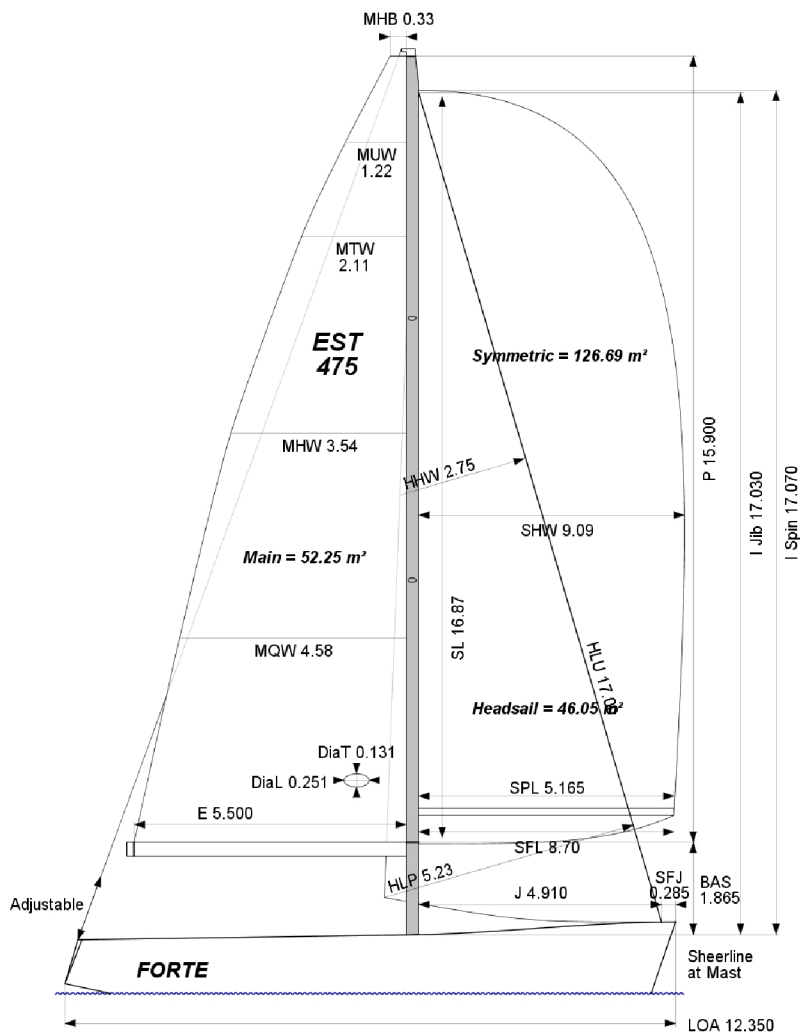




BOAT		GPH	HULL	
Name	FORTE	571.5	Data File	EST475 LOA 12.350m
Sail Nr	EST 475		Offset File	EST475.off MB 3.646m
			Displacement	7,177kg Draft 2.511m
CLASS				
Class	X-41			
Designer	JEPESEN			
Builder	X YACHTS			
Series	01/2006			
Age Date	05/2007			
Age Allowance	0.455%			
COMMENTS				
PROPELLER		CENTERBOARD		
Installation	Strut	PRD	0.430	N/A
Type	Folding 2 blades	PBW	0.125	
		PIPA	0.0032	

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	555.8			620.5		
Time on Time	1.0795			1.0878		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	651.0	507.3	453.9	839.8	622.7	543.7
Time on Time	1.0369	1.3306	1.4870	0.8038	1.0840	1.2416



2020 ORC Club Certificate

Rating Office
Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



Certificate
Number **129/20**
Issued On **04/08/2020**
ORC Ref **03880000NW3**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight
Default **801kg**
Maximum **890kg**
Minimum* **668kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **602.6 0.9957**
Non Spin OSN **586.4 1.0232**

Sails Limitations
Headsails **6** Spinnakers **4**

Spinnaker configuration
Symmetric: **Yes 126.69**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length
CDL = **10.756**

Stability (Measured)
Limit Positive Stab.: **124.0°**
Stability Index: **128.2**

BOAT

Name **FORTE**
File **EST475**

Sail Nr **EST 475**
Data in **meters/kilograms**

RIG

Forestay Tension **Aft**
Inner Stay **None Fitted**
Carbon Mast **Yes**
Fiber Rigging **No**
Non-Circular Rigging **No**
Articulated Bowsprit **No**

Spreaders **2**
Runners/Checkstays **0**
Jib Furler **No**
Main Furler **No**

P **15.900** E **5.500** MDT1 **0.131** MW **0.251**
IG **17.030** J **4.910** MDL1 **0.251** GO **0.276**
ISP **17.070** SFJ **0.285** MDT2 **0.122** BD **0.270**
BAS **1.865** SPL **5.165** MDL2 **0.190** MWT **204.00**
FSD **0.036** TPS TL **0.550** MCG **5.810**

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**
Flotation date **25/05/2020** SG **1.0000**

FFM **1.429** FF **1.439** SFFP **0.200**
FAM **1.079** FA **1.086** SAFF **11.995**

W1 **99.6** PD1 **552.9** WD **14.000**
W2 **99.6** PD2 **553.9** GSA **1.0**
W3 **99.6** PD3 **553.1** RSA **1.0**
W4 **99.6** PD4 **552.2** PLM **9000.0**

LCF from stem on CL / on sheer **6.949 / 7.158**
Maximum beam station from stem **8.432**
RM Measured **198.6kg·m**
RM Default **206.0kg·m**
Limit of positive stability / Stab.Index **124.0° / 128.2**
Freeboard at mast at 5.195 **1.197**

MIZZEN RIG AND SAILS

N/A

COMMENTS

PROPELLER

Installation **Strut** PRD **0.430**
Type **Folding 2 blades** PBW **0.125**
Twin Screw **No** PIPA **0.0032**

ST1 **0.060** ST3 ST5 **0.325**
ST2 ST4 **0.092** EDL **1.540**

MOVABLE BALLAST

N/A

CENTERBOARD

N/A

Certificate

Number **129/20**
ORC Ref **03880000NW3**
Issued On **04/08/2020**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**


ESTONIAN YACHTING UNION

SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.33	1.22	2.11	3.54	4.58	52.26				Unknown	P15,90; E5,50
7	0.21	1.16	2.01	3.46	4.46	50.92				Unknown	P15,80;E5,37

HEADSAILS (2)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
10a	0.12	0.79	1.46	2.75	3.99	5.23	17.00	107%	46.05	Y	No	EST7	24/07/2020	North Sails	Unknown	2019 light
9	0.12	0.76	1.42	2.70	3.97	5.24	17.05	107%	45.77	Y	No				Unknown	2015 medium

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
6	16.87	16.87	16.87	9.09	8.70	126.70				Unknown	runner 2015

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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MEASUREMENT INVENTORY

Measurer **K-H Tagu EST7**
Date **20/07/2020**
Comment
Internal Ballast total = 361.8

Id	Item	Weight	Distance	VCG	Description
Id	Item	Maker	Model		
1	Engine	Volvo-Penta	D2 (29 kW)		
Id	Item	Weight	Description		

MEASUREMENT INVENTORY

Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condn	Description
1	Tank	Fuel	metal	90.0	7.00			45.0
2	Tank	Water	plastic	180.0	6.00			0.0
3	Tank	Waste	metal	15.0	4.00			0.0
Id	Item	Weight	Distance	VCG	Description			
1	Ballast	75.5	7.20		Centerline, 37,2+38,3kg			
2	Ballast	143.0	6.70		Starboard, 33,9+34,8+36,1+38,2kg			
3	Ballast	143.3	6.70		Port, 36,1+36,2+35+36 kg			
1	Battery	25.0	8.00		Engine battery			
2	Battery	120.0	5.00		Service batteries			
-	Misc				Removed upper shelves			

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ORC Club Certificate Appendix

BOAT			
Name	FORTE	Certificate Number	129/20
Sail Nr	EST 475	Issued On	04/08/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	943.1	777.3	689.2	657.3	644.5	637.8	624.0
52°	619.5	520.9	478.6	464.8	459.4	456.7	449.2
60°	586.3	501.0	466.9	453.0	447.2	444.0	437.3
75°	561.1	487.8	458.7	441.5	429.5	422.9	416.9
90°	566.6	489.0	458.2	439.1	421.9	406.8	389.2
110°	586.4	487.3	449.4	425.8	409.7	396.8	376.9
120°	601.9	496.0	454.0	427.6	402.0	381.4	357.4
135°	665.7	538.4	474.7	445.4	420.4	394.9	344.4
150°	789.5	629.8	532.2	475.9	447.6	424.4	378.0
Run VMG	911.7	727.2	614.5	543.3	496.4	461.4	415.7
Selected Courses							
Windward / Leeward	927.4	752.2	651.9	600.3	570.5	549.6	519.8
Circular Random	783.3	633.9	554.6	509.1	481.1	462.2	436.3
Coastal / Long Distance	925.8	707.6	589.9	526.1	491.7	463.5	418.3
Non Spinnaker	839.1	673.4	584.0	531.7	499.3	477.7	449.2

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	42.8°	41.3°	39.8°	38.3°	37.9°	37.9°	37.7°
Beat VMG	3.82	4.63	5.22	5.48	5.59	5.64	5.77
52°	5.81	6.91	7.52	7.75	7.84	7.88	8.01
60°	6.14	7.19	7.71	7.95	8.05	8.11	8.23
75°	6.42	7.38	7.85	8.15	8.38	8.51	8.63
90°	6.35	7.36	7.86	8.20	8.53	8.85	9.25
110°	6.14	7.39	8.01	8.45	8.79	9.07	9.55
120°	5.98	7.26	7.93	8.42	8.95	9.44	10.07
135°	5.41	6.69	7.58	8.08	8.56	9.12	10.45
150°	4.56	5.72	6.76	7.56	8.04	8.48	9.52
Run VMG	3.95	4.95	5.86	6.63	7.25	7.80	8.66
Gybe Angles	142.5°	147.5°	150.0°	156.0°	170.0°	180.0°	180.0°