

**GPH = 587.8**    **CDL = 9.653**

**BOAT**

Class **Waarschip 36 WK**  
 Designer **Peltzer Design**  
 Builder **NCD**  
 Age Date **01/2018**  
 Series Date **01/2018**  
 Offset File **WAARSCHIP36.off**

**HULL**

Length Overall **10.955 m**  
 Maximum Beam **3.588 m**  
 Draft **2.031 m**  
 Displacement **4,678 kg**  
 DLR **5.1502**  
 IMS Division **Performance**  
 Dynamic Allowance **0.000%**  
 Age Allowance **0.098%**

**PROPELLER**

Installation **Strut**  
 Type **Folding 2 blades**  
 Diameter **0.430m**

**CREW**

Maximum weight **695 kg**  
 Minimum weight **521 kg \* when applied**  
 Non Manual Power  
 Crew Arm Extension

**SAIL AREAS (m²)**

	Measured	Rated
Mainsail	<b>41.96</b>	<b>43.02</b>
Headsail Luffed	<b>31.61</b>	<b>31.61</b>
Headsail Flying		
Symmetric		
Asymmetric	<b>130.23</b>	<b>130.23</b>

*\* All asymmetric spinnakers with SHW/SFL > 85%*

**SAIL LIMITATIONS**

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

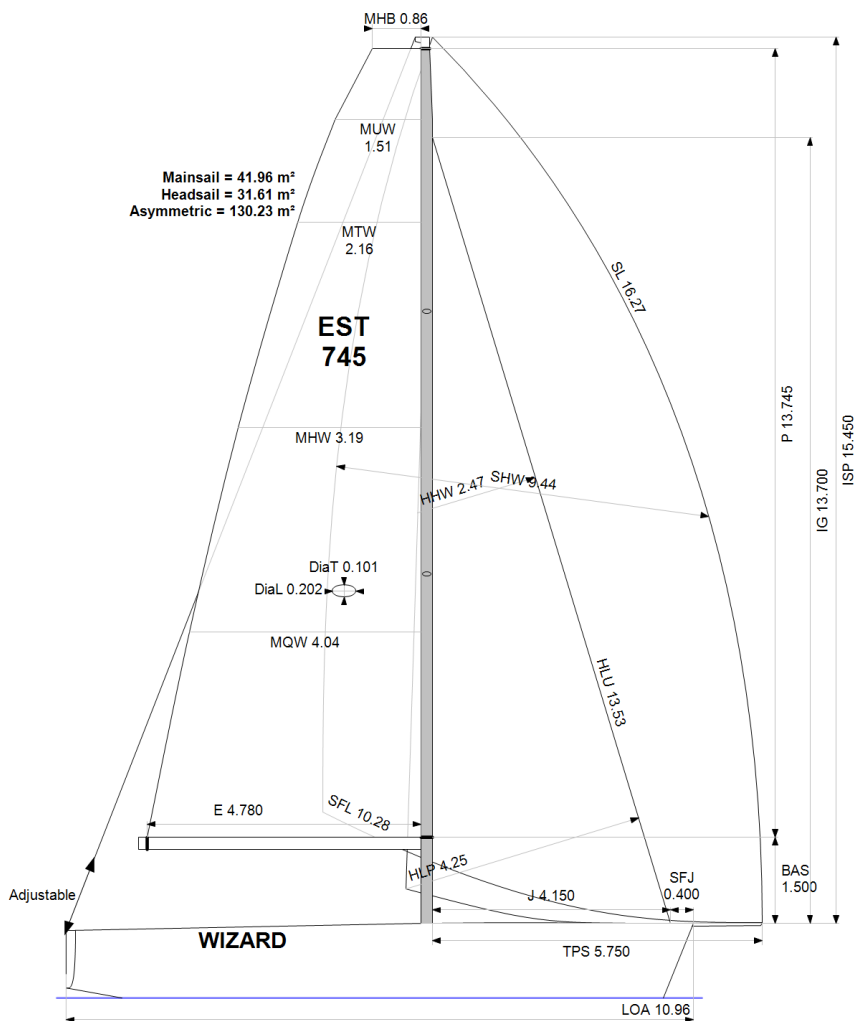
**STABILITY**

Righting Moment **144.8 kg·m**  
 Stability Index **130.9**

**COMMENTS**

EX NED 2018

**OWNER**



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.9°	42.0°	41.1°	40.5°	39.8°	39.8°	40.1°
Beat VMG	3.51	4.30	4.90	5.20	5.32	5.36	5.43
52°	5.43	6.51	7.20	7.51	7.62	7.67	7.76
60°	5.78	6.83	7.41	7.72	7.88	7.96	8.05
75°	6.07	7.07	7.57	7.93	8.27	8.50	8.68
90°	6.10	7.26	7.70	7.98	8.37	8.80	9.44
110°	6.25	7.41	8.02	8.55	8.89	9.21	9.94
120°	6.11	7.32	7.94	8.58	9.24	9.72	10.60
135°	5.39	6.80	7.60	8.15	8.79	9.51	11.51
150°	4.54	5.72	6.81	7.54	7.94	8.37	9.73
Run VMG	3.93	4.95	5.90	6.53	6.88	7.39	8.43
Gybe Angles	143.0°	146.5°	148.0°	151.0°	150.0°	176.0°	142.5°

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

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1025.3	836.7	734.7	691.9	676.4	671.2	662.7
52°	663.1	553.1	500.0	479.6	472.5	469.4	463.8
60°	622.8	526.8	485.7	466.5	456.8	452.1	447.3
75°	592.8	508.9	475.7	453.8	435.4	423.4	414.9
90°	590.4	495.8	467.5	451.2	429.9	409.1	381.4
110°	576.0	485.9	449.1	421.3	404.8	390.9	362.1
120°	588.7	491.8	453.5	419.6	389.5	370.4	339.6
135°	667.9	529.5	473.7	441.5	409.8	378.6	312.8
150°	793.3	629.6	528.3	477.7	453.4	430.1	370.0
Run VMG	916.0	727.0	610.0	551.2	523.5	487.2	427.3
Selected Courses							
Windward / Leeward	970.6	781.8	672.3	621.6	599.9	579.2	545.0
All purpose	741.1	606.9	539.3	505.3	485.7	469.8	441.1

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	652.8	0.9191
All purpose	523.3	1.1465

### Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	571.5	1.0499
Triple Number Coastal/Long Distance Low	674.0	0.8902
Triple Number Coastal/Long Distance Medium	520.2	1.1535
Triple Number Coastal/Long Distance High	463.0	1.2959
Triple Number Windward/Leeward Low	876.3	0.6847
Triple Number Windward/Leeward Medium	646.4	0.9282
Triple Number Windward/Leeward High	571.5	1.0498

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	965.2	732.7	606.7	540.0	504.4	473.3	419.0

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES**

Class	<b>Waarschip 36 WK</b>	LOA	<b>10.955</b>	VCGD	<b>-0.337</b>
Measurement	<b>04/04/2018</b>	Max. Beam	<b>3.588</b>	VCGM	<b>-0.275</b>
Measurer		Draft	<b>2.031</b>	RM Measured (kg·m)	<b>144.8</b>
HIN		Displacement	<b>4,678</b>	RM Default (kg·m)	<b>123.1</b>
Plan review		Wetted area	<b>25.38</b>	Limit of positive stability(°)	<b>133.4</b>
Hull construction	<b>Cored</b>	IMS L	<b>10.007</b>	Stability Index	<b>130.9</b>
Carbon Rudder	<b>No</b>	LSM0	<b>9.685</b>		
Light stanchions	<b>No</b>	Acc. length	<b>10.955</b>		
Trim tab	<b>No</b>	Sink (kg/mm)	<b>19.02</b>		

**PROPELLER**

Propeller Type	<b>Folding 2 blades</b>	PRD	<b>0.430</b>	EDL	<b>1.490</b>	ST3	<b>0.220</b>
Installation	<b>Strut</b>	PBW	<b>0.117</b>	ST1	<b>0.042</b>	ST4	<b>0.092</b>
Twin screw				ST2	<b>0.180</b>	ST5	<b>0.290</b>
PIPA	<b>0.0028</b>						

**RIG**

Forestay tension	<b>Aft</b>	P	<b>13.745</b>	E	<b>4.780</b>
Inner stay	<b>None Fitted</b>	IG	<b>13.700</b>	J	<b>4.150</b>
Carbon mast	<b>Yes</b>	ISP	<b>15.450</b>	BAS	<b>1.500</b>
Headsail furler	<b>No</b>	MDT1	<b>0.101</b>	FSD	
Mainsail furler	<b>No</b>	MDL1	<b>0.202</b>	SFJ	<b>0.400</b>
Articulated bowsprit	<b>No</b>	MDT2	<b>0.100</b>	SPL	
Non-circular rigging	<b>No</b>	MDL2	<b>0.150</b>	TPS	<b>5.750</b>
Fiber rigging	<b>No</b>	TL	<b>1.250</b>	BD	<b>0.220</b>
Runners/Checkstays	<b>0</b>	MW	<b>0.192</b>	MWT	<b>106.20</b>
Spreaders	<b>2</b>	GO	<b>0.215</b>	MCG	<b>5.250</b>

**FLOTATION AND STABILITY**

Inclining Test	<b>Poles Inclining</b>	SFFP	<b>0.000</b>	SAFP	<b>10.955</b>	W1	<b>88.0</b>	PD1	<b>552.5</b>	WD	<b>11.580</b>
Flotation Date	<b>11/06/2021</b>	FFM	<b>1.109</b>	FAM	<b>0.164</b>	W2	<b>88.0</b>	PD2	<b>556.3</b>	PLM	<b>9000.00</b>
Measurer		FF	<b>1.116</b>	FA	<b>0.173</b>	W3	<b>88.0</b>	PD3	<b>558.0</b>	GSA	<b>1.0</b>
Comment	<b>GOOD CONDITIONS-TALLINN</b>	LCFcl	<b>5.932</b>	LCFsh	<b>6.150</b>	W4	<b>88.0</b>	PD4	<b>550.2</b>	RSA	<b>1.0</b>
		SG	<b>1.0000</b>	HBI	<b>1.305</b>						

**MEASUREMENT INVENTORY**

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
A	<b>FUEL RIGID</b>	<b>62.0</b>	<b>7.15</b>			<del>40.0</del> It
Id	Item Description	Weight	LCG	VCG		
A	<b>Ballast PORT+STB</b>	<b>134.8</b>	<b>5.60</b>			
B	<b>Ballast 4 LEAD PIGS</b>	<b>54.5</b>	<b>2.08</b>			
C	<b>Ballast 3 LEAD PIGS</b>	<b>45.5</b>	<b>2.08</b>			
<b>Total ballast</b>		<b>234.8</b>				
Id	Item Description	Weight	LCG	VCG		
A	<b>Battery CL</b>		<b>8.25</b>			



**MAINSAIL**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
2	0.86	1.51	2.16	3.19	4.04	41.96		31/05/2021	UK	Unknown	

**HEADSAIL**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
6	0.15	0.79	1.43	2.47	3.34	4.25	13.53	No	No		31.61		29/06/2021	One Sails	Unknown	
3	0.12	0.74	1.33	2.29	3.30	4.24	13.50	Yes	No		30.53		31/05/2021	UK	Unknown	J-2.2
2	0.12	0.67	1.22	2.20	3.20	4.15	13.44	Yes	No		29.26		31/05/2021	UK	Unknown	J-2.1
4	0.12	0.54	1.02	2.00	3.06	4.10	13.12	Yes	No		26.82		31/05/2021	UK	Unknown	J-3
5	0.10	0.35	0.65	1.25	1.93	2.60	7.35	No	No		9.50		31/05/2021	UK	Unknown	J-4

**ASYMMETRIC SPINNAKER**

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Meas.Date	Maker	Material	Comment
3	17.69	14.84	16.27	9.44	10.28	92%	130.23		29/06/2021	One Sails	Unknown	
6	17.41	15.40	16.41	9.23	10.44	88%	129.49		29/06/2021	One Sails	Unknown	
5	17.68	13.91	15.80	9.62	10.65	90%	129.33		29/06/2021	One Sails	Unknown	
4	16.36	14.69	15.53	6.44	7.55	85%	86.19		29/06/2021	One Sails	Unknown	