

<b>BOAT</b> Name <b>MY-CAR</b> Sail Nr <b>EST 535</b>	<b>GPH</b> <b>612.4</b>	<b>HULL</b> Length Overall <b>10.600m</b> Maximum Beam <b>3.250m</b> Displacement <b>4,632kg</b> Draft <b>2.000m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.066%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>X-35 mod</b> Designer <b>JEPPESEN</b> Builder <b>X YACHTS</b> Series <b>09/2005</b> Age <b>09/2008</b> Age Allowance <b>0.422%</b> Offset File <b>X35mk2DEFmkRud.off - 11/06/2017</b> Measurement by <b>Tetsmann - 09/06/2018</b>		IMSL <b>9.482m</b> VCGD <b>-0.166m</b> Sink <b>17.52kg/mm</b> RL <b>8.899m</b> VCGM <b>-0.179m</b> WS <b>24.67m<sup>2</sup></b> LSM0 <b>9.315m</b> Displacement/Length ratio <b>5.7309</b>



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>594.3</b>			<b>663.2</b>		
Time on Time	<b>1.0095</b>			<b>1.0177</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>702.2</b>	<b>542.0</b>	<b>482.7</b>	<b>904.8</b>	<b>664.2</b>	<b>579.8</b>
Time on Time	<b>0.9612</b>	<b>1.2453</b>	<b>1.3985</b>	<b>0.7460</b>	<b>1.0163</b>	<b>1.1641</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1039.7</b>	<b>855.4</b>	<b>749.7</b>	<b>707.9</b>	<b>691.9</b>	<b>685.8</b>	<b>674.5</b>
52°	<b>682.2</b>	<b>569.3</b>	<b>518.1</b>	<b>499.5</b>	<b>492.9</b>	<b>489.8</b>	<b>483.4</b>
60°	<b>646.1</b>	<b>545.4</b>	<b>505.2</b>	<b>487.4</b>	<b>479.2</b>	<b>475.0</b>	<b>469.1</b>
75°	<b>619.5</b>	<b>530.2</b>	<b>496.1</b>	<b>475.4</b>	<b>459.5</b>	<b>450.1</b>	<b>442.7</b>
90°	<b>626.6</b>	<b>526.4</b>	<b>490.5</b>	<b>473.8</b>	<b>452.7</b>	<b>434.2</b>	<b>411.5</b>
110°	<b>621.4</b>	<b>517.5</b>	<b>479.0</b>	<b>451.4</b>	<b>432.4</b>	<b>418.6</b>	<b>394.7</b>
120°	<b>636.7</b>	<b>526.4</b>	<b>484.0</b>	<b>453.1</b>	<b>424.2</b>	<b>400.7</b>	<b>372.8</b>
135°	<b>700.9</b>	<b>566.9</b>	<b>504.2</b>	<b>473.0</b>	<b>443.6</b>	<b>415.2</b>	<b>355.3</b>
150°	<b>831.9</b>	<b>661.5</b>	<b>557.7</b>	<b>503.0</b>	<b>474.2</b>	<b>447.2</b>	<b>395.5</b>
Run VMG	<b>960.5</b>	<b>763.8</b>	<b>643.7</b>	<b>569.8</b>	<b>520.5</b>	<b>487.5</b>	<b>436.6</b>

**Certificate**

Number **EST535**  
ORC Ref **EST00000209**  
Issued On **19/06/2018**  
VPP Ver. **2018 1.00**  
Valid until **31/12/2018**

**Crew Weight**

Default 622kg  
Maximum **770kg**  
Minimum\* **578kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>617.4</b>	<b>0.9718</b>
Double H.OSN	<b>601.4</b>	<b>0.9976</b>
Non Spin GPH	<b>648.2</b>	<b>0.9256</b>
Non Spin OSN	<b>628.2</b>	<b>0.9551</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1000.2</b>	<b>809.6</b>	<b>696.7</b>	<b>638.8</b>	<b>606.2</b>	<b>586.6</b>	<b>555.6</b>
Circular Random	<b>843.9</b>	<b>681.0</b>	<b>594.0</b>	<b>543.8</b>	<b>512.8</b>	<b>492.0</b>	<b>463.1</b>
Coastal / Long Distance	<b>996.2</b>	<b>760.7</b>	<b>630.9</b>	<b>561.7</b>	<b>523.9</b>	<b>493.2</b>	<b>443.5</b>
Non Spinnaker	<b>907.7</b>	<b>726.2</b>	<b>627.8</b>	<b>570.3</b>	<b>534.7</b>	<b>511.2</b>	<b>480.4</b>

**Sails Limitations**

Headsails	Spinnakers
<b>5</b>	<b>3</b>

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42.8°</b>	<b>41.6°</b>	<b>40.4°</b>	<b>39.2°</b>	<b>38.5°</b>	<b>38.3°</b>	<b>38.2°</b>
Beat VMG	<b>3.46</b>	<b>4.21</b>	<b>4.80</b>	<b>5.09</b>	<b>5.20</b>	<b>5.25</b>	<b>5.34</b>
52°	<b>5.28</b>	<b>6.32</b>	<b>6.95</b>	<b>7.21</b>	<b>7.30</b>	<b>7.35</b>	<b>7.45</b>
60°	<b>5.57</b>	<b>6.60</b>	<b>7.13</b>	<b>7.39</b>	<b>7.51</b>	<b>7.58</b>	<b>7.67</b>
75°	<b>5.81</b>	<b>6.79</b>	<b>7.26</b>	<b>7.57</b>	<b>7.83</b>	<b>8.00</b>	<b>8.13</b>
90°	<b>5.75</b>	<b>6.84</b>	<b>7.34</b>	<b>7.60</b>	<b>7.95</b>	<b>8.29</b>	<b>8.75</b>
110°	<b>5.79</b>	<b>6.96</b>	<b>7.52</b>	<b>7.98</b>	<b>8.33</b>	<b>8.60</b>	<b>9.12</b>
120°	<b>5.65</b>	<b>6.84</b>	<b>7.44</b>	<b>7.95</b>	<b>8.49</b>	<b>8.98</b>	<b>9.66</b>
135°	<b>5.14</b>	<b>6.35</b>	<b>7.14</b>	<b>7.61</b>	<b>8.12</b>	<b>8.67</b>	<b>10.13</b>
150°	<b>4.33</b>	<b>5.44</b>	<b>6.46</b>	<b>7.16</b>	<b>7.59</b>	<b>8.05</b>	<b>9.10</b>
Run VMG	<b>3.75</b>	<b>4.71</b>	<b>5.59</b>	<b>6.32</b>	<b>6.92</b>	<b>7.39</b>	<b>8.25</b>
Gybe Angles	<b>141.0°</b>	<b>148.6°</b>	<b>150.4°</b>	<b>158.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**

CDL = **9.191**

**Storm Sails Areas**

Heavy Weather Jib **27.29**  
Storm Jib (JL=9.24) **10.11**  
Storm Trysail **11.49**

**Owner**

<b>BOAT</b>	
Name <b>MY-CAR</b>	Sail Nr <b>EST 535</b>
File <b>Est0535</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>09/06/2018</b>	SG <b>1.0000</b>	
FFM <b>1.287</b>	FF <b>1.296</b>	SFFP <b>0.075</b>
FAM <b>0.993</b>	FA <b>0.999</b>	SAFP <b>10.275</b>
W1 <b>80.3</b>	PD1 <b>597.7</b>	WD <b>11.740</b>
W2 <b>80.3</b>	PD2 <b>595.7</b>	GSA <b>1.0</b>
W3 <b>80.3</b>	PD3 <b>594.5</b>	RSA <b>1.0</b>
W4 <b>80.3</b>	PD4 <b>594.8</b>	PLM <b>9000.0</b>
LCF from stem on CL / on sheer		<b>5.914 / 6.112</b>
Maximum beam station from stem		<b>7.300</b>
RM Measured		<b>124.6kg·m</b>
RM Default		<b>121.2kg·m</b>
Limit of positive stability / Stab.Index		<b>128.5° / 129.6</b>
Freeboard at mast at 4.185		<b>1.098</b>



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**IMS Measurement Certificate**

<b>RIG</b>				
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>			
Inner Stay <b>None Fitted</b>	Runners <b>0</b>			
Carbon Mast <b>Yes</b>	Jumper Struts <b>None</b>			
Taper Hollows <b>No</b>	Jib Furler <b>No</b>			
Fiber Rigging <b>Yes</b>	Main Furler <b>No</b>			
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>			
Articulated Bowsprit <b>No</b>				
P <b>13.400</b>	E <b>4.900</b>	MDT1 <b>0.101</b>	MW <b>0.225</b>	
IG <b>14.160</b>	J <b>4.185</b>	MDL1 <b>0.233</b>	GO <b>0.242</b>	
ISP <b>14.610</b>	SFJ	MDT2 <b>0.076</b>	BD <b>0.220</b>	
BAS <b>1.540</b>	SPL <b>4.400</b>	MDL2 <b>0.160</b>	MWT <b>94.00</b>	
FSP <b>0.068</b>	TPS	TL <b>1.250</b>	MCG <b>5.100</b>	

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<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0.420</b>	
Type <b>Folding 2 blades</b>	PBW <b>0.128</b>	
Twin Screw <b>No</b>	PIPA <b>0.0033</b>	
ST1 <b>0.042</b>	ST3 <b>0.182</b>	ST5 <b>0.255</b>
ST2 <b>0.178</b>	ST4 <b>0.112</b>	EDL <b>1.740</b>

<b>COMMENTS</b>

<b>MOVABLE BALLAST</b>	
N/A	



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<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.375	1.16	1.94	3.24	4.18	40.33 41.34 $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric	SLU	SLE	SL	SHW	SFL	102.00 $SL \cdot (SFL + 4 \cdot SHW) / 6$
	14.97	14.97	14.97	8.18	8.16	
Asymmetric	Not Available					

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.21	0.72	1.28	2.33	3.34	4.41	14.10	32.45			09/06/2018	Unknow	Code 2
0.22	0.70	1.26	2.31	3.33	4.42	14.14	32.39			09/06/2018	Unknow	Code 1
0.10	0.65	1.23	2.32	3.33	4.20	14.10	31.58			17/05/2016	Unknow	JibTop
0.14	0.58	1.09	2.15	3.26	4.42	13.36	29.29			08/06/2017	Unknow	Code 3
0.10	0.55	0.99	1.82	2.61	3.32	12.42	21.99			25/04/2017	Unknow	

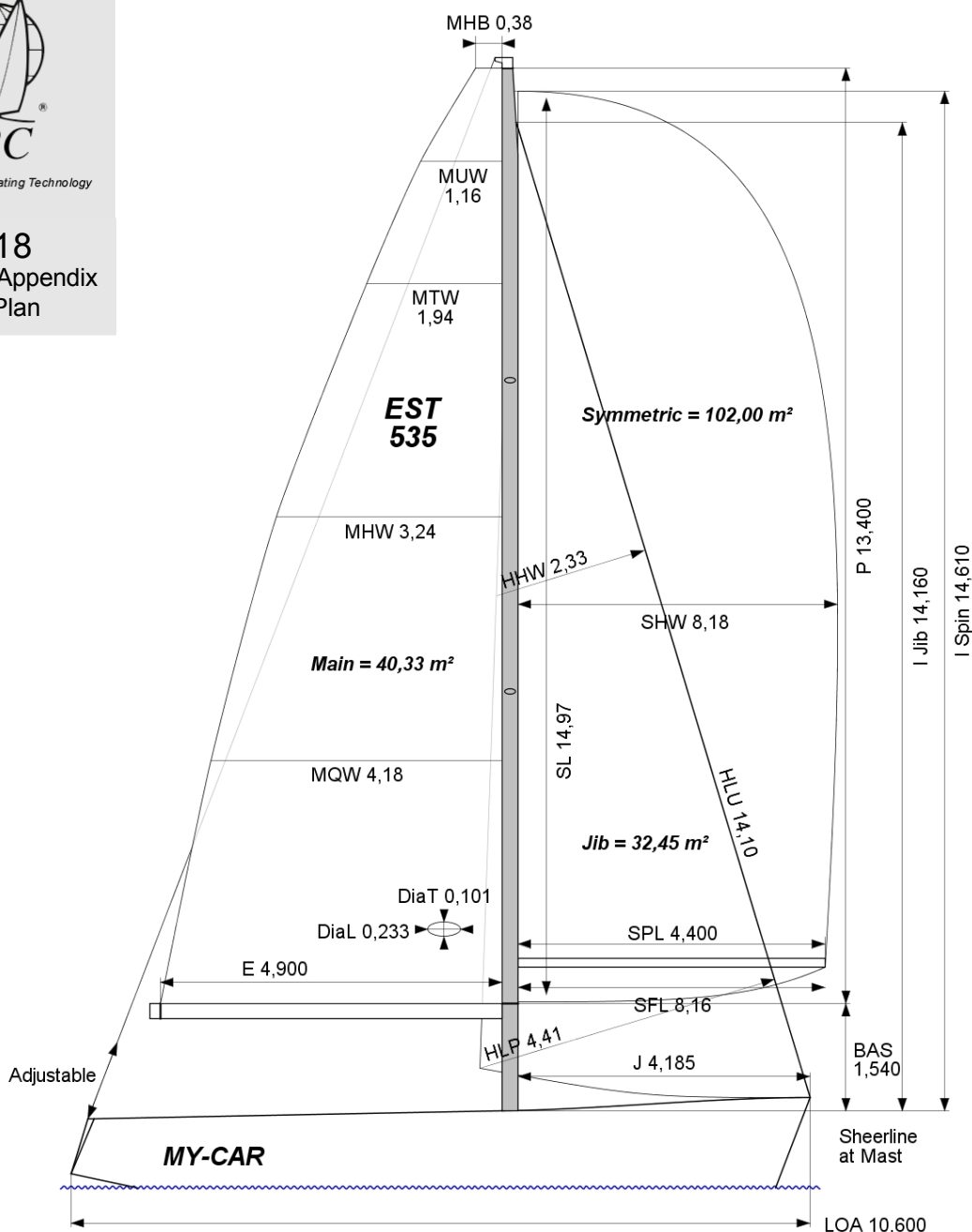
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Karl- Hannes tagu EST 7</b>				
Date <b>09/06/2018</b>				
Comment <b>Tallinn - Pirta</b>				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Yanmar	3YM20C	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

<b>MEASUREMENT INVENTORY</b>						
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG Condtn Description</i>
1	Tank fuel		st.stl	60.0	6.15	40.0 fuel
2	Tank water		pvc	120.0	5.50	0.0 Water
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>		
1	Battery	4.85	90 Ah			
2	Battery	5.20	30 Ah			
Re	Misc	Removed decorative wall panels				



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Sail Plan



**SAILS INVENTORY**

**MAINSAIL (2)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
9	0.375	1.16	1.94	3.24	4.18	40.20	EST 7	09/06/2018	OneSails	Unknown	P13,40;E4,90
7a	0.430	1.10	1.81	3.03	4.01	38.54	EST 7	09/06/2018	OneSails	Unknown	P13,40;E4,88

**HEADSAILS (5)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
11a	0.21	0.72	1.28	2.33	3.34	4.41	14.10	105%	32.45			EST 7	09/06/2018	OneSails	Unknown	Code 2
10a	0.22	0.70	1.26	2.31	3.33	4.42	14.14	106%	32.39			EST 7	09/06/2018	OneSails	Unknown	Code 1
8a	0.10	0.65	1.23	2.32	3.33	4.20	14.10	100%	31.58			EST 1	17/05/2016	OneSails	Unknown	JibTop
12	0.14	0.58	1.09	2.15	3.26	4.42	13.36	106%	29.29			SLO 03	08/06/2017	OneSails	Unknown	Code 3
13	0.10	0.55	0.99	1.82	2.61	3.32	12.42	79%	21.99			SLO 03	25/04/2017	OneSails	Unknown	

**SYMMETRIC SPINNAKERS (5)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
6	14.97	14.97	14.97	8.18	8.16	102.00	SLO 03	25/04/2017		Unknown	VMG
9	14.98	14.98	14.98	8.22	7.95	101.94	SLO 03	15/07/2017		Unknown	
7	14.95	14.95	14.95	8.26	7.72	101.56	SLO 03	25/04/2017		Unknown	Runner
8	14.05	14.05	14.05	6.54	6.76	77.09	SLO 03	25/04/2017		Unknown	Reacher
3	13.95	13.95	13.95	6.25	6.80	73.94	EST 1	09/09/2013		Unknown	

**ASYMMETRIC SPINNAKERS (0)**

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