



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020  
ORC Club  
Certificate**

**Rating Office**

**EYU  
Purje 8  
11911, Tallinn  
Estonia**

**Certificate**

Number **Est309**  
Issued On **5/20/2020**  
ORC Ref **03580000IKS**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 373kg  
Maximum **331kg**  
Minimum\* **246kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **860.5 0.6973**  
Non Spin OSN **830.4 0.7226**

**Sails Limitations**

Headsails **1** Spinnakers **4**  
**Woven Polyester**

**Spinnaker configuration**

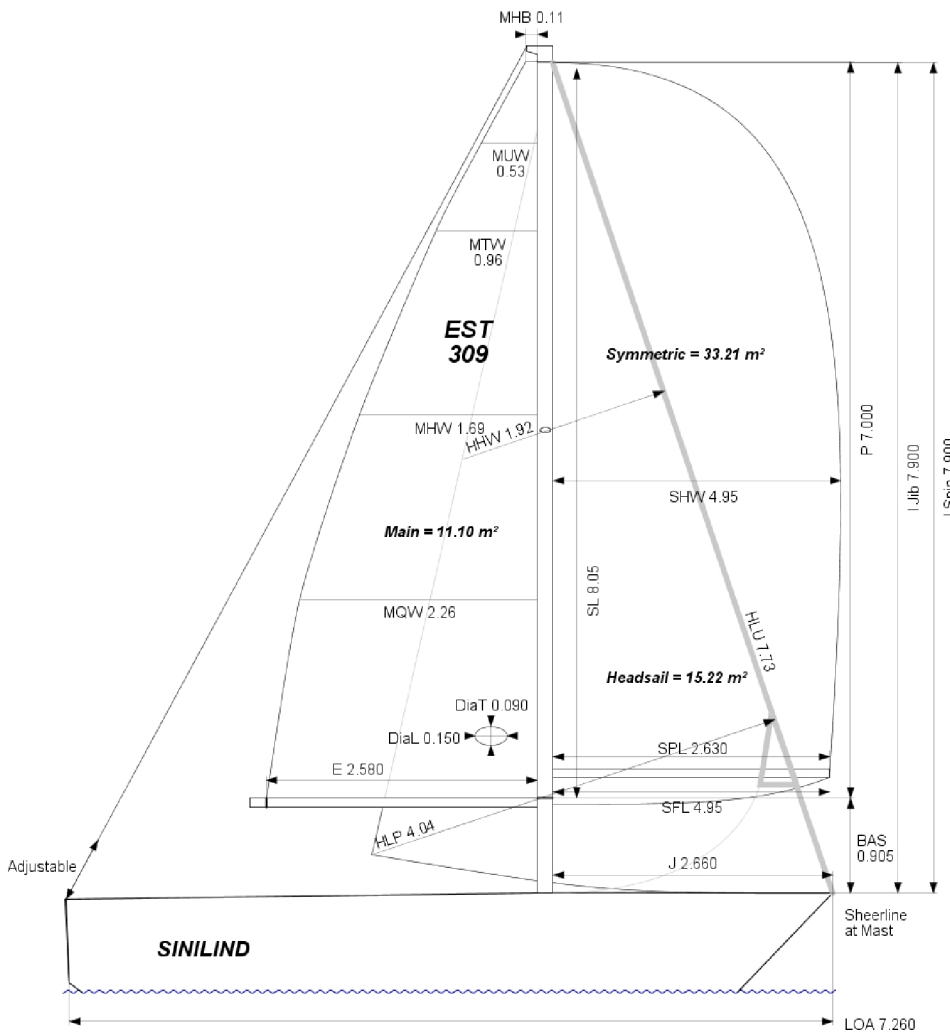
Symmetric: **Yes 33.21**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**

**CDL = 5.330**

**Stability (Estimated)**

Limit Positive Stab.: **126.2°**  
Stability Index: **125.6**



<b>BOAT</b>		<b>GPH</b>		<b>HULL</b>					
Name <b>Sinilind</b>		<b>827.0</b>		Data File <b>Est0309</b>	LOA <b>7.260m</b>				
Sail Nr <b>EST-309</b>				Offset File <b>rock20cl.off</b>	MB <b>2.248m</b>				
				Displacement <b>1,689kg</b>	Draft <b>1.086m</b>				
<b>CLASS</b>				IMS Division <b>Cruiser/Racer</b>	Dynamic All. <b>0.427%</b>				
Class <b>ROCK 20</b>				Plan Review	Construction <b>Solid</b>				
Designer <b>Jyrgen Sass</b>				Fiber Rigging <b>No</b>	Aramid Core <b>No</b>				
Builder <b>Birka Marine</b>				Crew Arm Ex	Carbon Rudder <b>No</b>				
Series <b>01/1969</b>					Light Stanchions <b>No</b>				
Age Date <b>01/1971</b>				IMSL <b>6.319m</b>	VCGD <b>-0.167m</b>	Sink <b>8.00kg/mm</b>			
Age Allowance <b>0.487%</b>				RL <b>4.341m</b>	VCGM <b>-0.059m</b>	WS <b>11.96m²</b>			
<b>COMMENTS</b>				LSM0 <b>6.504m</b>	Displacement/Length ratio				
				Water Ballast	Trim Tab <b>No</b>				
				BLR Index <b>0.0000</b>					
<b>PROPELLER</b>				<b>CENTERBOARD</b>					
Type <b>No Propeller</b>				N/A					
<b>SCORING OPTIONS</b>									
	<b>COASTAL / LONG DISTANCE</b>					<b>WINDWARD / LEEWARD</b>			
Time on Distance	<b>801.6</b>					<b>899.7</b>			
Time on Time	<b>0.7485</b>					<b>0.7503</b>			
Triple Number	Low	Medium	High	Low	Medium	High			
Time on Distance	<b>965.7</b>	<b>727.2</b>	<b>643.7</b>	<b>1256.7</b>	<b>906.6</b>	<b>780.5</b>			
Time on Time	<b>0.6990</b>	<b>0.9282</b>	<b>1.0486</b>	<b>0.5371</b>	<b>0.7445</b>	<b>0.8648</b>			

<b>BOAT</b>	
Name <b>Sinilind</b>	Sail Nr <b>EST-309</b>
File <b>Est0309</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date <b>20/05/2020</b>		SG	
FFM	FF <b>0.923</b>	SFFP	<b>0.475</b>
FAM	FA <b>0.878</b>	SAFP	<b>7.306</b>
LCF from stem on CL / on sheer		<b>4.205 / 4.303</b>	
Maximum beam station from stem		<b>4.560</b>	
RM Measured		<b>22.6kg·m</b>	
RM Default		<b>22.0kg·m</b>	
Limit of positive stability / Stab.Index		<b>126.2° / 125.6</b>	
Freeboard at mast at 2.660		<b>0.939</b>	



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**2020**  
**Measurements**  
**Datasheet**

<b>RIG</b>			
Forestay Tension	<b>Aft</b>	Spreaders	<b>1</b>
Inner Stay	<b>None Fitted</b>	Runners/Checkstays	<b>0</b>
Carbon Mast	<b>No</b>	Jib Furler	<b>Yes</b>
Fiber Rigging	<b>No</b>	Main Furler	<b>No</b>
Non-Circular Rigging	<b>No</b>		
Articulated Bowsprit	<b>No</b>		
P	<b>7.000</b>	E	<b>2.580</b>
IG	<b>7.900</b>	J	<b>2.660</b>
ISP	<b>7.900</b>	SFJ	<b>2.630</b>
BAS	<b>0.905</b>	SPL	<b>2.630</b>
FSD		TPS	
MDT1	<b>0.090</b>	MDL1	<b>0.150</b>
MDT2	<b>0.000</b>	MDL2	<b>0.000</b>
TL	<b>-3.000</b>	MWT	
MW		GO	
		BD	
		MWT	
		MCG	

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

<b>PROPELLER</b>	
Type <b>No Propeller</b>	

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<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
52	0.11	0.53	0.96	1.69	2.26	10.95	EST5		JK Sails	Dacron						
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
22	0.05	0.49	0.94	1.92	2.95	4.04	7.73	152%	15.22	No	EST5	EST5	23/08/2019	JK Sails	Dacron	
<b>SYMMETRIC SPINNAKERS (2)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
42	8.05	8.05	8.05	4.95	4.95	33.21	EST 5	27/04/2016		Dacron						
41	8.32	8.32	8.32	4.24	4.63	29.94	EST 5	03/03/2011		Dacron						
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>Sinilind</b>	Certificate Number	<b>Est309</b>
Sail Nr	<b>EST-309</b>	Issued On	<b>5/20/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1521.2</b>	<b>1255.8</b>	<b>1114.3</b>	<b>1013.4</b>	<b>955.9</b>	<b>944.6</b>	<b>972.2</b>
52°	<b>962.2</b>	<b>804.3</b>	<b>713.9</b>	<b>665.7</b>	<b>641.5</b>	<b>634.8</b>	<b>639.2</b>
60°	<b>893.9</b>	<b>750.5</b>	<b>674.0</b>	<b>640.7</b>	<b>621.5</b>	<b>612.9</b>	<b>613.0</b>
75°	<b>847.2</b>	<b>713.7</b>	<b>649.1</b>	<b>621.7</b>	<b>602.9</b>	<b>587.5</b>	<b>574.9</b>
90°	<b>846.6</b>	<b>694.6</b>	<b>629.4</b>	<b>601.0</b>	<b>587.5</b>	<b>575.8</b>	<b>543.6</b>
110°	<b>821.7</b>	<b>676.5</b>	<b>618.6</b>	<b>587.1</b>	<b>557.8</b>	<b>534.1</b>	<b>510.6</b>
120°	<b>846.7</b>	<b>689.9</b>	<b>624.6</b>	<b>591.5</b>	<b>560.6</b>	<b>531.3</b>	<b>488.0</b>
135°	<b>947.4</b>	<b>759.0</b>	<b>649.9</b>	<b>609.5</b>	<b>579.9</b>	<b>549.8</b>	<b>495.2</b>
150°	<b>1089.8</b>	<b>861.0</b>	<b>720.3</b>	<b>640.6</b>	<b>606.8</b>	<b>579.7</b>	<b>525.7</b>
Run VMG	<b>1258.4</b>	<b>991.3</b>	<b>829.3</b>	<b>716.8</b>	<b>649.6</b>	<b>614.0</b>	<b>561.6</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1389.8</b>	<b>1123.5</b>	<b>971.8</b>	<b>865.1</b>	<b>802.7</b>	<b>779.3</b>	<b>766.9</b>
Circular Random	<b>1154.7</b>	<b>925.7</b>	<b>801.2</b>	<b>728.3</b>	<b>684.2</b>	<b>657.4</b>	<b>629.7</b>
Coastal / Long Distance	<b>1376.7</b>	<b>1048.6</b>	<b>867.2</b>	<b>752.6</b>	<b>691.5</b>	<b>652.5</b>	<b>589.9</b>
Non Spinnaker	<b>1211.9</b>	<b>967.3</b>	<b>833.1</b>	<b>753.8</b>	<b>705.4</b>	<b>675.7</b>	<b>645.0</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>46.3°</b>	<b>44.3°</b>	<b>45.0°</b>	<b>44.6°</b>	<b>43.1°</b>	<b>42.8°</b>	<b>44.3°</b>
Beat VMG	<b>2.37</b>	<b>2.87</b>	<b>3.23</b>	<b>3.55</b>	<b>3.77</b>	<b>3.81</b>	<b>3.70</b>
52°	<b>3.74</b>	<b>4.48</b>	<b>5.04</b>	<b>5.41</b>	<b>5.61</b>	<b>5.67</b>	<b>5.63</b>
60°	<b>4.03</b>	<b>4.80</b>	<b>5.34</b>	<b>5.62</b>	<b>5.79</b>	<b>5.87</b>	<b>5.87</b>
75°	<b>4.25</b>	<b>5.04</b>	<b>5.55</b>	<b>5.79</b>	<b>5.97</b>	<b>6.13</b>	<b>6.26</b>
90°	<b>4.25</b>	<b>5.18</b>	<b>5.72</b>	<b>5.99</b>	<b>6.13</b>	<b>6.25</b>	<b>6.62</b>
110°	<b>4.38</b>	<b>5.32</b>	<b>5.82</b>	<b>6.13</b>	<b>6.45</b>	<b>6.74</b>	<b>7.05</b>
120°	<b>4.25</b>	<b>5.22</b>	<b>5.76</b>	<b>6.09</b>	<b>6.42</b>	<b>6.78</b>	<b>7.38</b>
135°	<b>3.80</b>	<b>4.74</b>	<b>5.54</b>	<b>5.91</b>	<b>6.21</b>	<b>6.55</b>	<b>7.27</b>
150°	<b>3.30</b>	<b>4.18</b>	<b>5.00</b>	<b>5.62</b>	<b>5.93</b>	<b>6.21</b>	<b>6.85</b>
Run VMG	<b>2.86</b>	<b>3.63</b>	<b>4.34</b>	<b>5.02</b>	<b>5.54</b>	<b>5.86</b>	<b>6.41</b>
Gybe Angles	<b>149.0°</b>	<b>153.5°</b>	<b>152.0°</b>	<b>168.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>