



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club**  
**Certificate**

**Rating Office**  
A.Goštauto g. 40 A  
LT-03163, Vilnius  
Lithuania  
+370 650 28392



**Certificate**

Number **LT103**  
Issued On **2020-07-16**  
ORC Ref **03590000MKS**  
VPP Ver. **2020 1.02**  
Valid until **31-12-2020**

**Crew Weight**

Default	302kg
Maximum	<b>335kg</b>
Minimum*	<b>250kg</b>
*when applied by the NoR and SI	
Non Manual Pwr	<b>No</b>

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>813,8</b>	<b>0,7373</b>
Non Spin OSN	<b>785,0</b>	<b>0,7643</b>

**Sails Limitations**

Headsails **5** Spinnakers **4**  
**Woven Polyester**  
**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **Yes** **36,79**  
Asymmetric: **Yes** **31,83**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**

**CDL = 5,661**

**Stability (Estimated)**

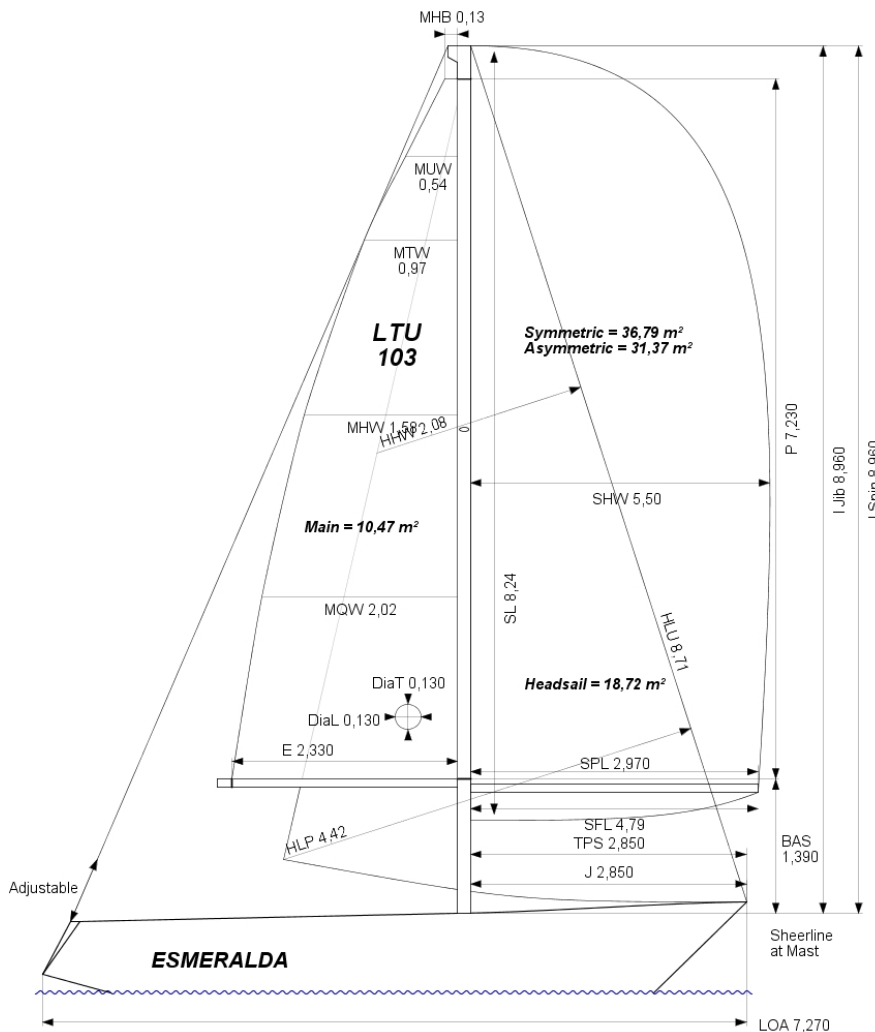
Limit Positive Stab.: **97,1°**  
Stability Index: **89,2**

**Owner**

Laimis Smažinas  
Vilnius  
Lithuania

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



<b>BOAT</b>		<b>GPH</b>		<b>HULL</b>		
Name <b>ESMERALDA</b> Sail Nr <b>LTU 103</b>		<b>779,8</b>		Data File <b>Esmeralda_LTU</b>	LOA <b>7,270m</b>	
				Offset File <b>Conrad24.off</b>	MB <b>2,648m</b>	
				Displacement <b>1 564kg</b>	Draft <b>1,435m</b>	
<b>CLASS</b>		<b>IMS Division Performance</b>				
Class <b>Conrad 24</b>		Dynamic All. <b>0,349%</b>				
Designer		Plan Review				
Builder <b>Poland</b>		Construction <b>Solid</b>				
Series <b>06-1977</b>		Fiber Rigging <b>No</b>				
Age Date <b>06-1977</b>		Aramid Core <b>No</b>				
Age Allowance <b>0,487%</b>		Carbon Rudder <b>No</b>				
		Light Stanchions <b>No</b>				
		IMSL <b>5,914m</b>	VCGD <b>0,112m</b>	Sink <b>8,71kg/mm</b>		
		RL <b>5,407m</b>	VCGM <b>0,218m</b>	WS <b>11,58m²</b>		
		LSM0 <b>5,615m</b> Displacement/Length ratio <b>8,8346</b>				
<b>COMMENTS</b>		Water Ballast <b>0</b> Trim Tab <b>No</b>				
		BLR Index <b>0,0000</b>				
<b>PROPELLER</b>		<b>CENTERBOARD</b>				
Type <b>No Propeller</b>		<b>N/A</b>				
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>755,1</b>			<b>837,2</b>		
Time on Time	<b>0,7946</b>			<b>0,8063</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>894,0</b>	<b>691,1</b>	<b>614,4</b>	<b>1143,7</b>	<b>842,4</b>	<b>732,6</b>
Time on Time	<b>0,7550</b>	<b>0,9767</b>	<b>1,0987</b>	<b>0,5902</b>	<b>0,8013</b>	<b>0,9214</b>

<b>BOAT</b>	
Name <b>ESMERALDA</b>	Sail Nr <b>LTU 103</b>
File <b>Esmeralda_LTU103</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date		SG	
FFM	FF	0,924	SFFP 0,500
FAM	FA	0,603	SAFP 6,885
LCF from stem on CL / on sheer		4,063 / 4,248	
Maximum beam station from stem		4,380	
RM Measured		30,8kg·m	
RM Default		29,9kg·m	
Limit of positive stability / Stab.Index		97,1° / 89,2	
Freeboard at mast at 2,850		0,815	



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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>No</b>
Fiber Rigging	<b>No</b>	Main Furler	<b>No</b>
Non-Circular Rigging	<b>No</b>		
Articulated Bowsprit	<b>No</b>		
P	7,230	E	2,330
IG	8,960	J	2,850
ISP	8,960	SFJ	
BAS	1,390	SPL	2,970
FSD		TPS	2,850
MDT1	0,130	MW	
MDL1	0,130	GO	
MDT2		BD	
MDL2		MWT	
TL		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 (2)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	0,13	0,54	0,97	1,58	2,02	10,48	V.Stankus	21-07-2018		Dacron						
1	0,15	0,59	0,97	1,56	1,99	10,44	V.Stankus	28-07-2012		Dacron						
<b>HEADSAILS (4)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
5	0,04	0,52	1,02	2,08	3,24	4,42	8,71	155%	18,72		No	V.Stankus	21-07-2018		Dacron	
2	0,00	0,53	1,07	2,17	3,39	4,48	8,22	157%	18,29		No	V.Stankus	28-07-2012		Dacron	
4						3,95	8,39	139%	16,87		No				Unknow	
3						2,77	8,20	97%	11,57		No	V.Stankus	28-07-2012		Dacron	
<b>SYMMETRIC SPINNAKERS (2)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
5	8,24	8,24	8,24	5,50	4,79	36,80	V.Stankus	21-07-2018		Unknown						
4	8,20	8,20	8,20	5,30	4,86	35,62	V.Stankus	17-06-2009		Unknown						
<b>ASYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	9,01	8,08	8,55	4,27	4,95	31,38	asym	LBS#6	18-07-2017		Unknown					

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>ESMERALDA</b>	Certificate Number	<b>LT103</b>
Sail Nr	<b>LTU 103</b>	Issued On	<b>2020-07-16</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1325,2</b>	<b>1111,6</b>	<b>988,6</b>	<b>908,1</b>	<b>868,3</b>	<b>859,5</b>	<b>875,5</b>
52°	<b>869,0</b>	<b>735,7</b>	<b>669,5</b>	<b>638,0</b>	<b>620,2</b>	<b>612,5</b>	<b>612,9</b>
60°	<b>824,4</b>	<b>701,7</b>	<b>649,2</b>	<b>623,0</b>	<b>604,4</b>	<b>592,4</b>	<b>589,1</b>
75°	<b>793,8</b>	<b>680,8</b>	<b>634,6</b>	<b>609,2</b>	<b>587,5</b>	<b>568,8</b>	<b>551,5</b>
90°	<b>803,1</b>	<b>675,0</b>	<b>620,1</b>	<b>589,9</b>	<b>565,9</b>	<b>552,4</b>	<b>529,1</b>
110°	<b>794,5</b>	<b>664,1</b>	<b>613,2</b>	<b>578,4</b>	<b>547,7</b>	<b>524,0</b>	<b>493,8</b>
120°	<b>817,5</b>	<b>677,1</b>	<b>620,1</b>	<b>584,7</b>	<b>552,6</b>	<b>525,3</b>	<b>483,0</b>
135°	<b>893,1</b>	<b>729,6</b>	<b>644,6</b>	<b>605,7</b>	<b>573,2</b>	<b>543,7</b>	<b>494,0</b>
150°	<b>1030,6</b>	<b>822,1</b>	<b>702,1</b>	<b>636,8</b>	<b>603,2</b>	<b>573,3</b>	<b>522,0</b>
Run VMG	<b>1190,0</b>	<b>947,8</b>	<b>803,5</b>	<b>705,1</b>	<b>643,9</b>	<b>609,8</b>	<b>554,1</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1257,6</b>	<b>1029,7</b>	<b>896,0</b>	<b>806,6</b>	<b>756,1</b>	<b>734,7</b>	<b>714,8</b>
Circular Random	<b>1073,5</b>	<b>867,6</b>	<b>756,8</b>	<b>691,9</b>	<b>652,1</b>	<b>626,8</b>	<b>598,0</b>
Coastal / Long Distance	<b>1250,8</b>	<b>967,5</b>	<b>810,6</b>	<b>713,9</b>	<b>661,3</b>	<b>625,3</b>	<b>569,0</b>
Non Spinnaker	<b>1132,9</b>	<b>910,0</b>	<b>788,9</b>	<b>717,6</b>	<b>673,7</b>	<b>645,7</b>	<b>613,6</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>42,4°</b>	<b>42,0°</b>	<b>41,6°</b>	<b>39,8°</b>	<b>38,6°</b>	<b>38,6°</b>	<b>40,1°</b>
Beat VMG	<b>2,72</b>	<b>3,24</b>	<b>3,64</b>	<b>3,96</b>	<b>4,15</b>	<b>4,19</b>	<b>4,11</b>
52°	<b>4,14</b>	<b>4,89</b>	<b>5,38</b>	<b>5,64</b>	<b>5,80</b>	<b>5,88</b>	<b>5,87</b>
60°	<b>4,37</b>	<b>5,13</b>	<b>5,55</b>	<b>5,78</b>	<b>5,96</b>	<b>6,08</b>	<b>6,11</b>
75°	<b>4,54</b>	<b>5,29</b>	<b>5,67</b>	<b>5,91</b>	<b>6,13</b>	<b>6,33</b>	<b>6,53</b>
90°	<b>4,48</b>	<b>5,33</b>	<b>5,81</b>	<b>6,10</b>	<b>6,36</b>	<b>6,52</b>	<b>6,80</b>
110°	<b>4,53</b>	<b>5,42</b>	<b>5,87</b>	<b>6,22</b>	<b>6,57</b>	<b>6,87</b>	<b>7,29</b>
120°	<b>4,40</b>	<b>5,32</b>	<b>5,81</b>	<b>6,16</b>	<b>6,51</b>	<b>6,85</b>	<b>7,45</b>
135°	<b>4,03</b>	<b>4,93</b>	<b>5,58</b>	<b>5,94</b>	<b>6,28</b>	<b>6,62</b>	<b>7,29</b>
150°	<b>3,49</b>	<b>4,38</b>	<b>5,13</b>	<b>5,65</b>	<b>5,97</b>	<b>6,28</b>	<b>6,90</b>
Run VMG	<b>3,03</b>	<b>3,80</b>	<b>4,48</b>	<b>5,11</b>	<b>5,59</b>	<b>5,90</b>	<b>6,50</b>
Gybe Angles	<b>149,0°</b>	<b>152,0°</b>	<b>154,5°</b>	<b>174,0°</b>	<b>180,0°</b>	<b>180,0°</b>	<b>180,0°</b>