

BOAT Name Technicol Sail Nr EST 615	GPH 565.1	HULL Length Overall 12.350m Maximum Beam 3.646m Displacement 7,068kg Draft 2.320m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.011% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class X-41 mod Designer JEPPESEN Builder X YACHTS Series 01/2006 Age 04/2010 Age Allowance 0.422% Offset File EST615.off - 5/13/2019 10:11:32 PM Measurement by Tetsmann/Pindoizzi - 27/05/2019		IMSL 11.140m VCGD -0.157m Sink 23.10kg/mm RL 10.137m VCGM -0.179m WS 32.62m² LSMO 11.024m Displacement/Length ratio 5.2757



2019
ORC International
Certificate

Rating Office
EYU
Purje 8
11911, Tallinn
Estonia

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	551.1			617.1		
Time on Time	1.0886			1.0938		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	640.7	502.6	449.3	833.2	619.6	541.7
Time on Time	1.0536	1.3430	1.5024	0.8101	1.0895	1.2460

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	952.7	781.0	695.1	663.2	649.4	639.2	627.5
52°	617.7	515.8	478.8	465.3	459.6	456.7	448.4
60°	577.5	491.8	463.3	452.8	446.9	443.7	435.4
75°	541.6	474.9	450.0	435.6	427.4	421.5	414.8
90°	539.8	475.2	449.9	431.2	414.2	400.7	386.3
110°	566.5	475.3	441.6	420.5	406.1	390.1	357.0
120°	580.2	482.3	445.4	417.7	392.6	376.7	348.7
135°	651.9	522.1	464.6	436.0	408.4	381.5	325.7
150°	770.4	614.4	519.2	467.5	440.1	414.9	364.5
Run VMG	889.6	709.5	599.5	532.7	489.2	455.7	407.8

Certificate
Number **EST615**
ORC Ref **EST00000603**
Issued On **5/29/2019**
VPP Ver. **2019 1.01**
Valid until **12/31/2019**

Crew Weight
Default **791kg**
Maximum **890kg**
Minimum* **668kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	575.2	1.0431
Double H.OSN	563.1	1.0655
Non Spin GPH	603.8	0.9937
Non Spin OSN	587.6	1.0211

Selected Courses							
Windward / Leeward	921.1	745.3	647.3	598.0	569.3	547.5	517.7
Circular Random	772.5	626.0	548.6	504.2	476.5	457.4	430.0
Coastal / Long Distance	918.0	699.4	584.7	522.7	488.2	459.8	413.3
Non Spinnaker	843.4	675.7	585.0	531.9	498.9	476.8	447.9

Sails Limitations

Headsails	Spinnakers
6	4

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	43.6°	42.2°	40.4°	38.9°	38.3°	38.2°	38.5°
Beat VMG	3.78	4.61	5.18	5.43	5.54	5.63	5.74
52°	5.83	6.98	7.52	7.74	7.83	7.88	8.03
60°	6.23	7.32	7.77	7.95	8.06	8.11	8.27
75°	6.65	7.58	8.00	8.26	8.42	8.54	8.68
90°	6.67	7.58	8.00	8.35	8.69	8.98	9.32
110°	6.35	7.57	8.15	8.56	8.87	9.23	10.08
120°	6.20	7.46	8.08	8.62	9.17	9.56	10.32
135°	5.52	6.89	7.75	8.26	8.81	9.44	11.05
150°	4.67	5.86	6.93	7.70	8.18	8.68	9.88
Run VMG	4.05	5.07	6.00	6.76	7.36	7.90	8.83
Gybe Angles	143.9°	146.8°	149.7°	156.0°	169.9°	180.0°	180.0°

Class Division Length
CDL = **10.640**

Storm Sails Areas

Heavy Weather Jib	39.53
Storm Jib (JL=11.13)	14.64
Storm Trysail	15.13

Owner
Sailing Team OÜ
Regati 1, Tallinn
Estonia
KJK

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

Signature

BOAT	
Name Technicol	Sail Nr EST 615
File Est0615	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 18/04/2019		SG 1.0030	
FFM 1.437	FF 1.449	SFFP 0.200	
FAM 1.090	FA 1.095	SAFP 11.995	
W1 110.0	PD1 569.1	WD 13.220	
W2 110.0	PD2 546.1	GSA 1.0	
W3 110.0	PD3 571.1	RSA 1.0	
W4 110.0	PD4 568.7	PLM 9000.0	
LCF from stem on CL / on sheer		6.923 / 7.135	
Maximum beam station from stem		8.432	
RM Measured		203.2kg·m	
RM Default		205.9kg·m	
Limit of positive stability / Stab.Index		128.2° / 132.1	
Freeboard at mast at 5.210		1.207	



2019
IMS Measurement Certificate

RIG				
Forestay Tension Aft	Spreaders 2			
Inner Stay None Fitted	Runners 0			
Carbon Mast Yes	Jumper Struts None			
Taper Hollows No	Jib Furler No			
Fiber Rigging No	Main Furler No			
Lenticular Rigging No	Without Backstay No			
Articulated Bowsprit No				
P 15.800	E 5.470	MDT1 0.131	MW 0.240	
IG 17.035	J 5.210	MDL1 0.240	GO 0.263	
ISP 18.200	SFJ	MDT2 0.115	BD 0.270	
BAS 1.865	SPL 5.670	MDL2 0.190	MWT 187.00	
FSP 0.076	TPS 6.480	TL 0.550	MCG 5.700	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.430		
Type Folding 2 blades	PBW 0.125		
Twin Screw No	PIPA 0.0036		
ST1 0.060	ST3 0.180	ST5 0.325	
ST2 0.180	ST4 0.100	EDL 1.520	

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COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.380	1.31	2.17	3.59	4.60	52.54	53.70	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	17.80	17.80	17.80	9.99	10.48	149.64		SL · (SFL + 4·SHW) / 6	
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL				
	19.20	17.52	18.36	10.27	11.13	159.76		AS · (SFL + 4·SHW) / 6	

HEADSAILS												
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
0.11	0.83	1.58	3.07	4.49	5.80	18.39	55.35		Y	20/05/2019	Unknow	
0.19	0.96	1.75	2.99	4.21	5.40	16.78	48.86			27/05/2019	Unknow	Jib 1
0.18	0.86	1.60	2.89	4.10	5.40	16.62	46.99			27/05/2019	Unknow	Jib 2
0.12	0.69	1.32	2.58	3.90	5.35	16.71	44.03			08/05/2017	Unknow	Jib 3
0.13	0.63	1.17	2.21	3.18	4.01	14.81	31.70			08/05/2017	Unknow	Staysail

MEASUREMENT INVENTORY				
Measurer Pindozi Grubiša				
Date 18/04/2019				
Comment Crack Boats				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
A	Engine	VOLVO PENTA	D2-408	
Id	Item	Weight Description		

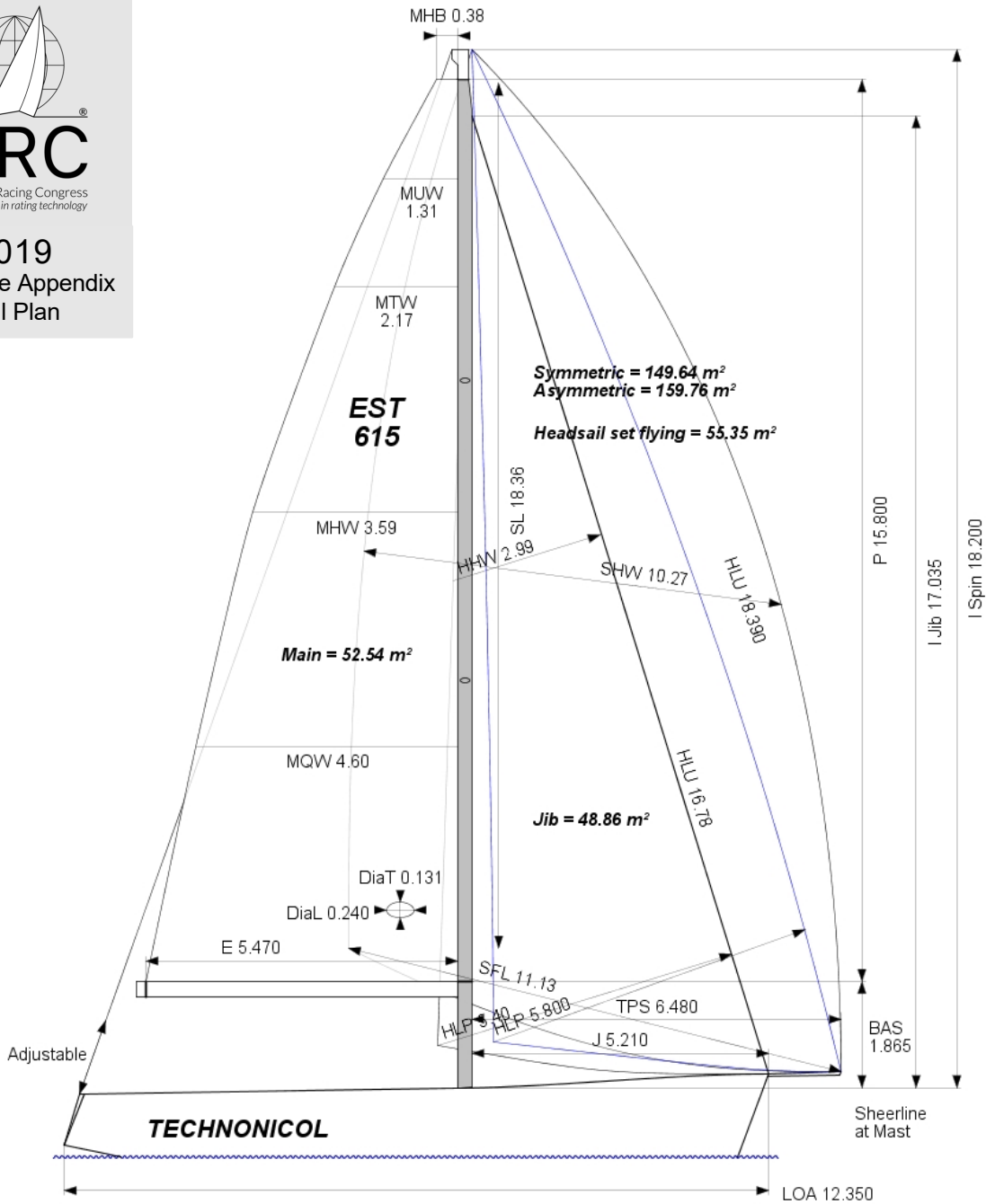
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
C	Tank	WASTE	Plastic	40.0	4.15	0.00	0-0
B	Tank	FUEL	Steel	90.0	5.50	0.00	30-0
A	Tank	WATER	Plastic	210.0	5.20	0.00	0-0
Id	Item	Weight	Distance	VCG Description			
C	Battery	0.0	7.50	0.00 30 Ah Engine			
B	Battery	0.0	4.50	0.00 180 Ah Sevice			
-	Misc			Removed closet in front cabin			
-	Misc			Removed decorative wall panels			
-	Misc			Removed sofa backboards in saloon			
-	Misc			Rem.hammock, closet doors in back cabin			



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Certificate Appendix
Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measur	Meas.Date	Manufacture	Material	Comment					
C	0.38	1.31	2.17	3.59	4.60	52.55	SLO 03	10/05/2018	OneSails	Unknown	P15,80;E5,47					
HEADSAILS (5)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measur	Meas.Date	Manufacture	Material	Comment
G	0.11	0.83	1.58	3.07	4.49	5.80	18.39	111%	55.35		Y	SLO 03	20/05/2019	OneSails	Unknown	Unknown
C	0.19	0.96	1.75	2.99	4.21	5.40	16.78	104%	48.86			Pindoizzi	27/05/2019	OneSails	Unknown	Jib 1
D	0.18	0.86	1.60	2.89	4.10	5.40	16.62	104%	46.99			Pindoizzi	27/05/2019	OneSails	Unknown	Jib 2
E	0.12	0.69	1.32	2.58	3.90	5.35	16.71	103%	44.03			SLO 03	08/05/2017	OneSails	Unknown	Jib 3
F	0.13	0.63	1.17	2.21	3.18	4.01	14.81	77%	31.70			SLO 03	08/05/2017	OneSails	Unknown	Staysail
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measur	Meas.Date	Manufacture	Material	Comment					
E	17.80	17.80	17.80	9.99	10.48	149.64	Gale	17/04/2019	One Sails	Nylon						
F	17.84	17.84	17.84	9.84	10.86	149.33	Gale	17/04/2019	One Sails	Nylon						
ASYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measur	Meas.Date	Manufacture	Material	Comment				
B	19.20	17.52	18.36	10.27	11.13	159.77	asym	SLO 03	17/04/2019	OneSails	Unknown	A 1				
C	18.68	17.35	18.02	5.90	7.83	94.37	asym	SLO 03	20/05/2019	OneSails	Unknown	A 0				