

BOAT Name SCUGNIZZA Sail Nr ITA-16639	GPH 622.1	HULL Length Overall 11.410m Maximum Beam 3.542m Displacement 6,236kg Draft 1.990m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.202% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class NM38S Designer COSSUTTI Builder NAUTILUS MARINE Series 09/2010 Age 10/2010 Age Allowance 0.195% Offset File I16639F.off - 30/05/2016 18:29:00 Measurement by ZIZZI-AVETA - 13/06/2016		IMSL 10.535m VCGD 0.057m Sink 23.17kg/mm RL 8.365m VCGM 0.112m WS 29.45m² LSM0 10.286m Displacement/Length ratio 5.7302



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SCORING OPTIONS						
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	603.4			677.8		
Time On Time	0.9944			0.9958		
Performance Line	PLT	PLD		PLT	PLD	
	0.634	11.7		0.765	150.9	
Triple Number	Low	Medium	High	Low	Medium	High
	0.9254	1.2337	1.4136	0.7059	0.9861	1.1659

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1118.1	915.0	803.6	730.1	698.2	684.2	672.3
52°	715.1	593.1	525.5	490.6	477.3	471.8	467.5
60°	664.5	555.9	500.4	474.6	461.6	456.0	451.9
75°	623.0	526.0	483.1	461.7	444.7	431.6	421.8
90°	623.8	524.8	476.4	456.8	443.1	425.8	398.1
110°	630.8	517.8	472.0	445.8	420.6	405.3	384.5
120°	649.4	531.1	478.3	451.5	425.7	400.4	366.3
135°	723.1	581.7	503.6	468.8	444.8	420.0	372.9
150°	868.8	682.9	571.0	501.8	469.7	447.2	402.2
Run VMG	1003.2	788.6	659.3	574.0	520.7	482.0	436.7

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Crew Weight

Declared **870kg**
Default* **717kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	626.1	0.9584
Double H.OSN	609.1	0.9850
Non Spin GPH	654.4	0.9169
Non Spin OSN	633.7	0.9468
N/S Perf. Line	-7.8	0.573

Selected Courses							
Windward / Leeward	1060.6	851.8	731.5	652.0	609.4	583.1	554.5
Circular Random	871.6	697.6	602.7	546.5	511.3	488.1	459.1
Ocean for PCS	1076.2	823.2	679.2	590.3	532.3	491.8	435.8
Non Spinnaker	928.2	738.1	633.3	570.6	531.2	505.4	473.9

Sails Limitations

Headsails	Spinnakers
6	3

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	45.1°	43.8°	43.2°	42.4°	41.0°	41.0°	40.7°
Beat VMG	3.22	3.93	4.48	4.93	5.16	5.26	5.35
52°	5.03	6.07	6.85	7.34	7.54	7.63	7.70
60°	5.42	6.48	7.19	7.58	7.80	7.89	7.97
75°	5.78	6.84	7.45	7.80	8.10	8.34	8.54
90°	5.77	6.86	7.56	7.88	8.13	8.45	9.04
110°	5.71	6.95	7.63	8.08	8.56	8.88	9.36
120°	5.54	6.78	7.53	7.97	8.46	8.99	9.83
135°	4.98	6.19	7.15	7.68	8.09	8.57	9.65
150°	4.14	5.27	6.30	7.17	7.66	8.05	8.95
Run VMG	3.59	4.57	5.46	6.27	6.91	7.47	8.24
Gybe Angles	138.4°	149.2°	149.4°	155.5°	169.8°	180.0°	180.0°

Class Division Length

CDL = **9.451**

Storm Sails Areas


Heavy Weather Jib **26.97**
Storm Jib (JL=9.19) **9.99**
Storm Triesail **12.29**

Owner

BOAT	
Name SCUGNIZZA	Sail Nr ITA-16639
File I16639.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 29/05/2016		SG 1.0250	
FFM 1.528	FF 1.527	SFFP 0.347	
FAM 1.045	FA 1.047	SAFP 10.720	
W1 101.3	PD1 555.3	WD 12.300	
W2 101.3	PD2 550.0	GSA 1.0	
W3 101.3	PD3 553.7	RSA 1.0	
W4 101.3	PD4 550.5	PLM 9000.0	
LCF from stem on CL / on sheer		6.641 / 6.871	
Maximum beam station from stem		7.480	
RM Measured		177.6kg·m	
RM Default		166.7kg·m	
Limit of positive stability / Stab.Index		114.3° / 117.0	
Freeboard at mast at 4.410		1.349	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging Yes	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 14.040	E 5.000	MDT1 0.125	MW 0.198
IG 14.070	J 4.410	MDL1 0.198	GO 0.218
ISP 14.250	SFJ 0.000	MDT2 0.094	BD 0.250
BAS 1.550	SPL 4.550	MDL2 0.180	MWT 175.00
FSP 0.088	TPS	TL 1.150	MCG 5.860




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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.405		
Type Folding 2 blades	PBW 0.108		
Twin Screw No	PIPA 0.0029		
ST1 0.051	ST3 0.200	ST5 0.335	
ST2 0.170	ST4 0.088	EDL 2.110	

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.630	1.30	2.05	3.22	4.18	42.98	43.95	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	103.49		SL · (SFL + 4·SHW) / 6	
	15.05	15.05	15.05	8.30	8.06				
Asymmetric Not Available									

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
0.10	0.80	1.43	2.47	3.46	4.44	14.20	33.98	N	N	13/06/2016	Carbon	J1
0.10	0.78	1.43	2.48	3.45	4.44	14.15	33.83	N	N	13/06/2016	Carbon	J2

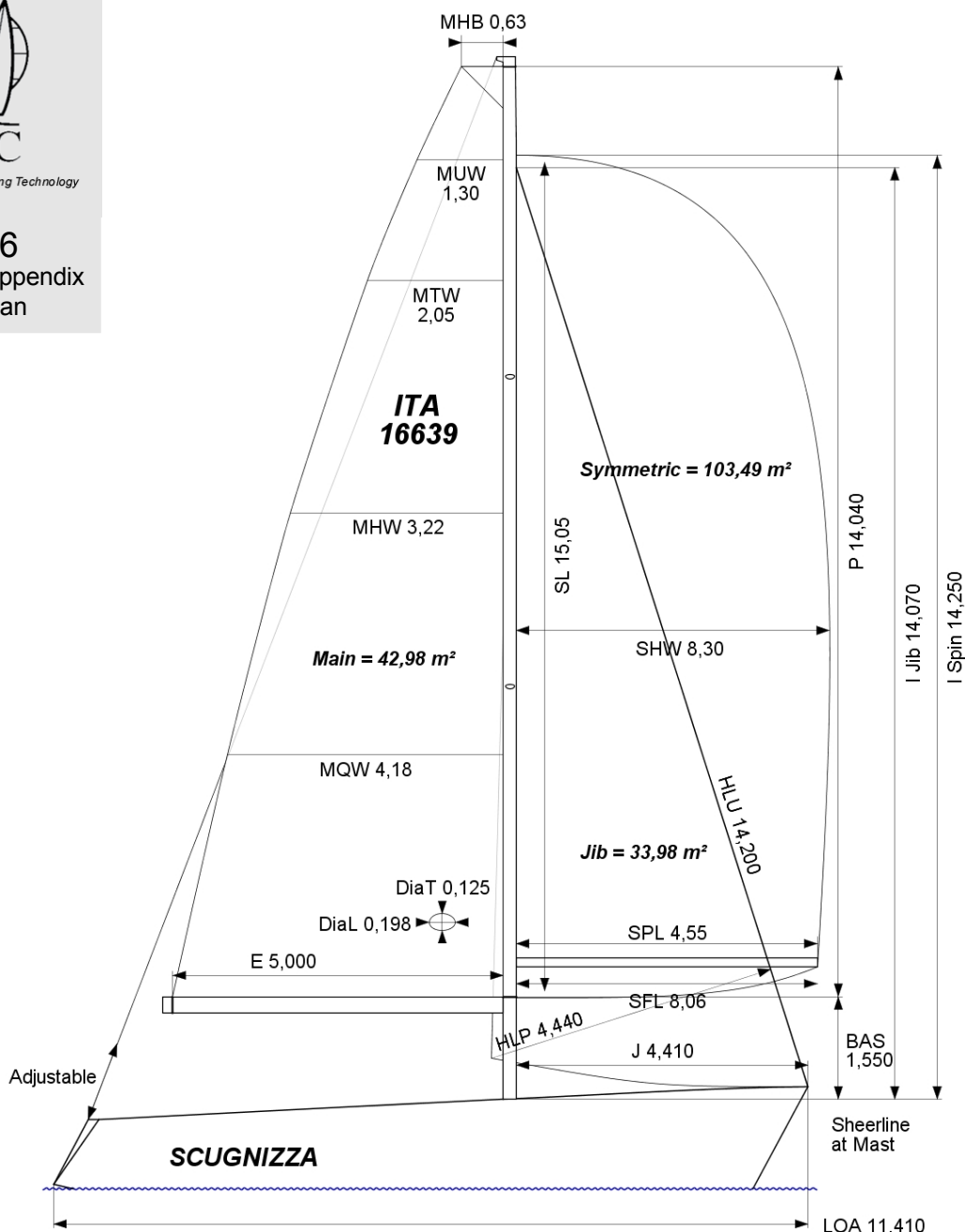
MEASUREMENT INVENTORY				
Measurer AVETA 164				
Date 29/05/2016				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
A	Engine	LOMBARDINI	30 HP	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY							
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn Description</i>
A	Tank	GASOLIO	INOX	130.0	9.61	0.00	47-0 LT
B	Tank	ACQUA	PVC	100.0	9.30	0.00	0-0 VUOTO
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>			
A	Ballast	29.0	4.71	0.00 PB SUB(15x1)+(6x2+2x1)			
B	Ballast	39.0	5.52	0.00 PB SUB(9x1)+(27x1)+(3x1)			
C	Ballast	31.0	5.75	0.00 PB SUB(15x2+1x1)			
D	Ballast	12.0	6.14	0.00 PB SUB(4x2)+(2x2)			
E	Ballast	14.0	6.44	0.00 PB SUB (4x2+6x1)			
A	Battery	56.0	8.36	0.00 2 DA 75 Ah			
B	Battery	56.0	8.36	0.00 2 DA 75 Ah			



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Sail Plan



SAILS INVENTORY

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
E	0.630	1.30	2.05	3.22	4.18	42.98	AVETA	13/06/2016	QUANTUM	Carbon	

HEADSAILS

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G	0.10	0.80	1.43	2.47	3.46	4.44	14.20	101%	33.98	N	N	AVETA	13/06/2016	QUANTUM	Carbon	J1
H	0.10	0.78	1.43	2.48	3.45	4.44	14.15	101%	33.83	N	N	AVETA	13/06/2016	QUANTUM	Carbon	J2

SYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
J	15.05	15.05	15.05	8.30	8.06	103.49	AVETA	13/06/2016		Unknown	S1.5
I	15.10	15.10	15.10	8.24	8.08	103.28	AVETA	13/06/2016	QUANTUM	Nylon	S1

ASYMMETRIC SPINNAKERS

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