

BOAT	GPH	HULL
Name Kind of Magic Sail Nr FIN-15476	600.2	Length Overall 11.360m Maximum Beam 3.660m Displacement 5,549kg Draft 2.106m Plan Review IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL		IMSL 9.853m VCGD -0.056m Sink 19.73kg/mm RL 9.282m VCGM 0.004m WS 26.22m² LSM0 9.778m Displacement/Length ratio 5.9356
Class IMX-38 Designer Niels Jeppesen Builder X-YACHTS Series 01/1992 Age 05/1996 Age Allowance 0.487% Offset File ORC0010.BOF - 23/11/1995 14:46:54 Measurement by - 28/04/2020		



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	584.6			651.3		
Time on Time	1.0263			1.0363		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	678.1	534.5	480.7	873.1	653.8	574.4
Time on Time	0.9954	1.2628	1.4043	0.7731	1.0324	1.1752

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	967.8	805.3	723.3	693.1	679.5	672.4	666.2
52°	637.4	541.1	504.0	491.5	485.8	482.8	480.2
60°	603.5	522.5	492.7	479.3	473.0	469.4	466.7
75°	578.0	510.5	483.8	466.6	454.1	446.9	440.2
90°	584.0	511.2	482.5	463.1	445.4	430.7	413.7
110°	619.3	516.5	477.8	452.8	432.1	416.9	396.9
120°	635.3	525.3	482.1	454.6	428.8	407.4	378.4
135°	700.4	568.1	502.2	471.6	445.3	419.8	371.8
150°	828.6	660.4	558.1	501.4	473.2	448.9	402.7
Run VMG	956.8	762.5	644.4	570.2	520.3	485.9	439.0

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Number **15476**
ORC Ref **03290000IMP**
Issued On **23/05/2020**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default **667kg**
Maximum **700kg**
Minimum* **525kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	626.9	0.9571
Non Spin OSN	611.0	0.9820

Selected Courses							
Windward / Leeward	962.3	783.9	683.9	631.6	599.9	579.2	552.6
Circular Random	817.6	664.0	582.9	536.5	508.1	489.2	464.4
Coastal / Long Distance	961.7	738.1	619.8	555.1	519.4	490.4	444.8
Non Spinnaker	864.5	697.6	608.1	556.2	524.2	503.0	475.3

Sails Limitations

Headsails	Spinnakers
5	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	42.4°	41.3°	39.8°	38.6°	38.3°	38.3°	37.9°
Beat VMG	3.72	4.47	4.98	5.19	5.30	5.35	5.40
52°	5.65	6.65	7.14	7.32	7.41	7.46	7.50
60°	5.97	6.89	7.31	7.51	7.61	7.67	7.71
75°	6.23	7.05	7.44	7.71	7.93	8.05	8.18
90°	6.16	7.04	7.46	7.77	8.08	8.36	8.70
110°	5.81	6.97	7.54	7.95	8.33	8.64	9.07
120°	5.67	6.85	7.47	7.92	8.39	8.84	9.51
135°	5.14	6.34	7.17	7.63	8.08	8.57	9.68
150°	4.34	5.45	6.45	7.18	7.61	8.02	8.94
Run VMG	3.76	4.72	5.59	6.31	6.92	7.41	8.20
Gybe Angles	145.0°	149.0°	150.0°	157.0°	174.0°	180.0°	180.0°

Class Division Length

CDL = **9.566**

Storm Sails Areas

Heavy Weather Jib **32.72**
Storm Jib (JL=10.12) **12.12**
Storm Trysail **11.57**

Owner

BOAT			
Name	Kind of Magic	Sail Nr	FIN-15476
File	L15476	Data in	meters/kilograms
RIG			
Forestay Tension	Aft	Spreaders	3
Inner Stay	None Fitted	Runners/Checkstays	1
Carbon Mast	No	Jib Furler	No
Fiber Rigging	No	Main Furler	No
Non-Circular Rigging	No		
Articulated Bowsprit	No		
P	13.380	E	4.940
IG	15.532	J	4.410
ISP	15.437	SFJ	0.260
BAS	1.862	SPL	4.420
FSD	0.033	TPS	
MDT1	0.117	MW	0.165
MDL1	0.200	GO	0.175
MDT2	0.117	BD	0.190
MDL2	0.170	MWT	186.50
TL	1.990	MCG	4.990

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date		20/06/2011	SG
			1.0050
FFM	1.210	FF	1.219
FAM	0.941	FA	0.948
SFFP	1.098	SAFP	10.595
W1	86.2	PD1	535.1
W2	86.2	PD2	527.8
W3	86.2	PD3	527.6
W4	86.2	PD4	535.2
WD	11.135	GSA	1.0
RSA	1.0	PLM	9000.0
LCF from stem on CL / on sheer		6.258 / 6.498	
Maximum beam station from stem		6.705	
RM Measured		142.2kg-m	
RM Default		138.6kg-m	
Limit of positive stability / Stab.Index		114.6° / 114.2	
Freeboard at mast at 4.670		1.085	



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MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Installation	Strut	PRD	0.410
Type	Folding 2 blades	PBW	0.113
Twin Screw	No	PIPA	0.0037
ST1	0.065	ST3	0.180
ST2	0.180	ST4	0.110
ST5	0.290	EDL	1.460

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COMMENTS			

MOVABLE BALLAST			
N/A			

CENTERBOARD			
N/A			



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.25	1.03	1.81	3.19	4.12	39.19	40.03	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	109.41		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL	92.66		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	Flying	Meas.Date	Material	Comment
0.10	0.80	1.56	3.15	4.81	6.46	15.54	49.73		No	21/02/2018	Unknow	Stratis
0.09	0.77	1.49	3.00	4.55	6.17	15.33	46.68		No	18/06/2011	Kevlar	3DL
0.07	0.74	1.44	2.90	4.48	6.17	15.36	45.98		No	18/06/2011	Kevlar	3DL
0.09	0.72	1.38	2.85	4.39	6.01	14.98	43.81		No	21/02/2018	Unknow	
0.10	0.65	1.21	2.30	3.37	4.38	15.31	34.77		No	19/07/2013	Kevlar	Maxx black
0.08	0.08	0.46	1.40	2.49	3.73	15.03	23.64		No	18/06/2011	Dacron	

MEASUREMENT INVENTORY				
Measurer FIN104				
Date 20/06/2011				
Comment				
Internal Ballast total = 0.0				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Ancher	45.0	5.20	
2	Ancher	3.5	5.70	
4	Tools	40.0	7.40	
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Volvo Penta	28hv	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

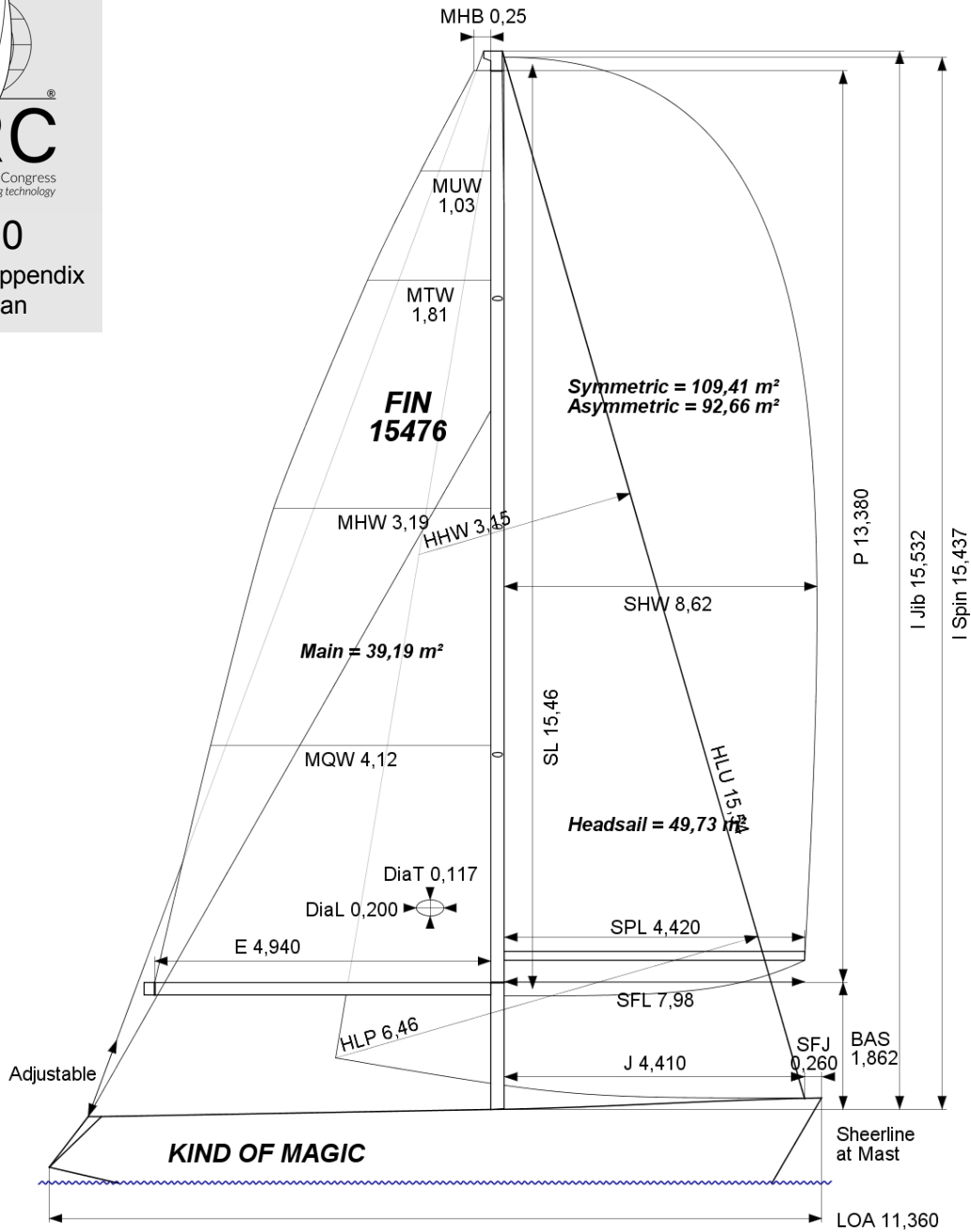
MEASUREMENT INVENTORY							
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn Description</i>
1	Tank Fuel		RST	90.0	6.70		40.0 10 l
2	Tank Water		Plastic	110.0	6.30		0.0 Empty
3	Tank Boiler			30.0	5.30		0.0 Empty
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>			
1	Battery		6.80	3*85 Ah			
1	Misc		4.60	Oven, gas			



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Sail Plan



SAILS INVENTORY

MAINSAIL (3)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
3	0.25	1.03	1.81	3.19	4.12	39.19		28/04/2020	Doyle	Carbon	
2	0.21	1.01	1.76	3.04	3.97	38.00		27/12/2013	WB-Sails	Carbon	D4

HEADSAILS (6)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
G1Max	0.10	0.80	1.56	3.15	4.81	6.46	15.54	146%	49.73		No		21/02/2018	Doyle	Unknow	Stratis
L1	0.09	0.77	1.49	3.00	4.55	6.17	15.33	140%	46.68		No		18/06/2011	North Sails	Kevlar	3DL
H1	0.07	0.74	1.44	2.90	4.48	6.17	15.36	140%	45.98		No		18/06/2011	North Sails	Kevlar	3DL
G1	0.09	0.72	1.38	2.85	4.39	6.01	14.98	136%	43.81		No		21/02/2018	Doyle	Unknow	
F	0.10	0.65	1.21	2.30	3.37	4.38	15.31	99%	34.77		No		19/07/2013	WB-Sails	Kevlar	Maxx black
FH	0.08	0.08	0.46	1.40	2.49	3.73	15.03	85%	23.64		No		18/06/2011	North Sails	Dacron	

SYMMETRIC SPINNAKERS (4)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
Lightn	15.46	15.46	15.46	8.62	7.98	109.41		06/06/2016	One Sails	Unknown	
1	15.47	15.47	15.47	8.12	8.20	104.89		10/07/2015	One Sails	Nylon	
Light	14.94	14.94	14.94	7.94	7.57	97.94		18/06/2011	UK/McWillia	Nylon	Blue
MedR	14.99	14.99	14.99	7.70	7.59	95.92		18/06/2011	Sobstad	Nylon	White/Red

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1	15.80	14.64	15.22	7.09	8.17	92.67	asym		18/06/2011	North Sails	Nylon	White/Blue