

BOAT Name IRONFX Sail Nr CYP-46	GPH 510.3	HULL Length Overall 13.901m Maximum Beam 4.188m Displacement 6,751kg Draft 2.879m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Light Carbon Rudder Yes Crew Arm Extension
GENERAL Class COREL 45 Designer B. FARR Builder CARROL Series 06/1996 Age 01/1997 Age Allowance 0.487% Offset File US30708.OFF - 06/09/1996 11:52:00 Measurement by KALATZIS - 31/05/2012		IMSL 12.246m VCGD -0.615m Sink 25.48kg/mm RL 12.488m VCGM -0.615m WS 34.52m² LSM0 11.949m Displacement/Length ratio 3.9571



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	496.4			557.6		
Time on Time	1.2087			1.2106		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	577.0	455.3	401.5	744.1	561.8	489.7
Time on Time	1.1699	1.4827	1.6811	0.9071	1.2014	1.3784

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	831.2	680.1	621.1	597.5	585.7	571.0	565.0
52°	544.8	459.6	435.8	426.7	421.3	415.8	406.4
60°	513.9	445.0	423.4	412.8	406.0	401.5	387.7
75°	491.4	435.6	410.4	391.4	380.9	374.1	363.0
90°	497.7	437.6	410.0	384.3	364.3	351.0	337.2
110°	520.8	437.9	404.1	383.4	365.1	349.5	311.1
120°	537.6	443.6	406.2	373.8	353.0	336.1	301.2
135°	595.6	476.3	427.1	394.2	361.7	329.3	276.6
150°	708.0	560.8	476.1	430.5	400.5	370.8	311.9
Run VMG	817.5	647.5	549.7	491.2	453.8	422.5	360.1

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VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **887kg**
Maximum **950kg**
Minimum* **713kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	542.5	1.1060
Non Spin OSN	529.7	1.1327

Selected Courses							
Windward / Leeward	824.4	663.8	585.4	544.3	519.7	496.8	462.6
Circular Random	697.7	565.7	495.7	455.0	428.6	409.4	381.0
Coastal / Long Distance	823.7	625.4	529.9	473.9	441.6	412.3	363.4
Non Spinnaker	754.7	606.5	526.2	478.5	447.7	426.1	396.5

Sails Limitations

Headsails	Spinnakers
7	5

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	42.9°	41.1°	39.1°	37.8°	37.2°	36.2°	36.3°
Beat VMG	4.33	5.29	5.80	6.02	6.15	6.30	6.37
52°	6.61	7.83	8.26	8.44	8.54	8.66	8.86
60°	7.00	8.09	8.50	8.72	8.87	8.97	9.29
75°	7.33	8.27	8.77	9.20	9.45	9.62	9.92
90°	7.23	8.23	8.78	9.37	9.88	10.26	10.68
110°	6.91	8.22	8.91	9.39	9.86	10.30	11.57
120°	6.70	8.12	8.86	9.63	10.20	10.71	11.95
135°	6.04	7.56	8.43	9.13	9.95	10.93	13.01
150°	5.08	6.42	7.56	8.36	8.99	9.71	11.54
Run VMG	4.40	5.56	6.55	7.33	7.93	8.52	10.00
Gybe Angles	143.0°	143.1°	148.7°	155.6°	163.8°	180.0°	146.1°

Class Division Length

CDL = **12.368**

Storm Sails Areas


Heavy Weather Jib **44.08**
Storm Jib (JL=11.75) **16.33**
Storm Trysail **21.95**

Owner

BOAT	
Name IRONFX	Sail Nr CYP-46
File GR46	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 15/08/2013		SG 1.0270	
FFM 1.500	FF 1.500	SFFP 0.201	
FAM 1.137	FA 1.137	SAFP 13.110	
W1 114.9	PD1 454.1	WD 14.090	
W2 114.9	PD2 451.2	GSA 1.0	
W3 114.9	PD3 450.2	RSA 1.0	
W4 114.9	PD4 449.7	PLM 9000.0	
LCF from stem on CL / on sheer		7.613 / 7.864	
Maximum beam station from stem		8.733	
RM Measured		282.5kg-m	
RM Default		245.8kg-m	
Limit of positive stability / Stab.Index		138.3° / 136.4	
Freeboard at mast at 5.416		1.305	

RIG			
Forestay Tension Aft	Spreaders 3		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	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 18.580	E 6.750	MDT1 0.140	MW 0.248
IG 17.954	J 5.416	MDL1 0.248	GO 0.283
ISP 19.669	SFJ 0.000	MDT2 0.091	BD 0.293
BAS 1.929	SPL 5.930	MDL2 0.144	MWT 214.50
FSP 0.072	TPS	TL 2.755	MCG 6.200




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IMS Measurement Certificate

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.423		
Type Folding 2 blades	PBW 0.114		
Twin Screw No	PIPA 0.0037		
ST1 0.042	ST3 0.180	ST5 0.280	
ST2 0.180	ST4 0.110	EDL 0.698	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.265	1.47	2.61	4.41	5.67	75.31	77.05	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	19.50	19.50	19.50	10.97	10.49	176.70		SL · (SFL + 4·SHW) / 6	
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
0.12	0.83	1.54	2.89	4.22	5.58	18.17	52.08	Y		18/06/2018	Unknow	
0.12	0.80	1.49	2.85	4.21	5.57	18.11	51.47	Y		20/05/2014	Carbon	LIGHT
0.11	0.79	1.48	2.83	4.19	5.56	18.08	51.13	Y		20/05/2014	Carbon	MEDIUM
0.11	0.78	1.48	2.86	4.21	5.57	17.93	50.91	Y		15/08/2013	Carbon	MEDIUM AP
0.13	0.77	1.43	2.79	4.18	5.57	17.85	50.13	Y		02/06/2012	Kevlar	HEAVY
0.10	0.74	1.40	2.73	4.12	5.50	17.97	49.60	Y		21/04/2018	Unknow	
0.06	0.53	1.05	1.17	3.37	4.56	15.97	31.98	Y		31/01/2012	Unknow	STAYSAIL

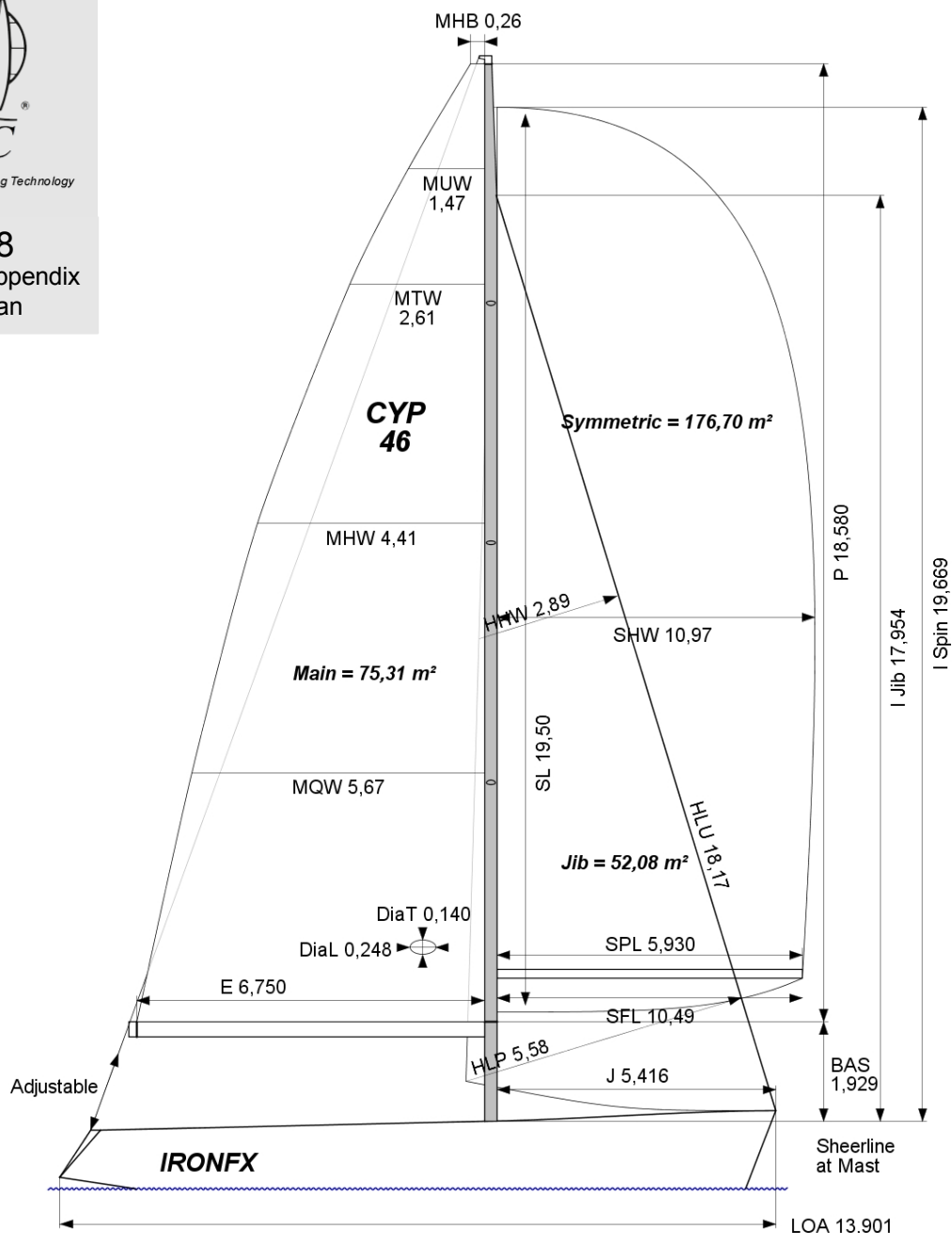
MEASUREMENT INVENTORY				
Measurer KALATZIS GRE-21				
Date 15/08/2013				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	YANMAR	4JH (47 HP)	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank	FUEL	Aluminium	110.0	8.40	15.0
2	Tank	WATER	Soft bag	80.0	7.20	0.0 (P)
3	Tank	WATER	Soft bag	80.0	7.20	0.0 (S)
Id	Item	Weight	Distance	VCG Description		
1	Ballast	79.0	12.10			
1	Battery	30.0	6.10	1 x 100 Ah (approx. weight)		
2	Battery	100.0	6.10	2 x 120 Ah (approx. weight)		



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Sail Plan



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.265	1.47	2.61	4.41	5.67	75.31	CROWDER	30/05/2017	NORTH	Unknown	
1	0.257	1.46	2.59	4.35	5.66	74.89	KALATZIS	20/05/2014	QUANTUM	Carbon	

HEADSAILS (7)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
8	0.12	0.83	1.54	2.89	4.22	5.58	18.17	103%	52.08	Y		5151L	18/06/2018		Unknown	
1	0.12	0.80	1.49	2.85	4.21	5.57	18.11	103%	51.47	Y		KALATZIS	20/05/2014	QUANTUM	Carbon	LIGHT
2	0.11	0.79	1.48	2.83	4.19	5.56	18.08	103%	51.13	Y		KALATZIS	20/05/2014	QUANTUM	Carbon	MEDIUM
3	0.11	0.78	1.48	2.86	4.21	5.57	17.93	103%	50.91	Y		KALATZIS	15/08/2013	QUANTUM	Carbon	MEDIUM AP
4	0.13	0.77	1.43	2.79	4.18	5.57	17.85	103%	50.13	Y		KALATZIS	02/06/2012	QUANTUM	Kevlar	HEAVY
9	0.10	0.74	1.40	2.73	4.12	5.50	17.97	102%	49.60	Y		5151L	21/04/2018	NORTH	Unknown	
6	0.06	0.53	1.05	1.17	3.37	4.56	15.97	84%	31.98		Y	KALATZIS	31/01/2012	QUANTUM	Unknown	STAYSAIL

SYMMETRIC SPINNAKERS (4)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	19.50	19.50	19.50	10.97	10.49	176.70	KALATZIS	05/08/2013	QUANTUM	Nylon	0.60 RUNNER
2	19.48	19.48	19.48	10.78	10.71	174.77	KALATZIS	05/08/2013	recut	Nylon	0.50 RUNNER
3	19.44	19.44	19.44	10.72	10.83	174.02	KALATZIS	05/08/2013	recut	Nylon	0.75 AP
4	17.76	17.76	17.76	7.79	9.69	120.92	us810	23/09/2002		Unknown	

ASYMMETRIC SPINNAKERS (0)

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