

BOAT Name Blue Chip Sail Nr CRO 2013	GPH 611.2	HULL Length Overall 11.300m Maximum Beam 3.758m Displacement 6,975kg Draft 1.969m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.215% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class Dehler 38 Designer Judel/Vrolijk Builder Dehler Yachts Series 01/2013, CIN D-DEH81043A414 Age 03/2014 Age Allowance 0.195% Offset File DEH38-COSKEEL.off - 20/03/2018 Measurement by - 14/03/2014		IMSLS 10.564m VCGD 0.329m Sink 22.77kg/mm RL 8.452m VCGM 0.258m WS 29.52m² LSM0 10.499m Displacement/Length ratio 6.0270



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	596.6			671.8		
Time on Time	1.0056			1.0047		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	700.9	540.9	484.6	921.5	674.5	586.9
Time on Time	0.9630	1.2479	1.3930	0.7325	1.0007	1.1502

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1077.1	887.1	778.6	726.3	709.0	703.8	695.0
52°	693.3	582.8	520.7	494.2	485.7	482.3	478.0
60°	649.0	541.0	499.5	479.5	470.4	466.9	464.1
75°	576.9	498.0	470.9	460.7	453.5	446.3	440.7
90°	556.7	489.1	463.4	446.0	431.8	424.2	413.4
110°	603.3	513.1	470.3	447.0	428.4	408.7	385.6
120°	636.4	523.2	474.9	449.6	426.2	404.8	375.5
135°	701.8	569.2	497.2	465.0	442.0	418.7	374.6
150°	831.0	660.2	558.0	496.4	466.5	445.0	402.4
Run VMG	959.6	762.3	644.2	567.1	515.9	478.9	435.7

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Selected Courses							
Windward / Leeward	1018.3	824.7	711.4	646.7	612.5	591.3	565.3
Circular Random	841.1	679.3	592.8	543.1	512.9	493.4	469.0
Coastal / Long Distance	1012.5	770.4	637.7	561.4	522.6	493.3	445.9
Non Spinnaker	915.3	731.0	630.6	571.7	535.7	512.7	484.7

Crew Weight

Default **738kg**
Maximum **778kg**
Minimum* **584kg**
**when applied by the NoR and SI*
Non Manual Pwr

Special Scoring

ToD	ToT
Non Spin GPH 651.3	0.9212
Non Spin OSN 631.9	0.9495

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	43.9°	42.5°	41.8°	41.3°	40.8°	40.7°	40.8°
Beat VMG	3.34	4.06	4.62	4.96	5.08	5.12	5.18
52°	5.19	6.18	6.91	7.29	7.41	7.46	7.53
60°	5.55	6.65	7.21	7.51	7.65	7.71	7.76
75°	6.24	7.23	7.65	7.81	7.94	8.07	8.17
90°	6.47	7.36	7.77	8.07	8.34	8.49	8.71
110°	5.97	7.02	7.66	8.05	8.40	8.81	9.34
120°	5.66	6.88	7.58	8.01	8.45	8.89	9.59
135°	5.13	6.32	7.24	7.74	8.14	8.60	9.61
150°	4.33	5.45	6.45	7.25	7.72	8.09	8.95
Run VMG	3.75	4.72	5.59	6.35	6.98	7.52	8.26
Gybe Angles	144.7°	148.8°	150.3°	155.7°	170.6°	180.0°	180.0°

Sails Limitations

Headsails	Spinnakers
5	3

Class Division Length

CDL = **9.509**

Storm Sails Areas

Heavy Weather Jib **31.18**
Storm Jib (JL=9.88) **11.55**
Storm Trysail **13.02**

Owner

BOAT	
Name Blue Chip	Sail Nr CRO 2013
File CRO2013	Data in meters/kilograms

RIG	
Forestay Tension Forward	Spreaders 2
Inner Stay None Fitted	Runners 0
Carbon Mast No	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 14.330	E 5.190 MDT1 0.110 MW 0.210
IG 15.110	J 4.350 MDL1 0.210 GO 0.235
ISP 15.780	SFJ 0.000 MDT2 0.090 BD 0.250
BAS 1.680	SPL 4.490 MDL2 0.180 MWT 170.00
FSP	TPS 4.750 TL 1.000 MCG 5.710

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 22/05/2019	SG 1.0253	
FFM 1.448	FF 1.444	SFFP 0.455
FAM 1.094	FA 1.102	SAFP 11.081
W1 100.0	PD1 702.7	WD 14.200
W2 100.0	PD2 701.6	GSA 1.0
W3 100.0	PD3 701.5	RSA 1.0
W4 100.0	PD4 701.8	PLM 9000.0
LCF from stem on CL / on sheer	6.185 / 6.441	
Maximum beam station from stem	7.681	
RM Measured	159.3kg-m	
RM Default	180.8kg-m	
Limit of positive stability / Stab.Index	109.4° / 111.9	
Freeboard at mast at 4.350	1.335	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.415	
Type Folding 2 blades	PBW 0.123	
Twin Screw No	PIPA 0.0039	
ST1 0.065	ST3 0.180	ST5 0.320
ST2 0.180	ST4 0.110	EDL 2.475

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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	
	0.260	1.13	2.00	3.32	4.31	44.26	45.22	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	110.16		SL · (SFL + 4·SHW) / 6	
	15.90	15.90	15.90	8.40	7.97				
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	1.41	2.72	5.03	6.73	7.97	14.87	67.88		Y	08/04/2019	Kevlar	C0
0.12	0.79	1.44	2.51	3.45	4.55	15.06	36.44	Y		08/04/2019	Carbon	M
0.09	0.79	1.46	2.56	3.49	4.55	14.89	36.35	Y		08/04/2019	Kevlar	L
0.07	0.67	1.22	2.25	3.39	4.56	14.81	34.00			08/03/2016	Pentex	

MEASUREMENT INVENTORY				
Measurer CROAK6				
Date 22/05/2019				
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>	
1	Engine	Volvo D1-30	30HP	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>

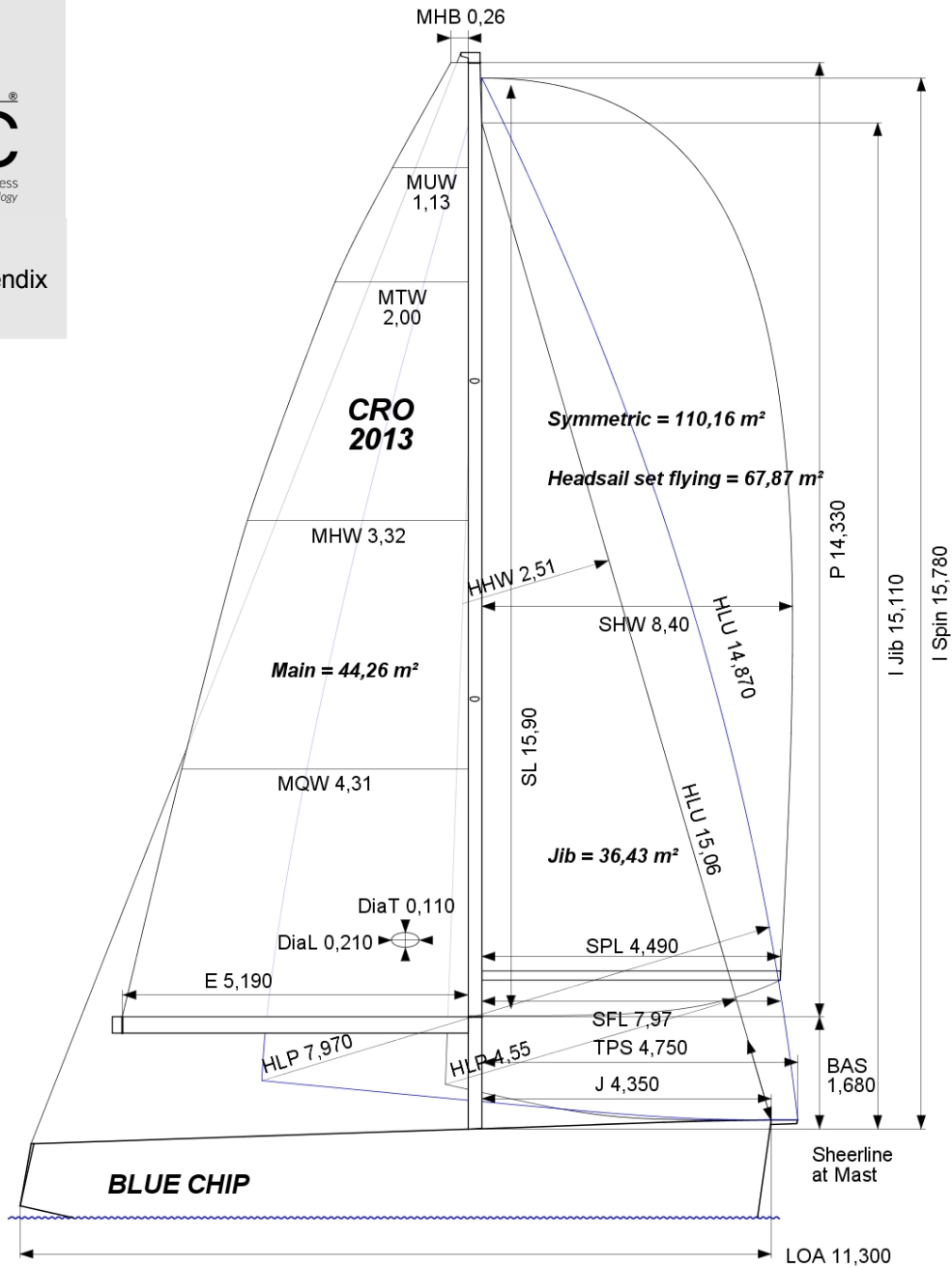
MEASUREMENT INVENTORY						
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG Condtn Description</i>
1	Tank Fuel		PVC	160.0	9.02	0-0
2	Tank Water		PVC	200.0	2.20	0-0 front
3	Tank Grey		PVC	30.0	6.00	0-0 bathroom
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>		
1	Battery	25.0	4.60	Varta 140 AH		
2	Battery	20.0	8.14	Varta 90AH		



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SAILS INVENTORY

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.26	1.13	2.00	3.32	4.31	44.27		08/04/2019	North sails	Kevlar						
2	0.14	1.00	1.82	3.22	4.26	42.91		08/03/2016	North sails	Pentex						
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.10	1.41	2.72	5.03	6.73	7.97	14.87	183%	67.88		Y		08/04/2019	North sails	Kevlar	C0
3	0.12	0.79	1.44	2.51	3.45	4.55	15.06	105%	36.44	Y			08/04/2019	North sails	Carbon	M
2	0.09	0.79	1.46	2.56	3.49	4.55	14.89	105%	36.35	Y			08/04/2019	North sails	Kevlar	L
4	0.07	0.67	1.22	2.25	3.39	4.56	14.81	105%	34.00				08/03/2016	North sails	Pentex	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	15.90	15.90	15.90	8.40	7.97	110.17		18/03/2014	North sails	Nylon	Heavy					
1	15.90	15.90	15.90	8.22	7.94	108.18		18/03/2014	North sails	Nylon	Light					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				