

BOAT
Name HALBTROCKEN Sail Nr GER 5564

GPH
641,9

HULL
Length Overall 10,640 m
Maximum Beam 3,458 m
Displacement 5.851 kg
Draft 2,236 m
IMS Reg. Division Cruiser/Racer
Dynamic Allowance 0,221%
Fwd Accommodation No
Hull Construction Solid
Carbon Rudder No
Crew Arm Extension
IMS L 9,645 VCGD 0,181 VCGM 0,157
Sink 19,48 kg/mm Wetted Area 25,54 m²



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2014
ORC International
Certificate

GENERAL
Class FIRST 36.7
Designer FARR
Builder BENETEAU
Series 02/2001
Age 02/2005
Age Allowance 0,422%
Offset File F196.OFF - 21/7/2014 16:07:48
Measurement by KALL - 08/05/2010

SCORING OPTIONS						
	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	622,8			692,1		
Time On Time	0,9634			0,9753		
Performance Line	PLT	PLD		PLT	PLD	
	0,821	104,6		0,762	159,7	
Triple Number	Low	Medium	High	Low	Medium	High
	0,9068	1,1918	1,3479	0,6972	0,9658	1,1379

Rating Office

Offshore
Racing
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1092,5	906,7	798,0	730,2	703,2	689,8	682,5
52°	712,2	599,1	534,7	506,7	496,1	491,2	487,9
60°	670,2	566,2	516,4	494,0	482,6	477,5	474,0
75°	637,3	543,1	504,4	484,3	468,9	457,3	448,2
90°	644,5	540,1	497,5	480,6	470,0	454,6	429,1
110°	655,3	542,2	497,3	473,1	450,4	432,4	416,4
120°	678,5	559,5	505,3	479,9	458,9	437,1	404,1
135°	758,9	621,1	538,2	499,6	477,0	456,1	414,5
150°	906,6	716,0	605,7	534,6	499,1	477,1	436,3
Run VMG	1046,9	826,4	696,1	603,6	539,3	502,7	460,3

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Selected Courses							
Windward / Leeward	1069,7	866,6	747,1	666,9	621,3	596,2	571,4
Circular Random	891,0	716,7	622,4	567,1	533,1	511,0	483,8
Ocean for PCS	949,0	748,3	636,2	567,9	523,6	492,6	449,0
Non Spinnaker	945,1	755,0	650,7	588,9	550,6	526,0	496,9

Crew Weight	
Declared	656 kg
Default*	650 kg
Non Manual Pwr	No

Special Scoring		
	ToD	ToT
Double H. GPH	644,8	0,9306
Double H. OSN	627,1	0,9567
Non Spin GPH	671,9	0,8930
Non Spin OSN	649,0	0,9245
N/S Perf. Line	75,9	0,744

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	43,3°	41,7°	41,7°	40,2°	39,2°	38,5°	38,5°
Beat VMG	3,30	3,97	4,51	4,93	5,12	5,22	5,27
52°	5,05	6,01	6,73	7,11	7,26	7,33	7,38
60°	5,37	6,36	6,97	7,29	7,46	7,54	7,60
75°	5,65	6,63	7,14	7,43	7,68	7,87	8,03
90°	5,59	6,67	7,24	7,49	7,66	7,92	8,39
110°	5,49	6,64	7,24	7,61	7,99	8,33	8,64
120°	5,31	6,43	7,12	7,50	7,84	8,24	8,91
135°	4,74	5,80	6,69	7,21	7,55	7,89	8,69
150°	3,97	5,03	5,94	6,73	7,21	7,55	8,25
Run VMG	3,44	4,36	5,17	5,96	6,67	7,16	7,82
Gybe Angles	145,3°	151,7°	157,4°	169,2°	175,2°	178,7°	179,1°

Sails Limitations		
Genoa	Jibs	Spinnakers
0	4	3
Spinnaker configuration Symmetric		

Storm Sails Areas	
Heavy Weather Jib	26,75
Storm Jib (JL=9,15)	9,91
Storm Try sail	11,49

Owner

BOAT	
Name HALBTROCKEN	Sail Nr GER 5564
File (0)	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 08/05/2010	SG 1,0150	
FFM 1,312	FF 1,326	SFFP 0,367
FAM 1,049	FA 1,049	SAFP 10,162
W1 80,000	PD1 548,0	WD 11,280
W2 80,000	PD2 542,8	GSA 1,0
W3 80,000	PD3 543,1	RSA 1,0
W4 80,000	PD4 543,4	PLM 9000,0
LCF from stem on CL / on sheer		5,884 / 6,107
Maximum beam station from stem		6,980
RM Measured / Default		130,6 / 140,8
Limit of positive stability / Stab.Index		110,9° / 113,4
Freeboard at mast at 3,980		1,181



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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 No	Main Furler No			
Lenticular Rigging No	Without Backstay No			
Articulated Bowsprit No				
P 13,850	E 4,740	MDT1 0,111	MW 0,202	
IG 14,076	J 3,980	MDL1 0,202	GO 0,202	
ISP 14,076	SFJ 0,000	MDT2 0,111	BD 0,160	
BAS 1,568	SPL 4,040	MDL2 0,202	MWT 167,00	
FSP 0,072	TPS 0,000	TL 0,000	MCG 5,390	

PROPELLER		
Installation Strut	PRD 0,382	
Type Folding	PBW 0,112	
Twin Screw No	PIPA 0,0033	
ST1 0,042	ST3 0,180	ST5 0,260
ST2 0,180	ST4 0,112	EDL 2,520

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MIZZEN RIG AND SAILS	
N/A	

MOVEABLE BALLAST		
N/A		

COMMENTS	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)						
Mainsail	HB	MGT	MGU	MGM	MGL	
	0,160	0,98	1,78	3,07	3,99	
	Area	Area (r)	Formula			
	39,11	39,87	P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)			
Symmetric	SL	SMG	SF			
	14,01	7,21	7,12	83,97	SL · (SF + 4·SMG) / 6	
Asymmetric	Not Available					

HEADSAILS												
Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)												
JH	JGT	JGU	JGM	JGL	LPG	JL	Area	Btn	Fly	Meas.Date	Material	Comment
0,06	0,65	1,22	2,25	3,24	4,19	13,93	30,63	Y		18/07/2014	Carbon	C1J-2 # 88693
0,06	0,63	1,21	2,23	3,22	4,17	13,93	30,40			16/06/2013	Carbon	C1 Jib # 70980
0,06	0,58	1,12	2,14	3,16	4,17	13,94	29,66			16/06/2013	Carbon	C2 Jib # 75027
0,07	0,58	1,13	2,12	3,13	4,12	13,90	29,34			16/06/2013	Carbon	C2 Jib # 63354
0,08	0,51	0,97	1,92	2,92	3,95	13,45	26,32			16/06/2013	Carbon	C3.5 Jib 66346

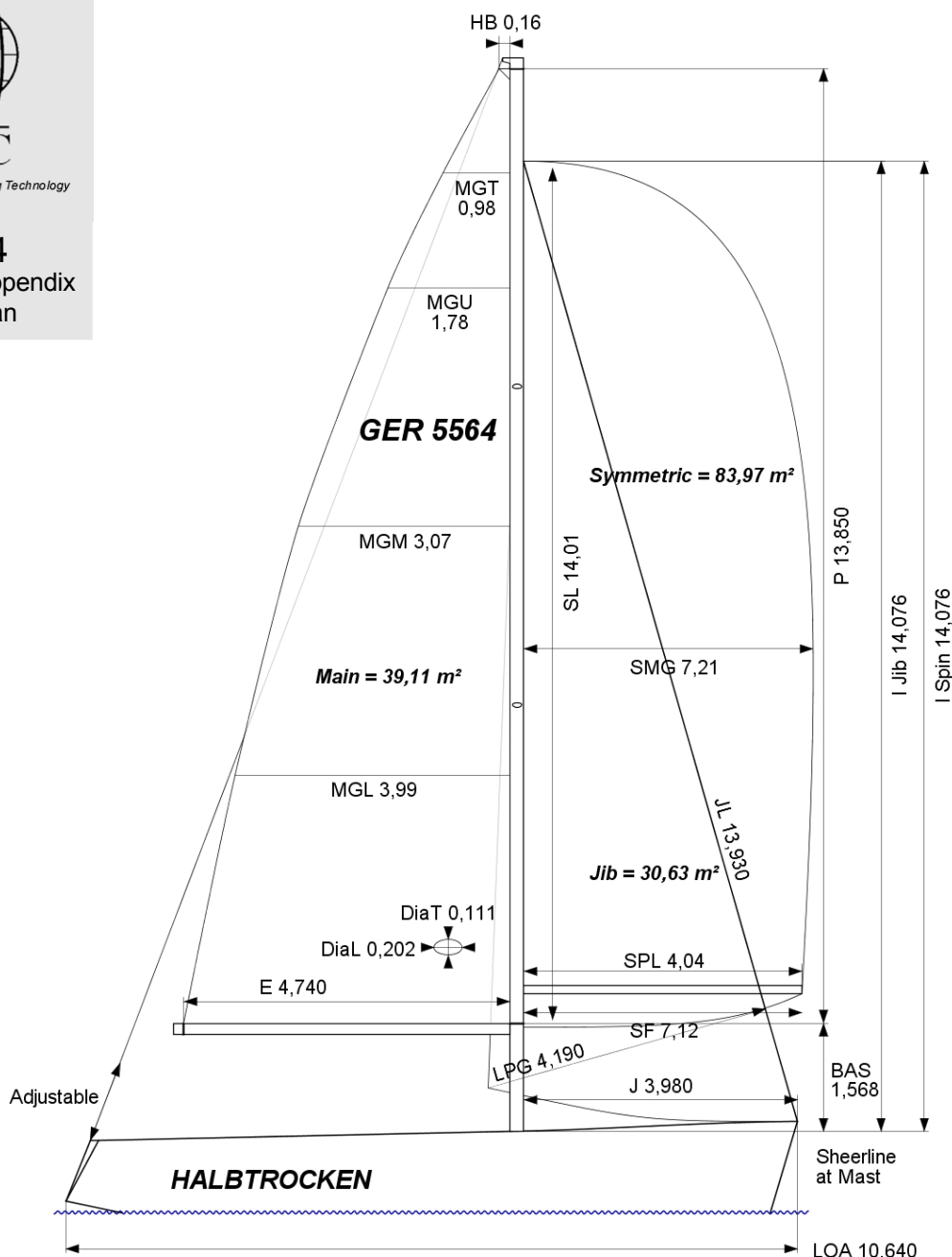
MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
01	Anchor	14,0	0,50	
02	Chain	8,0	0,50	
03	Chain	2,0	0,50	Warp
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
07	Engine	Yanmar	25 kW	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		
06	Deck Gear	20,0		

MEASUREMENT INVENTORY						
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG Condtm Description</i>
08	Tank Fuel			75,0	8,00	15,0
09	Tank Water			300,0	5,00	0,0
10	Tank Holding			50,0	5,60	0,0
11	Tank LPG			5,0	9,85	5,0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>		
04	Battery		7,80	Engine 1 * 70 Ah		
05	Battery		7,00	Service 2 * 70 Ah		



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Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
149205	0,160	0,98	1,78	3,07	3,99	39,11	KRAUSE	16/06/2013	QUANTUM	Carbon	# 75026
143021	0,160	0,97	1,75	3,05	3,98	38,91	KRAUSE	16/06/2013	QUANTUM	Carbon	# 63353

HEADSAILS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
15007	0,06	0,65	1,22	2,25	3,24	4,19	13,93	105%	30,63		Y	KRAUSE	18/07/2014	QUANTUM	Carbon	C1J-2 # 88693
14537	0,06	0,63	1,21	2,23	3,22	4,17	13,93	105%	30,40			KRAUSE	16/06/2013	QUANTUM	Carbon	C1 Jib # 70980
14920	0,06	0,58	1,12	2,14	3,16	4,17	13,94	105%	29,66			KRAUSE	16/06/2013	QUANTUM	Carbon	C2 Jib # 75027
14302	0,07	0,58	1,13	2,12	3,13	4,12	13,90	104%	29,34			KRAUSE	16/06/2013	QUANTUM	Carbon	C2 Jib # 63354
14303	0,08	0,51	0,97	1,92	2,92	3,95	13,45	99%	26,32			KRAUSE	16/06/2013	QUANTUM	Carbon	C3.5 Jib 66346

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
145370	14,01	7,21	7,12	83,97	KRAUSE	19/06/2014	QUANTUM	Nylon	S3 # 70737
150063	14,01	7,21	7,12	83,97	KRAUSE	21/07/2014	QUANTUM	Nylon	S2 Provinzial # 87449
143001	14,01	7,21	7,12	83,97	KRAUSE	31/08/2011	QUANTUM	Nylon	S2 # 66347
147019	14,01	7,21	7,12	83,97	KRAUSE	16/06/2013	QUANTUM	Nylon	S1 # 75028

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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