

BOAT
Name Tunante II Sail Nr PER 3005

GPH
589.3

HULL	Length Overall	13.350 m
	Maximum Beam	4.250 m
	Displacement	11,233 kg
	Draft	2.264 m
	IMS Reg. Division	Cruiser/Racer
	Dynamic Allowance	0.630%
	Fwd Accommodation	Yes
	Hull Construction	Solid
	Carbon Rudder	No
	Trim Tab	No
	IMS L	12.343
	VCGD	0.096
	VCGM	0.043
	Sink	30.19 kg/mm
	Wetted Area	38.79 m²



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GENERAL
Class Dufour 44
Designer Felci Yachts
Builder
Series 04/2002
Age 10/2006
Age Allowance 0.520%
Offset File dufour44.off - 29/12/2003 08:41:30
Measurement by Juan Carrion - 29/01/2009

SCORING OPTIONS						
	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	589.3			661.4		
Time On Time	1.0181			1.0205		
Performance Line	PLT	PLD		PLT	PLD	
	0.850	76.6		0.967	236.8	
Triple Number	Low	Medium	High	Low	Medium	High
	0.9831	1.2983	1.4873	0.7426	1.0275	1.2196

Rating Office
Roberto Peschiera peschiera56@gmail.com Asociación de Veleros Oceánicos del Peru

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1029.1	845.2	743.4	691.4	660.0	639.9	627.4
52°	654.9	542.7	491.1	464.3	450.3	441.5	432.5
60°	606.7	512.0	468.8	443.9	431.5	423.7	414.9
75°	567.5	490.1	452.6	428.8	411.4	401.0	391.1
90°	565.1	479.2	439.0	415.6	404.5	397.7	375.6
110°	577.2	489.5	447.9	421.3	399.6	382.0	363.7
120°	614.4	509.4	460.9	431.3	408.7	389.0	354.6
135°	710.3	569.8	495.8	455.4	429.1	408.4	373.5
150°	854.0	671.5	563.7	498.9	460.0	433.9	395.8
Run VMG	986.2	775.3	651.0	569.8	514.6	475.4	425.9

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Selected Courses							
Windward / Leeward	1026.4	822.2	707.7	638.7	594.2	564.1	532.7
Circular Random	821.5	659.6	571.4	519.1	486.0	464.0	436.3
Ocean for PCS	879.0	690.4	584.1	518.3	474.5	443.2	398.9
Non Spinnaker	879.9	700.8	601.9	542.2	504.2	478.8	447.4

Crew Weight	
Declared	958 kg
Default*	958 kg
Non Manual Power	No

Special Scoring		
	ToD	ToT
Double Handed	590.4	1.0162
Non Spinnaker	621.5	0.9654
N/S Perf. Line	44.7	0.756

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	45.5°	44.6°	43.3°	41.1°	39.7°	39.1°	39.8°
Beat VMG	3.50	4.26	4.84	5.21	5.45	5.63	5.74
52°	5.50	6.63	7.33	7.75	7.99	8.15	8.32
60°	5.93	7.03	7.68	8.11	8.34	8.50	8.68
75°	6.34	7.35	7.95	8.40	8.75	8.98	9.20
90°	6.37	7.51	8.20	8.66	8.90	9.05	9.58
110°	6.24	7.35	8.04	8.54	9.01	9.42	9.90
120°	5.86	7.07	7.81	8.35	8.81	9.25	10.15
135°	5.07	6.32	7.26	7.91	8.39	8.82	9.64
150°	4.22	5.36	6.39	7.22	7.83	8.30	9.09
Run VMG	3.65	4.64	5.53	6.32	7.00	7.57	8.45
Gybe Angles	141.6°	146.2°	148.9°	158.0°	166.0°	170.3°	174.5°

Sails Limitations		
Genoas	Jibs	Spinnakers
4	3	4
Spinnaker configuration Symmetric		

Storm Sails Areas	
Heavy Weather Jib	42.88
Storm Jib (JL=11.59)	15.88
Storm Trysail	16.26

Owner
Ruben Loaiza Carlos Porras Osoros 370-1701 rloaiza@prima.com.pe
I certify that I understand my responsibilities under ORC Rules and Regulations
Signature

BOAT	
Name Tunante II	Sail Nr PER 3005
File PER3005.dxt	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 3
Inner Forestay None Fitted	Runners 0
Carbon Mast No	Jumpers None
Taper Hollows No	Jib Furler No
Fiber Rigging No	w/o Backstay No

P 16.740	E 5.550	MDT1 0.120	TL 1.000
IG 17.550	J 5.220	MDL1 0.235	MWT 303.00
ISP 17.650	SFJ 0.150	MDT2 0.120	MCG 5.860
SPS 3.910	SPL 5.120	MDL2 0.180	CPW 2.770
BAS 1.720	TPS	MW 0.180	BD 0.190
BAL 0.280	FSP 0.080	GO 0.260	BWT

MIZZEN RIG AND SAILS	
N/A	

COMMENTS

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 29/01/2009		SG 1.0250
FFM 1.440	FF 1.440	SFFP 0.502
FAM 1.130	FA 1.130	SAFP 12.353
W1 35.250	PD1 58.8	WD 14.130
W2 70.500	PD2 117.5	GSA 38.0
W3 105.75	PD3 176.2	RSA 7800.0
W4 141.00	PD4 235.0	PLM 2130.0
Maximum beam station from stern		8.500
RM Measured / Default		314.5 / 300.2
Limit of positive stability		113.1°
Stability Index		118.9
Freeboard at mast at 5.370		1.235

PROPELLER		
Installation Strut	PRD 0.460	
Type Folding	PBW 0.120	
Twin Screw No	PIPA 0.0040	
ST1 0.063	ST3 0.180	
ST2 0.180	ST4 0.108	
	ST5 0.310	
	EDL 3.150	


WATER BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Area (r)	Formula
	0.170	1.08	1.97	3.41	4.58	30.00	53.67	54.48	$P/8 \cdot (E + 2 \cdot MGL + 2 \cdot MGM + 1.5 \cdot MGU + MGT + 0.5 \cdot HB)$
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0.00	0.95	1.89	3.78	5.67	17.68	7.56		$0.1125 \cdot JL \cdot (1.445 \cdot LPG + 2 \cdot JGL + 2 \cdot JGM + 1.5 \cdot JGU + JGT + 0.5 \cdot JH)$
Symmetric	SL	SMG	SF						
	17.74	9.40	9.38				138.90		$SL \cdot (SF + 4 \cdot SMG) / 6$

MEASUREMENT INVENTORY			
Measurer	Date	Comment	
Id	Item	Weight	Distanc Description
OR	Anchor	10.0	0.00 *Legacy Anchor*
Id	Item	Weight	Description


MEASUREMENT INVENTORY			
Id	Item	Weight	Distanc Description



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2010
IMS Measurement
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Certificate
Number **PERI28**
ORC Ref **PER00000325**
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VPP Ver. **2010 1.11**
Valid until **31/03/2011**

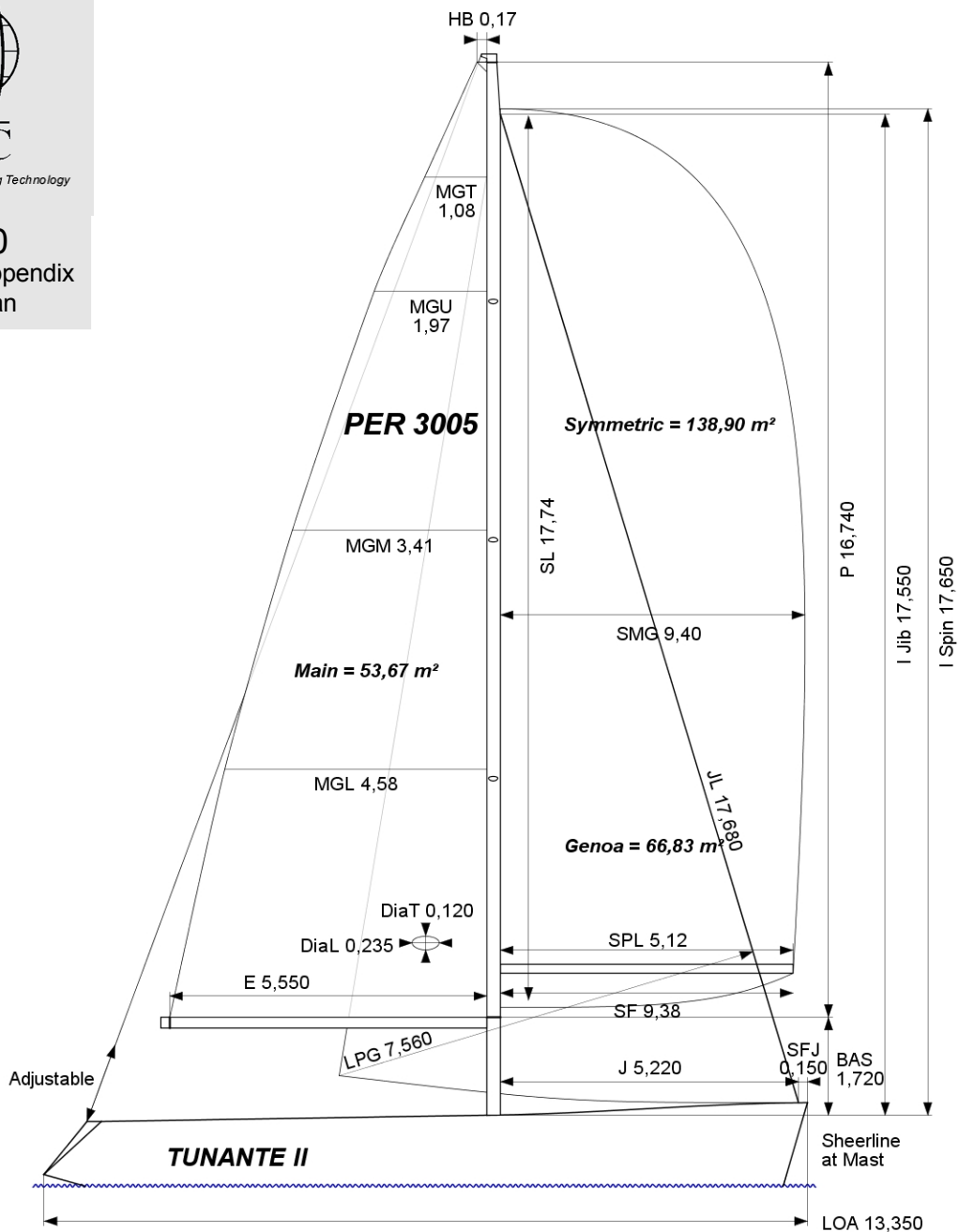


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Sail Plan



SAILS INVENTORY

MANSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.170	1.08	1.97	3.41	4.58	30.00	53.67					* Copied from legacy

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Overlp	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC						7.56	17.68	145%	66.84					* Copied from

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	17.74	9.40	9.38	138.90					* Copied from legacy *

ASYMMETRIC SPINNAKERS

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