

APH ToD: **474.9** CDL: **13.278**

APH ToT: **1.2634** CertNo:

#### BOAT

Class **Macchi 50**  
Designer **Macchi**  
Builder  
Age date **01/1988**  
Series date **01/1988**  
Offset file **macchi50-PER5566.off**  
Data file **PER5566**

#### HULL

Length Overall **15.021 m**  
Maximum Beam **4.474 m**  
Draft **2.982 m**  
Displacement **11,871 kg**  
DLR **4.3376**  
IMS Division **Cruiser/Racer**  
Dynamic Allowance **0.160%**  
Age Allowance **0.487%**

#### PROPELLER

Installation **Shaft exposed**  
Type **Folding 2 blades**  
Diameter **0.570m**

#### CREW

Maximum weight **1,111 kg** (default)  
Minimum weight **944 kg** \*when applied  
Non Manual Power **No**  
Crew Arm Extension

#### SAIL AREAS (m²)

	Measured	Rated
Mainsail	<b>57.32</b>	<b>57.79</b>
Headsail Luffed	<b>81.92</b>	<b>81.92</b>
Headsail Flying		
Symmetric	<b>178.11</b>	<b>178.11</b>
Asymmetric	<b>180.21</b>	<b>180.21</b>

(All asymmetric spinnakers with SHW/SFL > 85%)

#### STORM SAIL AREAS (m²)

Trysail **17.55**  
Storm Jib **23.40**  
Heavy Weather Jib **63.17**

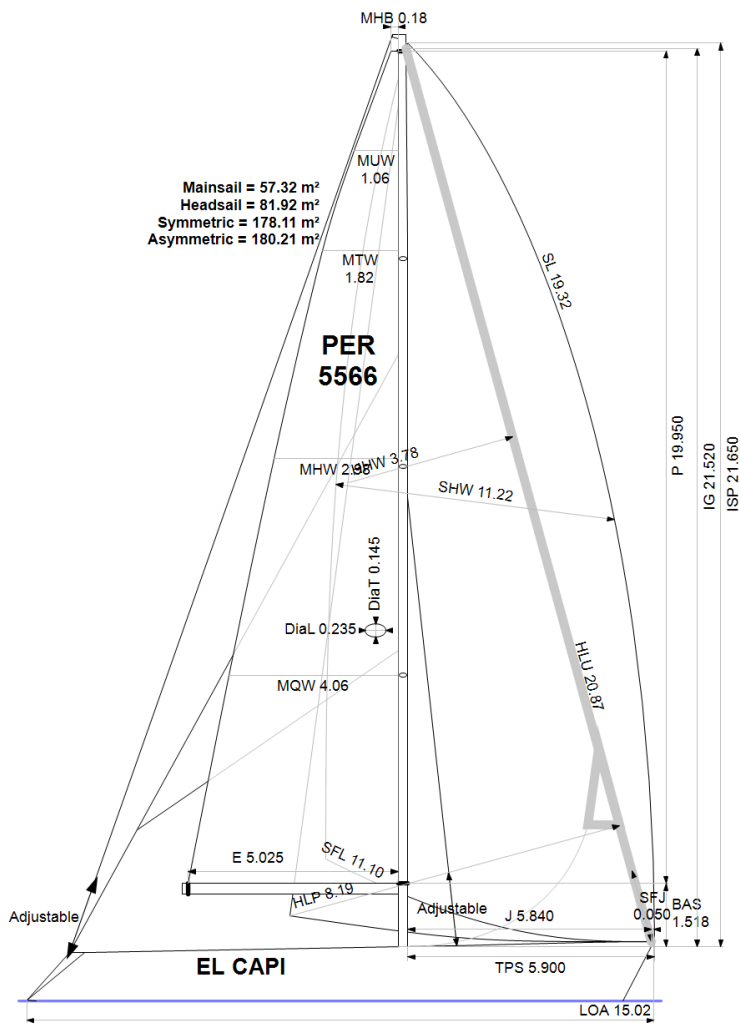
#### SAIL LIMITS

Headsails **1**  
Spinnakers **5** \* Asymmetric SHALL NOT be tacked on the pole

#### STABILITY

Righting Moment **349.7 kg·m**  
Stability Index **115.5**

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.



#### Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.9°	40.6°	38.8°	37.3°	36.6°	36.3°	35.8°	36.1°
Beat VMG	4.19	5.12	5.73	6.05	6.21	6.31	6.43	6.45
52°	6.37	7.54	8.19	8.47	8.61	8.69	8.80	8.82
60°	6.70	7.81	8.40	8.69	8.83	8.92	9.04	9.08
75°	6.93	7.98	8.55	8.88	9.12	9.26	9.45	9.57
90°	6.75	7.87	8.50	8.89	9.21	9.48	9.86	10.09
110°	6.34	7.74	8.56	9.05	9.43	9.71	10.18	10.37
120°	6.15	7.56	8.46	9.00	9.48	9.93	10.70	11.37
135°	5.45	6.87	7.96	8.65	9.17	9.68	10.80	12.47
150°	4.56	5.85	6.96	7.89	8.56	9.05	10.03	11.22
Run VMG	3.95	5.06	6.03	6.85	7.55	8.15	9.12	10.03
Gybe Angles	141.7°	144.7°	147.7°	152.8°	158.1°	168.2°	177.2°	176.5°



International  
Certificate  
2024

Boat  
**EL CAPI**  
PER 5566

Asociacion de Vela Oceánica  
del Peru - AVOP  
Roberto Peschiera - RO  
Peschiera56@gmail.com



Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	860.1	703.1	627.9	595.5	579.8	570.8	560.0	557.8
52°	565.4	477.3	439.7	424.8	418.1	414.3	409.2	408.2
60°	537.2	460.7	428.6	414.4	407.7	403.8	398.4	396.4
75°	519.8	451.0	421.2	405.2	394.9	388.7	380.9	376.3
90°	533.3	457.7	423.7	405.0	390.9	379.8	365.1	356.8
110°	567.5	465.1	420.4	397.9	381.8	370.9	353.8	347.2
120°	585.6	476.0	425.7	399.9	379.6	362.4	336.4	316.5
135°	660.3	524.3	452.4	416.0	392.7	371.9	333.2	288.7
150°	789.8	615.6	517.3	456.4	420.8	397.9	359.0	320.9
Run VMG	912.0	710.9	597.3	525.2	476.7	441.7	394.7	359.0
Selected Courses								
Windward / Leeward	886.1	707.0	612.6	560.4	528.2	506.2	477.3	458.4
All purpose	678.4	553.0	490.7	458.1	437.8	423.8	403.5	388.3

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	585.8	1.0243
All purpose	474.9	1.2634



Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>Macchi 50</b>	LOA	<b>15.021</b>	VCGD	<b>0.181</b>
Measurement	<b>28/04/2023</b>	Max. Beam	<b>4.474</b>	VCGM	<b>0.083</b>
HIN		Draft	<b>2.982</b>	RM Rated (kg·m)	<b>349.7</b>
Plan review		Displacement	<b>11,871</b>	Limit of positive stability(°)	<b>110.2</b>
Hull construction	<b>Light</b>	Wetted area	<b>46.39</b>	Stability Index	<b>115.5</b>
Carbon Rudder	<b>No</b>	IMS L	<b>13.982</b>	Default crew weight	<b>1,111</b>
Light stanchions	<b>No</b>	LSM0	<b>13.986</b>	Declared crew weight	<b>N/A</b>
Trim tab	<b>No</b>	Acc. length	<b>14.540</b>		
		Sink (kg/mm)	<b>34.82</b>		

**PROPELLER**

Propeller Type	<b>Folding 2 blades</b>										
Installation	<b>Shaft exposed</b>	PRD	<b>0.570</b>	PSD	<b>0.038</b>	PSA	<b>9.6°</b>	ST1	<b>0.023</b>	ST4	<b>0.076</b>
Twin screw	<b>No</b>	PBW	<b>0.145</b>	PHD	<b>0.095</b>	ESL	<b>1.090</b>	ST2	<b>0.115</b>	ST5	<b>0.210</b>
Hydro generator	<b>No</b>	PIPA	<b>0.0072</b>	PHL	<b>0.185</b>			ST3	<b>0.105</b>		

**RIG**

Forestay tension	<b>Aft &amp; Forward</b>	P	<b>19.950</b>	E	<b>5.025</b>
Inner stay	<b>Adjustable</b>	IG	<b>21.520</b>	J	<b>5.840</b>
Mast material	<b>Aluminum</b>	ISP	<b>21.650</b>	BAS	<b>1.518</b>
Single headsail furler	<b>Yes</b>	MDT1	<b>0.145</b>	FSD	<b>0.042</b>
Mainsail furler	<b>No</b>	MDL1	<b>0.235</b>	SFJ	<b>0.050</b>
Articulated bowsprit	<b>No</b>	MDT2	<b>0.145</b>	SPL	<b>5.825</b>
Non-circular rigging	<b>No</b>	MDL2	<b>0.190</b>	WPL	
Fiber rigging	<b>No</b>	TL	<b>4.650</b>	TPS	<b>5.900</b>
Adjustable mast foot	<b>No</b>	MW	<b>0.225</b>	BD	<b>0.260</b>
Runners/Checkstays	<b>2</b>	GO	<b>0.255</b>	MWT	
Spreaders	<b>3</b>			MCG	
Rotating mast	<b>No</b>				

**FLOTATION AND STABILITY**

Calculation method	<b>Poles inclining</b>	SFFP	<b>0.430</b>	SAFP	<b>13.644</b>	W1	<b>150.0</b>	PD1	<b>438.0</b>	WD	<b>12.910</b>
Flotation Date	<b>28/04/2023</b>	FFM	<b>1.420</b>	FAM	<b>1.105</b>	W2	<b>150.0</b>	PD2	<b>439.6</b>	PLM	<b>9000.00</b>
		FF	<b>1.420</b>	FA	<b>1.105</b>	W3	<b>150.0</b>	PD3	<b>432.5</b>	GSA	<b>1.0</b>
		LCFcl	<b>8.418</b>	LCFsh	<b>8.677</b>	W4	<b>150.0</b>	PD4	<b>430.5</b>	RSA	<b>1.0</b>
		SG	<b>1.0253</b>	HBI	<b>1.296</b>					RM	<b>350.5</b>



#### MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
M1	0.18	1.06	1.82	2.98	4.06	57.32	25/04/2023	

#### HEADSAIL

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
G3	0.09	0.94	1.85	3.78	5.87	8.19	20.87	No	No	81.92	12/01/2024	
G4	0.09	0.90	1.75	3.53	5.46	7.53	19.00	No	No	69.31	12/01/2024	

#### SYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
S1	20.67	20.67	20.67	10.35	10.30	178.11	25/04/2023	AZUL-BCO-ROJO
S2	20.60	20.60	20.60	10.30	10.20	176.47	25/04/2023	CREMA

#### ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A1	21.10	17.53	19.32	11.22	11.10	101%	180.21	25/04/2023	BLANCO

#### CRUISER/RACER REQUIREMENTS\*

Accommodation length	<b>14.5 m</b>	Table area	<b>0.66 m<sup>2</sup></b>	Headroom	<b>1.90 m</b>
Minimum number of berths	<b>6</b>	Personal gear stowage	<b>0.24 m<sup>3</sup></b>	Fresh water capacity	<b>255 l</b>
Minimum number of seats in cockpit	<b>4</b>	Food stowage	<b>0.36 m<sup>3</sup></b>	Fuel capacity	<b>140 l</b>

\*This list refers to the calculated requirements. See IMS Appendix 1 for the complete list of requirements.