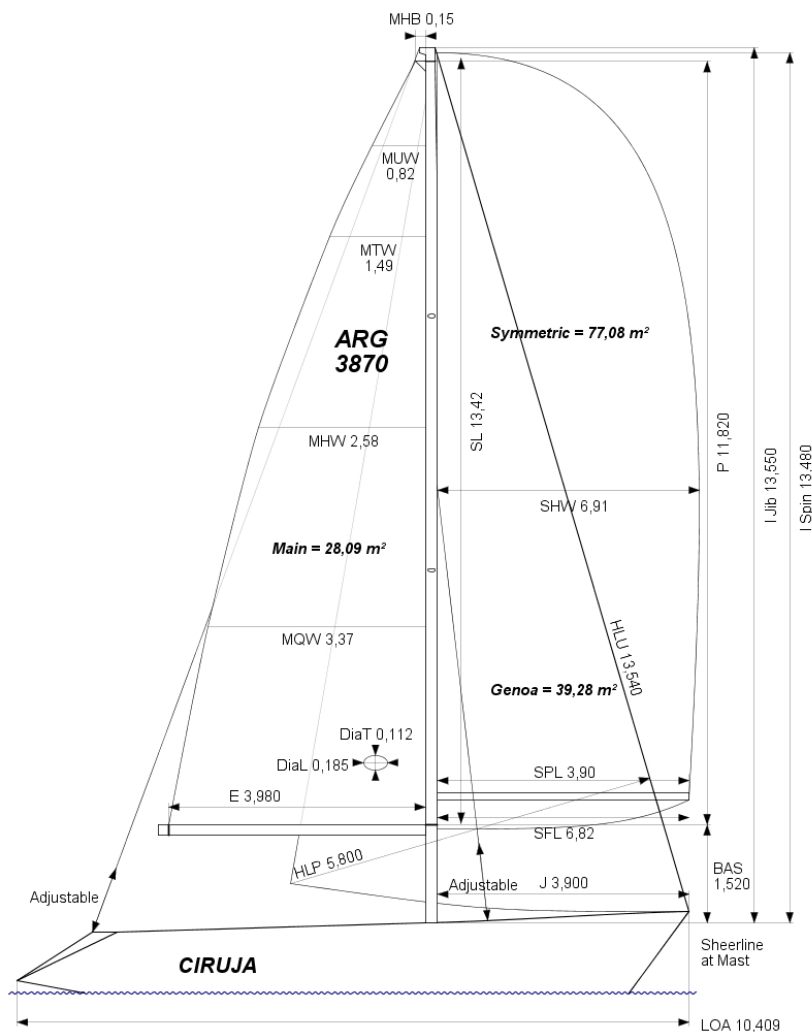




World Leader in Rating Technology

2017 ORC Club Certificate

Rating Office

**PATRICIO D. GUTIERREZ
C. GRIERSON Y
COSTANERASUR
Y.C.A**



Certificate

Number **387001**
Issued On **12/01/2017**
ORC Ref **ARG00004037**
VPP Ver. **2017 1.00**
Valid until **31/12/2017**

Crew Weight

Declared **570kg**
Default* **551kg**
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **683,8 0,8774**
Non Spin OSN **665,0 0,9022**

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes 77,08**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **8,108**

Stability (Estimated)

Limit Positive Stab.: **115,8°**
Stability Index: **113,0**

Owner

**JUAN RUGGERO
BUENOS AIRES**

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

BOAT		GPH	HULL	
Name	CIRUJA	659,9	Data File	ARG3870
Sail Nr	ARG-3870		LOA	10,409m
CLASS			Offset File	ARG3870-2.off
Class	PANDORA34		Displacement	4.457kg
Designer	NESTOR VOLKER		MB	3,520m
Builder	AST. MARCO		Draft	1,787m
Series	03/1992		IMS Division	Cruiser/Racer
Age Date	03/1992		Fwd Accom.	Yes
Age Allowance	0,487%		Fiber Rigging	No
COMMENTS			Crew Arm Ex	No
PROPELLER			Light Stanchions	No
Installation	Strut	PRD 0,428	IMSL	8,691m
Type	Folding 2 blades	PBW 0,113	VCGD	0,034m
		PIPA 0,0034	Sink	15,85kg/mm
SCORING OPTIONS			RL	7,523m
			VCGM	0,006m
			WS	22,06m²
			LSM0	8,552m
			Displacement/Length ratio	7,1259
			Water Ballast	0
			Trim Tab	No
			CENTERBOARD	
			N/A	

SCORING OPTIONS		COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance		642,3			716,2		
Time On Time		0,9342			0,9425		
Triple Number		Low	Medium	High	Low	Medium	High
Time on Distance		756,0	585,1	519,2	979,1	722,1	621,0
Time on Time		0,8929	1,1536	1,3002	0,6894	0,9348	1,0870



World Leader in Rating Technology

2017

ORC Club Certificate Appendix

BOAT

Name **CIRUJA**
Sail Nr **ARG-3870**

Certificate Number **387001**
Issued On **12/01/2017**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1105,8	924,7	823,8	769,9	742,4	727,3	717,1
52°	718,6	605,4	551,2	529,3	519,3	513,4	508,5
60°	676,1	573,8	534,0	515,1	503,6	496,9	490,9
75°	641,0	553,0	521,1	501,6	485,6	472,7	461,0
90°	641,0	551,3	518,2	498,3	480,5	463,7	439,4
110°	686,3	565,4	519,0	492,2	467,2	449,2	431,1
120°	706,7	579,2	525,0	497,5	472,4	448,6	414,2
135°	777,6	631,6	549,7	514,3	489,8	465,7	422,3
150°	911,4	721,9	611,5	545,0	513,6	490,7	446,9
Run VMG	1052,4	833,5	704,6	618,7	558,7	522,5	477,5

Selected Courses

Windward / Leeward	1079,1	879,1	764,2	694,3	650,5	624,9	597,3
Circular Random	908,3	734,0	640,4	585,8	551,9	529,6	501,6
Ocean for PCS	1114,4	861,8	719,3	631,9	574,8	534,8	479,0
Non Spinnaker	950,6	764,1	663,1	603,6	566,4	541,9	510,7

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°	42,9°	43,1°	41,5°	40,2°	39,5°	38,9°
Beat VMG	3,26	3,89	4,37	4,68	4,85	4,95	5,02
52°	5,01	5,95	6,53	6,80	6,93	7,01	7,08
60°	5,32	6,27	6,74	6,99	7,15	7,24	7,33
75°	5,62	6,51	6,91	7,18	7,41	7,62	7,81
90°	5,62	6,53	6,95	7,22	7,49	7,76	8,19
110°	5,25	6,37	6,94	7,31	7,71	8,02	8,35
120°	5,09	6,22	6,86	7,24	7,62	8,03	8,69
135°	4,63	5,70	6,55	7,00	7,35	7,73	8,52
150°	3,95	4,99	5,89	6,61	7,01	7,34	8,06
Run VMG	3,42	4,32	5,11	5,82	6,44	6,89	7,54
Gybe Angles	146,7°	150,6°	152,0°	158,2°	180,0°	180,0°	180,0°