



**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **US6451**
 Issued On **18/08/2020**
 ORC Ref **034100000MI**
 VPP Ver. **2020 1.02**
 Valid until **31/12/2020**

Crew Weight

Default 847kg
 Maximum **847kg**
 Minimum* **635kg**
 *when applied by the NoR and SI
 Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	616.9	0.9726
Non Spin OSN	599.6	1.0007

Sails Limitations

Headsails **1** Spinnakers **4**

Asymmetric on centerline

Spinnaker configuration
 Symmetric: **No**
 Asymmetric: **Yes 154.83**
 Flying H/S: **No**
 Spin. Pole: **No**

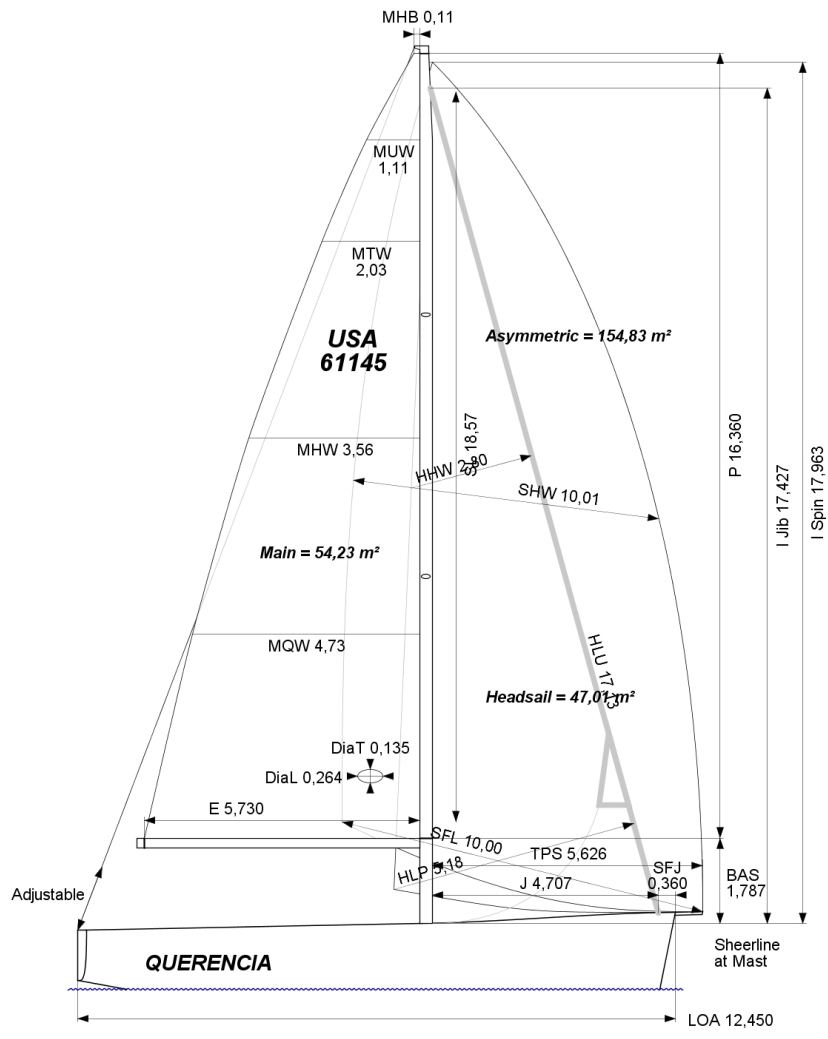
Class Division Length

CDL = 10.737

Stability (Measured)

Limit Positive Stab.: **112.8°**
 Stability Index: **118.1**

Owner



BOAT		GPH	HULL			
Name Querencia Sail Nr USA 61145		580.0	Data File US6451	LOA 12.450m		
			Offset File JCTX4DK.off	MB 3.946m		
			Displacement 9,328kg	Draft 2.526m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.181%		
Class X4^3			Plan Review	Construction Cored		
Designer Jeppeson			Fiber Rigging No	Aramid Core No		
Builder X- Yachts			Crew Arm Ex	Carbon Rudder No		
Series 02/2016				Light Stanchions No		
Age Date 08/2018			IMSL 11.687m	VCGD 0.219m		
Age Allowance 0.130%			RL 9.803m	VCGM 0.195m		
			WS 35.48m²			
COMMENTS			LSM0 11.561m	Displacement/Length ratio 6.0367		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.455	NA				
Type Folding 2 blades	PBW 0.117					
	PIPA 0.0039					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	564.4			635.3		
Time on Time	1.0631			1.0624		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	663.0	513.2	463.2	859.1	636.9	560.2
Time on Time	1.0181	1.3153	1.4574	0.7857	1.0598	1.2050

2020

ORC Club Certificate Appendix

BOAT			
Name	Querencia	Certificate Number	US6451
Sail Nr	USA 61145	Issued On	18/08/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	988.0	814.1	719.5	674.4	657.3	650.3	634.0
52°	644.4	542.0	487.6	466.7	459.8	456.5	450.7
60°	607.6	515.6	471.8	454.2	447.1	443.7	439.6
75°	578.8	496.1	460.8	443.5	432.4	425.8	420.5
90°	584.1	490.8	456.2	441.3	427.1	414.6	396.9
110°	578.9	481.5	444.7	424.7	412.1	402.0	383.5
120°	593.1	490.1	448.8	425.9	404.6	386.9	365.9
135°	663.6	535.5	469.2	440.6	419.1	396.9	354.9
150°	787.1	628.1	530.7	474.9	450.5	433.2	399.1
Run VMG	908.9	725.3	612.8	548.3	518.2	483.3	436.2
Selected Courses							
Windward / Leeward	948.4	769.7	666.1	611.4	587.7	566.8	535.1
Circular Random	796.6	643.5	562.4	516.4	488.9	471.0	447.0
Coastal / Long Distance	944.5	722.0	599.7	531.9	499.1	471.7	427.7
Non Spinnaker	865.7	692.0	597.4	541.7	507.4	485.0	457.0

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	43.1°	41.3°	40.5°	39.8°	39.2°	39.0°	38.4°
Beat VMG	3.64	4.42	5.00	5.34	5.48	5.54	5.68
52°	5.59	6.64	7.38	7.71	7.83	7.89	7.99
60°	5.92	6.98	7.63	7.93	8.05	8.11	8.19
75°	6.22	7.26	7.81	8.12	8.33	8.45	8.56
90°	6.16	7.34	7.89	8.16	8.43	8.68	9.07
110°	6.22	7.48	8.10	8.48	8.74	8.96	9.39
120°	6.07	7.35	8.02	8.45	8.90	9.31	9.84
135°	5.42	6.72	7.67	8.17	8.59	9.07	10.14
150°	4.57	5.73	6.78	7.58	7.99	8.31	9.02
Run VMG	3.96	4.96	5.87	6.57	6.95	7.45	8.25
Gybe Angles	143.0°	147.0°	147.5°	150.0°	151.5°	175.5°	178.0°