

Minotaur SANTA CRUZ 37 USA 4892

Class: SANTA CRUZ 37 Configuration: Sail Number: USA 4892 Year Built: 2009 Builder: Santa Cruz Owner(s): Roland, George			
Certificate #: EZ11783-1 Valid Year: 2023 Type: Mid Seas Change Issue Date: 2023-09-28 Exp. Date: 2023-12-31 Offsets_file: US42059A.OFF Cert Group: ORR-Ez SOCAL Comment:			
Rig Type: Sloop Forestay: Fractional Keel Type: Fixed Prop Type: Folding Prop Install: Strut Drive Prop Blades: 2			
LOA: 37.11 ft LWL: 34.97 ft Rated Length: 36.13 ft Beam Max: 10.65 ft Draft: 7.51 ft Disp Empty: 9689 lbs Disp Sailing: 11554 lbs Crew: 1653 lbs Water Ballast: 0 lbs Wetted Area: 283.4 ft ² LPS: 128.8 ° RM20: 773.6 ft-lbs Stab Index: 130 °			
Spinnaker: Asymmetrical tacked centerline on bow, sprit or prod Code Zero: Yes Genoa/Jib Leech: No Roach - Leech is straight Large Roach Headsail: No Jib Furler: No Main Roller Furling: No			
Rig Dimensions IG: 47.70 ft ISP: 52.46 ft J: 13.55 ft P: 47.01 ft E: 16.90 ft TPS: 19.16 ft	Mainsail Meas. HB: 0.49 ft MGT: 3.48 ft MGU: 6.40 ft MGM: 10.93 ft MGL: 14.21 ft Area: 483.1 ft ²	Jib/Genoa Meas. LP: 14.93 ft LPG %: 110.2 % J Luff: 47.47 ft J Leech: 44.36 ft Area: 354.3 ft ²	Asymmetric Spin. Meas. ASLU: 59.88 ft ASLE: 52.49 ft AMG: 34.45 ft ASF: 34.45 ft Area: 1612.9 ft ²

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Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	44.9	44.2	43.4	39.8	37.6	35.9	35.9	36.2
Beat VMG	1,367.47	970.04	777.32	694.14	656.79	624.38	609.36	602.34
52°	867.37	625.29	510.51	477.99	463.11	446.03	435.94	431.01
60°	786.68	580.10	486.72	459.37	446.20	429.83	419.73	414.46
75°	660.34	514.06	463.23	436.76	422.44	403.06	391.03	383.77
90°	622.58	487.47	442.87	418.19	400.46	375.64	359.17	347.61
110°	626.77	483.96	431.20	402.85	380.83	345.60	319.56	304.22
120°	654.40	498.35	435.78	400.63	376.51	335.51	305.01	287.91
135°	809.92	582.45	479.99	441.98	411.77	349.97	290.66	266.57
150°	991.95	713.35	580.73	514.56	465.89	403.56	339.53	275.03
165°	1,106.37	795.64	647.72	573.91	517.54	442.47	378.70	306.75
Run VMG	1,145.40	823.70	670.57	594.16	535.80	458.08	392.06	317.58
Opt Run Angle	128.7	132.5	138.3	145.6	154.3	161.6	138.0	143.4

Performance Metrics

SA/D Dnwind:	65.630
SA/D Average:	46.35
SA/D Upwind:	27.060
D/Length:	109.3
Ave Perf Screen:	42.400
DnWind Perf	60.0
Screen:	

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Standard Ratings

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.465	0.731	0.968	1.158	1,029.8	654.5	494.4	413.3
W50/L50	0.458	0.728	0.963	1.161	1,279.3	805.4	608.8	505.0
W60/L40	0.460	0.731	0.963	1.135	1,301.2	818.2	621.3	527.5
MOSTLY WW	0.475	0.752	0.966	1.068	1,269.4	801.0	623.9	564.1
MOSTLY LW	0.487	0.747	0.969	1.245	969.6	632.6	487.5	379.5

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.965	546.7
IR#	0.967	552.4

ORR-Ez PHRF

TOD (Spin)
16.1

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,030.8	741.8	604.4	532.5	490.2	442.9	412.4	388.8
W50/L50	1,279.4	914.6	739.3	653.2	603.6	546.4	505.0	463.9
W60/L40	1,301.2	929.3	750.5	663.9	616.0	563.3	527.1	492.8
MOSTLY WW	1,269.2	907.1	733.2	656.5	619.1	582.9	562.6	548.4
MOSTLY LW	969.6	708.2	587.3	526.7	484.2	425.7	379.0	334.2
MOSTLY REACH								

ORR-Ez PHRF Time Allowance 4 Winds

	TOD (Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	39.4	21.2	12.5	9.7
W50/L50	72.4	37.0	22.1	18.6
W60/L40	85.1	43.6	25.2	22.0
MOSTLY WW	102.3	50.3	24.2	22.7
MOSTLY LW	25.1	12.7	9.7	5.4

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Opt Beat Angle	44.9	44.2	43.4	39.8	37.6	35.9	35.9	36.2
Beat VMG	1,367.47	970.04	777.32	694.14	656.79	624.38	609.36	602.34
52°	867.37	625.29	510.51	477.99	463.11	446.03	435.94	431.01
60°	786.68	580.10	486.72	459.37	446.20	429.83	419.73	414.46
75°	711.91	538.52	466.74	436.76	423.72	406.16	393.93	386.01
90°	705.22	535.24	465.95	428.91	407.65	386.39	370.18	357.76
110°	802.14	591.07	495.48	455.78	427.20	376.73	343.38	323.12
120°	922.32	661.55	536.90	481.90	449.20	399.96	349.45	311.77
135°	1,254.97	859.58	662.85	555.88	494.27	430.76	383.68	332.36
150°	1,565.69	1,041.85	779.91	637.70	545.58	454.51	403.59	358.01
165°	1,656.66	1,100.11	830.51	672.53	571.98	463.19	407.02	359.48
Run VMG	1,715.10	1,135.47	845.73	683.98	581.15	469.06	412.21	364.67
Opt Run Angle	162.8	166.6	172.1	172.1	172.0	172.8	172.7	171.6

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance Metrics

SA/D:	27.06
D/Length:	109.3
Perf Screen:	24.8

Standard Ratings

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.400	0.652	0.902	1.096	1,195.4	734.0	530.5	436.6
W50/L50	0.381	0.644	0.924	1.133	1,539.9	909.8	634.3	517.6
W60/L40	0.397	0.664	0.933	1.113	1,509.1	901.8	641.7	537.6
MOSTLY WW	0.453	0.730	0.957	1.062	1,331.5	825.4	629.6	567.6
MOSTLY LW	0.351	0.599	0.874	1.155	1,345.2	788.3	540.8	409.1

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.881	599.0
IR#	0.919	582.9

ORR-Ez PHRF

TOD (Non-Spin)
46.6

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Non-Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,201.0	846.6	673.6	580.5	525.2	466.9	435.1	412.2
W50/L50	1,551.6	1,067.0	826.3	699.8	627.4	552.8	515.6	488.0
W60/L40	1,518.3	1,051.3	820.1	701.2	635.0	568.4	535.6	512.1
MOSTLY WW	1,333.7	943.1	753.0	666.6	624.3	585.1	565.7	554.1
MOSTLY LW	1,359.2	929.4	715.4	604.2	535.9	457.0	406.8	367.3
MOSTLY REACH								

ORR-Ez PHRF Allowance 4 Winds

	TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	205.0	100.7	48.6	33.0
W50/L50	333.0	141.4	47.6	31.2
W60/L40	293.0	127.2	45.6	32.1
MOSTLY WW	164.4	74.7	29.9	26.2
MOSTLY LW	400.7	168.4	63.0	35.0