Multihull Dynamics, Inc

Trend-Line Analysis

Comanche 32

Designed by: Rod MacAlpine - Downie

Built by: Sailcraft UK

Compiled by MDI Staff All Rights Reserved February 20, 2009



Basic Specifications:

Loa	32.17 ft	9.80 m Length Over- All
Lwl	28.75 ft	8.76 m Length at Waterline
Boa	13.83 ft	4.48 m Beam Over- All
Bcl	10.03 ft	3.06 m Beam Centerline
Bh	4.18 ft	.73 m Beam Hull
BdCl	24 in	60.96 cm Bridgedeck Clearance
BdCl v. No	om + 2 in	+ 5 cm Bridgedeck Clearance vs. Nominal CL

Displacement

•	3.75	LT
•	8400.00	lbs

•	8400.00	lbs
	2010 10	1.0

•	2910.19	кg

SA 445 sqft 41.34 m² Sail Area (main and Jib/foretriangle)

-	Bcl	/Lwl	.35	Ratio
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Lwl/Bh 6.88 Ratio

Performance Indicators:

S/AD	17.23	Sail Area vs. Displacement Ratio
BN	1.04	Bruce Number
BSpd	7.93	Base Speed
PI-C	.62	Performance Indicator - Classic
Texel	156	Texel Rating

Stability Indicators:

SI-CM 2.93	Stability Index – Calvin Markwood
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SSpd 19.29 knots ** Stability Speed

Detailed explanations of terms, formulas and interpretations are available on the Technical pages of the website <u>www.multihulldynamics.com</u>

Trend-Line Graphs:

Below you will find 6 graphs of the Type Trend Lines. These Trend Lines are not averages or means, but rather are statistical evaluations that give the "relationship" of this multihull to other catamarans of similar waterline length in the Database. The gold star on the graphs represents the multihull in this report. For a more indepth understanding of these graphs and their results you may wish to read the Technical pages of the MDI website. Membership is required for some of the readings.

The orders of the graphs are: power ratings, performance and stability formula predictions.

- 1. The power graphs are: Bruce Number (BN) and Sail Area/Displacement Ratio (SA/D)
- The peformance graphs are: Base Speed (BSpd) and Texel Rating (TR)
- 3. The stability graphs are: Stability Speed (SSpd) and Stability Index (SI-CM)





Perfromance Graphs:





Stability Graphs:



****** Stability Speed (SSpd): This formula does not take wave action, shortening of sail or hiking-out into account. It includes a 40% safety factor for wind gusts but does not compensate for wave effect. For more information on Stability Speed read the Technical page on the website.

Stability Index is not a real world number, it is not the windspeed at which a hull will lift. Rather it is an abstract number that allows stability between two different multihulls to be compared. It is referred to as a Figure of Merit.



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Multihull Database

Multihull Dynamics, Inc. reserves the right to list boats for which specification information is published in magazines, brochures, websites and other public media. Where possible, we augment published information with specification data provided by the designers and builders. Where invitations to provide this information are declined, we use estimating methods described in the article <u>Analysis and Comparisons of Cruising Multihulls 2008</u> to provide the missing information.

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