



90' CONVERTIBLE

HULL #62 - JARUCO



TIP OF THE SPEAR

WHY JARUCO IS THE MOST ADVANCED SPORTFISH EVER BUILT

To say that *Jaruco* pushes the engineering envelopes of speed, performance and safety is a monumental understatement. From the time that team *Jaruco* first walked in the door, it was clear that the project was going to require an incomparable amount of research and development. “Probably more R&D man hours went into this boat than any other sportfish in the history of our sport,” explains Jarrett Bay founder Randy Ramsey. The project’s ambitious goals and attention to every detail was meticulous and unrelenting. Throughout the process, there were six engineers examining every decision, outside consultants, materials experts and extensive tank-testing at the Marine Research Institute Netherlands (MARIN).

This extensive engineering and design team collaborated on the materials science and propulsion physics that made *Jaruco*

unlike any other cold-molded boat ever built. Computer modeling was performed to calculate stress loads on the hull surface, stringers, bulkheads and running gear. This helped them project exactly how the new lightweight materials would hold up and provide insight into every ounce that could be shaved—without sacrificing strength and safety. The prop tunnels were designed and modeled in software before being constructed separately from the hull. Their precise shape and contours were digitally optimized before being physically tested and verified with the overall hull form in model tank testing which included multiple running gear configurations.

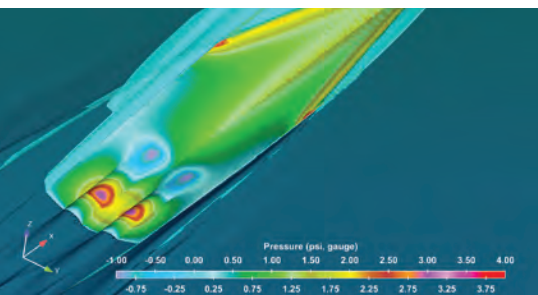
LIGHTER, FASTER, STRONGER

Jarrett Bay’s engineering team could write an entire book on the different composite layups used throughout the 90 feet of boat. The massive stringers and bulkheads, and most other structural components were manufactured primarily of carbon fiber—another first. The hull itself was cold-molded with Jarrett Bay’s traditional methodology of marine grade lumber, e-glass and epoxy, merged with new-age carbon fiber and Kevlar lamination layers. Their efforts resulted in pioneering several proprietary lamination matrices that improved the overall structural

integrity of the boat while eliminating approximately 40,000 pounds from a traditional build of the same size.

Davis also explains how the infusion of epoxy—and now their proprietary weaves of carbon fiber and Kevlar—help punch through big seas by forming an incredibly tough outer skin that reinforces the suppler wooden hull core. It’s in these tensioned layers of hull and stringer lamination that a wooden boat’s most classic traits come to life—cancelling out noise and vibration and producing what many well-weathered captains have proposed are superior fish-raising harmonics. In *Jaruco*, the Jarrett Bay team has produced a boat squarely in the Carolina tradition, yet cleverly augmented with today’s most innovative materials and technologies. Jarrett Bay has designed one of, if not the best performing large sportfish boats ever built. With her low center of gravity, Seakeeper 35 gyro and insane strength-to-weight ratio, *Jaruco* performs like a 60’ boat in a 90’ package.

The 90 was also built with the utmost forethought to seaworthiness and safety. In fact, the team succeeded in meeting American Bureau of Shipbuilding specifications to withstand 8-foot seas at 50 knots. “To our



THIS IS THE PINNACLE OF SPORTFISH YACHT CONSTRUCTION AND OWNERSHIP

knowledge, this is the only wood-based hull ever built to ABS standards,” Ramsey emphasizes. He and New Construction Superintendent Gary Davis explain how the structural bulkheads flow throughout the interior spaces and were designed to be independently watertight, including a crush zone in the bow. Similar bulkheads and baffles divide up the *Jaruco*'s 4,400 gallons of integral fuel cells tabbed into the hull. Kevlar and flame-resistant Nomex coring make-up part of the lamination in these interior compartments, for added safety and strength. “These advanced products allow us to do more with less material than ever before,” says Davis.

Beyond the titanium propeller shafts, carbon fiber tower structures and the aerospace-

grade flooring and countertops, the *Jaruco* is outfitted to the nines. Simply put, the 90 is one of the most extensively equipped recreational fishing machines known to man. Custom fit around a laundry-list of top-end equipment, the opulent, yet tastefully refined finish work found throughout this flagship build is equally impressive. Outstanding woodworking and craftsmanship expertly pair exotic lumbers, carpets and leathers. Engineered veneers, drain-less shower floors and self-adjusting glass tint impress the most discerning of guests. All this technology and luxury meshes together in a grand symphony of achievement.

Notably, Jarrett Bay is far from writing the last chapter in this story of innovation. Laced between its rigorous tournament and travel program between Costa Rica, the Caribbean and Northeast, the 90 is scheduled to return to Jarrett Bay to be further outfitted and tested with additional running gear enhancements. This will include further development and testing of removable hydrofoils aimed at providing lift, and consequently more top-end speed.



Throughout *Jaruco*'s construction, the Jarrett Bay team maintained that this project was going to change the way subsequent boats would be built in the future. Now that sportfishing's most elite captains, owners and builders have had a chance to see the *Jaruco* effortlessly blowing by other large boats on the tournament trail, the proof is in the pudding. It would seem a new arms race has begun, and Jarrett Bay is unquestionably positioned at the tip of that spear.

JARRETTBAY.COM/90

CONSTRUCTION & ENGINEERING

METICULOUS R&D

- » Painstaking attention to material science and propulsion physics
- » Advanced computer modeling of stress loads on hull surface, stringer system, bulkheads, compartments and running gear
- » Composition of every part closely examined by a team of six engineers
- » Cold-molded hull with carbon fiber stringer and bulkhead designs
- » Proprietary lamination matrices throughout, including the use of marine grade lumber, E-glass, epoxy, carbon fiber and Kevlar on the outer hull skin
- » Independently 3-D molded and inset tunnels
- » Foredeck engineered for helicopter touch-and-go landings

EXTENSIVE WEIGHT SAVINGS

- » Almost all structural components are primarily carbon fiber
- » Diab foam core and carbon fiber infused parts throughout
- » Titanium propeller shafts and carbon fiber tower structures
- » Aerospace-grade flooring, countertops and other interior appointments

SUPERIOR SEAWORTHINESS & SAFETY

- » Built to ABS specifications to withstand 8 ft seas at 50 knots
- » Structural bulkheads flow throughout interior spaces for maximum strength
- » All hull compartments structurally engineered to ABS standards and completely watertight, including a frontal crush zone
- » Fully independent integral fuel, water and holding tanks feature optimized structural baffles and are reinforced and bonded with a layer of Kevlar
- » Flame resistant Nomex core used in specialty areas for interior compartments

PEAK PERFORMANCE

- » Traditional wooden hull core ensures superior noise and vibration control
- » A low vertical center of gravity and structural rigidity designed to maximize functionality of a Seakeeper 35 gyro stabilization system
- » Development and testing of concealed running gear enhancements

JARRETT BAY 90

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Length: **90'**
Beam: **22' 6"**
Draft: **5' 8"**
Water Line: **81'**

Cockpit: **310 sq. ft.**
Fuel: **4,400 gal.**
Water: **400 gal.**
Holding: **250 gal.**

Engines: **MTU 16V2000 M96L**
Horsepower: **2,600hp x 2**
Propulsion: **ZF 3070 V-Drives**
with titanium shafts

Genset: **Northern Lights**
M944T3
Gyro Stabilizer: **Seakeeper 35**



PERFORMANCE

RPM	SPEED	GPH
2450	43.7 kts.	273
2100	38.0 kts.	199
1800	31.2 kts.	144
1600	26.1 kts.	107
1400	21.1 kts.	90

