

Florida's Patti Marine launches the 152-foot Sea Watcher II with ABS approval for offshore clamming

By Jean Paul Vellotti

t's no surprise that building a new commercial fishing boat is expensive. But for the first East Coast vessel built with an American Bureau of Shipping classification certificate and load line assignment, cost wasn't the only complicating factor in the Sea Watcher II's construction — every phase of the project was under intense scrutiny.

"I've built a lot of boats, a lot of very innovative boats, but I have never been through anything like this," says Jim Meyers, president of New Jersey-based Truex International, who commissioned the offshore clammer to be built at Patti Marine Enterprises in Pensacola, Fla. "The ABS certification process is just unbelievable, and the time to do things takes longer."

During sea trials in the Gulf of Mexico in June, the 152-footer had a full house, like it or not. In addition to the owners and staff from Patti Marine Enterprises, representatives from the Coast Guard and ABS were present. Additionally, to qualify for the certification, company vendors from all other parts of the boat — from the drivetrain to navigation and even the refrigeration systems — had to answer questions.

Ultimately, the Sea Watcher II passed with flying colors, but there was no time to celebrate. The boat departed for a five-day steam to the company yard at

Atlantic City, N.J., to have the dredges, hoses and deck cages installed. Final outfitting will take about a week, and then the boat will be sent off to its home port of New Bedford, Mass., joining a familiar, albeit slightly smaller sight, the 134-foot Sea Watcher I, also built by Patti Marine in 2004.



Martin Truex Sr. with Patti Marine's Frank Patti Jr. during launch ceremonies.

The Florida shipyard's Ashley Stone was involved with project management for both boats and notes that Patti Marine did the original concept drawings for these aft-pilothouse boats while Gilbert Associates of Braintree, Mass., completed the naval architecture schematics.

The Sea Watcher I was a radical design change at the time, since deepwater clam boats traditionally have a house-forward design, requiring the captain to look aft while maintaining the dredges and keeping the boat moving forward at the same time. With the aft pilothouse, the owners aimed to increase visibility to be able to, "see down the belly of the beast," according to Stone. But even more radical is that the dredges are still aft of the pilothouse, on a nearly vertical dredge ramp.

On the water now for more than a dozen years, the Sea Watcher I design has proven itself. Whether catching Atlantic Ocean surf clams or hardshell quahogs during in the winter months, the captain drops one of the two huge dredges off the transom and lets out between 350 and 400 feet of cable for a 2-minute tow.

When retrieved, the dredge slowly ascends the ramp, looking like something inspired by the famous roller coasters of the Jersey Shore. After reaching the top, the dredge door opens and everything drops into a hopper that shuffles the catch into sorting machine. Rocks and shells are returned overboard, but the valuable clams divert into giant cages, where they will be off-loaded for shoreside shucking.

In the summer months, the clams are treated to an extra cold-water bath to maintain peak freshness. Pumping 50 gallons of cool seawater a minute onto the



- **Designer:** Gilbert Associates, Braintree, Mass.
- Owners: Barney Truex, Jimmy Meyers and Martin Truex Sr., Mayetta, N.J.
- **Dimensions:** 152' x 36' x 15' 6" (midship); 12' draft
- Material: Steel
- Class: ABS Maltese Cross AMS fishing vessel
- Speed: 13 knots
- Power train: 1,810-hp Caterpillar 3512C with a Twin Disc MGX5600 with a 5.04:1 ratio
- **Propulsion**: 7-inch-diameter Aquamet-17 shaft; HS Marine (Hung Shen) 81" x 76" pitch four-blade, manganese bronze, kaplan style wheel; Custom Nozzle Fabricators 82"-inch type 19A Kort nozzle
- Steering: American Bow Thruster, 28-inch-diameter 28 TRAC dual-prop 160-hp hydraulic; Gulf Coast Air and Hydraulics, 2 15-hp steering motors with dual Jastram cylinders and steering controls

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product, the raw seawater chiller brings the bivalves down to a cool 40 degrees. In the hottest days of summer, when water temperatures are 75 degrees, that task requires a huge system.

The Sea Watcher II has a Highland Refrigeration skid-mounted unit with a 75-hp Bock compressor. Water moves through a 3-hp seawater pump and a 5-hp condensing pump before being sprayed on the clams. Meyers notes that the clam cage area on deck is pretty popular with the crew during the summer, as a way to catch a quick cool-down.

The new boat will hold 200 cages, compared to 132 cages on the first Sea

up two concepts.

"We presented 134-foot and 152-foot boats, and the owners weighed the options. Much of the cost of building the vessels was the same — adding midbody is about the cheapest thing you can do, since many of the things are going to be the same either way," says Stone.

After choosing the bigger boat that offered increased cage capacity, "we had to keep the geometry about the same, but the dredge ramp was slightly lengthened, and its angle increased by a few degrees," says Stone.

The pilothouse was also designed to be bigger and wider, and it has already vert some extra power from the wheel.

"The owners wanted a little more thrust on the banks, dealing with the amount of tide and current there," Stone says. As with anything, there are tradeoffs, and while the nozzle should perform well offshore, "it might make docking a little more challenging," he adds. "But it's better to sacrifice docking than thrust."

Supplying that power is a Caterpillar 3512C, 1,810-hp main engine, running at 1,600 rpm. Power is then transferred through a Twin Disc MGX5000 5.04:1 ratio gear set before spinning a fourblade, manganese bronze 81-inch-diameter by 76-inch-pitch wheel. A 7-inch





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Watcher. The decision to go bigger started as only a matter of increasing the original design by 12 feet. In fact, that boat was designed and ready to go at Patti Marine in 2013 where a twin tugboat project was on, then off.

Truex was hoping to catch a spot in the shipyard and even put down a deposit on a new keel — which incidentally, was before the classification requirements kicked in for boats greater than 79 feet on July 1, 2013. Had they started before that date, they likely would have been off the hook for the

new standards. But when the tug project was given the green light at the last minute, the Sea Watcher II was put on hold until discussions to build her began around three years ago. Because construction after the Coast Guard's new regulations took effect, the team had to design a totally new boat, and Patti drew

become everyone's favorite place on the boat even though it's ultimately the perch for the captain and mate, who can keep an eye on the deck and crew of four. Martek Marine Electronics of Avalon, N.J., supplied the integrated bridge

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Jim Meyers,

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system with the five Simrad MO19-T monitors that fit comfortably.

"Five flat screens fit perfect. Six would be too tight," jokes Stone.

For those Georges Banks trips, which can take 15 hours to reach (plus another 20 hours to work the grounds), an 82-inch type 19A Kort was specified to con-

Aquamet shaft connects the two.

Steering is by Gulf Coast Air and Hydraulics, and consists of two 15-hp steering motors with dual Jastram cylinders and steering controls. A 160-hp, 28-inch-diameter American Bow Thruster moves

water forward. With a top speed of 13 knots, the Sea Watcher II has the capacity to hold a little better than 40,000 gallons of fuel.

With the newest boat behind him and out catching, Meyers isn't sure they will go through the rigorous ABS process again unless the size requirement for fishing ves-

sels is increased to 180 feet.

"I hope we don't have to build another boat with these regulations again," Meyers adds with a laugh. "Because I don't know if we will ever pay it off." NF

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