

HEAVYWEIGHT CHAMP

Hatteras 75: Float like a butterfly.

BY ERIC COLBY

DIALING IN A BOAT'S PERFORMANCE IS AN engineering juggling act. Among other variables, the designer has to consider displacement, hull shape, propeller size, horsepower, and gear ratios. Change one, and any number of the others are affected. Hatteras knew its new 75 Cockpit Motor Yacht was a heavy boat. The question was, what aspect could be played with? The 74' model had been so successful that the designer didn't want to tamper with the running surface and decided to work instead with the propulsion system. Our test boat was powered by serious horses—burly Clydesdales in the form of twin 1,400-bhp Caterpillar 3412E diesels. To put even more pull in these beasts, the ZF transmissions are geared way down to 4.036:1. For every four turns of the crankshaft, those monster six-bladed props make one slow—but powerful—revolution. That nearly doubles the reduction ratio and adds 20 percent more power to most boats in this size range.

It works. This 110,000-pound heavyweight runs at a top speed of 31.6 mph and cruises at 27.4 mph, bullying its way along in a three- to five-foot groundswell topped with a wind-whipped chop. A motoryacht is not supposed to be a dragboat, but even at midrange speeds the 75 CMY accelerated with authority.

Other builders have made other choices. The Lazzara 76 (\$3.2 million with twin 1,150-hp MTU diesels) weighs 94,000 pounds dry; with 2.5:1-geared transmissions, it runs at similar speeds to the 75 CMY. The Ferretti 72 (\$2.8 million with twin MTU 1,150s) tips the scales at 97,020 pounds and sports 2.517:1 gearing; it tops out at 38.5 mph and cruises at 35.7 mph.

As waves threw spray over the bow, the 75 CMY never missed a beat and felt stable and solid. Even when turning, putting its beam to the sea, it did exactly

what was asked of it. And when it comes to dockside maneuverability, those big wheels backed arrow straight with excellent control down a long narrow channel. So in this case the designer/juggler didn't drop the ball.

SQUEAKY CLEAN. One reason for the six-digit numbers on the weight scale is Hatteras' commitment to conservative fiberglass construction. It uses weight-saving closed-cell foam core materials in the hullsides but not the 1"-thick bottom. The Lazzara 76's hull is fully balsa cored, and the Ferretti 72 has a solid bottom and cored sides.

Any manufacturer would be hard-pressed to duplicate Hatteras' immaculate rigging. From the engine room to the flying bridge, the wire harnesses and hoses are secured with cushioned clamps and wrapped in plastic tiewraps every two inches. The manufacturer even uses white vinyl cushioning on the clamps because black stains white hoses and wire casings. Even more meticulous is that every harness and accessory is color coded and labeled.

A unique engine installation uses fiberglass stringers with a 1/2"-thick steel plate bonded along their tops. The plates, which run from the transom to the forward engine room bulkhead, are tapped to accept mounting bolts for the motors, gensets, and rudder-post supports. Hatteras' stringers are foam-filled, which resists water penetration and deadens sound. To make sure turbo whine and engine vibration don't transmit up

top, there are rubber isolation mounts for the salon sole's support struts in the engine room. Even at high rpm, the decibel level at the lower helm never broke 72 dB-A; you can carry on a conversation in normal tones.

Routine maintenance can't get any easier. Fuel filters/water separators are on custom brackets at waist level right next



Standard amenities weigh in on the heavy side for comfort. Top end: 31.6 mph.



to the engines, and the monitoring gauges are mounted at eye level above each engine.

Hatteras has done it right on deck as well. Reboarding after a swim is easy with ladder receptacles on each side of the stern platform. For safety, the railings come up to my hip and the toerails are a good 8" tall. There are foot controls on each side of the bow for the Maxwell windlass, and the freshwater foredeck washdown facilitates cleanups.

SOFT TOUCH. The captain won't be lonely at the lower helm, thanks to the raised three-person lounge aft. The only oversight appears to be a lack of seating for the driver. The lounge is too far aft of the destroyer-style wheel to sit on and drive. Hatteras says you can order a captain's seat. Gee, thanks.

That lone gripe aside, the 75 CMY's lower helm station is thoughtfully laid out with a large compass and standard GPS, chartplotter, autopilot, and depthsounder. To save space, the water temperature, oil pressure, and voltmeter are clustered within a single instrument. For checking up on the engines, there's nothing better than the digital readouts on Caterpillar's electronic management system.

Should there ever be a problem with the gauges, controls, or steering, removing a couple of bolts located in the lockers to each side of the wheel lets you hinge the whole console forward. The helm lounge opens in the same manner to provide access to wiring for the chartplotter's black box. Adjacent to the helm is a three-shelf cabinet and a hanging locker.

Topside, the flying bridge helm has redundant gauges, stowage in its base, a swiveling captain's chair, plus a copilot's seat. The large wetbar (\$27,623) includes a cold-water sink, refrigerator, icemaker, and four bolted-down stools. I say pocket the cash and sit on one of the two large L-shaped lounges with lockers beneath. Here Hatteras may have gone over the top with its heavy-makes-you-happy theme. The locker lids are so massive that I had difficulty raising them and worried about letting go. Gas-filled supports would solve those problems.

THE HIGHS: Built like a brick...well, you know.

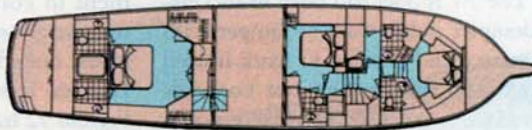
Sheer mass gives the boat a stable, secure ride in rough water. Big gears make it quick out of the hole. Rigged cleaner than almost any other boat.

THE LOWS: Nowhere for the captain to sit at the lower helm. Flying bridge locker lids too heavy. Big weight means bigger engines to match competitors' speeds.

BOATING CERTIFIED TEST RESULTS
Hatteras 75 Cockpit Motor Yacht

rpm	SPEED			EFFICIENCY				OPERATION	
	knots	mph	gph	naut. mpg	stat. mpg	n. mi. range	s. mi. range	run angle	sound level
900	9.6	11.1	10.2	0.9	1.1	1329	1529	2	62
1200	11.7	13.5	25.9	0.5	0.5	636	732	2	66
1500	14.7	16.9	46.3	0.3	0.4	446	513	3	68
1800	19.2	22.1	71.7	0.3	0.3	376	433	4	69
2100	23.8	27.4	110.1	0.2	0.2	304	350	4	70
2350	27.5	31.6	143.8	0.2	0.2	268	309	4	72

Advertised fuel capacity 1,561 gallons. Range based on 90 percent of that figure. Performance measured with five persons aboard, three-quarters fuel, full water. Sound levels measured at helm, in dBA.



LOA	76'4"
Beam	18'2"
Draft	6'0"
Displacement (lbs., approx.)	110,000
Transom deadrise	3'
Bridge clearance	21'2"
Minimum cockpit depth	3'9"
Max. cabin headroom	6'7"
Fuel capacity (gal.)	1,561
Water capacity (gal.)	345
Price (w/standard power)	\$2,757,100
Price (w/test power)	\$2,757,100

STANDARD POWER: Twin 1,400-bhp Caterpillar 3412E V-12 diesel inboards.

OPTIONAL POWER: Twin diesel inboards up to 2,800 bhp total.

TEST BOAT POWER: Twin 1,400-bhp Caterpillar 3412E V-12 diesel inboards with 1,649 cid, 5.4" bore x 6.0" stroke, swinging 48" x 72" six-bladed Nibral props through 4.036:1 reductions.

STANDARD EQUIPMENT (major items): Swim platform w/boarding ladder; anchor and hawse-

pipe; windlass w/300' chain; hydraulic stabilizer; boarding gates; remote-control searchlight; mooring lines; trim tabs; foredeck seat w/stowage, cushions, and cover; engine room lights; twin 21.5kW gensets; dockside water inlets; auto. bilge pumps; pressurized freshwater system; holding tanks; engine oil changing kits; water separator/fuel filters; twin 24v battery banks w/auto. charger and parallel system; twin retractable shorepower cords; a/c w/reverse-cycle heating; phone/CATV inlets; TV antenna; vinyl flooring in pilothouse and heads; sliding doors to side-decks; safety glass; electric windshield wipers; windshield cover; hydraulic power-assisted steering; GPS/chartplotter; VHF radio; autopilot; depth- and speedfinder; ss grabrails; aluminum radar arch; aft deckhouse door; freshwater wash-downs; 27" TV; VCR; AM/FM CD stereo; refrigerator/freezer w/icemaker; 4-burner stove w/oven; microwave oven; garbage disposal; dishwasher; tub w/shower and whirlpool jets; freshwater toilets throughout; washer/dryer.

HOT-TUB PARTY. After a long day of cruising, the 75 CMY's salon is inviting with a free-standing table and four chairs, plus extra seating on the lounges. The entertainment center houses a 27" TV and a stereo/CD player. Throughout the galley and heads Hatteras chose a faux-wood vinyl. It looks as good as the real thing and is much easier to clean and maintain.

If you like to cook, the galley just aft of the helm has everything you need to enjoy your time aboard—a full-size refrigerator, four-burner stove, oven, microwave, garbage disposal, and dishwasher. There is plenty of stowage in drawers and cabinets, including a china cabinet with glass doors. They didn't break during our punishing test, but over time I'd wonder. Next to the galley is a dinette table that can seat up to five.

With its four staterooms, there's more room to sleep than to dine aboard the 75 CMY. Two couples will be comfortable in staterooms in the bow and amidships with queen-size berths, large hanging lockers, chests of drawers, and TV/VCRs. Between these two is a smaller crew's or kids' cabin with two stacked berths. Twin forward heads with stand-up showers serve these three staterooms. Just forward of the midship stateroom is a laundry locker with a full-size washer/dryer.

A private stairway from the salon leads down to the enormous master stateroom aft. It features a king-size berth, four screened side ports, and a TV. Suitable for living aboard, there is a full-size walk-in locker and twin nine-drawer chests. In the master bath (the word *head* does not do this space justice) are a Jacuzzi and twin sinks. Nice, but what would bump this up to first class is a swing-out seat under one sink so a woman could sit down to do her makeup. ↴

LAST WORD. A heavy motoryacht, which means a comfortable ride when it gets rough, and big geared-down engines to push it. For more information, contact: Hatteras Yachts Inc., Dept. B, 110 N. Glenburnie Rd., New Bern, NC 28560, 252/633-3101, www.hatterasyachts.com.

