Twin helm stations is one of the most obvious changes in the new Hunter.

Hunter 45DS Meets Market Demands

Iron keel and mediocre finish quality overshadow design tweaks to the popular Hunter 44DS.

With the requisite fanfare, Hunter Marine unveiled its latest large auxiliary model, the Hunter 45DS (initials stand for "deck saloon") in late 2007. Intended to a replace the company's popular 44DS, which had been in production since 2002, the new boat is essentially an upgraded version with twin wheels, a new transom, new styling, and a roomier, reconfigured interior layout.

It takes features from previous Hunters—including the Pullman berth from the 41 and the cockpit layout with twin steering stations from Hunter's flagship 49—and meshes them with distinctive wraparound-style saloon windows and nearly elliptical port lights.

The 45DS also boasts of improved performance and enhanced sailhandling, but these should be taken in proper context. According to Hunter, the company has sold 152 hulls since the boat's debut in 2007, making it a fairly successful endeavour, particularly considering market conditions.

DESIGN

As director of engineering and chief naval architect at Hunter Marine, Glenn Henderson comes by his performance-leaning outlook honestly. Before joining the company in 1997, he had been a cruising sailor, a race-boat designer, and an avid surfer. Henderson designed the SR21, SR33, and the Henderson 30, among other racing designs, and is credited with improving the performance of Hunter's products.

The 45DS is a good example of the challenges Henderson faces. The typical Hunter clientele's preferences for roomy, comfortable, easily sailed cruisers do not always lend themselves to more fleet-footed or offshore-friendly designs.

Henderson's hull design on the 45DS is almost identical to the 44 it replaced, and the respective rig dimensions appear to be identical as well. To perform better in choppy conditions and resist pitching motion, the 45DS carries the same bow hollow and relatively shallow forefoot of the 44DS. But, to increase interior volume in the 45—an imperative according to Hunter's customer surveys—Henderson opted for relatively high freeboard and additional length. The hull is over a foot longer than the 44DS, though it measures the same at the waterline.

To improve handling in tight quarters, Henderson also matched a relatively large, nearly elliptical rudder with a smaller keel.

Because Henderson endowed the transom with increased radius, it lacks the pronounced reverse slope of the 44 as well as the deep platform seats and lazarettes. Only a 12-inch shelf remains to serve as a boarding step and swim platform. The change allows for more space in the master cabin just beneath it.

The transom modifications meant that the center of gravity shifted aft. Correspondingly, Henderson had to move the keel's center of gravity forward and tweak the mast placement. But market forces also account for differences in the keel configuration. Due to the rapidly increasing cost of lead (which tripled in price during 2007), Hunter now uses a keel and strut cast entirely from iron. The downside is that even minor groundings invite the risk of rust. While there are plenty of iron-keel boats still sailing today, their owners are typically the ones starting the pre-launch spring ritual a month before everyone else, as they grind, prime, and seal weeping craters. Needless to say, *PS* much prefers lead ballast keels.

The deck-stepped B&R rig that Hunter has used for years on all of its larger models changed very little from the 44 to the 45. The cap shrouds on the 45 extend out to the toerail, while the lowers run to the base of the cabinhouse. The design is meant to reduce compression loading on the rig and dispense with the backstay. A 574-square-foot mainsail provides the majority of the horsepower. The 110-percent, fractional (4/5) furling headsail is relatively small at 388 square feet. Henderson's decision to mount the mainsail traveler atop the arch offers some con-

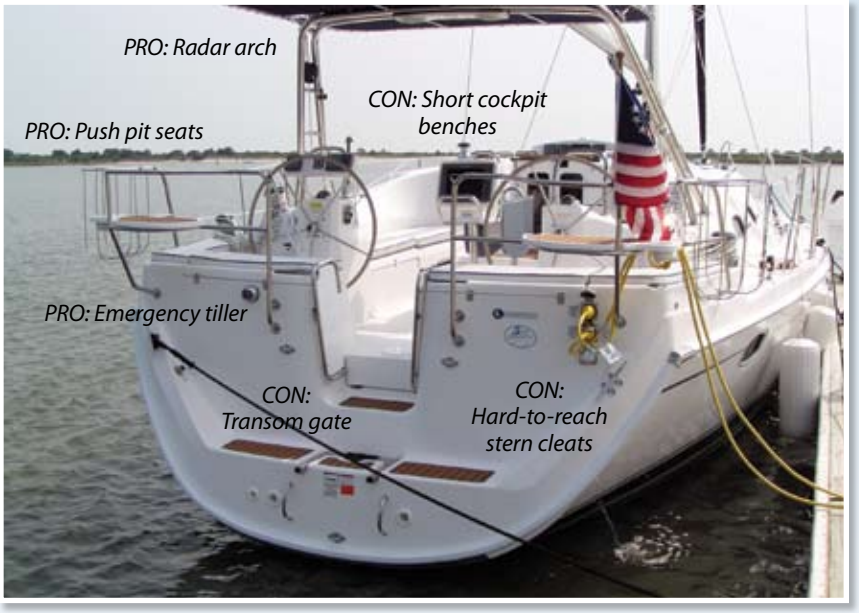
Photo courtesy of Hunter Marine

PROS

- Radar arch offers means for mounting sunshade, stereo speakers, and traveler controls.
- Pushpit seats offer comfortable guest perches for daysails.
- Functional emergency tiller.
- High companionway bridgedeck.

CONS

- Arch-mounted traveler pushes boom into the stratosphere.
- Stern cleats are virtually unreachable from the cockpit.
- Side decks are narrower than what we'd expect of a boat of these proportions.
- Loose sheets pile into steering stations and can slip past transom gate.



The twin steering stations allow for easier access to the swim platform on the 45DS. Flexiteek pads offers solid footing, even when wet.

Photos by Dan Dickison

venience and keeps sheet loads at the end of the boom, but it also pushes the boom and center of effort higher above the waterline than you'll find on many other monohulls in this category.

Forty-five-feet long is about the smallest you can go when matching an airy deck saloon with the canoe-shaped underbody of a contemporary cruiser without looking silly. Hunter does a better job than others at minimizing the bulky profile with a wraparound windscreen styling and a gradual transition to the maximum cabin height.

ON DECK

The twin helm stations afford good visibility forward, good protection for the helmsperson, and reasonable comfort. The space between the wheel and the transom measures 16 inches, less than you'll find on many boats this size. The cockpit sole in each station is fitted with a scupper for drainage when heeled.

PS sailed the boat with 10 men on board. There were often six in the cockpit, and it accommodated that number just fine. Integrated into the cockpit design is a centerline table with fold-down leaves and a well for cold storage. The table's raised mounting pad serves as a foot brace, while sections of tubing snake upward to provide handholds at the forward and aft ends. This also affords a place for a swiveling plotter, viewable from either helm position.

The cockpit seats are deep (21 inches), seatbacks offer modest support, and the coaming offers good protection. Surprisingly, the seats aren't long enough for anyone taller than 5' 10" to fully recline. However, there is voluminous storage area in the lockers beneath each seat.

Henderson located headsail winches just outboard and forward of each steering station so that the helmsman can manage most of the trimming duties. The primaries (self-tailing Lewmar 48s) on this vessel were electric.

The stout (3-inch diameter tubing), stainless steel radar arch spans the cockpit above the steering stations. The mainsheet traveler controls lead down either side of the arch, within easy reach of the helm. The aft end of the double-ended mainsheet runs through a line clutch on the port-side arch support so that the helmsman can adjust it when it's lightly loaded. The forward end of the mainsheet can be controlled by a winch (electric optional) mounted just to starboard of the companionway or by one adjacent to either steering station (self-tailing, electric Lewmar 42s).

The arch, which Hunter fabricates in two pieces for shipping, takes the traveler

Hunter does a good job of bringing the comforts of home into the main living areas (above), but the aft cabin (top left) is a different story. A small door offers quick access to engine service points (below left). The companionway stairs pull away for better access.

and mainsheet out of the cockpit, serves to anchor the bimini, and provides a location for overhead stereo speakers.

Throughout the cockpit and on deck, Hunter uses a standard nonskid grid pattern, but in locations like the transom boarding platform, bridgedeck, helm seats, and lazarette lids, faux teak Flexiteek is inlaid. The bridgedeck—at just 8 inches off the cockpit sole—adds headroom in the master cabin below and restricts water in the cockpit from flowing down the companionway. (Subsequent to our test sail, Hunter changed the deck mold, extending the bridgedeck further aft to increase headroom below.)

To facilitate sail trimming, Hunter has mounted Lewmar 40 self-tailing winches on either side of the companionway, just aft of a series of Spinlock XTS rope clutches and complemented by deep cubbies to retain the halyard and sheet tails. A similar containment system for the headsail and mainsail sheet tails near the steering stations would help with the clutter there.

The sidedecks are narrower than other boats we've tested in this size range, but adequate for fore and aft access, with two sections of stainless grabs rail mounted on either side of the cabintop for security. A 2-inch molded-in toerail offers adequate footing when the vessel is heeled.

Immediately aft of the stemhead fitting is a generous anchor well. Hunter's engineers have designed a recessed shelf in the aft end of this well and mounted a Lewmar vertical windlass between a U-bolt for the rode's bitter end and a horn cleat. The well is covered by a large, hinged lid, and foot-operated buttons for the windlass are mounted in the deck just aft of the well. The rode has a clean lead off the bow roller to the windlass and from there to the well. However, transferring the load of the rode from the windlass to the cleat is tricky. We'd prefer a chain stopper be added to the system.

In the broad area of the cabintop just forward of the mast partners, Hunter had affixed to the deck a three-piece custom cushion spanning a space the size of a double bed. Nice for daysailing with a large group of friends, these will likely be left at the dock when cruising.

Small hatches ventilate each head, a 16 x 16-inch hatch ventilates the forward cabin, and 20 x 20-inch hatch airs out the saloon. The main saloon also has two cowl vents. There are four opening ports in the cabin trunk (two in the galley, one over the nav station, and one in the aft head), but these aren't likely to be open underway. While this ventilation arrangement is better than on some comparable new boats in this size range, we were not surprised that the air-conditioning on our test boat was in operation for much of our time on board.

ACCOMMODATIONS

The 45DS is designed with a two-cabin layout (each with a dedicated head) integrating an ample saloon; a comfortable, efficient galley; and a snug nav station. The interior décor utilizes cherry-stained panels in the vertical surfaces, Corian countertops, a faux teak and holly sole (veneer over ½-inch marine plywood coated with aluminum dioxide) and Hunter's "Whisper Cloth" (a fancy name for foam-backed vinyl) in the overhead. The solid wood in the fiddles and doors is alder with a cherry finish. The collective effect is airy and open, particularly in the main saloon where 7 feet of headroom and ample natural light from the wraparound windshield set the tone.

In the galley—just to port of the companionway steps—Hunter has maximized stowage capacity with recessed trays beneath the cabin sole and a bank of drawers outboard. Broad Corian coun-

Photo (right) courtesy of Hunter Marine; others by Dan Dickison

Plexus Adhesive Bonds Interior Module and Grid to Hull

The 45DS is produced in Hunter's Alachua, Fla. facility, using Hunter's hybrid construction in which the interior is built separately and then installed in the hull as a finished module before the deck goes on.

HULL: The hull is hand-laid in a female mold, using solid fiberglass below the waterline, with balsa coring above. E-glass and vinylester resin are used. Kevlar skins are laminated, primarily along the centerline, to enhance impact resistance. The chainplate attachment points are heavily reinforced with fiberglass.

DECK: Sandwich construction with marine plywood coring. The marine ply is cut into small squares to prevent any moisture penetration from wicking. Where hardware is mounted, the plywood is replaced by aluminum plates.

HULL-DECK JOINT: Hull and deck are attached using an outward facing flange that is chemically bonded with 3M's 5200, and then through-bolted with stainless hardware all the way around. A heavy, synthetic rubber rail with a stainless steel inserts fits over the joint.

INTERIOR AND GRID: Hunter uses computer-guided tools to precisely cut parts for the interior, and all components, such as the galley unit and the head units, are put together as sub assemblies, and then bonded to a stout fiberglass grid to form the interior module. After the interior has been built on the grid, which is shaped precisely to fit inside the hull, the grid and interior are lowered into the hull and the grid is chemically bonded to the hull using Plexus. Structural bulkheads are tabbed to the hull using fiberglass before the deck is applied.

KEEL AND RUDDER: The rudder stock stern tube is adhered to the hull with a primary bond and reinforced around the base. The rudder itself (composite construction using fiberglass skins, a stainless-steel skeletal structure, and adhesive foam) is attached to a stainless-steel stock.

SPARS AND RIGGING: Hunter sources the majority of its spars from Seldèn Mast, which uses differing configurations of aluminum depending upon the mainsail option selected. The shrouds are fashioned from dyform wire swaged with studs, connected aloft with stemball fittings.

Tie-rods link the chainplates to U-shaped brackets that are bolted into the hull's structural grid.

tertops arranged in an L shape provide over 6 square feet of work area. There's easy access to the freshwater manifold under the counter. Batteries are stowed beneath the floor, but the installation on our test boat would not make it easy to service a bank of wet-cell batteries.

Access to the engine's key service points is very good, and noise abatement is above average. We measured 74 decibels in the nav station with the engine running at 2,500 rpm. It was 64 decibels in the forward cabin, 76 in the galley, and 74 in the cockpit at that same speed. The optional Fisher Panda 6-kilowatt genset mounted beneath the navigator's seat didn't add significantly to the noise level. (Conversation is about 60 decibels).

There is a generous amount of personal stowage in each cabin. The drawers, bins, shelves and a hanging locker in the forward cabin would fit all the clothes that two people would need for a cruise of a week or more. This cabin includes a sizeable Pullman berth to port (75 inches long, 50 inches wide at the shoulders, 30 inches wide at the feet) and good lighting, both task-oriented and general.

Directly forward of this cabin is a separate shower/head that measures 60 by 35 inches and has 6 feet of headroom. This entire space is essentially encased in a molded fiberglass liner that is smooth, with very few areas to trap mildew. One issue *PS* found with the forward cabin is the 5-inch step down into the cabin and the 3-inch step up into the head/shower. Hunter took this route to add more headroom, rather than raise the cabintop.

The aft cabin, which boasts a queen-size berth on centerline, also has an impressive amount of personal stowage, plus a separate door accessing the head. The low overhead—to accommodate the cockpit well above—is a drawback. As the owner's cabin, this should be the most luxurious space on board, but you have to stoop to move from one side of the cabin to the other, and the there was limited clearance above the berth. (Modifications to the deck mold since our test sail have improved the space, but there's still not full standing headroom in most of the cabin.)

On top of that, our 195-pound tester broke a 1-inch wooden cleat that supports the access hatch beneath the settee on the port side when he sat on the hatch. Despite this vessel's prototype status, that shouldn't happen.

Throughout the interior are numerous inspection hatches in the cabin sole, offering generous access to the mechanical and electrical systems' connections. The access is admirable, but none of these hatches were fitted with latches or dogging hardware. (Hunter's rep told *PS* that most owners don't feel such fittings are needed, a surprising comment for a boat intended for offshore passagemaking.) We also questioned the lack of true sea berths on a vessel meant in part for offshore work.

PERFORMANCE

With its 54-horsepower Yanmar auxiliary turning a fixed, three-blade prop, the Hunter 45DS topped 8 knots at 3,000 rpm in flat water and little current. Add some wind and sea, and the 75-horsepower option becomes attractive.

The combination of a large rudder and relatively short keel gives the 45DS good maneuverability. The turning radius was about the length of the vessel, and there was little resistance from the helm while steering. Hunter uses the all-mechanical Mamba system from Whitlock (Lewmar), which is fitted with a direct-drive autopilot. The system incorporates

Photo by Dan Dickison

The hull form and sailplan on the Hunter 45DS (left) is nearly identical to its predecessor, the 44DS, although rig and keel placement has been shifted slightly. Two interior configurations are available, one with a spacious aft cabin (above) and another with two double-berth cabins in the stern. In lighter winds, the Hunter's sail-area-to-displacement (SA/D) and displacement-to-length-ratios (D/L) ratios put it close to that of Catalina Morgan 440.

HUNTER 45DS IN CONTEXT

	HUNTER 45 DS	BENETEAU 46	CATALINA MORGAN 440	JEANNEAU SO 45DS
LOA	44′ 2″	47′ 3″	45′ 11″	45′ 1″
LWL	39′ 2″	40′	40′ 7″	37′ 7″
BEAM	14′ 6″	13′ 11″	14′	14′ 4″
DRAFT/SHOAL	5′ 0″ / 6′ 6″	5′ 9″/ 6′ 9″	4′ 11″/ 6′ 5″	5′ 4″/ 6′ 8″
DISPLACEMENT	22,936 lbs	23,292 lbs.	25,528 lbs.	22,932 lbs.
BALLAST	7,389 lbs.	7,143 lbs.	8,600 lbs.	6,512 lbs.
SAIL AREA (100% foretriangle)	925 sq. ft.	1,055 sq. ft.	931 sq. ft.	850 sq. ft.
ENGINE	54 hp.	54 hp.	75 hp.	54 hp.
WATER	140 gals.	150 gals.	176 gals.	162 gals.
FUEL	66 gals.	53 gals.	117 gals.	63 gals.
SA/D RATIO	18.33	20.7	17.18	16.85
D/L RATIO	170.25	162.47	171	191.06
PRICE*	$310,000	$310,000	$330,000	$300,000

** Median price of online search; actual prices can vary greatly.*

corrosion-prone metals and will need routine inspection and a regular blast of anticorrosive spray.

According to Hunter, the boat we sailed was slightly under-canvassed, and it showed. Hunter's largest models have in-mast furling for the mainsail, and that's how the 45DS comes equipped. This arrangement defeats one advantage of the backstay-less B&R rig: accommodating a powerful mainsail with a generous roach. Furling and unfurling is accomplished from the companionway, and an electric winch is optional for the chore. Mounting the mainsail traveler atop the radar arch puts sheeting at the end of the boom, where it belongs, but there are other ways to do this without raising the boom (and the center of effort) more than 11 feet above the water.

The double-ended mainsheet lets you trim the main from the port helm or the companionway. We sailed the boat with 10 people on board in relatively flat seas (about a 1-foot chop) and 13.5 knots of apparent wind. The boat heeled very little, about 6 to 8 degrees in those winds and managed to tack through about 110 degrees. With the wind at 11.6 apparent, we registered 4.6 knots of boatspeed upwind. In 13 apparent, we could make 5.8 knots. Not unexpectedly, the boat slows considerably in a tack, and it took us an average of 35 seconds to get back to full speed. Nonetheless, once moving, the 45DS is responsive and accelerated in puffs.

BOTTOM LINE

The current base price of the boat is $268,990, and when *PS* checked online, we found several 45DSs available, priced from $305,000 to $330,000. That's a lot to pay for a production-grade boat with an iron keel and no batteries (an additional cost tacked on by the dealer).

While plenty of new boat buyers will be satisfied by the boat's performance and its deck layout and interior, we have to stop short of a full endorsement. In addition to our test boat's disappointing fit and finish, the results of the re-configured twin-wheel cockpit seem out of synch with the boat's aspirations. We find it odd that a design that has clearly been re-worked to improve creature comforts doesn't offer an owner's cabin with full standing headroom (available in the 45CC).

Even when you take into account Hunter's assiduous pre-testing, the boat falls short of what buyers should expect in this price range. That said, the boat's warm response so far suggests that *Practical Sailor* may be out of step with the marketplace. But we can live with that.

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Illustrations courtesy of Hunter Marine