

Waterline 50

This all-steel custom cruiser from British Columbia is designed and built to cruise anywhere and everywhere

For the past 22 years Ed Rutherford has been designing and building great cruising boats in Victoria, British Columbia. Today you will find dozens of his Waterline designs out there cruising the world capably, swiftly and safely.

The Waterline 50 has proven to be one of the favorite Rutherford creations and is of a size that is proving to be very popular among cruising couples these days. The design sports a fairly plumb bow, moderate beam, a rakish walk-through transom and a raised saloon deck layout.

Under the water the 50 has a low aspect cruising fin keel with a lead bulb. Inside the keel you will find a large tank for fuel. The water tanks are stainless steel and positioned un-



Port and starboard profiles show the deck layout and useful stern platform

Waterline 50

LOA	50'6"
LWL	47'3"
Beam	14'10"
Draft	7'2"
Displ.	47,000 lbs.
Ballast	13,000 lbs
Sail area	1,240 sq. ft.
Mast ht.	74'
Water	200 gals.
Fuel	300 gals.
D/L	199
SA/D	15.3
B/D	27.66
Base price	US\$800,000

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der the raised saloon floor port and starboard. With ballast and heavy liquids positioned so low in the water, the boat will be stiff enough to really stand up in a blow and will have a solid, slow rolling motion when running in the trade winds. The rudder has a balanced elliptical form and hangs on a half-skeg that both protects it from damage in a collision and provides another set of rudder bearings to ease strain and increase efficiency.

The tall sloop rig shows a high aspect full-battened main in a Leisure furl boom, a genoa on the headstay and a staysail. This versatile rig is the easiest configuration for a couple to handle since all working sails can be reefed easily from the cockpit. The only additional sails cruisers would

need to carry would be a storm jib and a cruising spinnaker.

Steel construction enables the builder to create a structure that is extremely strong, durable and watertight. Yet, the hull is also reasonably light and the design shows performance numbers that are well in line with today's moderate performance cruisers. With a displacement/length ratio of 199, the 50 falls in the middle of the cruising fleet and is relatively lighter than many boats in her class. The sail area/displacement ratio of 15.3 (100 percent foretriangle) is somewhat conservative but that is the way it should be on a boat that is destined for long-haul passagemaking. The ballast/displacement ratio of 27.66 is lower than you might see on some passagemakers, but that is be-



cause the steel hull and the plating below the waterline add to the overall displacement and ultimate stability while reducing the role played by the lead ballast bulb.

Each 50 is a custom project with just about every aspect of the design tailored to an owner's needs and desires. The interior layout will get the most attention during this process as owners define their personal living space. The basic plan, which is a starting point for the discussion, shows a large double quarter cabin aft of the raised saloon. Just forward to port is the huge head and shower. The interior shown here has only one head, which should be ample for a cruising couple who are making the boat a floating home. Those who will be sailing with children, crew or friends may want to squeeze in a second head forward.

Bright and airy

The raised saloon area houses the chart table, a small dinette and the galley. This is a bright and airy space that will ventilate well. The elevations in the raised saloon have been designed so that you can see out well enough through the wraparound windows to actually stand a watch inside, provided the radar's guard zone is operating. The U-shaped galley will be secure in a seaway and provides plenty of counter space for concocting elaborate meals. The engine room lies below the saloon floor. Access is via large opening floor hatches. While this is a good place to position the engine from a design and performance point of view, owners may find that working on an engine so placed, particularly when the engine is hot from running, will prove a challenge, especially if a partner is trying to navigate or cook.

The main saloon is down a step and forward with a large L-shaped dinette to port and a settee to starboard. Both will make good sea berths. The master cabin is forward and shows a large double berth positioned on the centerline so it will be easy to mount and easy to make.

While the Waterline is distinctive

As seen in
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in just about every aspect of her design, it is her steel construction that really sets the boat apart from other boats in her size and quality class. Long popular in Europe, steel construction for cruising boats has never gained a huge following in North America and those seeking the security of a metal hull tend to opt for aluminum. Yet, steel has many qualities that make it excellent for the hull of a cruising boat, not the least of which is the metal's near indestructibility.

Rutherford and the craftsmen at Waterline have spent their lives perfecting steel yacht construction and have continued to pioneer the leading edge of the technology involved. For example, as the hull is plated, the plate thickness is graduated from one-inch on the bottom of the keel to 11-gauge on the house and deck. All seams are welded both inside and outside to ensure that the hull and deck are completely watertight.

Because the Waterline craftsmen know their trade, the hulls they create are as fair as any steel hulls built and require only a minimum of fairing. The key to a perfect looking steel hull starts with the hull itself and then depends on the coating system that is applied.

Waterline hulls are sandblasted inside and out and then coated using a unique flame-spray technique with molten zinc above the waterline that effectively galvanizes the hull. The exterior is coated with successive layers of epoxy while the interior is

sprayed with two coats of zinc-rich epoxy and then hand brushed behind frames to ensure complete coverage. The bilges receive two additional coats of epoxy.

The final finish requires several coats of sandable fairing paints, which are sanded smooth before the final polyurethane finish coats are applied.

BWS thoughts

Customers for a Waterline 50 will be a very special breed of sailors. They will be experienced enough to know that they need a cruiser that really can perform; they will be adventurous enough to know that they will be sailing far off the beaten track where a steel boat comes into its own; they will be discerning enough to require a boat that has a truly fine finish; and they will be positioned in life to create a cruiser tailored to their personal needs.

Ed Rutherford and his team have been serving clients like this for 22 years and have earned a reputation for delivering what owners want, without compromising the integrity of his design or the quality of the construction.

A friend of *BWS* recently bought a used Waterline 45. After a hard bash up the California coast he crowed about the boat's wonderful sailing characteristics and the immense sense of security he felt as the boat charged to windward in a strong breeze.

The Waterline 50 will provide its owners all that and more.



The 50's interior is bright and airy. From opposite top: The spacious forward cabin sports a centerline double; the raised nav station affords a great view; the seagoing galley has lots of counter space and (above) the saloon's settee will double as a sea berth

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