



## Design

# When reputation leads

**X-Yachts announces the latest model in its Xc series of blue water cruising boats with bold claims and some new design features**

**F**ew brands in the boat industry are as respected as Denmark's X-Yachts. It was founded 43 years ago by three passionate sailors and all through the 1980s various models built on the revolutionary Niels Jeppesen design won one world championship after another. Later, focus shifted to high-end performance cruisers, based on the Scandinavian tradition of craftsmanship. Through the years X-Yachts has become famous for attention to detail and a drive for innovation and high build quality. Reducing production cost has never been the main priority. If you ask the often very dedicated X owners, they will tell you that X-Yachts simply know how to make a boat that works. Not only in harbours, but in real offshore conditions.

It doesn't happen every day that a new model appears from the yard in Haderslev. But right now, something is cooking. The

next yacht is well under way and it's called the Xc 47. The launch will happen at Boot in Düsseldorf in January, and will mark the beginning of a new generation of the X cruising segment. When asked to comment, CEO at X-Yachts, Kræn Brinck Nielsen, simply puts it this way: 'It's probably the best yacht

### 'The end result is a boat that is really ocean proof'

sailing. And it's a yacht seriously designed to make short-handed sailing safe and easy. A lot of our customers share a dream of taking off on a long cruise – often around the world. With this yacht, they will be ready to do it whenever the opportunity arises.'

### Shorthanded with ease and style

Most sailing today – even blue water cruising – happens with a small crew, usually just a couple. The development process of the new Xc 47 has had this in

line', says Thomas Mielec, director of design and engineering at X-Yachts, 'but at the same time we wanted to accommodate the growing number of sailors that are looking for a true blue water cruiser. The 47 is an elegant high-performance cruiser, built for safe and comfortable ocean

sailing. And it's a yacht seriously designed to make short-handed sailing safe and easy. A lot of our customers share a dream of taking off on a long cruise – often around the world. With this yacht, they will be ready to do it whenever the opportunity arises.'

Those are big words so let's dive into what's behind the statement: The first Xc model was launched in 2008, marking a major shift away from X Yachts' racing roots, towards the market for luxury cruising yachts. Since then more than 300 yachts have been built. The range has been developing through the years and is presently going through a process of reinvention.

The concept behind the Xc 47 is built on years of experience with the X cruising



To check the ergonomics of the new Xc47 a full scale, heeling mock-up was built

## X qualities

**As a boat yard defining itself as a premium brand, X-Yachts has refined and defined their DNA into a list of items called "X qualities". Here are the most important:**

### Steel frame

The galvanised steel frame is the most famous signature feature in an X-yacht. It has been a core principle since 1981. The frame provides a safe, strong attachment between the keel and the hull and makes it possible to add more ballast, a key part of the inherent stability that X-Yachts are so famous for. The keel is bolted directly to the steel frame and any force working on the keel – even sudden shocks from grounding or hitting debris in the water – will be absorbed and distributed more evenly through the structure.

### Stability/weight distribution

X-Yachts has always prioritised high stability by maintaining a low centre of gravity. But longitudinal weight distribution is also important in a sailing yacht. Excessive weight in the bow and stern will cause pitching and slamming. This is not only uncomfortable, but also transmits massive loads through the boat and slows

it down. Moving tanks and other heavy items closer to the centre of gravity reduces inertia and increases both speed and comfort when going through waves.

### Laminate quality, clear gelcoat

The strength and integrity of a composite structure relies on a complete saturation of the fibres. To make it easier to detect potential dry spots or air bubbles during production, X-Yachts applies clear gelcoat on the bottom section of every hull.

### Encapsulated keel

X-Yachts' cast iron and lead keels are encapsulated in a reinforced epoxy e-glass shell, to guarantee a fair finish. The shell ensures that every keel stays accurate and faithful to the designed, original profile, and protects the keel from corrosion.

### Vacuum infused epoxy sandwich

Vacuum infusion makes it possible to control the amount and distribution of resin very precisely and produces a uniform, strong hull with an approximate

15 per cent weight reduction. Gurit Corecell M foam is used between the two layers of laminate, a sandwich material with excellent impact resistance, high strength and low resin uptake. This build process produces a very light, stiff and strong hull.

### Stiffness and rig tension

On any yacht, the forestay and backstay will pull the hull upwards while the mast will push it downwards. If the hull isn't stiff enough, the boat will flex – especially when sailing upwind in waves. This causes the forestay to lose tension momentarily every time the boat hits a wave. It's called forestay pumping and it deforms the headsail at a critical moment.

X-Yachts' solution is to build precisely engineered structures inside the hull that enhance its stiffness. This prevents forestay pumping and ensures that tuning adjustments of sails or rig are precisely transferred. Being able to adapt easily to changing conditions makes the boat perform well and makes it a safer and more enjoyable place to be.

The aft end of the cockpit is enclosed and the transom folds down from an aft deck that serves as a helm seat

**Component/material quality**  
The loads in an X-yacht are considerable – even more so because of the large sail plan. The strong hull and keel structure require the rigging components to be top of the line and dimensioned correctly. Only the best suppliers are used: Andersen, Harken, Reckmann and Spinlock provide reliable rig components that are easy to use and maintain, and correctly sized for the loads involved.

### Centre lift

X-Yachts are designed to be lifted using a single lift point integrated in the steel frame. This means there's no need for straps at the crane, which eliminates the risk of damage to propellers and rudders. Also, there's no scratching of topsides or removing of freshly painted antifouling. The single lift point makes things a bit easier when hauling out or launching the boat.

### Design, hull lines

X-Yachts' design office has a more than 40-year-long track record designing yachts that are known all over the world for their efficient lines and fast hulls. They have always taken pride in doing their design work inhouse, and continue to do so today.

### Ergonomics, easy handling

Behind an easy and free flowing experience of sail handling in the cockpit lies an extensive attention to detail when it comes to ergonomics and work positions. X-Yachts are well-known for easy handling, and their racing heritage means that they know where deck gear needs to sit to make things work as effortless as possible – not only for efficient high-performance sailing, but also for relaxed shorthanded cruising.

### Lead keel bulbs

Lead keel bulbs have a smaller volume than iron bulbs of the same weight. The use of lead in bulbs means a 30 per cent reduction of volume. Less wetted surface means less resistance and more speed.

### Semi deck saloon

The first thing most people will notice when looking at the hull lines is the shape of the superstructure. This is not something that's been a part of X-Yachts' visual signature in the past. 'We have introduced what we like to call a "semi deck saloon", says Mielec. 'This solution provides a better view of the surroundings when you are down below, with more natural light, and it creates an opportunity for multi-level floors.'

To make sure the Xc 47 is capable of carrying enough provisions for long periods of time at sea, the yacht has efficient storage volumes. Looking at the interior renderings, you can clearly see the influence of Danish design and architecture, which is famous for a clean and timeless style. X-Yachts has always been a part of this tradition but in the Xc 47, the inspiration from Nordic design is taken a step further.



## Design

The deep forefoot and fully integrated bowsprit are new Xc features and the cabin top shape is a new design

mind right from the beginning. The cockpit layout is designed for the helmsman to handle all lines. Four winches – two on each side – are positioned in front of the wheels. All relevant control lines are led aft from the mast foot in channels under the deck to the twin helms, with jammers that are easy for the helmsman to reach. The traveller is moved out of the cockpit, in front of the sprayhood. Apart from creating an efficient work space, this type of cockpit arrangement leaves room for a comfortable living space, with the main portion of the cockpit clear of all sail handling systems. At the aft end of the cockpit, a large aft deck provides a comfortable seat across the full width behind the wheels, as well as a nice sunbathing area. The cockpit is deep, well protected and with a closed transom.

A closer look at the hull lines will reveal deep V-shaped bow sections, generous rocker and a relatively high stern overhang, all aspects well-known from the previous Xc models, proven to provide comfortable seagoing characteristics. Further aft, the Xc 47 has wider stern sections than its predecessors and a soft chine that provides extra form stability, better reaching performance and more space in the aft cabins.

### Full size, heeling mock-up

'The design process this time has been different', Mielec explains. 'We have built a full-size model – a so called mock-up – that can be heeled up to 20 degrees. As far as I know, we are the only yard that has ever done that. This has given us a unique test platform – the opportunity to test



The Xc47's interior draws its inspiration from contemporary Nordic design