SWAN78











NAUTOR SWAN

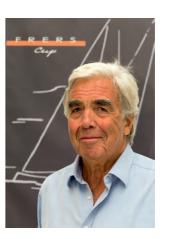
Heritage

Yacht sizes of around 78 feet, quite a central measure for the Swan range, are a watershed between the world of performance cruisers and that of maxi yachts. This means that the yachts in this family have all the features and amenities of a maxi yacht without the owner having to deal with any of the bureaucratic or managerial complications. It is the ideal measurement for enjoying the very best in terms of habitability with a relatively modest commitment. Over the years, Nautor has developed 11 Swan models plus 3 custom projects, totalling 14 different models. The most representative yachts include the legendary Swan 76, the latest in the long series of yachts signed by Sparkman & Stephens, and also the only one in this family a ketch. With his Swan 77, Germán Frers touched on the apex of elegance, in the era of large maxi IOR models. This has ensured success on the market as 10 units were sold. With a further two 80 foot models, launched in 1999 and 2010, Nautor focused more on shapes geared towards performance, returning to pure cruising with the 75 foot models. Within this scenario, the new Swan 78 is an evolution for the period, whilst still remaining faithful to the tradition of great ocean cruising Swan models.

Clockwise from top left: the Swan 77, one of Frers' masterpieces; the Swan 76, last S&S project for Nautor; Swan 80 class 2010; the pure cruiser Swan 75







Design Germán Frers

All of Nautor's know-how and experience in racing and cruising yachts have been incorporated into this new blue-water Swan 78, a direct descendant of the original Swan

80 and 82 models of the past. She is slightly shorter overall - in order to meet the EC 24.00 metre length overall limitation - beamier and more powerful. The modern hull lines, including a wide stern above the waterline, twin rudders and racing oriented keel design, are a reflection of the rapid evolution of yacht design during the past years, propelled by the experiences made on round-the-world races and other offshore events. The new boat will be faster, safer, easier to control and, as a result, more comfortable at sea. The keel options include deep telescopic lifting, fixed deep and fixed shallow possibilities yet maintaining stability, the same rudder configuration and standard sail plan. The same could be said of the deck with its modern design, uncluttered surfaces and straightforward, simple solutions to sail handling and life at sea. The appearance is that of neatness and efficiency. Centered around the main saloon and engine room, which maintain the same position facilitating weight distribution, planning of installations and flotation trim, presenting three cabins: one double berth VIP and two twin berth layouts. These allow for side by side bunks on the second and third guest rooms. Crew accommodations for two are ample and functional in both cases. This new Swan is, and will be, the best of her kind for years to come.











Hull

The new Swan 78 benefits from years of experience in Nautor's large yachts design and construction, but is in herself a large step forward. Long ocean races have brought significant changes to the principles of yacht design, with enormous advantages in terms of stability, safety and performance. Today's bluewater yachts are stable and fast, gliding on the waves and quickly gaining speed, with a significant increase in daily mileage and, at the same time, lower strain on the gear and rigging. This translates to greater durability. They are particularly stable, both in terms of roll, thanks to the new hull design and in direction, which is enhanced also by the twin rudders. The new Swan 78 encompasses all these principles in one of the most advanced bluewater packages of her category. The hull sections feature a tapered entrance and a powerful aft section, and are designed to maintain their symmetry at different heeling angles, with the optimal balance between performance and sea kindliness. The wide beam, that is nearly constant aftwards, contributes to the yacht's stability and provides the added bonus of extremely comfortable accommodation below. The mix between these different qualities makes for top performances in extremely safe conditions, all enclosed in a package of rare beauty and elegance, such as only the skill of Germán Frers can achieve.









Deck

The deck is the one area of the yacht where owners, guests and crew spend the most time. Here is where the yacht is handled under sail, and here is where guests enjoy the seascapes at anchor. The Swan 78 deck layout is the most recent evolution of the "S" concept (Semi-raised Saloon), with the celebrated Swan coachroof, discreet and streamlined, with panoramic views from inside, due to the raised saloon. On the 78 Frers signature lines have given their very best, with sleek curves that create a volume capable of protecting the cockpit and creating more space below. The coachroof design is a masterly mix of curved lines and multifaceted surfaces, with 360 degree windows and a generous roof that doubles up as a sunbathing area. The recessed sprayhood and the full beam bimini keep guests always well protected in a cockpit/lounge that features two C shaped settees each with its own table.

All manoeuvres are at the centre of the cockpit and can be handled easily by a reduced crew. The five available winches are well placed around the helm stations with a central tower dedicated to the mainsheet. As an option, a captive winch for main sheet can be provided.

Further aft the deck is equipped for sunbathing and swimming, with a completely open space than can be equipped with cushions and access to the beach area, which also opens a full beam lazarette that can stow a rigid inflatable.

Forward of the mast the deck is completely uncluttered, an expanse of pure teak that ends at the forepeak with the large locker for the anchor.





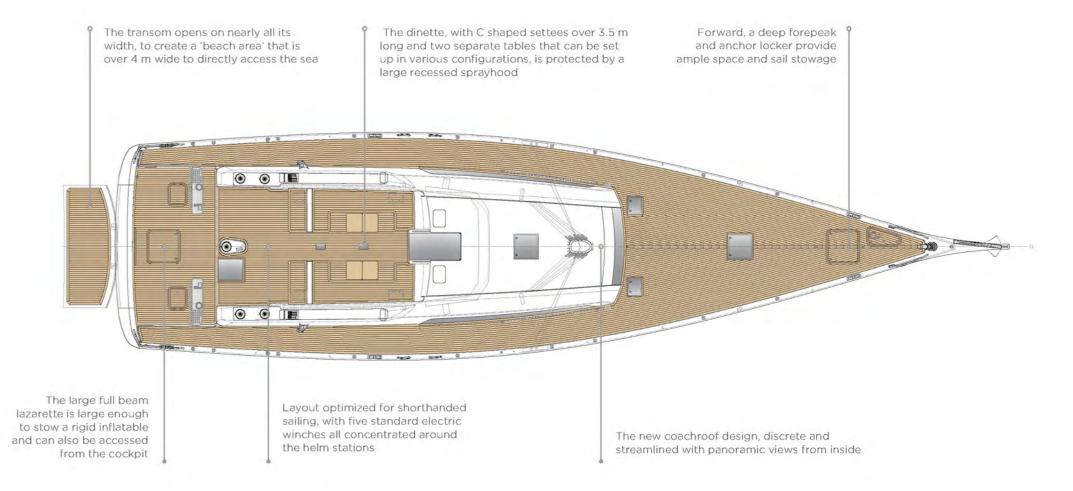
















Interior

To provide the most flexibility and satisfy any possible owners' requirement, in the interiors configuration the Owner has a large suite forward, cooler and quieter. It is 4.5 m long, with an island bed that is completely accessible on three sides. A desk and dedicated bathroom, with large separate shower compartment, complete this luxurious apartment.

The accommodation also features three guest cabins with different layouts, all ensuite with separate shower compartments. The saloon is also over 6 m wide. It is raised to provide better panoramic views. Below, ample bilge volumes allow for a full beam engine room, totally soundproofed and large enough to accommodate a variety of systems and equipment. The crew quarters are separate, forward or aft according to the chosen layout, with an ensuite cabin. The galley is in the same area, with large cooking areas and refrigerated stowage.

The celebrated Nautor finish guarantees top quality both in the technical details and in the finishing, with a wide choice of veneers and accessories.





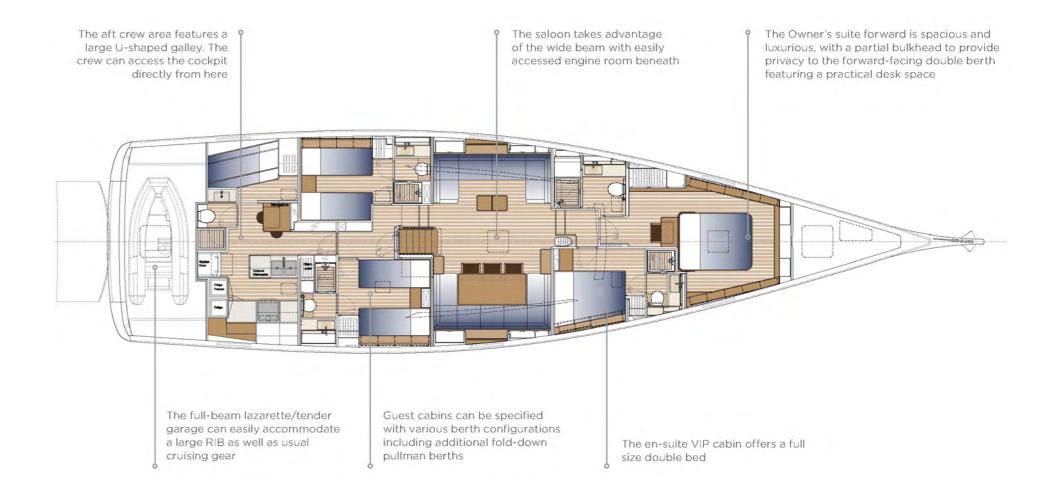
















Under sail

Sailing a Swan 78 is an experience that instantly explains the latest design trends for sailing yachts. The first feature that emerges is her extreme stability during sailing, made possible through her twin rudders. Indeed, as heel angle increases, the geometry in the water alters to adapt to the new position. The windward rudder lifts while the leeward one dips progressively, becoming more perpendicular and at the same time more efficient. Heeling stability is guaranteed - with the first few degrees of heel, the hull form facilitates prompt acceleration even in light conditions. Heel angle stabilises at around 20 degrees, remaining symmetrical and balanced throughout. Beyond this inclination, the hull shape contributes dynamically to the vertical force provided by the T-shaped keel, maintaining the optimal hull position. All this translates into two fundamental and apparently opposite effects. These are that performance is optimised keeping the hull sailing to its lines and therefore all the naval architecture including keel and rudders at maximum efficiency, and at the same time the yacht remains comfortable and liveable, allowing life on board to continue normally even when sailing upwind for long distances. If her performance off-wind appears obvious, the new Swan 78 will amaze even more upwind. Perfect balance translates into unexpected agility, with the helms remaining light. The rudders, almost always at centre, are only necessary for changing course. This allows those on board to play amongst the waves and promptly follow wind shifts. The Swan 78 allows her crew to sail at double digit boat speeds constantly and safely, easily managing manoeuvres from around the twin helms. At anchor, the various areas for relaxing, protected from or immersed in the elements, allows those on board to fully enjoy the surrounding scenery.

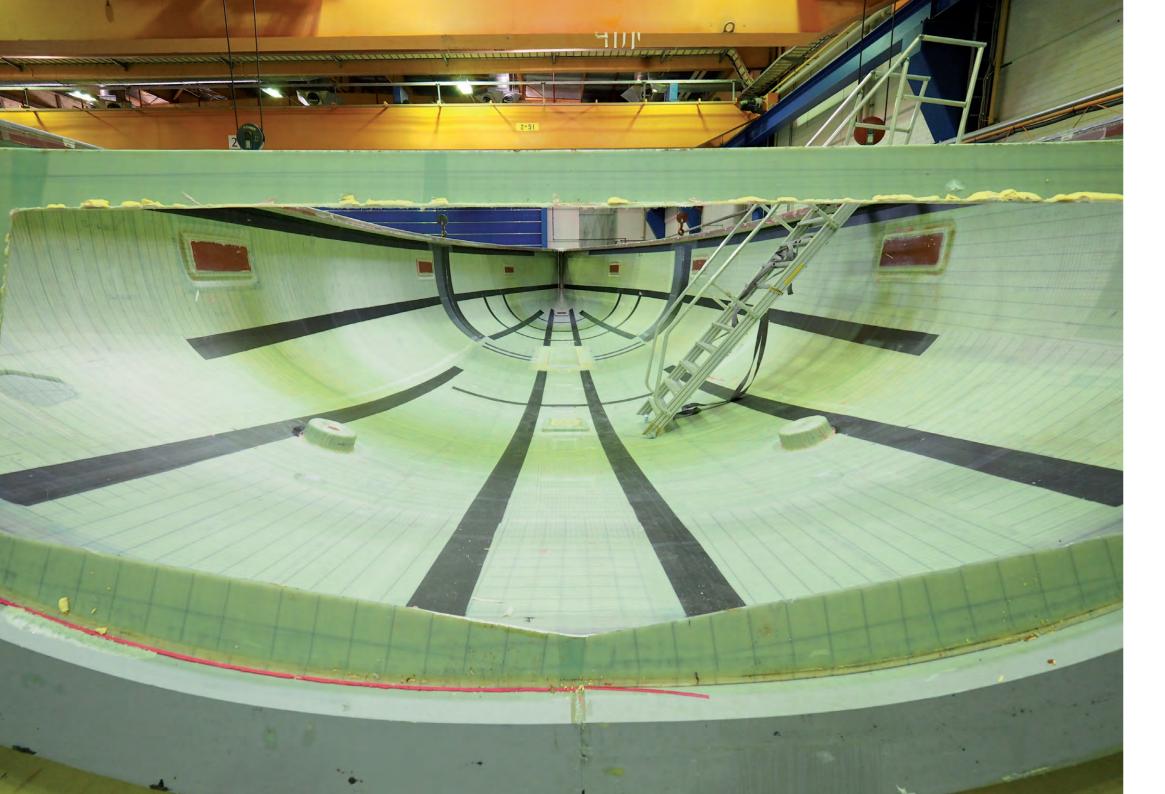














Construction

The hull is a foam cored glass fibre reinforced epoxy construction with carbon fibre unidirectional reinforcements built in a female mould. • The lay-up is vacuum assisted epoxy resin infusion, giving a stiff laminate with excellent strength and fatigue properties. The hull laminate is cured in an oven at a temperature specified by the material manufacturer. • All the stiffeners are moulded by vacuum assisted epoxy resin infusion in glass fabrics with carbon fibre reinforcements and foam cores. Special care is taken to assure rigid foundation and proper adhesion to hull. • The structural bulkheads are moulded by vacuum assisted epoxy resin infusion in glass fabrics with carbon fibre reinforcements and foam cores. The bulkheads are bonded using high strength structural adhesives. • The composite chain plates are built using pre-preg unidirectional carbon fibre straps laid over stainless steel bushings. The chain plates are attached to the hull using high strength structural adhesives. • The rudders have composite skins on a foam core, attached to the rudder stock. The rudders are designed with a sacrificial tip. A weed deflector is located in front of the rudder and is surface mounted • The main deck is of a carbon fibre pre-preg construction with a foam core. Coach roof and coamings are of a carbon fibre prepreg construction with a foam core. High density core is located in way of loaded areas. The deck is bonded to the hull using high strength structural adhesives. • The teak deck consists of 55 x 9 mm teak battens with black 5 mm caulking. The side decks, fore deck, cockpit sole and seats are teak covered. The teak deck is bonded under vacuum using epoxy. • Jib sheets are lead on deck to the primary winches. The 2:1 mainsheet system is lead to a drum winch, mounted on an island.



















Specification

General

Length of hull	23.99 m	78.70 ft
LOA	25.55 m	83.82 ft
LWL	22.18 m	72.77 ft
Beam max	6.40 m	21.00 ft
Draught	4.00 m	13.12 ft
Displacement (light)	42.600 kg	93.916 lbs
Ballast	11.600 kg	25.573 lbs
Engine Steyr SE186E38	129 kW	175 Hp

Rig and sail dimensions

IG	31.60 m	103.67
J	9.77 m	32.05
P	31.00 m	101.71
E	10.25 m	33.63

Sail areas

ore triangle	154.40 m ²	1662 sq.ft
1ain sail	196.00 m ²	2110 sq.ft
ib	174.30 m ²	1876 sq.ft

Tank capacity

Fuel	2.000	528 US
Water	1.300	343 US
Hot water	100	26 US

Battery & power sources

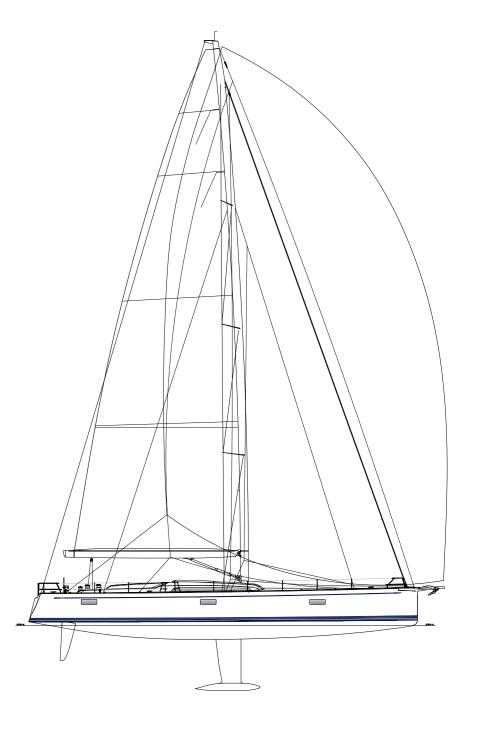
Service batteries 24 V 1050 Ah / 5 h
Handling system batteries 24 V 225 Ah / 20 h
Starting batteries 12 V 75 Ah / 20 h
Diesel generator Onan MDKDV 230 V 19 kW 50 Hz
Shore power 230 V 63 A + 230 V 50 A for AC

Classification

CE-Approval Category A Ocean

Naval Architect

Germán Frers





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