

SPECIFICATION  
FOR THE CONSTRUCTION OF A  
S W A N 5 5  
FIBREGLASS IOR SLOOP AND YAWL  
BY  
OY NAUTOR AB

DIMENSIONS

LENGTH OVERALL, YAWL	(APPROX.)	55' - 4"	(16,86 m)
LENGTH OVERALL, SLOOP	"	53' - 0"	(16,08 m)
WATERLINE	"	40' - 0"	(12,19 m)
BEAM	"	14' - 3"	( 4,35 m)
DRAFT	"	8' - 2"	( 2,49 m)
DISPLACEMENT	"	37,180 lbs	16,900 kg
BALLAST	"	17,000 lbs	7,727 kg

DESIGNER:

SPARKMAN & STEPHENS INCORPORATED

BUILDER:

OY NAUTOR AB, PIETARSAARI, FINLAND

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Note. The specifications are believed to be correct and we will do our utmost to make sure that the vessel is built to these specifications. However, there may be small alterations and changes on the finished boats, and we reserve the right to make these without notice.

GENERAL CONDITIONS

These specifications are intended to supplement the design. While details may be changed as the result of experience in construction or use of the boats, the standards of quality and completion are maintained to furnish a yacht ready for service.

The Owner's authorized agent will have access to the yacht and everything pertaining to the yacht at all reasonable times. Every facility will be afforded inspectors for the prosecution of their work.

The Builder reserves the right to approve or reject any changes in the construction of the boat when these are asked for after the boat is ordered.

The Builder guarantees skilled workmanship, in keeping with the best yacht practice, and in conformity with specifications.

INSURANCE - The Builder will maintain insurance on a yacht contracted for by an Owner, including all items furnished or delivered by Owner, appropriate to the value of the Owner's investment until the yacht is delivered.

DAMAGED WORK - The Builder will protect all work and be responsible and make good any or all damage from whatever cause, to any part of the yacht or its equipment or furnishings.

CLEANING - The Builder will at all times keep the yacht reasonably clean throughout. Particular care is taken that all chips, shavings and other foreign matter are removed and all parts cleaned before application of paint, and that when the yacht is delivered, her bilges and pockets are free from such matter.

ACCESS TO COMPARTMENTS - Arrangements for access to and for cleaning out and painting all compartments and all parts of the

vessel are provided wherever practical. Floorings are fitted with suitable hatches.

Access to the engine, steering gear and all other equipment that may require services of any kind will be provided.

Care is taken in locating pipes and other parts to avoid blocking of access. If necessary, removable sections are utilized.

TESTS - The standard machinery will be operated to the satisfaction of the Builder, in the water, running continuously for one hour and at as much speed as is practicable without undue heating. Steering and reversing tests will also be run. All standard auxiliaries, such as pumps etc. are thoroughly tried out.

The yacht will be properly rigged with standing rigging.

During tests, the yacht is at all times in the care, custody and control of the Builder.

WARRANTY - If any defective workmanship and/or materials are discovered within six months after delivery, except for the Owner-furnished items or installation of same, or unless due to negligence or other improper act of the Owner or any other user of the vessel, the Builder shall accept responsibility thereof. Under such circumstances, the Builder shall either procure the repair or authorize such a repair to be made in a way agreed upon in writing between the parties. The Builder shall not be responsible for any proprietary articles which shall bear the customary guarantee of the manufacturers.

#### HULL CONSTRUCTION

GENERAL - Scantlings, materials, and workmanship throughout are

consistent with the construction of a light hull, but without any sacrifice of strength or stability.

#### FIBREGLASS CONSTRUCTION

The fibreglass reinforced plastic hull does have scantlings as approved by Lloyd's Register of Shipping for Class 100A1 Reinforced Plastic Yacht and the yachts will be delivered with Lloyd's Register's Hull Moulding Certificate. The resins used shall be suitable for marine use.

#### COLOUR PIGMENTS

The colour pigments are of an approved type and will be used only in the gelcoat in the deck, deckhouse, cockpit, topsides, and boot top.

HARDWARE & FASTENINGS - Hardware and fastenings will be marine type above deck with quality finish.

BALLAST - The ballast keel is a lead casting with antimony. Keel bolts are stainless steel.

KEEL PLATES - Stainless steel docking plates are installed on keel.

LIMBER HOLES - Limber holes are cut where necessary, so that all water will drain to low point.

BILGE ACCESS - Maximum possible access will be provided to all portions of the bilge.

ENGINE BEDS - To be fibreglass. Special care is taken to assure rigid foundation and proper adhesion to hull.

BULKHEADS (STRUCTURAL) - Structural bulkheads are of marine grade water-proof plywood, butts and seams are secured with tong and groove joints.

CHAIN PLATES - are stainless steel flat bars thru-bolted to brackets matted to hull.

TOE RAIL - Teak.

MAST STEP - Galvanized steel.

RUDDER - The rudder is fibreglass.

RUDDER STOCKS - Stainless steel with stainless steel gudgeons and pintles with bushings.

STEERING - Steering of rudder is by a steering wheel mounted on aluminium pedestal steerer connected with quadrant by cable and sheaves.

Steerer has sprockets and non-magnetic chains leading to steering cables. Cables are stainless steel wire rope. Sheaves for cables have a score diameter of not less than 20 times the diameter of the wire rope.

Steering gear in general and especially within four feet of the compass consists solely of non-magnetic materials. Sheaves and fairleads are securely fastened to the hull framing. All sheaves and sprockets are fitted with guards to prevent cables or chains from becoming jammed.

EMERGENCY TILLER - is stainless steel pipe.

CLEATS - MOORING & TOWING - All mooring and towing cleats are securely thru-bolted to deck blocking as follows.

Two 12" light alloy mooring cleats mounted on foredeck.

Two 12" light alloy towing cleats to be mounted on after deck.

CHOCKS - are installed in each rail forward and aft.

STEM FITTING - is a stainless steel weldment with female socket for pulpit stanchion.

DRAFT MARKS - Marks of suitable size are installed on the centerline of the boat at forward and after ends 12" above designed waterline.

#### EQUIPMENT

COMPASS & BINNACLE - One 5" Brestrel Major compass mounted in dome type binnacle on steering pedestal, with low lighting, 45° lubber lines white on black with 5° card light connected to rheostat.

LIFE RAIL - Double life lines installed. Stanchions of stainless steel tubing, bases securely bolted through deck. Top life lines of stainless steel wire, white plastic covered, set up with turnbuckles at after ends. Lower life lines are similar.

Bow and stern pulpits installed, fabricated of tubing similar to that used for the life rail stanchions. Pulpits fitted with side lights and stern light. Height of pulpits and stanchions, spacing, distance does conform to I.O.R. requirements.

COVERS - Dacron hoods for hatches held in place by grooved sill pieces on three sides.

SPRAY HOOD - Folding spray hoods are installed over the companionways.

MATTRESSES & UPHOLSTERY - Mattresses are flexible foam. All mattresses have covers and are fitted with zippers.

FLAG POLE - One pole for ensign, with socket at stern.

GARBAGE CONTAINER - Plastic type, installed in galley.

#### JOINER WORK

GENERAL - All joiner work is done in accordance with the best yacht practice.

Corners of hatches, bureaus, seats, dressers, etc. have rounded corners. All projecting corners of partitions fitted with rounded corners. All fastening pieces, rails, door sills etc. are screw fastened or glued.

Hooks, lanyards, and bumpers are installed to control the swing of doors. Suitable catches are installed to hold the toilet and state room doors full open. Kick plates on steps, chafing pieces on sills installed.

JOINER HARDWARE - All fittings and hardware are of marine type.

CABIN SOLE - Laid teak veneer. Sole fitted with traps for access to bilge.

WINDOWS & PORTS - Windows in sides of cabin trunk are fixed type. Cockpit well has two opening ports over quarter berths. One opening port in forward side of the cabin house. There are two deck prisms located in main cabin, one in the 'C and one in the passage way.

TWO MIDSHIPS HATCHES of double action aluminium construction with grooved sill piece for cover.

FORECASTLE HATCH - This hatch is large enough to permit passing sails and sail bags, sliding type hatch. Has grooved sill pieces

on forward and port and starboard sides to take hood. Hatch is fitted with locking bolts.

COMPANIONWAY HATCHES - One hatch is large enough to permit passing main engine. The hatches are of sliding type with wood top, sliding under fibreglass hood. One hatch fitted with lock and two keys supplied.

LAZZARETTE HATCH - is located in aft cockpit seat, hinged fibreglass type with securing clamps.

STERN DECK HATCH - Provided on yawl.

ENGINE ACCESS - Access to main engine is through removable joiner work in way of engine. Removable joinery is such as to allow for access to engine top and sides.

DROP SLIDE - Drop slide is supplied for the main companionway hatch. Slide fitted with louvres and provisions for locking.

LADDERS - Wood frame ladders with rubber treads installed at companionway hatches.

SHELVES, DRAWERS AND LOCKERS - are arranged throughout quarters. Clothes lockers have rods. All drawers have guides and are of type that must be lifted to open.

BERTHS - Fixed berths, transom berths and built-in berths have drawers or traps under. All except forward berths have bunkboards.

TABLE - One drop leaf table, located in main cabin.

CHART TABLE - A chart table is installed with stowage for charts under top of table.

DOORS - Doors and panelling throughout are plywood. Locker doors have louvres for ventilation of locker spaces where possible. Sliding doors installed on dish racks.

HAND RAILS - Hand rails are installed below decks.



MIRRORS - installed in WCs.

GALLEY - Galley is equipped with gas stove, sink, refrigerator and deep freeze. Counter tops are Formica or equivalent. Galley is amply provided with racks for glasses and dishes, shelves, bins and cutting board.

STOVE - One gas stove, with oven, mounted on gimbals in galley space, which is asbestos insulated and sheathed with stainless steel. Gas container mounted in tight box with drainage out through hull. Copper line between stove and container.

REFRIGERATION AND DEEP FREEZE UNIT - Of built-in type, lined with fibreglass and insulated with foam. Insulation is 4" thick. Shelves provided. Has top opening flush hatch with flush lifting hardware. A drain is provided.

VENTILATION - Natural air intake vents for living quarters are 5-inch diameter cowl vents on Dorade type watertrap boxes. Cowls are clear of operation of all winches.

SOUND INSULATION - The inside of the joiner work in way of the engine is lined with sound insulation. Particular care is taken to install insulation to the fullest extent to muffle engine noises.

#### PAINTING

GENERAL - All materials are used in accordance with the manufacturer's latest instructions.

TOPSIDES & TRANSOM - Gelcoat white, coloured hull optional extra.

COVE STRIPE AND BOOT TOP - Gelcoat blue colour.

BOTTOM - Primed with antifouling bottom paint.

CABIN SOLE - Teak veneer cabin sole, oiled.

MAIN MAST - Two coats of clear sealer.

MIZZEN MAST - Anodized.

BOOMS AND SPINNAKER POLES - Anodized.

PLUMBING

SEA COCKS - Bronze sea cocks, installed on all thru-hull connections below water line. All openings finished flush with outside of hull. Inboard side of sea cocks fitted with hose nipple to take hose having two stainless steel hose clamps at each connection where possible. Sea cocks accessible and combined wherever feasible to minimise the number of thru-hull openings.

SCUPPERS - There are four scuppers through toe rail on each side.

The cockpit well has two scuppers, one on each side. All scuppers drain naturally.

FRESH WATER TANKS - Three tanks for a total capacity of 500 liters are provided. They are fitted with sufficient handhole plates to allow thorough cleaning. Suitable baffles provided.

Tanks are filled through a single fill pipe with fill plate on deck marked "WATER". Vents emptying into overflow piping, discharging into the galley sink.

PIPING (FRESH WATER) - All fresh water piping is copper or nylon tubing.

TOILETS - Two Baby Blake toilets, with white seat and cover, installed in toilet rooms. Discharge through a loop, then through an accessible sea cock. Toilet intakes are located very close to keel to ensure ample submergency even in heavy weather.

TOILET ROOM FIXTURES - Toilet rooms are suitably outfitted with medicine cabinets, towel bars, soap dishes, and paper holders.

WASH BASINS - One fibreglass wash basin is installed in each toilet room. Basin discharges into sump tank. Telephone type shower installed. A Diaphragm pump is provided to discharge sump tank.

GALLEY SINK - A double stainless steel galley sink is installed in galley counter top. The sink is fitted with a foot-operated pump with gooseneck spout for salt water. Electric pressure pump is provided for fresh water system with an auxiliary foot pump in galley. A 10 liter dual system (220 V or 110 V and engine bypass) hot water heater is provided. The sink discharges directly overboard through a sea cock.

BILGE PUMPS - Two diaphragm type hand pumps are installed. One pump located in cockpit well, second pump located below decks. Suction lines terminate in accessible flexible section protected by foot strainer. Discharge above waterline.

#### MACHINERY

MAIN ENGINE - Volvo Penta Marine Diesel Engine, model MD 21 A, rated at max. 75 hp at 4500 rpm. The engine is equipped with hydraulic reduction gear, fitted with two alternators.

CONTROLS - Double lever Morse controls operated from helmsmans position.

REFRIGERATION COMPRESSOR - Manual refrigeration driven by main engine with holding plates in deep freeze.

FUEL TANK - A tank with a capacity of approximately 300 liters. The tank has a fill, located in cockpit sole with deck plate marked "FUEL". Fill has oil-resistant hose with stainless steel hose clamps at the connections.

FUEL SYSTEM - Copper fuel lines with shut-off valve before fuel separator and flexible section connected to engine.

PROPELLER & SHAFT - Propeller is folding type, of bronze, two-bladed. Shaft is stainless steel, approximately 1 $\frac{1}{8}$ " diameter with flexible coupling.

SHAFT BEARING, SHAFT TUBE & STUFFING BOX - Strut bearing is a Cutless rubber bearing inserted in strut. Stuffing box is connected to stainless steel stern tube with hose and hose clamps of stainless steel.

MAIN ENGINE EXHAUST SYSTEM - Consists of a water jacketed section, muffler, exhaust hose, and thru-hull fitting. Discharge through topside above water line. Cooling water is connected to water jacket and discharges from water jacket to muffler.

DRIP PAN - An oiltight fibreglass pan with accessible sump is installed completely under engine.

ENGINE COOLING - Takes water through a sea cock located low down and insures ample submergence when heeled, then through a suitable basket strainer hose of proper size to engine.

#### ELECTRICAL

12V WIRING - 12V DC 2 wire, ungrounded system throughout. Controlled by a circuit breaker switchboard with adequate number of circuits.

STARTING BATTERY - Two 12 volt batteries rated 105 ampere-hours are mounted in fibreglass-lined tray, charged by 37 ampere alternator.

LIGHTING BATTERIES - Three 12 volt batteries rated 105 ampere-hours, mounted in fibreglass lined tray. Charged by auxiliary 55 amp alternator.

ELECTRICAL ARRANGEMENT - The following equipment is supplied

Mast head light

Bow light

Deck flood light (another one on yawl mizzen mast)

Red and green running lights

Stern light

Compass light

Bunk lights

Nav. table light

12 dome lights

4 Tannoy exhaust blowers are supplied in WCs, galley, and engine room.

CHARGING SYSTEM - Starting and lighting batteries are on separate current draw system protected by blocking diodes. There are master switches on the negative side of the systems.

LIGHTING PROTECTION - Heavy wire connected to chain plates, backstay fittings, and headstay fittings, grounded to ballast keel bolts.

#### SPARS

GENERAL - Sizes and shapes of all spars are within S & S specifications. Spars are sealed with two coats of clear sealer.

MAIN MAST - is made of aluminium alloy, hollow, oval section. Mast is fitted with stainless steel tangs for attachment of rigging.

Mast is wired internally for masthead light, bow light, deck flood light, with wires leading down inside of mast and out the forward face of the mast. Mizzen mast on yawl similar.

MAIN BOOM (ROLLER REEFING) - is aluminium alloy, hollow, round section, with screw clew outhaul.

MIZZEN BOOM - Aluminium alloy, hollow section.

SPINNAKER POLES - are aluminium alloy, hollow, round section.

JOCKEY POLE (REACHING STRUT) - is made of aluminium alloy, hollow, round section.

SPINNAKERTRACK - Stainless steel spinnaker pole track on mast with two cup sliders and cups.

MAST COLLARS - Mast collars are made with beaded lip to take lower edge of mast coat.

#### RIGGING AND FITTING LIST

GENERAL - Standing rigging is stainless steel wire with Norseman end fittings. Special adjusting handles are supplied to permanent backstay turnbuckle. All turnbuckles are bronze.

Sloop rig has a removable staysail stay and running backstays.

Yawl has a mid-stay with staysail stay and running backstays as optional.

#### WINCH LIST

Genoa sheet winches	Two	Barlow No. 35
Spinnaker sheet winches	Two	Barlow No. 35
Main Sheet Winch	One	Barlow No. 24
Genoa Halyard Winches	Two	Barlow No. 26
Spinnaker Halyard Winch	One	Barlow No. 26
Main Halyard	One	Barlow No. 20H

ADDITIONAL WINCHES ON YAWL MIZZEN RIG

Mizzen halyard	One Barlow No. 17H
Mizzen staysail halyard	One Barlow No. 16
Mizzen staysail sheet	One Barlow No. 16
Mizzen sheet	One Barlow No. 16

HANDLES

Two plain 10" handles, one 10" plain double grip handle, two 10" lock-in handles. On yawl additionally one 10" and one 8" lock-in handle. Handle holders supplied.

RUNNING RIG

	<u>Quantity</u>	<u>Dimension</u>
Main sheet with blocks	1	16 mm braid (5/8")
Heavy genoa sheets	2	16 mm braid (5/8")
Medium genoa sheets	2	12 mm braid (1/2")
Light genoa sheets	2	10 mm braid (3/8")
Heavy spinnaker sheets with snap shackles	2	16 mm braid (5/8")
Medium spinnaker sheets with snap shackles	2	12 mm braid (1/2")
Light spinnaker sheets with snap shackles	2	8 mm braid (3/8")
Aft guys with snap shackles	2	16 mm braid (5/8")
Fore guy with snap shackles	1	12 mm braid (1/2")
Main boom topping lift with blocks and shackles	1	8 mm Nylon (5/16")
Running backstays with blocks and tackle (sloop only)	2	12 mm braid (1/2") 5 mm wire (3/16")
Pole lift, block and snap shackle	1	12 mm braid (1/2")
Bell lift with blocks and shackles	1	12 mm braid (1/2")
Spinnaker halyards with blocks and snap shackles	2	16 mm braid (5/8")

<u>RUNNING RIG (continued)</u>	<u>Quantity</u>	<u>Dimension</u>
Genoa halyards - wire, line, and snap shackles	2	8 mm wire (5/16") 12 mm braid (1/2")
Main halyard wire with shackle	1	6 mm (1/4")
Heavy boom vang tackle with alum. claw and dacron strap	1	large 12 mm (1/2")
Staysail halyard of wire and braid, snap shackle and block (optional on yawl)	1	12 mm braid (1/2") 6 mm wire
Docking lines	4	16 mm Nylon (5/8")
Docking lines	2	20 mm Nylon (3/4")
Anchor rode, 50 m	1	16 mm Nylon (5/8")
18' chain and shackle	1	7/16"

ADDITIONAL ON YAWL

Mizzen halyard - wire with shackle	1	4 mm wire (1/4")
Mizzen staysail halyard with snap shackle	1	12 mm braid (1/2")
Mizzen sheet with blocks	1	12 mm braid (1/2")
Heavy mizzen staysail sheet	1	12 mm braid (1/2")
Light mizzen staysail sheet	1	10 mm braid (3/8")
Light boom vang tackle	1	10 mm braid (3/8")

STANDARD EQUIPMENT ALSO INCLUDES

14 kg Danforth type anchor stowed below deck

6 large snatch blocks  
(On yawl also two small snatch blocks)

2 Genoa fair lead cars on deck track

8 Slide cars on rail and deck track

2 Double foot blocks

Shroud rollers



Fenders - four large and two small with lines

Boat hook

Flag staff

Pig stick (two on yawl)

Bosun chair (two on yawl)

4 Jib pad eyes with two blocks

Spinnaker aft quarter fittings