

SPECIFICATION FOR THE SWAN 57 GRP AUXILIARY SLOOP

MAIN PARTICULARS

LENGTH OVERALL	17.50 m	(57.41')
LENGTH OF WATERLINE	13.96 m	(45.81')
BEAM	4.83 m	(15.85')
DRAFT	2.8 m	(9.1')
DISPLACEMENT (IOR)	22500 kg	(49500 lbs)
BALLAST	8600 kg	(18900 lbs)

Designer: SPARKMAN & STEPHENS INC.

Builder:

NAUTOR

OY WILH. SCHAUMAN AB

PIETARSAARI, FINLAND
TELEPHONE: 67-18204, TELEX: 75-47 nauto sf

Note. These specifications are believed to be correct at the time of printing. For the sake of continuous improvement, the Builder reserves the right to make alterations without notice, as considered desirable. No such alterations, however, will be considered retroactive for yachts already delivered.

Draft and displacement stated above vary with load condition.

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 yachts, the standards of quality and completion will be maintained to furnish a yacht ready for service.

The Owner or his authorized agent will have access to the yacht and everything pertaining to the yacht at all reasonable times.

The Builder reserves the right to approve or reject any changes in the details of the yacht when these are asked for after the yacht 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, provided that the Owner has delivered such items according to the Rules spelled out in the Contract Appendix following the Sales Contract. The insurance is appropriate to the value of the Owner's investment until the yacht is delivered to the Owner at the yard, or dispatched by road, train or vessel.

DAMAGED WORK — The Builder will protect and be responsible for all work until date of despatch 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 to be 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 yacht are provided wherever practical. Floorings are fitted with suitable hatches. Access to the engine, steering gear and all other equipment that may require service of any kind will be provided. Care is taken on 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 with the yacht in the water, running continuously for one hour and at as much speed as is practical on a new engine. Steering and reversing tests will also be done. All standard auxiliaries, such as pumps etc. will be thoroughly tried out.

The yacht will be properly rigged with standing and running rigging. During tests, the yacht is at all times in the care, custody, and control of the Builder.

TRIM — The Builder reserves the right to add internal ballast for trimming purposes.

CERTIFICATION — Every yacht is delivered with Lloyd's Register Hull Construction Certificate.

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. Owner must notify Builder or Builder's authorized representative of any discrepancies during the six month warranty period. 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

Scantlings, materials and workmanship throughout are consistent with the construction of a light hull, but without any sacrifice of strength or stiffness.

Construction

The hull is built of glassfibre reinforced polyester by the hand laying-up method.

Structural bulkheads are of marine grade water-proof plywood, laminated to hull and deck. Stiffeners are GRP lay-ups over foam cores. Engine beds are of GRP with steel inserts. Special care is taken to assure rigid foundation and proper adhesion to hull.

Finish

All gelcoat pigments used are of approved type.

Standard topside colour is white, boot top, cove stripe and coaming stripe blue.

Uncoloured gelcoat below waterline.

Flotation reference marks are located at bow and stern.

Bottom primed with antifouling.

Yacht's name and home port is painted on transom when specified.

Keel

Ballast keel is a lead casting with antimony.
Cast-in keel bolts are of stainless steel.
Docking shoe of stainless steel fitted to lower edge of keel.
Stainless steel fairing pieces fitted to keel trailing edge.
Two keel pockets provided, each taking 400 kg additional lead.

Rig anchorage

The mast is stepped through the deck onto a GRP mast step with movable shoe for mast rake adjustment. Transverse bolt through heel of mast.
Heavy GRP brackets are laminated to hull for the stainless steel chain plates.

Rudder

Of foam filled GRP with stainless steel stock, supported by three polymer bushed bearings.

Steering gear

Cable steering gear, sheaves provided with guards to prevent jamming. Aluminium steering quadrant bolted to rudder stock, and protected by removable cover. Destroyer type wheel with sprocket and friction brake mounted on pedestal. Emergency tiller of aluminium alloy with spanner for rudder stock access plate attached.

DECK

Construction and finish

Deck is made in GRP sandwich construction.
Single laminate with aluminium back-up plates under deck fittings.
Deck surface has painted non-slip finish, standard colour light grey.

Woodwork on deck

Teak hatch frames and hand rails, sheet and halyard cleats.
Laid teak battens on helmsman's seat.

GRP mouldings on deck

Hoods for entrance hatches, Dorade boxes, lazarette, liferaft and gas bottle locker, and stowage hatches.

Deck fittings for running rigging

On cockpit coaming:
Two spinnaker sheet winches Lewmar 55 or equal
On bridgedeck coaming:
Two genoa sheet winches Lewmar 65 or equal
Two genoa inhauler eyes each side, also serving running backstays.
Mainsheet winch Lewmar 44 or equal.

On cabin trunk:

Mainsheet track with double slider and tag lines.
Two genoa halyard winches Lewmar 48 or equal.
Two spinnaker halyard winches Lewmar 48 or equal
Two pole lift/staysail halyard winches Lewmar 44 or equal
Aluminium staysail sheet tracks

On deck:

One pair of double genoa foot blocks on aluminium bases.
Aluminium genoa sheet tracks
Spinnaker aft guy fittings at toe rail each side amidships.
Lugs for spinnaker sheet blocks at each quarter.
Six lead blocks for halyards and two deck eyes for slabreefing pennants at mast collar.
Release lever box on foredeck for forestay.
One eye for spinnaker foreguy block at stemhead.
Stowage provision for removable forestay and runners.

Other deck fittings

Anodized aluminium toe rail with one pair of hawse holes amidships, and drain holes where necessary.
16" aluminium mooring cleats, two on fore deck with guards, two aft.
Pulpit, pushpit and life line stanchions 750 mm high, of stainless steel, with bases bolted through deck. Spacing conforming to ORC requirements.
Isolated and plastic covered lifelines.
Socket for flag pole on pushpit. Aluminium mast collar with eyes for lazy halyards.
Stemhead fitting of stainless steel with chain roller and double headsail tack attachment.
Spinnaker and jockey pole fastenings on deck.
Stowage for two 8-man liferafts in cockpit locker.
Stowage for two gas bottles (dia 320 mm, height 525 mm) in drained cockpit locker.

Four winch handle holders on bridgedeck, two near halyard winches, one on mast.
Stainless steel guards over all Dorade boxes except at transom.

Hatches and windows

On fore deck tinted acryl sliding hatch to fo'c'sle, lockable from inside.
Deck prism in head and adjacent passageway.
Hinged hatches Goyot 115—0 or equal in guest cabin and sail space.
Hinged hatch Goyot 118 or equal in main cabin.
In cabin trunk sides fixed windows forward, one pair of openable portholes Goyot 103 or equal aft.
Main companionway sliding hatch of tinted acryl, lockable from inside and outside, and large enough for passing engine.
Aft entrance sliding hatch of tinted acryl, lockable from inside, with removable drop board.
One openable porthole Goyot 108 or equal from owner's cabin to cockpit, (not available with ketch rig).

INTERIOR

General

All joiner work is done in accordance with the best yacht practice, using first-grade materials. Teak with hand rubbed satin finish is used for all visible woodwork.
Floorboards with laid teak veneer, and providing access to the bilge.
Teak grating in fo'c'sle and heads.
Topsides where visible line with teak battens.
Overhead lined with removable panelling.
Tables, bureaus, seats, dressers etc. have rounded corners.
Doors, partitions, and panelling throughout are plywood.
Door sills have stainless steel chafing pieces. Hooks installed to hold doors in open position. Hanging lockers are equipped with rods and hooks and their doors are provided with louvres.
Drawers have to be lifted to open.
Hinged wooden companionway ladders with tool box behind.
Removable wooden ladder for aft entrance.

Fo'c'sle

Sail bins under folding pipe berths.
One canvas stowage bag each side.
Steps below hatch
Doors to fore peak.

Passage

Upper forward locker opposite head with shelves, aft locker arranged as hanging locker. Lower lockers with shelves.
This area can optionally be arranged as a head.

Guest cabin

Fixed berths with stowage lockers outboard. Drawers under lower berth.
Cupboards at forward end.

Sail space

Folding pipe berth over sail locker. Stowage lockers outboard, and at forward end.
This area can optionally be arranged either with fixed berths similar to guest cabin, or with part of the sail locker as a shower compartment.

Main cabin

Removable drop leaf table with fiddles and condiment rack.
Lockers behind settee backrests each side. Book shelf to starboard.
Space for bottles and glasses in locker at port forward end.
Drawer under aft sofa wing.

Galley

Insulated and sheathed space for stove, protected by stainless steel guard.
Stainless steel sinks with waste container below. Drawers for utensils. 150 l top- and front-loaded refrigerator and 120 l top-loaded freezer, insulated with 100 resp. 125 mm thick foam, both lined with GRP, and provided with aluminium shelves and drains.
Counter tops of Formica or equivalent. Racks for plates of 17, 20 and 24 cm diameter in cupboard on aft bulkhead.
Drying cupboard above sinks.

Navigation area

Chart stowage under table top, book shelf outboard, if space available after radio installation. Dished navigator's seat in front of oilskin locker. Chest of drawers in chart table base.

Heads

Stainless steel wash basin with Formica or equivalent dresser.
Equipped with telephone type shower, mirror, towel, soap and paper holder and waste container. Aft head with shower curtain.
Lockers with shelves outboard.

Aft cabin

Lockers outboard of berths. Double berth with undivided mattress.
Access from aft end of double berth to lazarette.
Dresser with mirror on forward bulkhead.
Outboard of seat hanging locker aft, shelves forward.
Drawers under forward end of berths.
Space for optional diesel generator between berths.

PROPULSION MACHINERY

Engine

Perkins four-cylinder 4-stroke marine diesel, type 4-236M rated 54.4 kW (73 SHP) at 41.7 rps (2500 rpm), on flexible mountings with Hurth mechanic reverse gear, reduction 2,1:1.
Drip tray integral with engine bed.
Removable engine box internally sound insulated.

Starting system

The engine has its own starting battery, 93 Ah, 24 V, located with the service batteries.

Engine controls

In cockpit:
Engine controls on/off
Start and stop buttons
Cold start button
Recessed single lever control of throttle and gear shift.
Tachometer
Coolant temperature gauge
Oil pressure gauge
Control light for starting and service battery charging.
Warning light and audible alarm for low oil pressure/high engine or exhaust temperature.
Engine space blower switch.

At chart table:

Warning light for low oil pressure/high engine or exhaust temperature.

Propeller shaft

Made of corrosion resistant steel with rigid shaft coupling, outboard end supported by strut with rubber bearing.
Morse or equal stuffing box flexibly supported by hose connection to stern tube. For locking the shaft during charging, a shear pin is provided. Zinc anode on shaft. Right handed Nautomatic folding propeller, diameter 25".

Engine cooling system

Thermostat-controlled fresh water cooling with heat exchanger.
Strainer on seawater intake, discharge through exhaust system.

Fuel system

Fuel capacity 570 litres (150 US gallons), in two tanks forward of engine with shut-off cocks. Separate fillers on deck.
Water separator on fuel feed line, return line to each tank. Tanks vented to coachroof. Fuel tank level gauges and overflow alarm in cockpit.

Exhaust system

Wet system exhaust with rubber silencer and cooling water bypass, discharging at transom. Silencer provided with drain tap and temperature alarm.
Raw water loop provided with bleed line, discharging through topside.

PLUMBING AND VENTILATION

General

Sea cocks of bronze for all through-hull fittings below water line, finished flush with outside and located in accessible positions. Inboard side of sea cocks fitted with nipple long enough to take two hose clamps.
Sea water piping of reinforced PVC tubing, fresh water piping of nylon or copper tubing. All fuel and water tanks of welded stainless steel, and provided with baffles, inspection covers, sounding plug, and vent pipes.
Shower sump tanks of GRP, integral with the molded floor liner.

Fresh water system

Pressurized water, heated by engine cooling water.
Water capacity 1000 litres (264 US gallons) in three tanks amidships. One filler line from deck, terminating at valve chest. Tank vent pipes drain into galley sink.
Foot pumps for galley sinks and wash basins.

Sea water system

Foot pump for galley sink spout.
One inlet sea cock feeding heads, galley, and engine cooling.

Drainage system

Galley sinks drain through sea cock.
Wash basins and shower trays drain to respective sump tank, capacity about 40 l each. Sump tanks are emptied by hand pump to outlet above waterline.
Two manual bilge pumps, one below, one in cockpit, discharging through outlets above waterline.
Two 2" drains in cockpit discharging above waterline. Refrigerator and freezer drained to translucent plastic tank in bilge.

Toilets

BABY BLAKE oval pan toilet or equal, discharging through sea cock with seawater pump, shut-off valve, and drainage pump.

Stove

Three-burner gas stove with oven, gimballed and provided with fiddles.
Gas shut-off cock adjacent to stove. Main shut-off on gas bottle.

Refrigeration

Refrigerator and freezer cooled by compressor unit with holdover plates, Simpson & Simpson or equal.

Ventilation

Dorade ventilators on foredeck, and at main companionway.
Exhaust ventilators in heads and galley.
Engine space air inlet in lazarette, outlet with blower to coachroof coaming.
Battery boxes ventilated to main mast.

ELECTRICAL

General

24 V DC two-wire system for lighting, instruments, and battery charging.
Care is taken that cables are heavy enough to prevent excessive voltage loss. For lightning protection, headstay, backstay, mast step, and main chain plates are grounded to ballast keel bolts with heavy cable.

Service power

One battery set 524 Ah, 24 V in glassfibre box below main cabin floorboards.

Outlets

24 V outlets at main switchboard and in each head, one watertight in cockpit.

Lighting arrangements

Interior:

One berth light over each berth, necessary dome lights overhead, slim lights over galley counter.
Flexible chart light at navigation station. Red night lights at floor level in main cabin.

Outside:

Downward flood light on forward side of mast.
Masthead light.

Navigation lights:

Red and green side lights on pulpit
White stern light on pushpit
White bowlight on forward side of mast.

Main switchboard 24 V DC

Located outboard of navigator's seat, and protected by a Perspex door.
Provided with necessary breakers of trip-free circuit type, four spares included.
One V-meter with two-way switch for checking service and starting battery voltage.
Two Ammeters, one for service, one for starting battery charging control.
Switches for outside and navigation lights.
Switches for cutting alternator field current to non-charging level.
Main switch and fuses located in separate locker aft of switchboard.

Charging system

On the engine there is a 35 Amp 24 V alternator for charging the engine starting battery and a 70 Amp alternator for charging the service battery.

Cockpit controls

Push button for mast flood light
Dimmer rheostat for compass light

INSTRUMENTS

Compass

One Danforth Constellation C654C steering compass or equivalent, mounted in binnacle on steering pedestal. No magnetic materials within four feet radius.

RIG

Scantlings within Sparkman & Stephens specifications. Spars of extruded aluminium alloy tubing, anodized. Sloop rig is standard, for optional ketch rig see last page.

Mast

Of elliptical section, with joint at approximately half length, and stainless steel tangs. Tapered and welded masthead with two spinnaker cranes and four halyard sheaves. Spare halyard messenger provided.

Internal wiring, shielded in a PVC tube secured to mast.

Mainsail track riveted to mast.

Spinnaker gooseneck track on forward face.

Two each side for jockey pole.

Main halyard winch Lewmar 44 or equal.

Tapered spreaders of aluminium alloy.

Neoprene rubber mast boot with Dacron cover.

Main boom

Of oval section with outhaul winch Lewmar 16 or equal, and arrangements for slab reefing with lock-off cams for three reefing lines. Topping lift led forward internally from boom end.

Poles

Two spinnaker poles and one jockey pole. Of round section with appropriate fittings.

Standing rigging

Main and upper shrouds are of solid Navtec rod or equivalent, all others stainless steel 1x19 wire with Norseman or equal terminals. Rigging screws of bronze with toggles at lower end. Rigging screw with handles for backstay and forestay adjustment. Headstay and forestay also have toggles at upper end. Rope tail end for running backstays.

Running rigging

Wires are of 7 x 19 stainless construction, ropes Trevira. Main halyard with screw shackle. All other halyards as well as spinnaker sheets and guys with snap shackles. Internal halyards and topping lifts.

Description	Quantity	Material	Diameter
Main sheet with blocks	one	braid	16 mm (5/8")
Main sheet tag lines	two	braid	12 mm (1/2")
Heavy genoa sheets	two	braid	20 mm(3/4")
Light genoa sheets	two	braid	12 mm (1/2")
Heavy spinnaker sheets	two	braid	16 mm(5/8")
Light spinnaker sheets	two	braid	10 mm (3/8")
Staysail sheets	two	braid	16 mm (5/8")
Aft guys	two	braid	20 mm (3/4")
Fore guys	two	braid	16 mm (5/8")
Main boom topping lift	one	wire	6 mm (1/4")
Tail end with blocks for above	one	braid	12 mm (1/2")
Outhaul	one	wire	6 mm (1/4")
Outhaul tackle with blocks	one	braid	12 mm (1/2")
Cunningham line	one	braid	16 mm (5/8")
Reefing pennants	two	low-stretch rope	16 mm (5/8")
Spinn. pole lifts	two	braid	14 mm (9/16")
Spinn. gooseneck lift/downhaul with blocks	one	braid	14 mm (9/16")
Spinn. halyards	two	braid	16 mm (5/8")
Genoa halyards	two	wire	8mm(5/16")
Tail ends for above	two	braid	14 mm (9/16")
Main halyard	one	low-stretch rope	16 mm (5/8")
Staysail halyard	one	wire	6 mm (1/4")
Tail end for above	one	braid	12 mm (1/2")
Heavy boom vang tackle	one	braid	20 mm (3/4")
Lace line for reefing	three	braid	5 mm (7/32")

STANDARD EQUIPMENT

Owner's Manual with directions for use and maintenance, drawings and diagrams for main systems, and handbooks for machinery and components.

Anchoring and Mooring

One Danforth 60 H anchor stowed in fo'c'sle.

6 metres anchor chain 1/2"
 50 m plaited nylon anchor line, diameter 20 mm (3/4")
 Two chain links 1/2"
 Two chain shackles
 Four mooring lines 20 m each, diameter 20 mm (3/4")
 Six airfenders with lines
 One boat hook of divided type, stowed in fo'c'sle.

Sailing gear

Four large snatch blocks
 Four genoa fairlead cars
 Two sliders with stops
 Two spreader blocks
 Two blocks with shackles for spinnaker aft guys
 Winch handles: four 10" lock-in, four double grip 10" lock-in
 Bosun's chair
 Flag pole
 Hatch dodgers for hinged deck hatches and fo'c'sle sliding hatch.

Miscellaneous

One half model of hull
 1/2 litre gelcoat, hull colour
 1/4 litre gelcoat, boot top colour
 Catalyst for above
 Spanner for rudder shaft stuffing box.
 Safety belts for navigator and cook.
 Sounding rods for fuel and water tanks.
 One 6 kg aluminium gas bottle.
 Except pipe berths, all berths are equipped with canvas leeboards and 10 cm (4") thick mattresses of flexible foam.
 Textile covers with zippers, colour to owner's choice.
 Engine spare parts
 Engine tool kit
 Electric spare parts
 One wooden cleat of each size.

SWAN 57 KETCH:

Length over all including boomkin 18.30 m (60.04')

Mizzen rig anchorage

The mast is stepped through deck onto an aluminium alloy mast step. GRP brackets are laminated to hull for the stainless steel chain plates. Boomkin of aluminium alloy tubing at transom for mizzen backstay.

Deck fittings

Aluminium mast collar with eyes for lazy halyards.

Hatches

No porthole from owner's cabin to cockpit.

Mizzen mast

Of elliptical section, with tapered and welded masthead. Jointed at approximately half length, stainless tangs. Sail track riveted to mast. Tapered spreaders of aluminium alloy. Neoprene rubber mast boot with Dacron cover.
 Mizzen halyard winch Lewmar 16 or equal
 Mizzen sheet winch Lewmar 25 or equal.
 Mizzen staysail halyard winch Lewmar 25 or equal.

Mizzen boom

Of round section with outhaul tackle and topping lift led forward internally.

Mizzen standing rigging

Of stainless steel 1 x 19 wire with Norseman or equal terminals. Rigging screws of bronze with toggles at lower end.

Mizzen running rigging

Description	Quantity	Material	Diameter
Mizzen halyard	1	low-stretch rope	12 mm (1/2")
Mizzen staysail halyard	1	low-stretch rope	12 mm (1/2")
Mizzen sheet	1	braid	12 mm (1/2")
Mizzen staysail sheet	1	braid	12 mm (1/2")
Mizzen topping lift	1	wire	3mm(1/8")
Tail end with blocks for above	1	braid	10 mm (3/8")
Mizzen outhaul	1	wire	5 mm (3/16")
Outhaul tackle with blocks	1	braid	12 mm (1/2")
Boom vang tackle	1	braid	12 mm (1/2")

Sailing gear

Bosun's chair
 Two small snatch blocks