SVIAIN GIL

# SPECIFICATION FOR THE SWAN 41 GLASSFIBRE IOR SLOOP

### Dimensions:

LENGTH OVERALL	41.0'	(12,5 m)
LENGTH OF WATERLINE	30,2'	(9,2 m)
BEAM	11,9'	(3,6 m)
DRAFT	6,5'	(1,9 m)
DISPLACEMENT	17.750 lbs	(8.100 kg)
BALLAST	9.700 lbs	(4.400 kg)

Designer: SPARKMAN & STEPHENS INCORPORATED

Builder:

NAUTOR

OY WILH SCHAUMAN AB

PIETARSAARI, FINLAND

TELEPHONE: 18 204, TELEX: 75-47 nauto sf

Note. These specifications are believed to be correct at the time of printing. Nautor will do its utmost to make sure that the vessel is built according to them. However, there may be minor alterations on the finished yachts, and we reserve the right to make these without prior 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 yachts, the standards of quality and completion are 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. 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 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, appropriate to the value of the Owner's investment until the yacht is delivered to the Owner in Pietarsaari harbour or dispatched by road or train.

**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 of 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 with the yacht 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.

**GLASSFIBRE CONSTRUCTION** — The GRP hull does have scantlings as approved by Lloyd's Register of Shipping, and the yachts are delivered with Lloyd's Certificate of Hull Construction.

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 AND 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 BED** — Of GRP. 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 grove joints.

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

TOE RAIL - Aluminium, anodized.

MAST STEP - Galvanized steel.

RUDDER - The rudder is fibreglass.

**RUDDER STOCK** — Stainless steel with stainless steel gudgeons and pintles with nylon 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 chain 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. 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 — installed in each rail forward, midships and aft.

STEM FITTING — is stainless steel welding, with female socket for pulpit stanchion.

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

### EQUIPMENT

COMPASS & BINNACLE — One 6" Danforth Constellation 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.

Pushpit and pulpit installed, fabricated of tubing similar to what is used for the life rail stanchions. Side lights and stern light are standard. Height of pushpit, pulpit and stanchions, spacing, distance does conform to ORC requirements.

COVERS — Dacron hoods for the two centerline deck hatches held in place by aluminium tracks on three sides.

MATTRESSES & UPHOLSTERY — Mattresses are flexible foam. All mattresses have covers 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. are rounded. All projecting corners of partitions are rounded. All mounting blocks, rails, door sills etc. are fastened with screws or glued.

Hooks, lanyards, and bumpers are installed to control the swing of doors. Suitable catches are installed to hold the toilet door 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 AND PORTS - Windows in sides of cabin trunk are fixed type.

MIDSHIPS HATCH - Aluminium framed with aluminium tracks for cover.

FORECASTLE HATCH — This hatch is a sliding type hatch, large enough to permit passing sails and sail bags. The hatch is provided with aluminium tracks on three sides to take hood.

MAIN COMPANIONWAY HATCH — This hatch is large enough to permit passing of main engine, with perspex top, sliding under a fibreglass hood. Hatch fitted with lock and two keys supplied.

LAZZARETTE HATCH - is located under helmsman's seat.

ENGINE ACCESS - Access to main engine is through removable joiner work.

**LADDERS** — Wood frame ladder with rubber treads installed at main companionway hatch with tool box behind.

SHELVES, DRAWERS & LOCKERS — are arranged throughout quarters. Lockers and locker doors have openings for ventilation. Hanging 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 pipe berths have canvas leeboards.

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.

MIRROR - installed in all heads.

**GALLEY** — Galley is equipped with gas stove, sink and ice-box. 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 lines between stove and container.

ICE BOX — built-in type lined with fibreglass and insulated with foam. Insulation is 4" thick. Shelves provided. Top opening flush hatch with flush lifting hardware. A drain is provided.

**VENTILATION** — Natural air intake vents for living quarters are through 4-inch diameter cowl vents on Dorade type watertrap boxes. Cowls are clear of operation from all winches.

**SOUND INSULATION** — The inside of the engine hood is lined with sound insulating lining. 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 — Standard colour white.

COVE AND COAMING STRIPE AND BOOT TOP - Standard colour blue.

BOTTOM - Primed with antifouling bottom paint.

CABIN SOLE - Teak veneer, oiled.

### PLUMBING

SEA COCKS — Bronze sea cocks, installed on all thru-hull connections below waterline. 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 minimize the number of thru-hull openings.

SCUPPERS — The cockpit well has two scuppers, one on each side. Three scuppers through toe rail each side. All scuppers drain naturally.

FRESH WATER TANKS — Three tanks for a total capacity of 250 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** — One Baby Blake toilet with white seat and cover installed in toilet room. Discharge through a loop and an accessible sea cock. Toilet intake is located very close to keel to ensure ample submergency even in heavy weather.

**TOILET ROOM FIXTURES** — Toilet room is suitably fitted with medicine cabinet, towel bar, soap dish, and paper holder.

WASH BASINS — One fibreglass wash basin is installed in toilet room. Basin discharges into sump tank. Telephone type shower installed.

GALLEY SINK — A single stainless steel galley sink is installed in galley counter top. The sink is fitted with foot-operated pumps with gooseneck spout for salt water. 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 — Perkins Marine Diesel engine, model 4-108 M low line, rated with 2,1:1 hydraulic reduction gear and a 12 Volt 55 Amp. alternator for charging the batteries.

CONTROLS - Single lever Morse controls operated from helmsman's position.

FUEL TANK — One tank with a capacity of approximately 100 liters. The tank has a fill located on deck 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 of two-bladed folding type, diameter 17", of bronze. Shaft is stainless steel, 30 mm diameter.

SHAFT BEARING, SHAFT TUBE & STUFFING BOX — Stern bearing is a cutless rubber bearing inserted in strut. Stuffing box is connected to stainless steel stern tube hose and hose clamps of stainless steel.

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

DRIP PAN - An oiltight fibreglass pan is installed under the engine.

**ENGINE COOLING** — Cooling water is taken through a sea cock located low down to ensure ample submergence when heeled. The water is passed through a suitable basket strainer hose of proper size to engine.

# ELECTRICAL

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

STARTING BATTERY — One 12 Volt battery rated 95 Amperehours is mounted in fibreglass-lined tray.

LIGHTING BATTERIES — Two 12 Volt batteries rated 95 Amperehours each connected in parallel, mounted in fibreglass-lined tray.

LIGHTING ARRANGEMENT — The following lights are supplied:
Masthead light
Bow light
Deck flood light
Red and green running lights
Stern light
Compass light
Six Bunk lights
Navigation table light
Nine Dome lights
One fluorescent tube fixture

CHARGING SYSTEM — Starting and lighting batteries are on same charging circuit but on separate current draw system protected by blocking diodes. There is one master switch on the positive side of the system. \_

LIGHTNING PROTECTION — Heavy wire connected to chain plates, backstay fittings, and headstay fittings, gounded to ballast keel bolts.

# SPARS

GENERAL — Scantlings of all spars are within S & S specifications. Spars are anodized.

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

Mast is wired for masthead light, bow light, deck flood light, with wires leading down inside of mast.

MAIN BOOM (ROLLER REEFING) — is aluminium alloy, hollow section, with worm clew outhaul and sliding fitting for boom vang.

SPINNAKER POLES are aluminium alloy, hollow section.

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

SPINNAKER TRACK — Stainless steel spinnaker boom track on mast with two cup sliders and cups.

MAST COLLAR — Aluminium mast collar is 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.

# WINCH LIST

Main halyard
Genoa halyard
Spinnaker halyard
Main sheet
Genoa sheet
Spinnaker sheet
Handles
Handle holders

One Lewmar 2 on mast
Two Lewmar 40 on deck
Two Lewmar 40 on deck
One Lewmar 16
Two Lewmar 16
Two Lewmar 55 (3-speed)
Two Lewmar 45 (3-speed)
One plain 10" handle, one 10" and one 8" lock-in handle

# SNATCH RIOCKS

Four large ones Two small ones

MAIN GOOSENECK — Roller reefing type to suit diameter of boom. Lower end stopper to hold boom at black band position.

# RUNNING RIGGING

Wires are of  $7 \times 19$  construction, ropes Trevira. Main halyard with shackle. All other halyards as well as spinnaker sheets and guys with snap shackles

Description	Quantity	Material	Diameter
Main sheet with blocks	one	braid	12 mm (1/2")
Heavy genoa sheets	two	braid .	16 mm (5/8")
Light genoa sheets	two	braid	12 mm. (1/2")
Heavy spinnaker sheets	two	braid	12 mm (1/2")
Light spinnaker sheets.	two	braid	8 mm (5/16")
Aft guys	two	braid	16 mm (5/8")
Fore guy	two	braid	12 mm (1/2")
Main boom topping lift	one	wire	4 mm (5/32")
Tail end with blocks for above	one	nylon braid	6 mm (1/4")
Main boom downhaul with blocks	one	braid	12 mm (1/2")
Spinn. pole lift	two	braid	10 mm (7/16")
Spinn, bell lift with blocks	one	braid	10 mm* (7/16")
Spinn. halyards	two	braid	14 mm (9/16")
Genoa halyards	two	wire	6 mm (1/4")
Tail ends for above	two	braid	12 mm (1/2")
Main halyard	one	wire	6 mm (1/4")
Heavy boom vang tackle	one	braid	12 mm (1/2")

# STANDARD EQUIPMENT ALSO INCLUDES

Four air fenders One boat hook
One flag staff
One Bosun's chair
Two fair lead genoa cars

Two genoa track cars with separate stoppers
Two storm jib pad eyes and blocks
One staysail pad eye
Two double foot blocks

Two spinnaker quarter eye fittings One Danforth 40 S anchor with 6 m chain (5/16")

Instruction manuals on engine, electrical system and water system.

Rod Stephens' instructions One half model of hull