

# TECHNICAL SPECIFICATIONS - SILENT 60 -



\* The rendering above shows optionally available equipment

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# 1. GENERAL INFORMATION

The following technical specifications ("Specifications") describe the technical construction elements of the SILENT 60 in detail.

All components are marine grade and have a CE certificate. The SILENT 60 has been designed and built in accordance with the ISO rules and in compliance with the safety standards according to the 94/25/CE directive.

## 2. MAIN TECHNIAL CHARACTERISTICS

# **Dimensions and capacities**

Design & naval engineering	Dr. Albert Nazarov	
Concept and innovation	Mag. Michael Köhler	
Length overall	17,99 m	59,0 ft
Length of waterline	17,80 m	58,4 ft
Beam overall	8,99 m	29,5 ft
Draft	0,93 m	3,0 ft
Slenderness ratio (Lwl/Bwl)	10,08	
Light displacement *)	29 t	63,900 lbs
Water *)	2 x 500 L	2x 132 gal (US)
Waste-water *)	2 x 500 L	2 x 132 gal (US)
Fuel *)	2 x 500 L	2 x 132 gal (US)
Standard motors (electric)	2 x 50 kW	
CE certification	A: 12; B: 12; C: 16; D: 20	

<sup>\*)</sup> Light displacement and performance predictions subject to change due to specification of vessel.

# **Engines and Performance**

- a) 2 x 50kW high efficiency PM-motors
- b) Cruising speed 6-7 knots, top speed approx. 11 knots
- c) High-efficiency bronze propellers on shafts
- d) Engine controls and control panels at salon- and fly helm
- e) Access to engine- / technical-compartments via cockpit hatch and liftable stairs
- f) Engine-compartments ventilation: natural aeration and forced extraction
- g) Generator-, engine- and technical compartments sound protected
- h) Equipment includes:
  - Filtration: pre-filter, water-separator and filter
  - Fuel cut-out remote control
  - Fuel filler, aeration
  - Gauges for fuel level on chart table

# **Tests before Delivery**

Before the delivery the manufacturer will carry out the following test:

- a) Preliminary test of electrical system
- b) Preliminary test of hydraulic system
- c) Preliminary test of propulsion system
- d) Test for maneuvering
- e) Test of speed at different rpm
- f) Test and commissioning of electronics systems
- g) Control and check of the correct installation and operation of all components
- h) All surveys required for CE must be passed successfully

## 3. CONSTRUCTION CHARACTERISTICS

- a) Light weight glass sandwich composite construction
- b) Resin infusion and vacuum bagging for strong and lightweight structure
- c) High quality and osmosis free vinyl ester resin
- d) Highly sophisticated torsion resistant hull and bulkhead structure
- e) Watertight bulkheads, sealed floor-sections and collision-compartments for ultimate safety
- f) Foam sandwich structure of boat acts as thermal and sound insulation
- g) Additional thermal insulation of the hull and the superstructure
- h) Complete boat in gelcoat surface

# 4. EXTERNAL LAYOUT STANDARD AND FITTINGS

#### Transoms

- a) Shower (H/C) in starboard transom
- b) 1x swimming ladder at transom step
- c) Bench at the salon-wall with cockpit table
- d) Stairs to flybridge

# **Engine- / Technical Compartments**

- a) Access through liftable stairways + through deck hatches
- b) Space for generator and other technical components on port side
- c) Space for bike, water toys etc. in the starboard stern compartment
- d) Sound protection
- e) LED-light in each technical compartment

# Cockpit

- a) L-shaped sofa with storage underneath
- b) Large storage for SUPs and Kajaks under the Cockpit floor
- c) 3 large deck hatches + 2 hatches at the transom give access to the storage under the cockpit floor

### **Foredeck**

- a) 2 x deck-hatches for access to forward storage-compartments
- b) 1.500W electric windlass (12mm chain)
- c) Large flush front deck
- d) Large hatches give access to storages for fenders, ropes, deckchairs
- e) Dedicated storage for the (optional) kite

# **Flybridge**

- a) Helm console for engine controls and navigation equipment
- b) Full set of navigational equipment according to the specification in the Options list, such as 4 monitors, autopilot, depth sounder, wind .....
- c) L-shaped sofa with table, 2 sunbeds
- d) storage underneath all sofas
- e) Helm bench with flipable backrest
- f) Rigid solar-roof (optionally retractable)

# **Deck fittings**

- a) 10 x mooring cleats total
- b) 630 900mm inox stanchions with inox handrail
- c) Pulpit in stainless steel, optional bow seats with teak

## **Exterior decoration**

SILENT-YACHTS logo on sides of coach roof, model name on each hull.

## 5. INTERIOR DECORATION AND FITTINGS

# **Layout Versions**

Standard Version - Master Cabin in front of the salon

a) 4 CABIN VERSION: 1 full-width (20m²) Master-cabin in front of the salon, 1 VIP-cabin, 2 generous guest cabins, with 1 double bed or 2 single beds each, all cabins with en-suite bathroom

**Grand Salon - Front Exit Version: (optional)** 

- a) 4 CABIN VERSION: 1 Master cabin with separate living room, 1 VIP cabin, 2 guest cabins with 1 double bed or 2 single beds each, all cabins with en suite bathroom
- b) 4 + 1 CABIN VERSION: 1 Master cabin with separate living room, 1 VIP cabin, 2 guest cabins with 1 double bed or 2 single beds, 1 crew cabin with separate entrance from the deck, all cabins with en-suite bathroom (optional)
- c) **5 CABIN VERSION**: 1 Master cabin, 3 guest cabins with 1 double bed each, 1 guest cabin with 2 single- or 2 bunk beds, all cabins with en-suite bathroom **(optional)**
- d) **5 + 1 CABIN VERSION**: 1 Master cabin, 3 guest cabins with 1 double bed each, 1 guest cabin with 2 single- or 2 bunk beds, 1 crew cabin with separate entrance from the deck, all cabins with en-suite bathroom. **(optional)**

All cabins with en-suite bathroom.

All bathrooms incl. sink, electric toilet and shower.

Some cabins are available with double bed or two single beds or bunk beds. Customized versions on request.

# **Electricity**

- e) Fuses and interrupters for 12 and 24V DC and 230V AC (US configuration 110V optional)
- f) All wiring with tin-coated copper cables of marine grade
- g) All cables labelled and numbered and mounted on rails
- h) All lights high quality LED
- i) Main switchboard with fuses and gauges for battery level, fuel-, water- and blackwater-levels, navigation lights
- j) Shore-power connection with fuse
- k) Air Conditioning system according to the specifications in the options list

#### **General Interior**

- a) Headroom in the cabins, bathrooms and corridors 2,10m (6,9')
- b) Headroom in the salon / galley: 2,20m (7,3')
- c) Large portlights in all cabins
- d) Natural aeration and forced aspiration-system in all cabins / bathrooms
- e) Furniture built in plywood or composite wood, covered with real wood veneer
- f) Thermal insulation for excellent room climate
- g) All walls in plywood or composite materials, lacquered, real wood veneered or covered with synthetic leather, all ceilings covered with synthetic leather
- h) Hand rails in stainless steel, optionally covered with leather
- i) All cabin- and bathroom doors in light weight material, high quality, soft closure
- j) Door-locks with high quality "anti-rattle" mechanism, all drawers soft closure
- k) Port lights and deck hatches in "flush deck" design
- l) All steps with antiskid surface, LED courtesy-lights

## Salon

- a) Vast panoramic salon of ~ 48m<sup>2</sup>
- b) Sliding salon door and sliding window
- c) Sliding window on the port side, fixed window on stb side
- d) Dimmable LED spotlights on the ceiling

#### Inside Helm-Position

- a) Helm-position with steering, engine-controls and -displays, compass
- b) Large helm console for electronic equipment
- c) Full set of navigational equipment according to the specification in the Options list, such as 4 monitors, autopilot, depth sounder, wind .....
- d) 2 x 230V (US 110V) socket, 2 x 12V, 2 x USB sockets
- e) Helms-seat for two persons (~120cm wide)
- f) Vast storage underneath with long drawers

#### Salon Lounge Area

- a) L-shaped sofa with comfortable cushions, could serve as bed
- b) Dining table

#### **Pantry**

- a) U-shaped kitchen with acrylic stone worktop
- b) Sink in stainless steel
- c) 3 x 2 230V sockets on the worktop
- d) Induction cook-top (4 plates)
- e) Fridge or side-by-side fridge / freezer (depending on version)
- f) Several lockers and drawers (soft closure)

#### **Front Exit Version**

- a) Front exit to front cockpit with weathertight front door
- b) L-shaped sofa with foldable table

- c) two lounge seats with cushions and cup holders
- d) steps up to the front deck
- e) Grating at the front door with drainage system underneath

#### **General Cabins**

- a) 1 large double bed or 2 single beds with slatted base and comfortably upholstered headboard
- b) Maritime mattresses in PU-foam (140 mm thick)
- c) Storage under the bed, accessible from the side or from the top
- d) Hanging lockers and lockers with shelves, storage boards
- e) 2x 230V sockets, 2x USB socket
- f) LED-ceiling-lights (dimmable) and reading lights back side of the bed

#### Front Master-Cabin - Additionally to the above-mentioned features

- a) Full-width cabin
- b) 1 large double bed 200cm x 180cm with side access with slatted base
- c) Vast storage area on the bridge deck alongside the bulkhead
- d) Bathroom on portside with upholstered seat, large shower and 230V plugs

## **Bathrooms**

- a) Sink / basin with mixer tap (H/C), electric toilet
- b) Locker under / above the sink / basin, mirror above the basin
- c) Accessories like towel holder, soap-dispenser, paper-holder
- d) Separate shower (H/C) in each bathroom, non-skid flooring
- e) Storage-shelf and seat in shower
- f) 2 x 230V socket and LED spotlights

#### Bathroom of Master- and VIP Cabin

Additionally, to the above-mentioned features:

- a) Generous bathroom with large shower
- b) Additional mirror and lockers

# 6. ENERGY PRODUCTION AND STORAGE

- a) 42 high-efficiency solar-panels with 17 kWp in total
- b) MPPT solar charge regulators
- c) Lithium batteries 400 V, 75 kWh
- d) 24V 10 kWh service batteries with 30 A charger
- e) Inverter 16 kVA sufficient for all standard household appliances
- f) Charge-, consumption- and capacity controls for all electric circuits

## 7.STEERING SYSTEM

- a) 2x rudder blades with stainless steel rudder shaft (except with turntable sail drives)
- b) GRP tube for rudder bearings
- c) Self-aligning upper and lower bearings
- d) Electro-Hydraulic steering system (except with turntable sail drives)

# 8.FRESH WATER, BILGE AND SEWAGE SYSTEM

- a) All hoses and pipes are marine grade
- b) Fresh water:
  - 2 x 500L fresh water tank
  - Gauges for water level on chart table
  - Fresh water circuit including pressure pumps
  - Electric boilers for showers / sinks

- 1x hand shower on stern platform (H/C)
- Watermaker 90 liters / h, high pressure system
- c) Waste water:
  - 2x waste water tank with electric pump, gauges on chart table
- d) Drainage circuit:
  - Self-draining cockpit as per CE standards
  - Automatically activated electric bilge pump & manual pump in every watertight compartment

## 9.SAFETY AND REDUNDANCY

- a) Watertight bulkheads
- b) Hermetically closed compartment at the bow bottom
- c) Oversized electric bilge pumps
- d) additional manual bilge pumps for double safety, all vital systems are redundant