

**CHEOY LEE
SHIPYARDS**

STANDARD SPECIFICATION



**Specifications^(A)
SERENITY 68'
by
Cheoy Lee Shipyards**

Length Overall	68' 0"	20.73 m
Hull Length	65' 7"	19.99 m
Length Waterline	59' 0"	17.98 m
Beam	18' 0"	5.49 m
Draft	5' 3"	1.60 m
Displacement (full load-est)	116,000 lbs	52,600 kg
Fuel ^(B)	2,350 USG	8,900 ltr
Water ^(B)	600 USG	2,270 ltr
Black Water Tank ^(B)	140 USG	530 ltr
Grey Water Tank ^(B)	40 USG	150 ltr
Engines	Twin JOHN DEERE 6081AFM75 (330 bhp each)	
Generators	KOHLER 20kW, 60Hz, 2 sets	

STANDARD EQUIPMENT

Construction

- Single skin fiberglass hull and topsides laminate

- Decks, bulkheads and internal soles of DIVINYCELL or equivalent cored fiberglass
- Integral fiberglass fuel, fresh water and holding tanks with baffles and cleaning manholes
- Fiberglass rub rail with stainless steel capping
- Tinted, tempered glass (6mm) windows, utilizing high strength, adhesion style window system. Forward pilothouse windows are not tinted.
- Wood border for floors and headliner
- Bookmatched veneers on passage doors
- ALEXSEAL non-skid exterior decks except where specified
- ALEXSEAL exterior finish (Off White with Navy Blue trim)
- Two coats of antifoul bottom paint
- Vinylester hull laminates and epoxy barrier system applied to hull bottom, with five-year structural and anti-osmosis warranty
- Germanischer Lloyd approved structural design

Deck

- All hardware chrome on brass, 316 stainless steel or anodized/painted aluminum
- Two vertical anchor windlasses, MAXWELL VWC 4000, 24vDC each with 7/16" chain cathead and rope capstan, deck pipe, chain stopper and divided chain locker
- 175 amp-hour battery bank, 24vDC, stored in forward stateroom for windlass service
- Two 150 lb. galvanized steel high holding power anchor stowed in hawse pipe in bow
- Two 30 fathom lengths of 7/16" high test galvanized chain
- Divided chain locker with for optional second rode with flush access hatch on deck
- Fresh water anchor wash down with spigot
- Fiberglass bulwarks with teak caprail
- Twin trumpet air horn
- Stainless steel bollards (6)
- Stainless steel fairleads
- Stainless steel bow rails 1.25", incorporating fender storage racks for four fenders
- Stainless steel burgee flag staff on bow rail
- Navigation lights
- Walkway lighting on side deck overhangs
- Flag staff
- Boarding gates in side deck bulwark, port (1) and starboard (1)
- Step plate located at deck entrances
- Scuppers draining to boot top

Electrical Systems

- 220/110vAC 60 cycle and 24/12vDC electrical panels, main panels in engine room and zone panels throughout vessel. Automatic lights for electric panel cabinets
- SIDE-POWER 12", 16hp DC bow thruster with dedicated battery bank
- ACR 100 searchlight with dual station remote control

- LED lighting throughout for interior, exterior, rope, cabinet, navigation, step and engine room lights
- Overhead light fixtures throughout with dimmers in specified areas.
- Valance lights and floor rope lighting with control switches
- Wardrobe lights, automatic
- Emergency lights, automatic at loss of primary lighting system, operating from an independent DC power supply. Removable emergency flashlights in each stateroom
- 110vAC receptacles in galley, heads and exterior are protected with GFI safety breakers
- Two banks of 24vDC 210 amp-hour gel cell batteries for engine starting and ship service
- Emergency engine start battery parallel system, dual station
- Two sets of 12vDC 175 amp-hour gel cell batteries for generator starting
- 24vDC 60 amp battery charger
- 12vDC 20 amp battery charger
- 12vDC power supply for electronics in pilothouse
- GLENDINNING Cablemaster shore power cable retrieval system, for 230vAC 50 amp service, with 75 ft. cable
- Shore cable television inlet located in locker on aft deck
- Shore cable television inlet located in locker on aft deck
- Electric copper bonding system, connecting all through hulls and major metal components to exterior hull zinc anodes
- Isolation transformer (15 kVA), for shore power system
- Dynaplate grounding plate and strap to pilothouse and flybridge ground terminal boards
- Voltmeters and ammeters for supply circuits
- Generating set/shore power selector switches, shore power polarity indicator
- LCD touch screen control/alarm monitoring system with audible and visual signals displayed on Programmable Logic Controller (PLC) located in pilothouse for generator low oil pressure, generator high temperature, high bilge level, and smoke detectors (engine room, staterooms, galley, salon). Security alarm sensors on all doors and hatches. Navigation light control and monitoring.

Engine Room and Machinery Rooms

- Twin JOHN DEERE 6081AFM75 (330 bhp each, 2300rpm) diesel engines, fresh water cooled, standard engine maker instrumentation, 24vDC 75 amp alternators and 24vDC starting
- Local mounted start/stop instrument panels for main engines
- Hull side exhausts with fiberglass mufflers
- Two KOHLER generators, 20kW with sound shields. 12vDC starting
- 230vAC reverse cycle direct expansion air conditioning systems (except engine room)
- CENTEK combo generator mufflers, air/water separator type, with hull side exhaust
- NAIAD 254 stabilizer system with 9 sq. ft. fins

- Engineered engine room ventilating system, with intake blowers taking air in via air/water separator filters in hull side
- Fire protection system, consisting of manually and automatically actuated fire extinguisher system with audio and visual alarms. Upon system actuation, blowers are shut down and hull side ventilation inlet dampers are closed
- REVERSO lube oil change system with manifold and hoses to all engines and gearboxes
- RACOR fuel filters for the main engines, manifolded two per engine to allow filter change underway
- RACOR filters for generators, one for each
- Water heater, 30 gallons, dual element, quick recovery type
- Cartridge style whole system water filter unit
- Fresh water hose bib
- Automatic sump pumps
- Automatic bilge pumps, for each separate compartment in the vessel
- HEADHUNTER Mach 5 AC water pump with accumulator tank, for water pressure system
- Fuel management system, consisting of fuel shut-off valves, fuel transfer pump and meter system
- Fuel tank gauges, pneumatic pump type
- Water tank gauges, pneumatic pump type
- Black and gray water tank gauges, pneumatic pump type
- Black water tank level indicator and high level alarm
- Black water holding tank system with Y-valve selector to allow direct discharge overboard or into holding tank. Macerator pump for pump out of holding tank direct over board, or to vented deck fitting for shore side disposal.
- GROCO bronze raw water strainers, all engines and sea water pump intakes
- Seacocks on all through hull fittings below the waterline
- Fiberglass battery boxes and battery tie downs
- Engineered sound vibration and noise attenuation system for engine room spaces consisting of lead tile sound barriers and Mylar faced synthetic lead-foam insulation covered with white painted aluminum perforated sheeting. Custom sound mounts for main engines, generators, engine room stanchions, head pumps/motors, air conditioning compressors and seawater cooling pumps
- Drip trays under engines
- Stainless steel propeller shafts
- Stainless steel rudder blades
- Nibral propeller shaft struts
- Nibral propellers, 5 blade, dynamically balanced
- DURAMAX cutlass rubber stern and rudder bearings
- PYI packless shaft and rudder stock seals
- Overhead lights
- Smoke detectors
- 110vAC outlets (2), GFI type
- Watertight access door

- Preparation for watermaker, including mounting platform, plumbing and power supply

Pilothouse

- TELEFLEX/HYNAUTIC hydraulic steering
- MATHRES MC-2000-2 electronic engine controls
- Engine instrumentation and alarms
- MAXWELL Auto-Anchor 560 control for anchor windlass
- Remote control for searchlight
- 28" wooden steering wheel
- STIDD helmsman's seat with vinyl cover
- Upholstered settee with chart storage drawer under step
- Wooden table
- Two DRS Half Moon 8" wall lights
- Teak and holly flooring
- Alarm panel (see Electrical Systems)
- 110vAC duplex outlets (2)
- Instrument and electronic console
- Pantograph windshield wipers with fresh water wash system
- Weathertight fiberglass side doors to main deck
- Red night light and switch
- Stairs down to guest/crew cabins and engine room
- Stairs up to flybridge

Flybridge

- MATHRES MC-2000-2 electronic engine controls
- TELEFLEX/HYNAUTIC hydraulic steering
- Engine instrumentation and alarms
- Remote control for anchor windlass
- Remote control for searchlight
- Fiberglass instrument and electronic console
- Four moulded cup holders and two storage pockets
- 28" stainless steel steering wheel
- NAUTICAL STRUCTURES 1500 lb. davit with manual rotation
- Stainless steel framed acrylic flybridge windscreen
- GRP hard top with down lights including two red lights on separate circuit
- Stainless steel rails. Life lines around aft deck
- Hatch and ladder to aft deck with stainless steel rails and gate
- Fiberglass radar arch with flush mounted lighting
- STIDD helmsman's seat with vinyl cover
- Fiberglass L-shaped lounge seat with upholstered cushions, storage under and painted fiberglass table (1) with magazine rack under
- Fiberglass bench seat with upholstered cushions
- Teak planked deck surface to aft edge of L-shaped lounge seat
- Scuppers draining to boot top

- Lightning arrester system
- Painted fiberglass bar/storage cabinet, including sink with hot and cold water faucet, fresh water wash down hose bib, U-LINE model 29 icemaker/combo refrigerator unit and barbeque grill
- 110vAC outlets (3), GFI type
- ACR 100 quartz halogen search light, remote dual station control

Salon

- Staircase down to owner/guest staterooms
- Smoke detector
- Entertainment cabinet wired for television and stereo, no units
- Ceiling lights with control/dimmer switches
- Valance lights and floor lighting
- Settee and two teak arm chairs, cocktail table with slide out seats
- 110VAC power supply to both ends of salon sofa for optional table lamps
- Wooden dining table with pearl inlay
- Teak and holly carpet border
- Lighting soffit over dining table with pearl inlay
- Fixed adhesion style, tinted, tempered glass windows
- Wood blinds and fabric accent valance for saloon windows
- 110vAC duplex outlets (3)
- Stainless steel framed tempered glass sliding door to aft deck area

Galley

- Stainless steel range/oven unit
- Stainless steel microwave oven with ventilation hood
- Stainless steel 20 cu. ft. side-by-side refrigerator/freezer with ice dispenser
- Stainless steel dishwasher
- Stainless steel double sink
- Garbage disposal
- Faucet with removable sprayer handle at galley sink
- Cabinets, upper and lower
- Stone^(C) countertop
- Smoke detector
- Ceiling lights
- Under cabinet lights
- 110vAC outlets (4), GFI type

Master Stateroom and Head

- King berth with storage under
- Over berth soffit with indirect lighting on dimmer control
- Stainless steel framed opening ports with screens and hold open arms in stateroom and head
- Two night tables
- Smoke detector
- Closet, cedar lined on back surface

- Chest of drawers **or** sit down vanity unit with seat and mirror
- Upholstered settee
- Ceiling lights with control/dimmer switch
- Valance lights and floor lights
- Two Cantalupi Bermuda reading lights
- Mirror on closet door
- Planked wall finish, white paint
- Teak and holly foyer floor with nautilus shell inlay
- HEADHUNTER electric head, fresh water flush
- Custom moulded spa bath with shower
- Carona Leda vasque ceramic sink
- Faucets and bath accessories
- Stone^(C) countertop with two sinks
- Mirrored medicine cabinet
- DRS Half Moon 8" wall lights
- Exhaust blower
- 110vAC duplex outlets (3) in stateroom, two GFI type in head

Aft Guest Stateroom and Head

- Double berth with storage drawers under
- Smoke detector
- Wardrobe, cedar lined on back surface mirror on door
- Ceiling lights
- Valance and floor lights
- Two Cantalupi Rango reading lights
- Planked wall finish, white paint
- Stainless steel framed opening ports (4) with screens hold open arms in stateroom and head
- Stall shower
- Carona Leda vasque ceramic sink
- Mirrored medicine cabinet
- DRS BCM 2120/00 wall lights
- Faucets and bath accessories
- Stone^(C) countertop with sink
- Exhaust blower
- HEADHUNTER electric head, fresh water flush 110vAC duplex outlets (2) in stateroom, one GFI type in head

Forward Stateroom and Head

- Double berth with storage drawers under
- Ceiling lights
- Valance and floor lights
- Two Cantalupi Rango reading lights
- Stainless steel framed opening ports with screens and hold open arm in stateroom and head
- Smoke detector

- Wardrobe cedar lined on back surface with mirror on door
- Stainless steel framed tinted tempered glass ventilation/escape hatch with Oceanair Skyscreen
- HEADHUNTER electric head, fresh water flush
- Stall shower
- Carona Leda vasque ceramic sink
- Faucets and bath accessories
- Stone^(C) countertop with sink
- Mirrored medicine cabinet
- DRS BCM 2120/00 wall lights
- Exhaust blower
- 110vAC duplex outlets (1) in stateroom, one GFI type in head

Crew Stateroom and Head

- Upper and lower berths
- Smoke detector
- Wardrobe cedar lined on back surface and mirror on door
- Ceiling lights
- Valence and floor lights
- Two reading lights
- Stainless steel framed opening ports with screens and hold open arm in stateroom and head
- HEADHUNTER electric head, fresh water flush
- Stall shower
- Stone^(C) countertop with sink
- Mirrored medicine cabinet
- Duravit DuraPlus sink
- Faucets and bath accessories
- Exhaust blower
- 110vAC duplex outlets (1) in stateroom, one GFI type in head

Laundry Centre

- Stack up washer and dryer 24"
- Locker with shelves
- Teak and holly floor with nautilus shell inlay
- Ceiling lights
- 110vAC outlet (1), GFI type

Aft Deck

- Stainless steel and teak ladder to flybridge
- Teak planked deck surface
- Fiberglass settees with upholstered cushions
- Painted fiberglass pedestal mounted table
- Painted fiberglass storage cabinet with stainless steel sink, hot and cold water faucet and fresh water wash down hose bib inside
- Painted fiberglass cabinet with U-LINE model 29 icemaker/refrigerator unit

- Door and stairs to swim platform
- Wing doors to side decks
- Overhead lights

Transom Swim Platform

- Teak planked deck surface on fiberglass swim platform
- Door and teak stairs to swim platform from aft deck
- Stainless steel swim ladder
- Fresh water hot and cold shower

Owner's Documentation

- Vessel supplied with list of major equipment, serial numbers and manufacturers' contact details. Manufacturer equipment manuals will be supplied as available. Drawings for major systems, safety and docking plans are supplied on CD

Optional Equipment

- Watermaker
- Navigational electronics
- Remote plug-in stations for electronic engine controls
- RITCHIE 5" compass, flush mount with cover, lighted with dimmer
- Telephone/intercom system
- Audio/visual systems
- Dinghy, chocks and backing plates in deck
- Power rotation for davit
- Liferafts and chocks
- Soft goods decor, such as drapes, Roman shades, bed treatments
- Loose furniture, chairs and stools
- 24vDC back-up fresh water pump
- Lube oil storage system consisting of two 38 quart stainless steel lube oil tanks
- Inverter system
- Germanischer Lloyd Hull Construction Certificate (HCC)
- Smart battery monitoring system
- 100 amp shore power system with 25kVA isolation transformer

NOTES TO SPECIFICATIONS

- (A) Right is reserved to make changes at any time, without notice, in prices, materials, specifications and equipment. Line drawings may show optional items. Where these specifications differ from drawings, the specifications shall take precedence.
- (B) Capacities are estimated to be the total of all constituent tanks $\pm 5\%$. Usable capacities will vary depending upon conditions.
- (C) References to stone include a choice of CORIAN or AVONITE. Colours from builder's standard selection.

