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FORTALEZA 85 SERIES

85' 0" / 25.91m INACE 2021

10 Guests / 4 Staterooms

SPECIFICATIONS

Length:	85' 0" (25.91m)
Beam:	23' 6" (7.16m)
Draft:	8' 0" (2.44m)
Model Year:	2021
Year:	2021
Builder:	INACE
Model:	Fortaleza
Hull Configuration:	Displacement w/ Bulbous Bow
Hull Material:	Steel
Flag:	Cayman island
Engines:	2x Caterpillar Caterpillar
Fuel:	32,176.00 L / 8,500.00 Gal
Cruising speed:	10 Knots
Max speed:	13 Knots
Staterooms:	4
Guests:	10
Total Crew:	4
Location:	Fortaleza , Brazil
Price:	\$6,895,000 USD

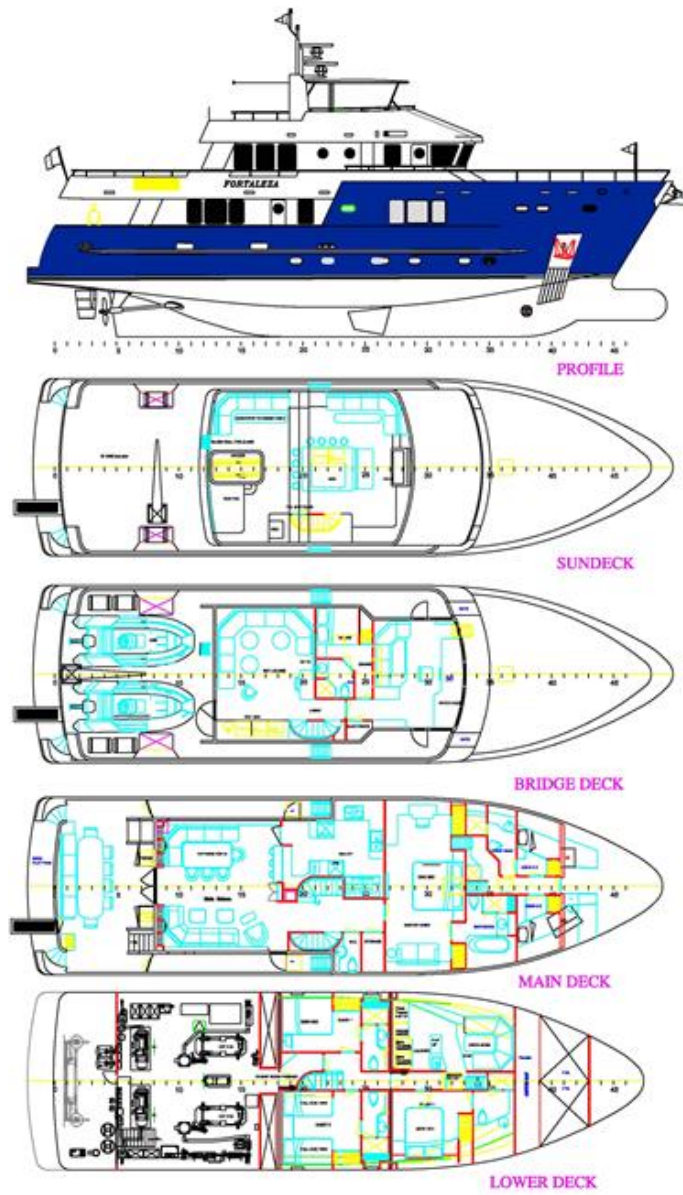


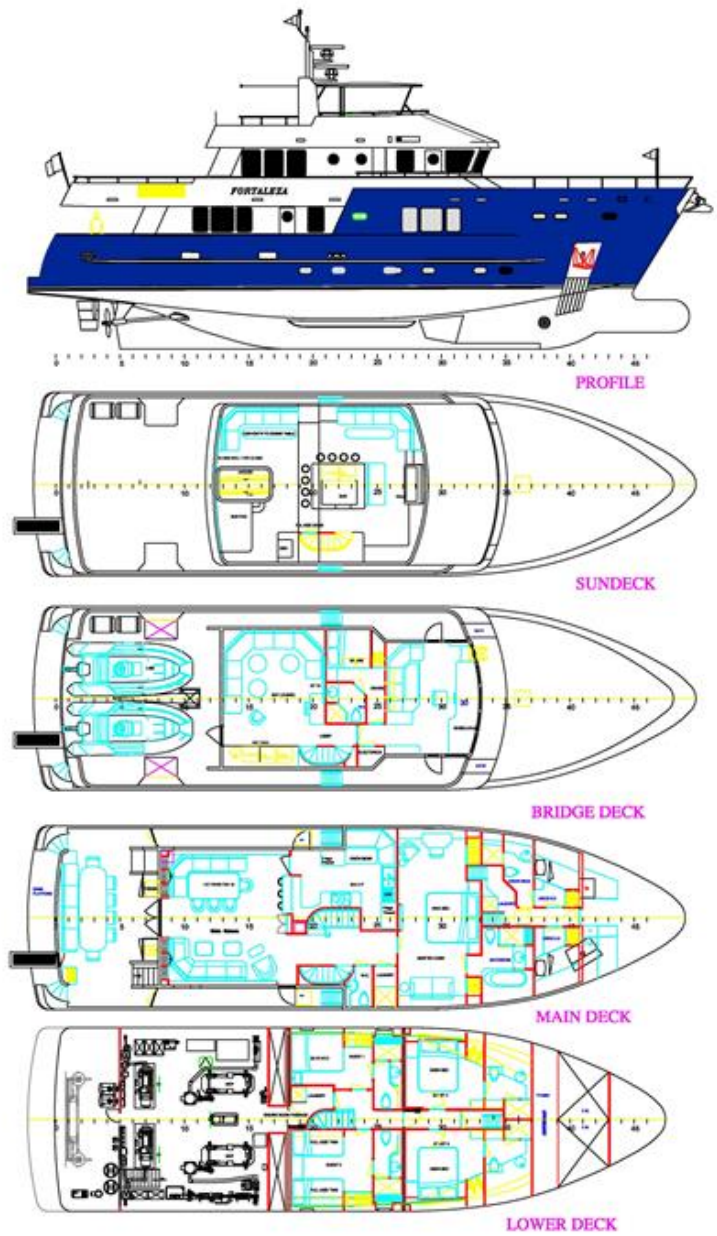












DESCRIPTION

The Fortaleza series of Explorer Yachts is based on a proven 85' Explorer with many thousands of miles under her bottom.

The design has been fully updated and offers two layout choices with 4 or 5 staterooms. An on deck master king stateroom is standard on both layouts.

This is a large volume Explorer Yacht with the features of vessels much larger than her. There is a huge modern fly bridge with full stand-behind bar that seats eight guests, dining for ten plus lounge seating, sun pads and a Jacuzzi. There is also a full centerline helm station. She can carry two 15.5' tenders or a 19' tender plus toys on her boat deck. There is a voluminous sky lounge that easily seats 10 and has a wet bar and office space. The engine room is professional in nature and layout with high quality equipment arranged for ease of upkeep.

The four guest room layout has 3 guest cabins below, two queen staterooms and a lower twin bed stateroom with an option for a Pullmans bed.

There is also a large crew lounge with full laundry area, extra freezer, extra refrigeration and extensive storage

The 5 stateroom layout has 3 queen staterooms below, a crew settee in the galley and washer and dryers in several locations around the vessel.

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ACCOMMODATIONS

The Fortaleza series of Explorer Yachts has a very large internal volume which allows for several layouts all of which have a king master on the main deck. The main difference is in the accommodations and galley arrangements. In one of the layouts, the four cabin arrangement, the port side queen guest stateroom is reconfigured into a crew lounge with laundry

and additional freezer and storage.

Layout # 1 with 5 guest staterooms for up to 11 guests with optional Pullman berth:

The master stateroom is on the main deck forward and full beam. There is a king size bed, extensive wardrobe space and drawers space. The cabin is made very light and airy by the large windows to port and starboard. To port is a comfortable desk/makeup area and to starboard is a large settee. The master head features both a large shower and a hot tub. The master is about a 1/3 of the length of the boat back from the bow.

The standard lower deck layout has 4 guest staterooms with en-suite head. There are 3 queen cabins plus a double lower single cabin. The single cabin can be configured with a Pullman berth to allow for a total of 11 guests. There is a crew service access from the crew's quarters to the guest area and a hidden third engine room access door for rough weather entrance to the engine room.

The crew quarters' layout is done to give maximum separation between guest and crew. Per above they can access lower cabins directly from the crew area; they can go from the bridge to the galley via an external stair and from the decks to the crew area without going into guest zones.

The crew quarters are located forward of the bridge and accessed from the bridge. The layout gives you a great deal of flexibility in number and arrangement of crew from a total of 6 for charter or high guest use to 3 for an owner who would be involved with the operation of the vessel. The standard layout has two crews' cabins for 2 to 4 crew with a large head and shower. One cabin has direct access to the head the other has access from the hallway. All bunks are full size single beds. If operating with 3 crew or 4 crew with a captain and wife team, each could have their own cabin. Alternately you can have a two female crew in the port cabin with direct head access, one male crew in the starboard cabin and a single captain. You could carry as many as 6 crew with a captain team and all crew bunks filled.

The crew's quarters have direct access to the lower deck guest cabins via a hidden door. This allows the crew to service all the lower guest without intruding in the upper deck areas. In highly inclement weather they can use an access door behind the stairs to reach the engine room. There is also a second washer and dryer located behind the stairs. The captain's cabin is located behind the wheelhouse and has a queen bed and an ensuite head.

The crew lounge is located in the galley.

The galley can be open or closed to the saloon dining area. There is a breakfast bar/pass through with coffee station. The galley has a comfortable settee for crew and is fully equipped with high grade gear. The crew can access the galley via the port side door in normal operating conditions.

Layout # 2 with 4 guest staterooms for 9 guests with optional Pullmans berth:

The master stateroom is on the main deck forward and full beam. There is a king size bed, extensive wardrobe space and drawers space. The cabin is made very light and airy by the large windows to port and starboard. To port is a comfortable desk/makeup area and to starboard is a large settee. The master head features both a large shower and a hot tub. The master is about a 1/3 of the length of the boat back from the bow.

The lower deck is laid out the same as the 5 cabin arrangement except for the forward port queen has been changed into a crew lounge with laundry center and additional freezer and refrigerators. This allows the galley to be expanded and additional refrigeration to be added plus storage.

The rest of the arrangement is the same in both layouts.

Aft deck main saloon and master stateroom:

You can reach the aft deck via either the stern swim platform or the port and starboard aft side gates. There are two additional side gates on the side decks port and starboard in line with the side house doors and stairs leading to the pilothouse deck on port and starboard. The aft deck is large and has a dining table that seats 10 a drinks refrigerator to port and a sink with storage under to starboard. There is a full size door with comfortable stair to the engine room in the port side outboard. The class approved emergency shut offs are located by the engine room door.

HULL CHARACTERISTICS

Length Overall 85'/ 25.30 Mt

Length on the Waterline 72' / 22 MT

Beam molded 23.7' / 7.15 Mt

Draft (Fully loaded) 7'2" / 2.20 Mt

Draft (50% load) 6000 gal Fuel, 1080 gal F.W. 6.2' / 1.90 Mt

Displacement (100% Fuel & 100% Water) 186 Tons

Displacement Light Ship 147 Tons

Design Speed at Cruise ½ load 9.5 knots

100% engine load continuous rating 10.6 knots

Fuel Oil Tankage 8500 Gls

Portable Water Tankage 5000 Gls.

Lube Oil Tankage 120 gal

Contaminated Oil Tankage 120 gal

Black Water Tank 400 gal

Grey Water Tank 400 gal

HULL AND HOUSE STRUCTURE

The hull shall be of "Marine Grade steel" and the superstructure shall be constructed of "Marine Grade" aluminum alloy. The superstructure joint will be Tri-clad or similar. Weld seams are to be faired. All practical means will be taken to reduce distortion in any of the plates. This will be done by using proper fitting, weld sequencing, temporary strong backs, permanent panels, stiffeners, etc.

HULL SUBDIVISION

The vessel's hull shall be subdivided by transverse and longitudinal watertight and/or oil tight bulkheads as shown on the contract drawings and consist of the following compartments:

1. Forepeak
2. Fresh Water Tanks
3. Bow thruster Compartment
4. Guest Stateroom Compartment
5. Master Stateroom Compartment
6. Fuel Oil Tanks Steering Gear Compartment
7. Engine Room
8. Steering Gear Compartment

STRUCTURE EXAMPLE

KEEL

3/4" x 10" full length

STEM

3/4" x 10"

FLOORS

1/4" plate

SKEG

Sides 5/16", cross section 5/16", bottom 1/2", Depth 6"

BOTTOM PLATING

5/16" plate, up to the chines

SIDE, TRANSOM PLATING

1/4"

MAIN DECK PLATING

1/4" plate

BULKHEAD PLATING

1/4" plate

TANK TOP PLATING

1/4"

TRANSVERSE FRAMES

Deck: 3"x 3" x 5/16", Side: 3" x 3" x 5/16"

TRANSVERSE FRAMES

Floors: 1/4"

ENGINE FOUNDATION

8" x 3/4"

BULWARK CAP PLATE

MAJOR MACHINERY & EQUIPMENT

Main Engines

Caterpillar C18 A rated 1800 rpm, 469 hp with deep oil sump. Water-gas separator exhaust system

Engine control:

Caterpillar controls located in pilothouse, fly bridge and port and stb wing stations

Reduction Gears:

Two x Twin Disk or ZF reduction gears, 350:1 ratio, with hydraulic power takeoffs on each one

Generators:

2 x Kohler 28 KW, Model 28 EOZD, 3 Phase 120/240 1800 RPM with sound shield and Decision Maker 3500 for auto paralleling. Water-gas separator exhaust system

Shafts:

3.5" Aqualoy 22

Propellers:

2x 5 Blade 1m diameter Work horse or equal

Rudder:

Flat blade, semi-balanced with 3.5" Aqualoy 22 shaft

Fire Extinguishing system:

Kidde-Fenwal or similar CO2 in engine room with audible and visual alarm in Engine room and Wheelhouse. There will be CO2 release and manual shut down of main engines, generators, ventilation fans, air flaps and fuel located on deck outside of the engine room

Steering system: :

Hydraulic with twin steering pumps and manual backup pump in wheelhouse

Bow thruster:

American Bow thruster or equal 12" 40 Hp driven through PTO on each reduction gear

Windlass and anchors:

2x Maxwell 4500 or equal with 400' of 4/5 high tensile galvanized chain, remote switches on deck and remote plug in control

Air conditioning:

Aqua Air Alpha Series, Tempsize-2000 fan controls, 2x 12 ton capacity compressors with 2x self-priming sea water pumps and 2x circulating pumps, condensate drains from fan coils units shall drain to gray water tank, compressor and fan coil units shall have secondary drip pans under them.

Stabilizers :

CMC Marine zero speed electric

Engine room fans:

2 x adjustable and reversible

Sea water system:

2x Sea chests interlinked with each chest capable of feeding the entire system with 30% blockage. The tops of the sea chest shall extend above the water line for and each chest will be able to be fully isolated and have a compressed air blow down system and removable bottom grate for easy of cleaning. All piping will be flanged or crimped, there shall be no treaded pipe used in the system. The main cross over feed pipe and all other feed and discharge pipes to be CuNi.

Bilge/Fire:

There shall be a 220 AC bilge system and a 24vt light de-watering system. The main AC system shall two interlinked pumps, one of which will be the fire pump and be plumbed to each watertight compartment; the piping shall be CuNi with CPVC 80 pickups with bronze foot pickups. The 24 vt system shall have run timers and alarms and high water alarm. Both systems pickups shall be located at the lowest practical points in the bilge areas.

The fire system will be interlinked to the bilge system with hose locations on deck and in engine and in accordance with ABS requirements. A 3rd optional pump out outside the engine room can be incorporated into the system to meet MCA requirements

Black and Gray water:

A Head Hunter system shall be used for the Black water system, all piping for the system shall be PVC schedule 80 pipe except for required connections. There shall be a Head Hunter Title IMO MEPC227(64) waste treatment plant incorporated into the system. There shall be a 400 gal black water tank with shore pump out

Fuel System:

3 tanks, 2x 3900 gal main tanks and a day tank of 700 gal, The system includes a Alfa Laval fuel cleaner that can clean fuel from all tanks, dual Racor filters for each main engine and single for each generator, Burks 120vt fuel transfer pump and a manual pump. All tanks to have inspection hatches

Lube oil system:

There shall be a 100 gal clean oil tank and a 100 gal dirty oil tank, The main engines and generators shall be connected to an oil transfer system for draining and filling, The clean oil tank shall be able to be filled from deck and the dirty oil tank shall be able to be drained from deck.

Potable water system:

There shall be two AC pressure sets, with a 36 gallon pressure tank, 2 x 220 VAC 50 gal tanks with fast recover heater elements. Hot water piping shall be insulated throughout the boat, cold water will be insulated in the engine room

Compressed air system:

The system shall service air horns, sea chest blow downs, engine room and boat deck via a 1/3 hp compressor with a 2.5 gal reserve tank.

Air horn:

There shall be a Buel three trumpet air horn with auto signal system.

Shore power:

Shall have one 220 VAC 50 amp shore cord and 100 VAC amp shore cord and

shall feed into a power converter system that shall feed the main electrical panel with seamless transfer capabilities

Lighting:

All internal and external lighting shall be LED type lights, there shall be 3 underwater lights located at the stern

Davit:

There shall be a 1 ton davit on the boat deck powered by the hydraulic system

Windshield wipers:

3x Exalto / Vetus 295M pantograph with integral washers, or equal.

Paint systems:

International Paints

INTERIOR AND EXTERIOR STYLE AND FINISH

The interior style and finish shall be the same as seen on the 95' Inace Explorer Yacht "Fortaleza" the interior wood type shall be selected from the shipyard selection of standard wood choices.

The exterior style of finish shall be the same as seen on the 95' Inace Explorer Yacht "Fortaleza", shall have a white hull and superstructure finish. Teak decks will be on the fly bridge, swim platform, aft deck seating area and main deck side decks and on all steps.

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ALLOWANCES

White goods Allowance:

\$80,000 Per examples below:

Suggested appliances to be used are from GE White on White Collection (or equal)

One (1) Dishwasher (GSD2230L)

One (1) Trash Compactor (GSA90)

One (1) Single self-cleaning oven (JKP37GL)

One (1) 30" Cooktop (JP333L)

One (1) Garbage Disposal (GFC1000)

One (1) Microwave Oven (JVM132J)

One (1) GE Built-in Ref /Freezer

One (1) GE Spacemaker Washer/Dryer (DDP1375G), located in stateroom passage

Electronics and AV:

US\$120,000 plus US \$6000 yard installation allowance

ENGINE ROOM LAYOUT

The engine room has 3 ways of entering and leaving; two main entrances and the emergency exit.

The primary entrance is off the aft deck on the port side. This door is well protected from the elements, oversized to allow for major equipment to be removed, and comfortable angled stairs. This entrance can be used under a wide variety of conditions in safety and comfort. The secondary entrance is forward on centerline and leads to a service area under the lower stairs via a watertight door and a secondary door. Depending on the layout there will either be a washer and dryer in this area or storage. This door is meant to be used in very inclement weather conditions and during extended passage making. The emergency escape is located in the overhead on the port side.

The engine room is very spacious and well laid out as is necessary on a true

Explorer Yacht with an average of 7' (2.1m) of head room. As much as possible all equipment and pumps have been kept above the floor boards to allow them to be easily seen as this is the first requirement for maintaining equipment, and positioned to be easily serviced. All major equipment is has a backup in place. The twin Cat C18 A rated engines can be serviced from all sides as can the twin generators as they have been set away from the bulkhead by 20"(.5m) from the sound shields. The main engines and generators are plumbed to a clean and dirty oil transfer system with individual lines for dirty and clean oil. The supply and storage tanks can be filled and pumped out from the deck. The main engine starting battery bank is 24v DC with each engine having a dedicated bank, either engine can be started from either bank. The generators' starting is 12v DC with each generator having a dedicated bank, either generator can be started from either bank. The main engines and generators battery banks can be charged by an alternator on the engines or from a 12v and 24v AC charger.

Both the main engines and generators are isolated for sound and vibration. The exhausts are supported from the floor structure not the overheads. All pumps and major equipment are also sound and vibration and large motors have soft starts.

There are two sea chests that are interlinked; each one can feed all systems on the vessel with 30% blockage. There is a cross pipe that feeds from both chests, all raw feeds are off the cross pipe. Each sea chest can be isolated and cleaned while underway and have removable primary screens, removable bottom grates and compressed air blow downs. The tops are above the waterline and they are vented above the engine room. There are secondary filters at each raw water user, where possible the tops of these are above the waterline. They are positioned to be easily seen and serviced. All pump switches are located in remote waterproof boxes.

The main electrical panel is in a waterproof cabinet with hinged door and hold open. There is a non-conductive handle on the front and a non-conductive mat in front of it. AC and DC voltage is in separate cabinets and wire runs. Electronics cables are also in separate wire runs. There is an inverter system integrated into the AC system that can run refrigerators, freezers, lighting and other small systems for approximately 12 hours.

There is a fuel transfer and polishing system that can circulate fuel to and from all tanks. There is a main high speed 120v transfer pump and can be run off the inverter, an Alfa Laval polishing system and a manual pump. The day tank can be fed from any of them but is meant to only be feed from the Alfa

Laval under normal operations. The main engines and generators have secondary Racor filters, the main engines has dual filter and the generator has a single filter. There is a drip tray under each one and they are positioned to be easily changed and cleaned.

The bilge and fire main are interlinked to back each other up. The black and gray water pumps are interlinked to back each other up. There are twin AC fresh water pumps. The air-conditioning system has twin raw water feed pumps and twin circulating pumps that can be valued over. The engine room intake and exhaust fans are variable speed and reversing.

The steering system has twin AC pumps and a manual hand operated pump in the wheelhouse. There are twin steering rams that can be isolated if required.

The hydraulic system is fed off pumps on each of the main engine transmissions. They can individually or jointly feed the system. The system feeds the bow thruster, crane and windlasses. They are sized to provide maximum power to the thruster at idle speed.

Between the main engines is a work bench with a sink, cabinets above and tool box below.