

GEMINI 105M



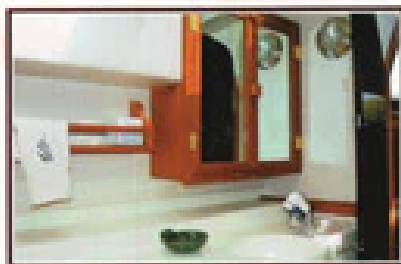


bridgedeck

The solid foredeck of the Gemini 105M is a major benefit as well as a huge safety factor in rough weather. When sailing on a broad reach into large waves in a boat with a solid foredeck the reserve buoyancy that it provides will keep the boat from burying the bows as it falls off the crest of a wave. However, without this reserve buoyancy each hull would dig into the water and could cause the boat to pitch pole.

Besides the safety factor, the solid foredeck provides a comfortable, roomy space for sunbathing or just relaxing in the sun as well as a safe solid place for sail handling.

The bridgedeck of the Gemini 105M was designed to give maximum interior space with a lower center of gravity and to reduce structural pounding where it is most likely to happen. The maximum bridgedeck height is 39" at the front and 20" at the rear. The hull shape of the 105M has maximum buoyancy at the bows to keep you on top of the water instead of pounding down into it, and the fine entry at the bow also prevents a center wave between the hulls for the boat to pound on.



navigation station

In the port hull is the navigation station. Hidden in the front of the unit is the seven-foot long centerboard case with the socket to lower the centerboard accessed from the front of the unit. Behind the centerboard case is deep storage, and directly across from the navigation unit. Storage under the dinette seats can be accessed through two sets of sliders. To the left of the navigation unit is the battery box. Two 24 series, deep cycle batteries come with the standard boat but there is room for two more.

diesel engine

The Gemini 105M comes standard with a 27-hp. Waterford diesel. This is a three cylinder freshwater cooled engine with a 55-amp alternator. The engine drives a Siletto sonic drive leg hung from the transom. This drive leg can be hydraulically pumped up out of the water to reduce drag. The leg is directly connected to the rudders so the thrust of the engine can be directed. This configuration gives better maneuverability than having an engine in each hull. Access to this engine is both through the cockpit locker and the locker on the transom of the boat. The locker in the cockpit also has removable panels on either side so that the entire engine is accessible.



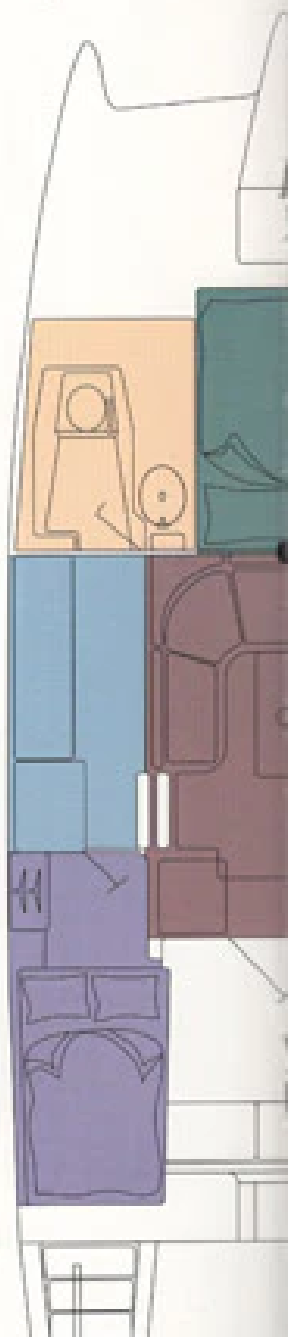
head

The head of the Gemini 105M comes equipped with a Raritan toilet, a sink and hand held shower and a teak medicine cabinet with a mirrored door. The toilet comes with two Y valves so the toilet can either be pumped overboard when legal or into the 18 gallon holding tank. The holding tank can either be pumped out from the deck or gravity drained.

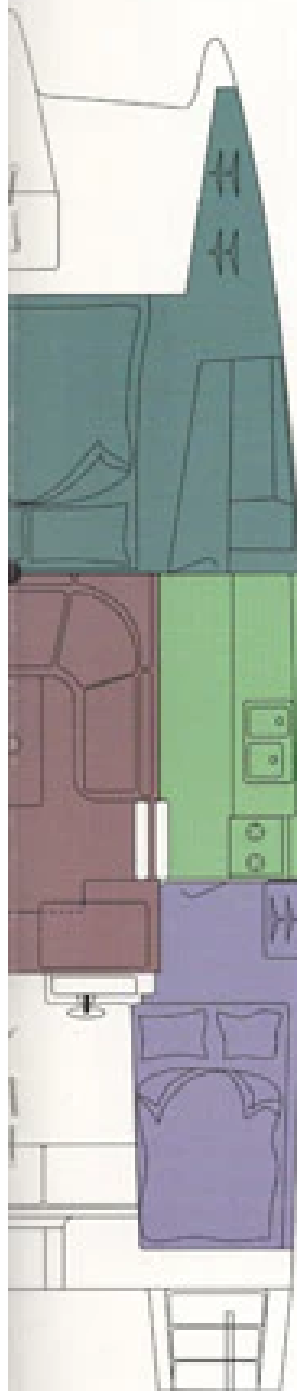
There is also an Earth Safe sanitation system included in the toilet to prevent odor problems. A four square foot overhead hatch provides ventilation to the head.

cockpit

The cockpit of the Gemini 105M has a comfortable layout for entertaining as well as sailing. A unique hard canopy covers the entire cockpit providing protection from the weather without all the hardware of a regular canvas canopy. Openings in the canopy allow for sail visibility and ventilation. Visibility from the cockpit is excellent because of the unique design of the cabin. The captain actually looks through the pilothouse window (14" chemical and scratch resistant Lexan) as well as through two side windows, giving good peripheral vision.



NI 105M



master cabin

The master cabin of the Gomeri 105M is spectacular featuring a full queen sized bed and panoramic windows giving you full view of the sunrise over the water each morning. This cabin has a set of hand crafted teak drawers, ample storage, a vanity with a mirror and a hanging locker. A 4 sq ft opening hatch over the bed and the opening sliders above the head board provide excellent ventilation for a comfortable nights sleep.

dinette

The dinette area of the Gomeri 105M is a U shape with comfortable seating for six. The table in the center has two hinged leaves, which can fold in to make getting in and out of the dinette easier. Two four square foot overhead hatches and three opening windows through into the cockpit provide an excellent thru draft for the entire dinette area. This area, being on the same level as the cockpit and open to the galley and navigation areas is a great configuration. It provides a light open airy feeling that does not isolate the crew whether cooking, navigating, steering or just relaxing with a book in the dinette.



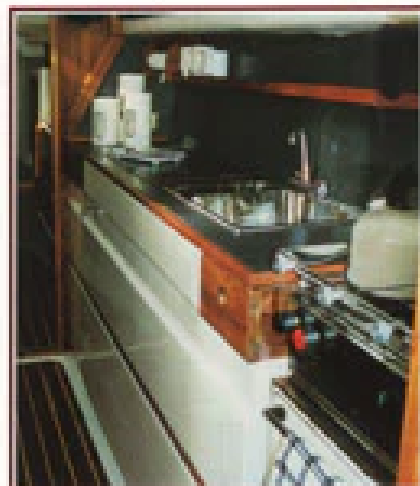
galley

The galley comes equipped with a double-sink and faucet that can be used with pressurized hot and cold water or, to save battery power, a fresh water foot pump is also located on the floor. Next to the sink is a propane stove with two burners, a broiler, and an oven. The galley has ample storage behind the centerboard case and through sliders which access storage under the dinette. There is also additional shelf storage above the countertop.



aft cabins

The aft cabins feature a double bed, hanging locker and teak drawer. Good ventilation is provided through two opening ports. Underneath the beds in both the port and starboard aft cabins are two 30-gallon water tanks. In the port aft cabin there is also the six-gallon hot water heater under the bed. This water heater can be run from the engine or 110V. Behind the water tanks under the aft cabin beds are the rear buoyancy tanks.





LOA	33'6"	Draft (up)	1'6"	I	11"
WL	31'9"	Draft (down)	5'9"	P	35'0"
Beam	14'	SA	510 sq. ft.	Berths	8
Displacement	7,300 lb.	I	48%	Headroom	6'4"

rudders

The rudders of the Gemini 105M are revolutionary in design and function. The rudders, just like the centerboards, will lock up if they hit ground. A major feature of this design is that when in the up position these rudders will still steer the boat without any extra load on the steering system. These rudders actually have two separate parts, the bearing and the rudder shaft and blade. The bearing swings in and out of the boat while the blade moves side to side to steer the boat. They are constructed of foam cored fiberglass with a one and a half inch steel shaft. The bearings are a split mold assembled around the rudder shaft and filled. The rudders are brought up and down with two ropes on the transom of the boat and the entire mechanism can be accessed through a hatch in the transom steps. The rudders are actually off center. This is for several reasons. One, to be more in line with the centerboards. Two, to give more clearance for the steering system and three, so they do not interfere with the swim ladder in the up position.

hull

The hull is molded using a barrier coat with vinyl ester resin for blister protection then several layers of cloth and mat make up the main lay up. There is one half inch end grain balsa core covering the bridgedeck for extra strength.

mast

The mast has a mast head rig which is deck stepped on the main bulkhead. Under the mast the bulkhead is increased in thickness to two inches and there is additional steel reinforcing in line with the chain plates. The mast is 38' from the deck, 45' from the water and is a double spreader rig. The shrouds come down to the main bulkhead and all halyards are internal. A unique feature of Gemini is the permanently fixed cheek stays and baby stays, which stop the mast from pumping when going to windward in rough seas.

boom

The 14' boom of the Gemini 105M just kisses the pilot house, if there were a few feet in between the pilothouse and the boom, as there are with most other catamarans, Gemini would not be able to go to windward as well as she does. What actually happens here is that all the wind that comes up over the cabin and up over the pilot house then has no where else to go but straight into the main sail. So Gemini actually gets drive out of all the wind that in most other catamarans escapes under the boom. This, in combination with her centerboards makes Gemini the best sailing boat in her class as many owners will tell you.

sails

The reason we use a masthead rig is so that you have backstays, which take the tension of the headstay. This gives support needed for large headsails in light air cruising and increased mast support for offshore sailing. The standard mainsail is 260 square feet with two rows of reef points and four short battens. Reefing is simple slab reefing. The standard headsail is a 150% roller furling genoa, which comes with a foam furl and UV protection. This sail is a great cruising option but for optimum performance a selection of hank on headsails is preferred.

All sails have extra reinforcement at the tack, clew, head and reef points. Tell-tails and leech lines are standard.

centerboards

What has always set the Gemini line of catamarans apart is her centerboards. Over 600 Gemini's have been produced with this system and it has proven to be incredibly reliable and effective.

The mechanism to raise the centerboards is extremely simple and virtually flawless. A rope goes around a drum, which is attached to a padeye at the front of the board and also to one at the back. The entire board can be raised and lowered with about two turns of a winch handle. This handle is inserted into a socket in the galley or navigation unit. The board is then locked down using a wing nut and if the boards hit the ground the mechanism unlocks and the board floats up.

The centerboard cases as well as the rudder cases in the Gemini 105M are continuously molded into the hull during the building process, needing no secondary bonding and allowing exceptional dimensional accuracy. These cases are 7' long and run along the front of the galley and navigation unit. The cases are 18" off center to allow for more walking space in the galley and raw and to eliminate the chance of stones or debris from getting trapped in the slot when the boat is run aground or beached. When the centerboard is up the hull bottom is clean and the boat only draws 18". When down the board looks like a triangle with the leading edge about 45 degrees to the hull bottom. Only 4" of the board comes out of the slot even though the board is 7' long, making the draft 56" when the boards are down. The majority of the board actually remains in the case so that the slot is still full. This eliminates turbulence in the slot. The other reason for this system is so that the centerboard bears on the full 7' side of the slot.

deck

The deck of the Gemini 105M is spacious and well thought out. It provides excellent room for walking and has plenty of handrails in all the necessary areas. The Deck is hand laid up with all the horizontal surfaces reinforced with one half inch end grain balsa. At points of high stress such as stanchions and cleats, balsa is replaced with extra heavy fiberglass reinforcement.