

Specifications:		
LOA:	19' 6 "	5.95 m
Max. Beam:	7'	2,15 m
Hull weight:	875 lbs.	398 kg
Max. HP	250	10 or outboards
Fuel capacity:	80 gallons	320 liters
Material:	Epoxy-glass- plywood composite	

The Mangusta is a deep vee hull performance powerboat for outboard(s) or stern-drive. The clean design of this 18 degree hull delivers powerful performance and quick acceleration. The hull material is a major performance factor: a composite fiberglass- plywood-epoxy hull is stronger and lighter than an equivalent fiberglass production boat. The Mangusta hull weight is only 875 lbs.



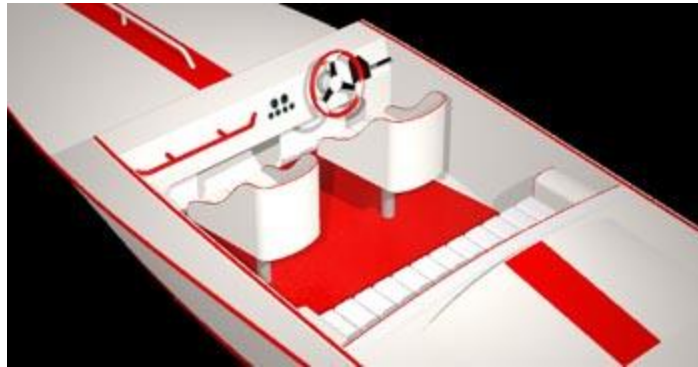
Building method:

The Mangusta is built in stitch and glue fashion but the hull is a true composite sandwich. The plywood bottom is sandwiched between layers of directional glass and it is the fiberglass that supplies most of the strength, not the plywood.

As in our other boats, the frames, bulkheads, sole, deck etc. are part of the structure.



The hull is assembled upside down on a jig to guarantee a perfectly straight planing surface. See the [our building tutorial for a step by step overview](#) of the process.

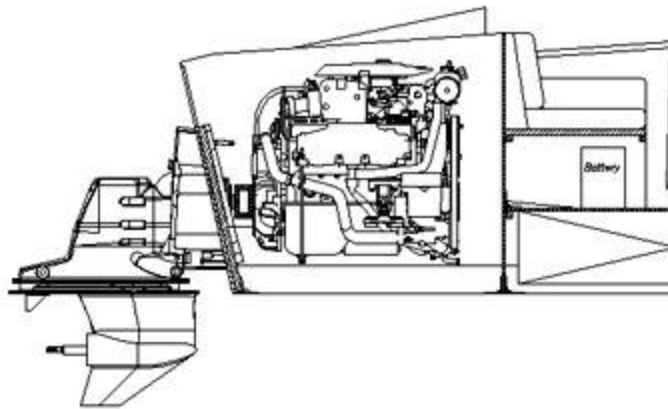


Winning offshore racing boats are built in this material for more than 10 years. See Wooden Boat magazine issue #73.

Required Skills:

As all our stitch and glue boats, the MG20 is easier to build than plywood on frame and easier than most other stitch and glue boats.

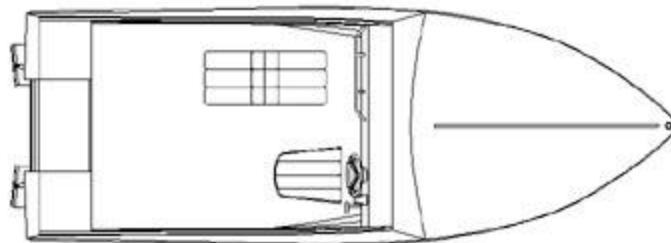
All the plywood parts have been precisely calculated: you cut them flat on the floor, no need for templates, no need to take measurements from the jig as in the plywood on frame method.



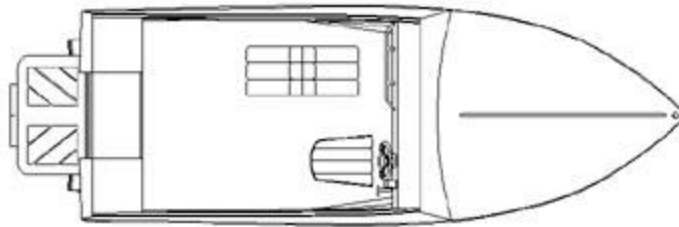
The plans are very detailed and include engine room space with engine beds for the inboard version, dimensions and drawings for the motorwell versions single and twin, transom outline for the bracket version, cockpit and deck dimensions for all the versions.

Options:

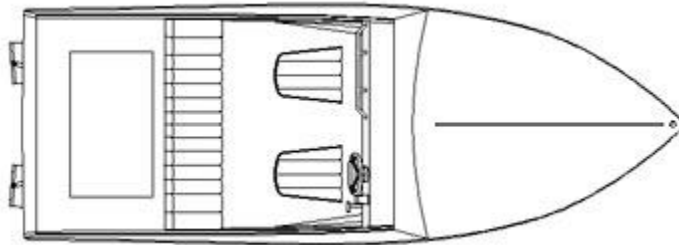
There are three powering options: single or twin outboards in a well



or on a bracket



and single stern-drive inboard.



The type of power defines the size of the cockpit. Seating can combine bucket seats, benches and back to back (fold down) seats.

Other options are fuel tanks: saddle tanks can be added to increase the fuel capacity to 120 gallons.

Different sizes of inboards can be used, max. engine weight is 700 lbs. Engine beds spacing, motorwell dimensions, fuel tank installation etc. are shown and follow ABYC (USCG) industry standards.

This boats transom is designed for a standard 25" shaft. The transom can easily be modified to accept other shaft lengths.



There is access to the space under the foredeck but height is limited and it would not be reasonable to plan a cabin there. The forward part of the boat can be built as a bow rider (not shown on the plans).

Bill Of Materials:

A complete and detailed BOM is included with the plans.

Plywood 4x8' (122x244cm)		
1/4" (6mm)	12	
3/8" (10mm)	6	
1/2" (12mm)	6	
Fiberglass (totals)		
Biaxial tape	360 yards	324 m
Woven tape	50 yards	45 m
Biaxial fabric	85 yards	76.5 m
Resin		
Epoxy, total	24 gallons	96 liters

Labor:

The basic hull and deck structure can be build in 200 hours. Fairing, painting, rigging will require an additional 150 hours.

More:

Visit our message board, help pages, tutorial pages and read our FAQ: most questions are answered there.

Plans Packing List:

- 11 Detailed drawings, large scale with all dimensions required to cut the sides, bottom and the bulkheads from flat plywood sheets: no lofting, no templates required.
- Drawing List:
- B232_1 Plan and Profile
- B232_2 Nesting
- D232_3 Construction
- D232_4 Stations
- D232_5 Expanded Plates
- B232_6 Lamination Schedule
- D232_7 Inboard Version
- D232_8 Twin Version
- B232_9 Layouts
- E232_10 Full Size Bow Mold
- B221 Typical Small Boat Electrical Diagram
- Building notes including a detailed description of the assembly sequence and building tips.
- Bill Of Materials
- Help files reference list and more.