

A small traditional lobster boat that can be used as a fishing launch or picnic boat. Economical and versatile semidisplacement hull.

Specifications:		
LOA:	21' 9 "'	6,63 m
Max. Beam:	6' 11"	33 c m
Draft at DWL:	13"	24 cm
Hull weight:	950 lbs.	425 kg
Displacement at DWL:	2,000 lbs.	909 kg
PPI at DWL:	425 lbs.	193 kg
Recommended. HP	30 to 50	
Material:	Stitch & Glue	

The hull weight shown in the table includes the console, empty fuel tank and basic rigging but not the engine.

The Nina (LB22) design is based on a "double wedge" type hull. This what the H. Sucher writes about them in "The V-Bottom Boat":

"... The double wedge power launch, so called because its form presents a wedge shaped appearance both in profile and plan view ... modern power boat hulls based upon it are considered by many naval architects and knowledgeable boatmen to be among the best all-around performers" and further ".. the most useful and attractive feature of these launches is their ability to maintain good speed and handle well in rough or choppy water without pounding or undue spray throwing."



Lobster boats, picnic launches and many large sport fishing boats are variations on the double wedge hull shape. Those boats go fast with little power, not as fast as planing hulls (monohedron type) but they keep going at the same steady speed when the planing hulls are forced to slow down. Do a search on the Internet to read more praise about this type of hull. The Nina is a modern double wedge or small lobster boat. She is light and narrow for her length but will go at 18 mph top with a 30 HP, cruise at 15 mph. She can not take more than 50 HP and her speed will not be much greater with more power.

This boats transom is designed for a standard 20" shaft. The transom can easily be modified to accept other shaft lengths.



While our fiberglass/plywood composite material is 100% original, there isn't anything new in the hull lines. It is a proven type with very predictable behavior. For the looks and layout, we took ideas from several classic designs: the cuddy cabin is inspired by the Atkins design Ninigret, the open version windshield comes from Bolger's Halloween, the engine cover from the Handy Billy that was featured in Wooden Boats. We mixed it all with a touch of Culler's influence and it became the Nina.

Most of those boats have their outboard in a well. It helps to keep the CG where it belongs, looks good and reduce the engine noise. You will barely hear a 4 stroke engine.

Each version shows the same forward seats 7' 6" long and wide enough to used as berths. There is room for a portable head under the berths.

### **Comparisons:**

The LB22 is a semi-displacement boat and her top speed will never equal that of a true planing hull like the C19, OB19 or C21 but she will keep going fast in bad weather. A hull cross section at the consoles shows an almost round bottom. The Nina is a light (but strong) and narrow boat with less cockpit room than for example, the C21. The smaller cockpit is a good safety factor in real bad weather. The cockpit is self-bailing.

### **Building method:**

The boat is built in stitch and glue fashion but the hull, is a true composite sandwich. The plywood is used as a core 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, sole and other components participate in the structure.



The hull can be built the stitch and glue way, upright with panels folded around the frames or better upside down, using the frames as a jig. See the <u>our building tutorial for a step by step overview</u> of the process.

#### **Required Skills:**

As all our stitch and glue boats, the LB22 is easier to build than plywood on frame or 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 hull framing as in the plywood on frame method.



### **Options:**

The plans show two layouts that differ mostly by the shape of the coaming cabin side but three versions can be built:

- Open layout with the vee shaped windshield
- Cuddy cabin with a fabric roof on SS frames
- Long cockpit, cabin or open, without the covered motor well



Even the windshield version can be closed with canvas: we show a low bimini top that can be fitted with sides and a snap-on rear curtain.

The cuddy cabin version features a removable roof: canvas of stainless steel framing. A rear curtain can close the small cabin.

The fisherman looking for extra cockpit room can omit the closed motorwell and engine cover.

The boat can also be built with a center console.

Swim platforms can be bolted on the transom.

As all of our boats, the LB22 can be made unsinkable with foam, see our kits.

# **Bill Of Materials:**

(Excerpts from our BOM)

The BOM list materials based on our standard layout and includes a 15% waste factor for fiberglass. For plywood, we use standard sheets 4' x 8' (122 x 244 cm). Please read the building notes and see the plans for detailed specifications. Meranti 6566 is an inexpensive type of marine ply ideal for stitch and glue construction. It cost, on the average, less than \$20.00 a sheet in 1/4" (6 mm). Okoume or Meranti marine can also be used and cost starts at less than \$50.00 a sheet (1/4").

Our recommendation is to use at least marine ply for the outside parts. The inside can be made from quality exterior with no voids.

Plywood 4x8' (122x244cm)			
1/4" (6mm)	11		
3/8" (10mm)	12		
1/2" (12mm)	1		
Fiberglass (totals)			
Biaxial tape	225 yards	200 m	
Woven tape	20 yards	18 m	
Biaxial fabric	31 yards	35 m	
Resin			
Epoxy, total	15 gallons	60 liters	

# Labor:

The hull can be build in 50 hours but a finished boat will require 200 hours or more depending on the level of detail and the skills of the builder.

# More:

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

### Plans Packing List:

13 detailed drawings with all dimensions required to cut the all the panels from bottom to cabin parts and windshield from flat plywood sheets: no lofting, no templates required.

Nesting drawings for the best plywood layout, all parts nested.

- Drawing list:
- B234\_1: Plan and Profile
- B234\_2: Nesting on standard plywood sheets
- D234\_3: Construction with plan and profiles views and sections
- D234\_4: Stations with frames, bulkheads and transom outlines
- D234\_5: Frames and bulkhead details
- D234\_6: Expanded plates dimensions for all hull parts
- B234\_7: Lamination Schedule
- B234\_8: Details, gunwale, sole, hardware installation
- B234\_9: Assembly details
- B234\_10: Cabin version details and dimensions
- E234\_11: Full Size Pattern for Bow Mold
- B221 Small Boat Electrical
- B225 Seat Lockers
- Specific building notes for this boat with Bill Of Materials
- Help files reference list and more!

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