

Nova Scotia style outboard boat.

Specifications:		
LOA:	22' 10"	6,96 m
Max. Beam:	8' 2 "	2,49 m
Hull Draft at DWL:	8"	203 mm
Hull weight:	1500 lbs.	680 kg
Displacement:	2500 lbs.	1140 liters
PPI at DWL:	560 lbs.	255 kg
Recommended HP	50-100	35-75 Kw
Material:	Stitch & Glue	composite

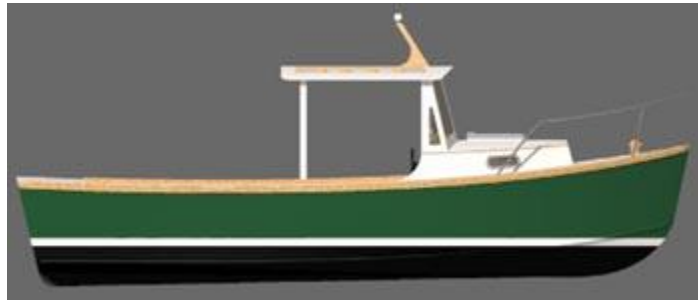


The Novi 23 combines traditional styling with an efficient, easy to build planing hull. She is not a true lobster boat of the double wedge type or a pure fast planing hull. The hull type is similar to what is now frequently called a picnic boat; a seaworthy planing boat but the topsides are more in the Nova Scotia work boat style. We kept the deep forefoot of the modern fast lobster boat hull but the underbody is a true monohedron. This means that the transition to planing speeds will be smooth without any excessive change of trim and without the wasteful suction of warped bottoms running at an S/L higher than 2.

(S/L ratio is speed in knots divided by square root of WL in feet. Displacement boats are the ones with an S/L<1.3, planing boats have S/L>2)

The Novi 23 will perform well at displacement speeds in bad weather and run efficiently at moderate planing speeds with relatively small engines.

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



The Novi 23 has an enormous capacity: she can be loaded with up to 2,000 lbs of passengers, engine and gear.

Performance:

The calculated top speeds with moderate load (displacement 2,600 lbs) are as follows:

50 HP: 25 mph

70 HP: 29.5 mph

100 HP: 35 mph

For a normal cruising displacement of 3500 lbs, reduce those speeds by 8 mph.



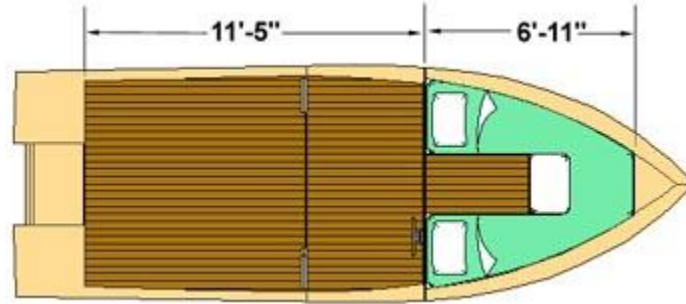
Compared to traditional lobster boat types, the Novi 23 hard-chine vee bottom hull will not only be faster than the typical round bilge type but also deflects spray more efficiently. The reduced deadrise aft increases stability at slow speed or rest. Compared to our HM19, the vee hull will pound less and give much better tracking when running off a steep sea. The soft riding vee hull requires more labor and materials to build but this hull shape is required for more exposed waters. She also differs from our faster planing hulls through her deeper forefoot and generous skeg for stability and tracking.



Layout:

The safe cockpit is deep and wide: 11'+ long (3,35 m), 8' wide (2,40 m) and 28" deep (71 cm). The full height motor well bulkhead provides excellent protection from following seas. The cockpit is self-bailing. The pilothouse

offers standing headroom: 6' 2" in the middle (182 cm), the forward cabin with two bunks has sitting headroom. There is room for a portable head under the vee berth. A sturdy samson post is welded to the forward bulkhead.



Building method:

The Novi 23 is a composite epoxy-fiberglass-plywood boat. The hull is built around a simple plywood core sandwiched between layers of directional fiberglass in epoxy. This method produces a high quality fiberglass boat using methods within the reach of any amateur builder. The hull is assembled on a simple jig made from the bulkheads, frames and some temporary molds. [See a complete step by step description of the method here.](#) The plans show all necessary dimensions: all bulkheads, frames, molds and transom dimensions plus accurate expanded plates dimensions for all hull panels. No lofting, no need to measure from the jig as in plywood on frame construction. We did all the calculations for you. The egg-crate structure is stronger than traditional framing and the space under the sole, between the stringers, can be filled with flotation foam to make the boat unsinkable.

The cabin and pilothouse can be built from a sandwich composite if the builders chooses that option.

There are several advantages to a foam sandwich superstructure. Lighter topsides means better performance, improved stability and easier towing on the road.

The plans show specifications for the two methods: cabin made of regular plywood and epoxy and our sandwich panels. We can supply all the materials for either method.

Required Skills:

The NV23 is easy to build: a plywood shell assembled the stitch and glue way but fiberglassed on each side. No woodworking skills or special tools are required. The plans include all dimensions and patterns to cut all the hull parts flat on the shop floor. No lofting, no beveling, no scarfing: the sides and bottom are cut from standard 4x8 plywood (122x244cm), joined with a simple fiberglass seam. All seams are taped with fiberglass and epoxy, see our "How To" section for details. These epoxy seams are much stronger than the plywood. The NV23 is a large boat. She is not difficult to build but we recommend to build a small boat first if only to become familiar with the material and technique

Options:

There are so many possible options that we can not list them all.

- The outboard can be mounted as shown in a motor well or on a transom bracket.
- We show an open cockpit but the builder can easily add all kind of benches, seats and other boxes.
- There is room for a small emergency outboard (kicker) on the transom.
- The plans show wide scuppers in the side but through transom scupper are an option.
- The companionway can be left open or closed with doors.
- The pilothouse can be fully closed with fixed side windows or roll up plastic windows can be used.
- The windshield can be hinged and lift.
- Hatches and portholes are optional.
- Access to the chain locker is shown from inside through a cut in the forward bulkhead but the builder can also cut a deck hatch if he prefers.
- Fuel capacity is ample with 42 gallons in one tank but there is room for a second fuel tank.
- The NV23 can be made unsinkable with expandable buoyancy foam under the sole and foam sheets glued under the gunwales for upright floatation.

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. Okoume or Meranti marine is preferred and cost starts at around \$50 per sheet (1/4").

If the boat is fitted with an engine larger than 50 HP, the builder must use marine plywood exclusively.

The plywood or foam for the pilothouse is not included in this BOM: add 3 to 4 sheets.

Plywood 4x8' (122x244cm)		
1/4" (6mm)	15	
3/8" (10mm)	10	
1/2" (12mm)	7	
Fiberglass (totals)		
Biaxial tape	472 yards	425 m
Woven tape	50 yards	45 m
Biaxial fabric	77 yards	70 m
Resin		
Epoxy, total	25 gallons	100 liters

Labor:

The hull can be build in 80 hours but a finished boat will require 250 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:

- 12 Detailed drawings with all dimensions required to cut the sides, bottom, bulkheads, deck, floors and all parts from flat plywood sheets: no lofting, no templates required.
- Nesting drawings for the best plywood layout with numbered parts.
- Construction drawings showing assembly and parts numbers for small hardware.
- Drawings list:
 - B239_1 Plan and Profile
 - D239_2 Nesting
 - E239_3 Construction
 - E239_4 Stations
 - E239_5 Frames
 - E239_6 Expanded Plates
 - D239_7 Expanded Plates
 - B239_8 Frames Details
 - B239_9 Lamination Schedule
 - B239_10 Details
 - E239_11 Full Size Pattern - Side Panel Tip
- B221 Typical Small Boat Electrical
- Specific building notes for this boat.
- Help files reference list and more.