

A classic Mc Innis bateau for epoxy-plywood composite.

Specifications:			
LOA:	12' 6"	3,80 m	
Max. Beam:	4'	1,20 m	
Hull weight:	60 to 80 lbs	30 to 37 kg	
Designed displacement/draft	413lbs/4"	185l/10cm	
Immersion:	138 lbs/1"	62 l/1cm	

^{*} hull weight vary in function of options and materials

The MI Bateau is the bateau.com version of the classic Mc Innis Bateau. This well known hull is described in several books and the original plans are available from the Mystic Seaport Museum.

The name "bateau" is French for boat and it is used all over North America for every different types of boats. This one is in the same category as the Adirondack guide boats, shaped like a wide canoe but not really a canoe. The bateau is much wider and uses oars, not paddles.

It is an excellent all around row boat, very able and seaworthy.

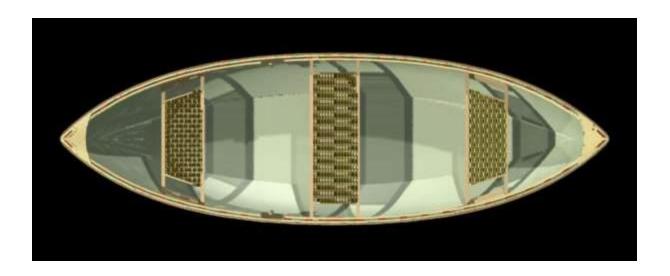
While researching the hull shape, we discovered a number of different versions adapted by famous designers like Herreshoff. Ours is close to the plans published in one of John Gardner's book "Building Classic Small Crafts".



We adapted the hull to our epoxy-plywood-glass composite material and went through a complete redesign in CAD with the focus on ease of construction. We designed a multichine version, see model # MI12 and a round chine version described on this page.



The two versions have the same flat bottom (with a small rocker in profile) built from a flat panel but the topsides of the round chine version are made in strip planking, wood or foam core.



Options:

This is a pure row boat, you can not adapt it to outboards or sail.



She can be kept simple or finished with some nice wood work: varnished breasthooks, multi colored rubrail, open girder inwale, caned seats.

The breasthooks shape and dimensions are suggestions. A breasthook is required and the dimensions we show are a minimum but that part can be made larger or even become a small deck.

Caned seats are available from online or mail order companies at a a low price. For example, Hamilton Marine sell caned seats for \$ 33.00, less than the cost of the materials (2010).



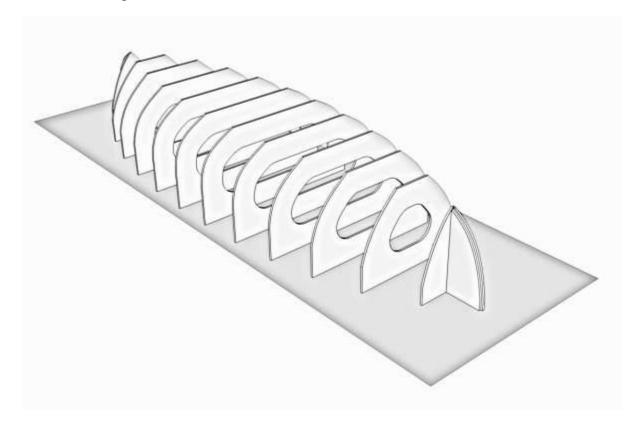
Building method:

Our Mc Innis bateau can be built in three different materials:

- foam sandwich
- cedar strips
- plywood strips

The bottom panel is one piece of foam or plywood, the sides are made from foam or wood strips and the whole hull is fiberglassed inside and outside. The MI12S is built upside down on a jig. The plans give the dimensions for all the molds. Full size patterns are included for those who prefer that method.

The picture shows the jig for foam sandwich. The jig for plywood or cedar strips requires less molds: the strips are stiffer and we can skip one mold out of two.



Download a condensed version of the building notes here. That PDF file shows the assembly...

Required Skills:

This boat could be build by a first time builder but some experience with epoxy and fiberglass will save labor and material.

Strip planking is labor intensive compared to plywood- epoxy but the technique is uncomplicated.

BOM:

Epoxy resin usage is based on a 45% glass content, first time boat builders will use more.

Foam Strip version

Divinycell 5/8"	4 sheets	
MDF 1/2" for the molds	3 sheets	
Biaxial Tape	21 yards	20 m
Biaxial Fabric 50" wide	25 yards	21 m
Epoxy, total	6 gallons	24 kg

Not included: fillers, wood strips for the rubrail (62') and paint.

Wood Strip version (cedar or plywood)			
Plywood 1/2"	1 sheet		
MDF 1/2" for the molds	2 sheets		
Strips 6mm (1/4")	about 500' (= 2 sheets ply cut in strips)	150 m	
Biaxial Tape	15 yards	13 m	
Biaxial Fabric 50" wide	12 yards	11 m	
Epoxy, total	4.5 gallons	18 kg	

Not included: fillers, wood strips for the rubrail (62') and paint.

Cost & Labor:

Cost and labor will depend very much on how simple you keep the boat. See our kits or supplies at BoatBuilderCentral.com.

We estimate that you will need around 100 man-hours to assemble the hull and jig and between 10 and 25 hours to finish the boat.

More:

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

Plans Package List:

Detailed drawings with all dimensions required to cut all parts from flat plywood sheets: no lofting, no templates required. The plans include a complete lines drawings for those who choose a different assembly method or want to customize the design.

Drawings list:

- B290_1 Plan and Profile
- B290_2 Molds and panels
- B290_3 Construction details
- A290 4 Molds A & B
- A290 5 Molds C & D
- A290_6 Molds E, F and bow
- E290_7 Full size patterns all molds
- Specific building notes for this boat
- Bill Of Materials and fiberglass lamination
- Help files reference list and more!