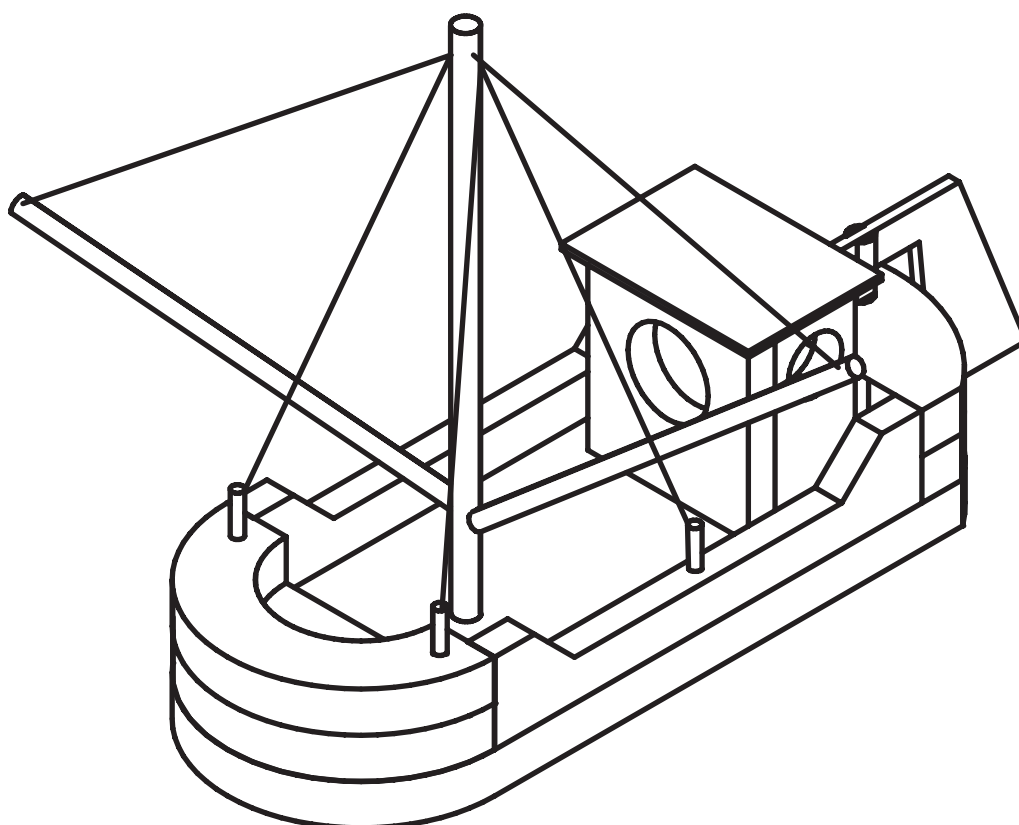


OPITEC

1 0 3 . 0 6 0 *Fishing Boat*



Contents

Part N°	Description	Quantity	Material	Size
1	Hull base	1	Pine	15 x 100 x 250 mm
2	Bow & Stern	1	Pine	15 x 100 x 250 mm
3	Sides/Cabin	2	Pine	10 x 30 x 300 mm
4	Cabin roof	1	Ply	2 x 50 x 70 mm
5	Rudder	1	Ply	4 x 80 x 80 mm
6	Mast/Rudder	1	Dowel	ø 8 x 250 mm
7	Mast sprit	2	Dowel	ø 6 x 150 mm
		2	Hooks	
		1	Thread	2 m
8	Posts	1	Dowel	ø 4 x 200 mm

Please Note

The OPITEC range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of Craft, Design and Technology. These projects should only be undertaken and tested with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

Warning!

This product contains a length of string.
There is a danger of strangulation!

Description

A simple impressive project to encourage pupils in achievable technology. The plans and drawings enable them to obtain good results.

The design can be altered as you wish and you can incorporate different ways of joining wood.

2. Planning and Making

Ships hull

Trace the pattern of the hull base on to the pine board 15 x 100 x 250mm. You can of course photocopy the plan and stick it as a pattern on to the wood.

Cut the rounded ends with a fret saw and shape with a file and glasspaper.

Tip: Use a course fret saw blade size 7-9.

When filing the rounded ends, follow the long grain of the wood.

If you file across the grain the wood will tend to split. Keep the sides at 90 degrees otherwise a gap will occur when the parts are glued together.

Bow / Stern

Use the patterns to saw out the parts for the bow and stern from the pine board 15 x 100 x 250mm. Clean up the parts and glue them to the hull as shown on the drawing.

Tip: To save time, your teacher could cut out some of the parts on a bandsaw. Glue the parts together so that any small splits are hidden and the clean side shows.

Sides / gunwales

The shape of these must be traced on to the pine board 10 x 30 x 300mm (the remainder is for the cabin). Check the length of the sides against the hull and adjust the lengths if necessary. Saw them out and clean them up with glasspaper. Finally glue them in between the bow and stern.

Cabin

Trace the parts of the cabin on to the remainder of the 10 x 30 x 300mm pine board and saw them out. Cut the window shapes with a fret saw and clean them up with glasspaper. Glue the front parts together and leave to dry. Then add the side walls. When this is completed glue the cabin in position on the deck.

Rudder

Trace the parts of the rudder and cut them out. Saw a piece 50mm long from the dowel 8mm dia x 250mm and saw a slit for the ruder as shown in the diagram. The hole for the rudder and mast is 8mm diameter. Drill the mast hole approx 10mm deep and for the rudder 30mm deep. Glue the rudder to the dowel (trim dowel as necessary).

Posts

The holes for the deck post are 4mm diameter and 10mm deep. The 4 posts are 30mm long and sawn from the 4mm dia x 200mm dowel. Mark out and drill a 2mm dia crossways hole in each post. If this is too difficult, you can file a notch around the post instead. The hole or the notch is for fixing the rigging. Glue the posts in position.

Tip: To avoid accidents when drilling the holes across the dowels, hold them in a machine vice.

Mast / boom

The mast needs a crossways hole drilled at the top and bottom, or a notch similar to the posts. These are to join the mast with the boom. Position and glue the mast in place.

Drill a crosshole, or make a notch near the end of each boom, then round off any sharp edges.

Varnish all the wooden parts.

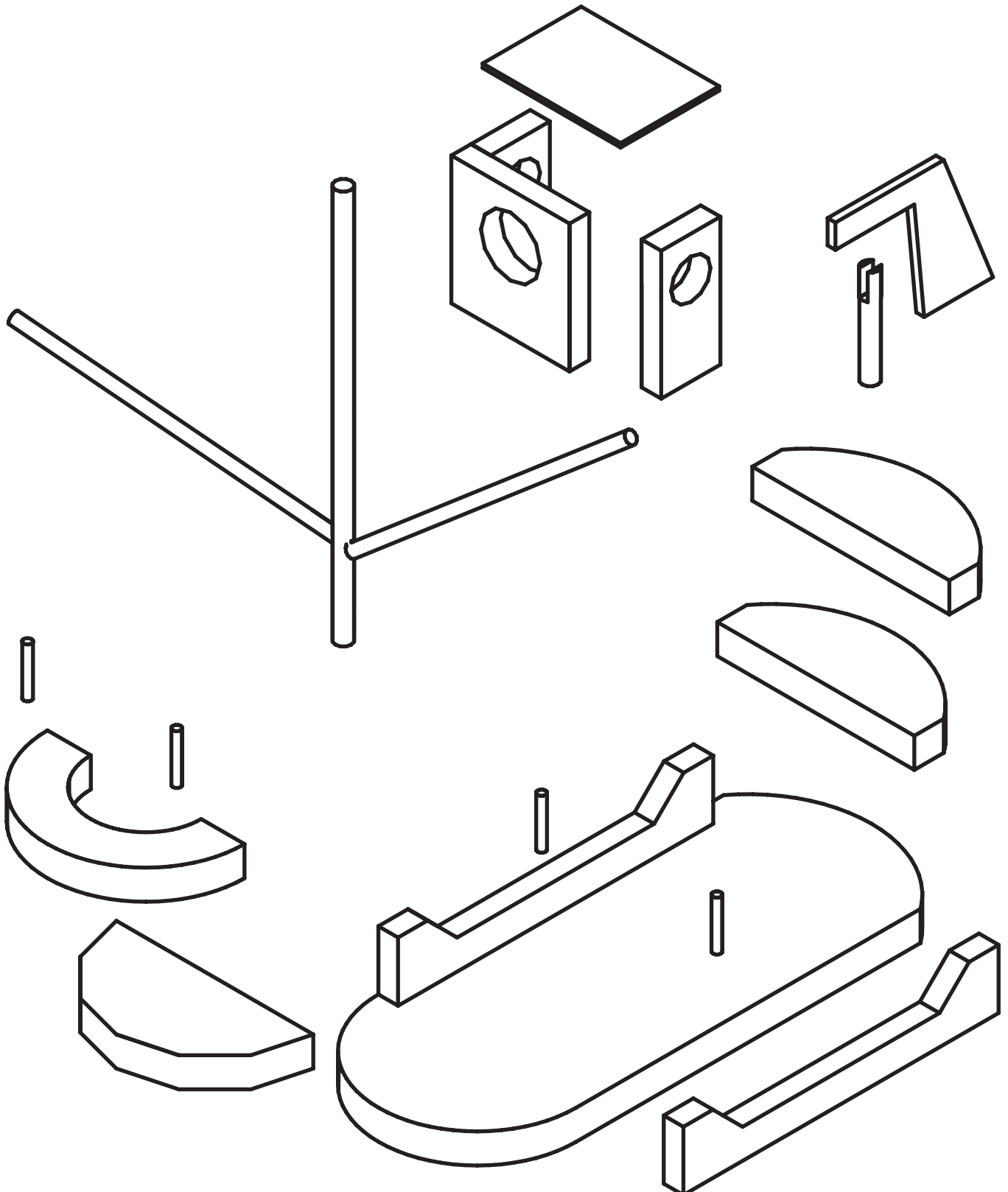
Rigging

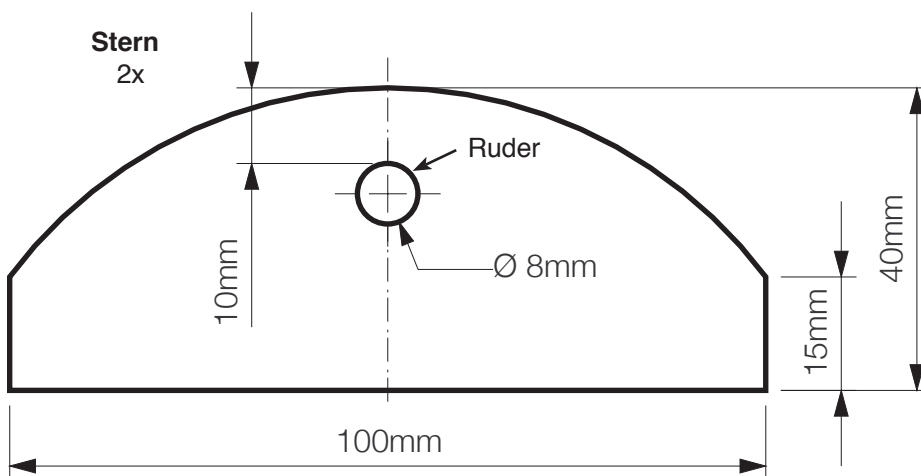
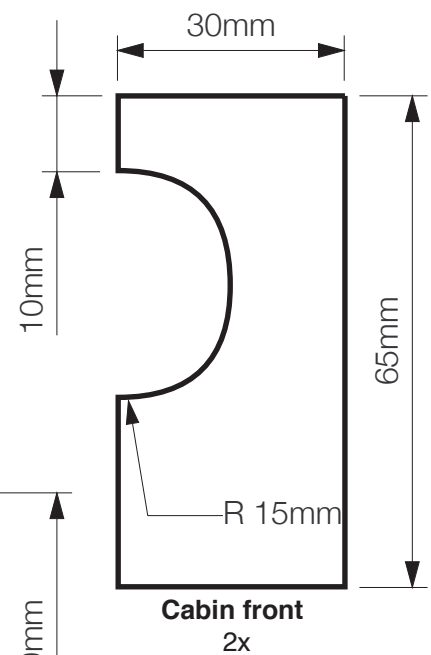
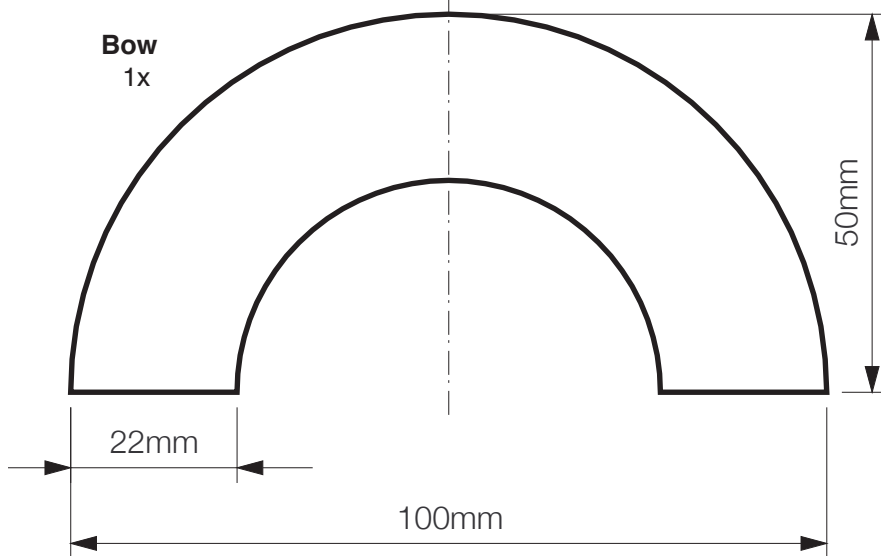
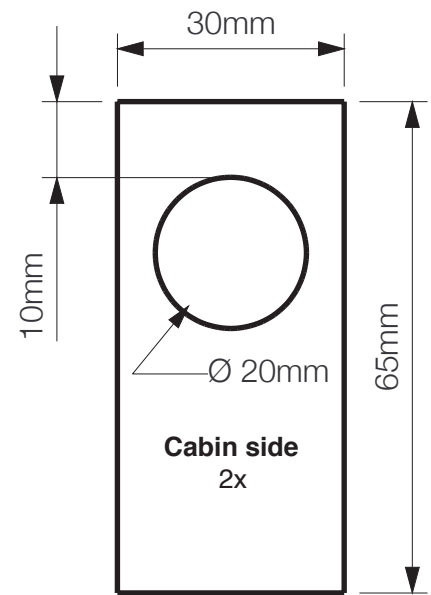
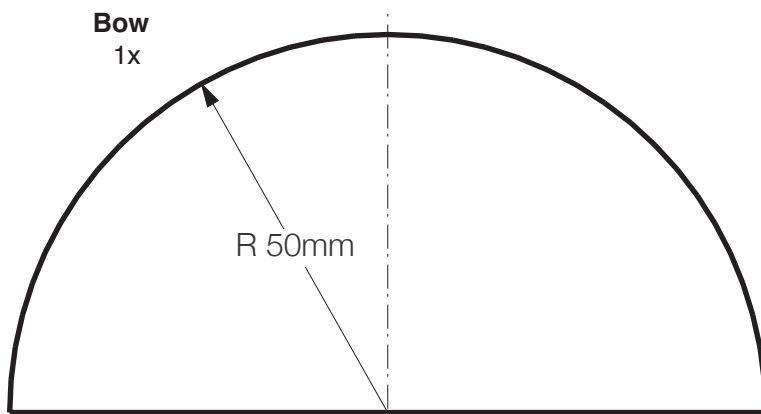
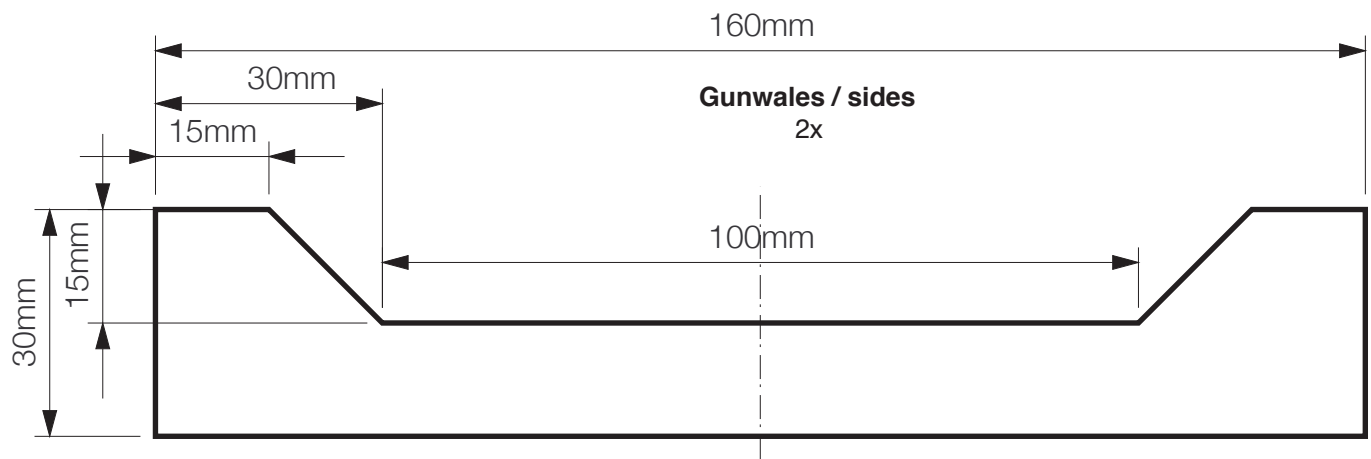
Tip: add a spot of glue to all the knots.

The two booms are joined to the mast by a short length of thread through the lower hole and tied so, that they can still move. The boom ends and the 4 posts can now be joined to the upper hole in the mast. Fix the crane hooks in position.

You can finish by adding a small net on to the hook.

Assembly

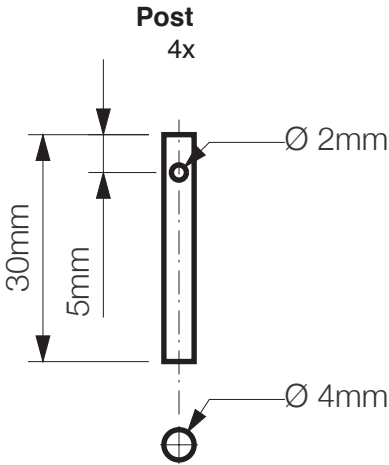
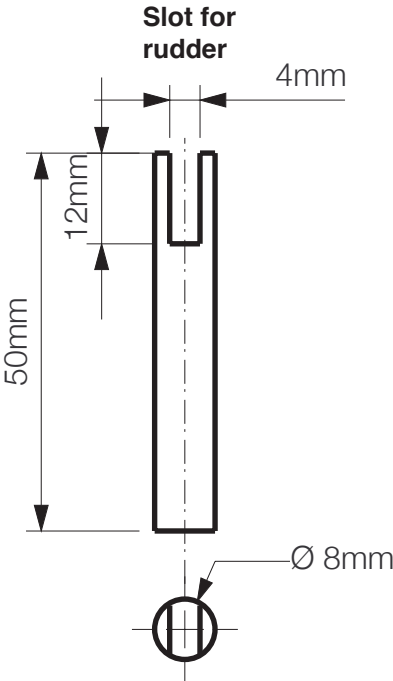
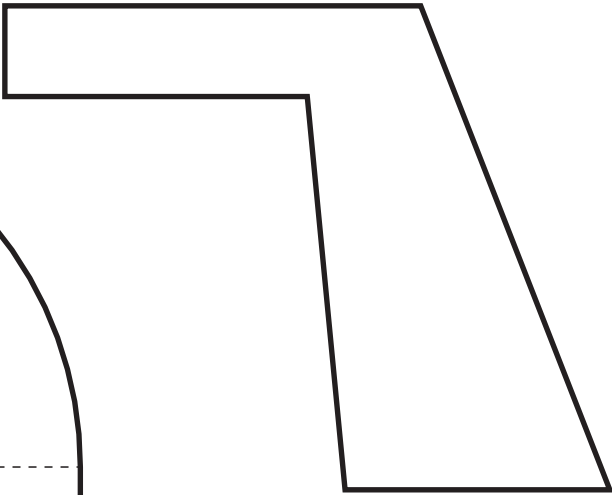
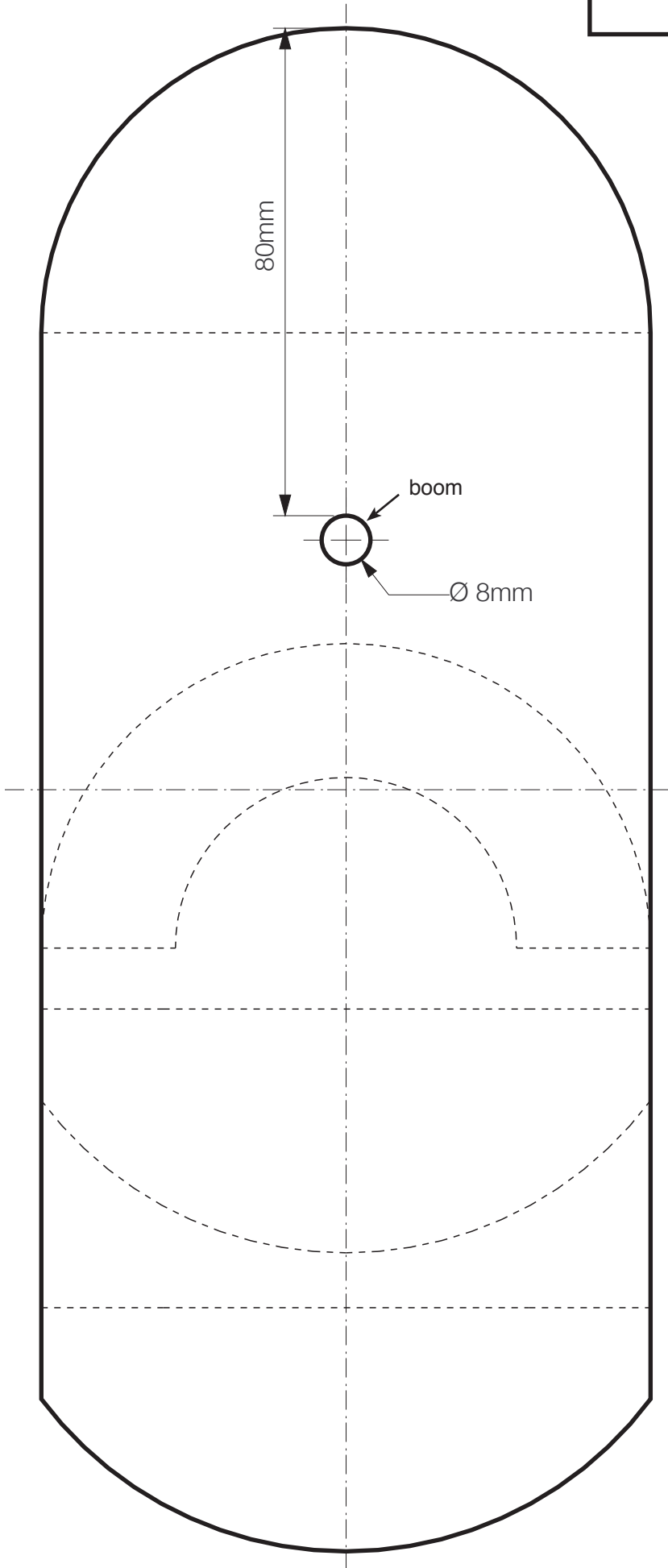




Scale 1 : 1

Rudder

Hull



Scale 1 : 1