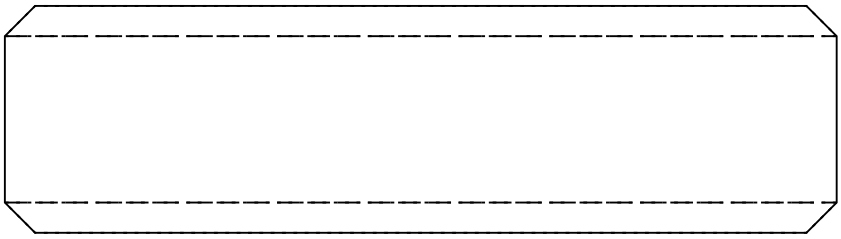
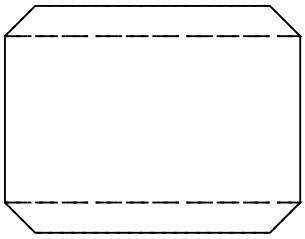
Side-wheel Paddle Steamer

paddle-steamer / 1.0.0 / A4 / Template page 1

H1 | cut 1
110.00 x 30.00 mm

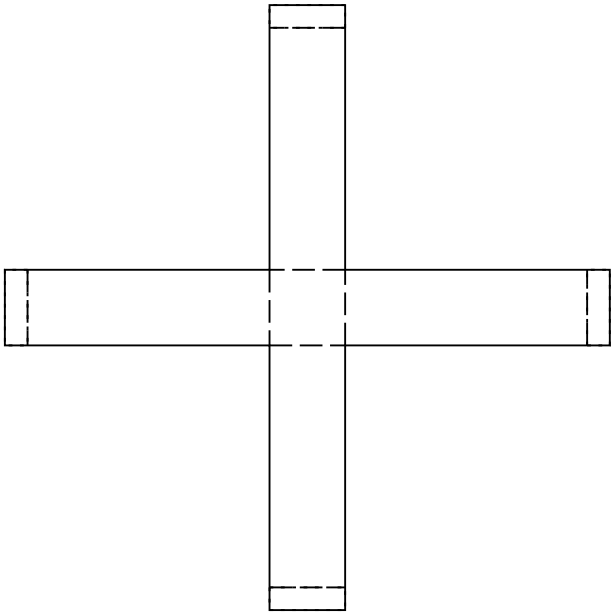


H2 | cut 1
39.05 x 30.00 mm

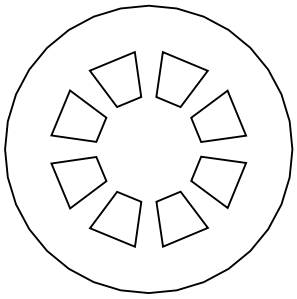


BR1 | cut 1
4.00 x 16.00 mm

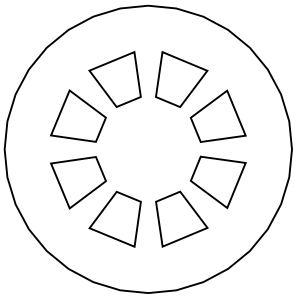
S | cut 1
80.00 x 80.00 mm



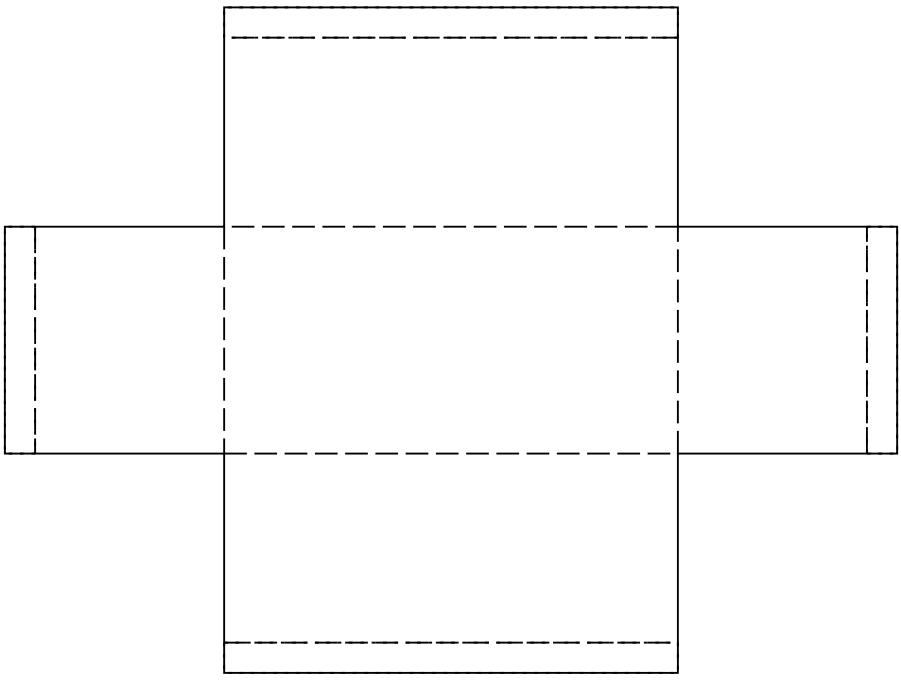
PRO | cut 1
38.00 x 38.00 mm



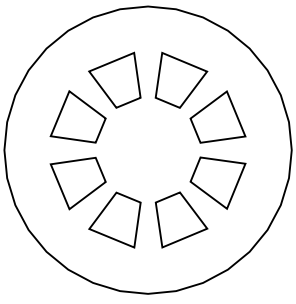
PLI | cut 1
38.00 x 38.00 mm



C | cut 1
118.00 x 88.00 mm

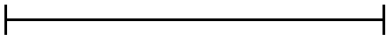


PRI | cut 1
38.00 x 38.00 mm



WL1 | cut 1
8.00 x 8.00 mm

Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue



50 mm calibration

Print at 100% / Actual size. Do not fit to page. Original paper craft template.

Side-wheel Paddle Steamer

paddle-steamer / 1.0.0 / A4 / Template page 2

WL2 | cut 1
8.00 x 8.00 mm

WL3 | cut 1
8.00 x 8.00 mm

WL4 | cut 1
8.00 x 8.00 mm

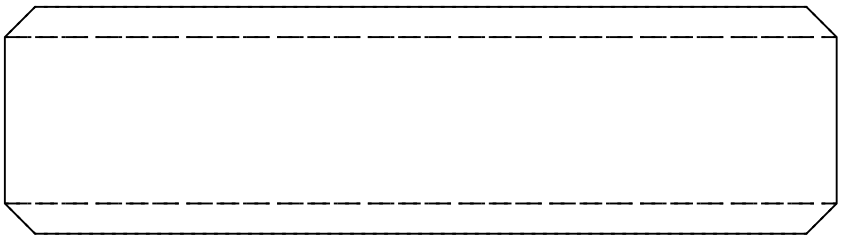
WR1 | cut 1
8.00 x 8.00 mm

WR2 | cut 1
8.00 x 8.00 mm

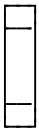
WR3 | cut 1
8.00 x 8.00 mm

WR4 | cut 1
8.00 x 8.00 mm

H4 | cut 1
110.00 x 30.00 mm



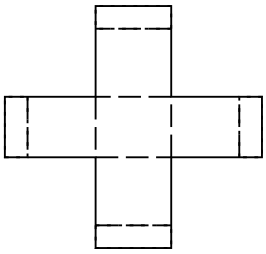
BR4 | cut 1
4.00 x 16.00 mm



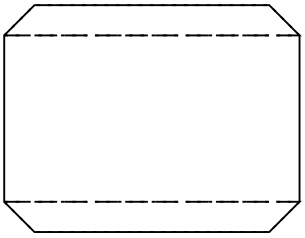
BR5 | cut 1
4.00 x 16.00 mm

BR6 | cut 1
4.00 x 16.00 mm

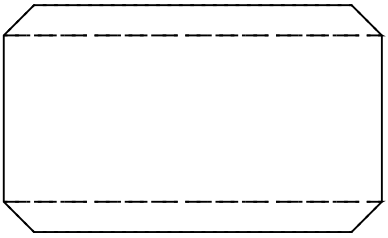
ML | cut 1
34.00 x 32.00 mm



H3 | cut 1
39.05 x 30.00 mm



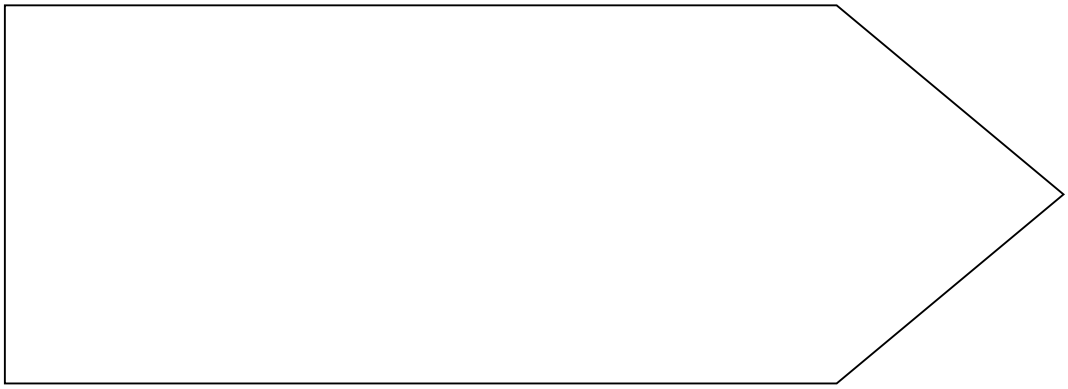
H5 | cut 1
50.00 x 30.00 mm



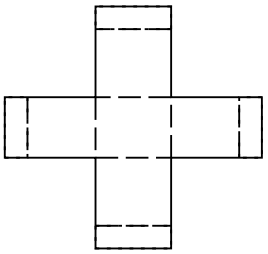
BR2 | cut 1
4.00 x 16.00 mm

BR3 | cut 1
4.00 x 16.00 mm

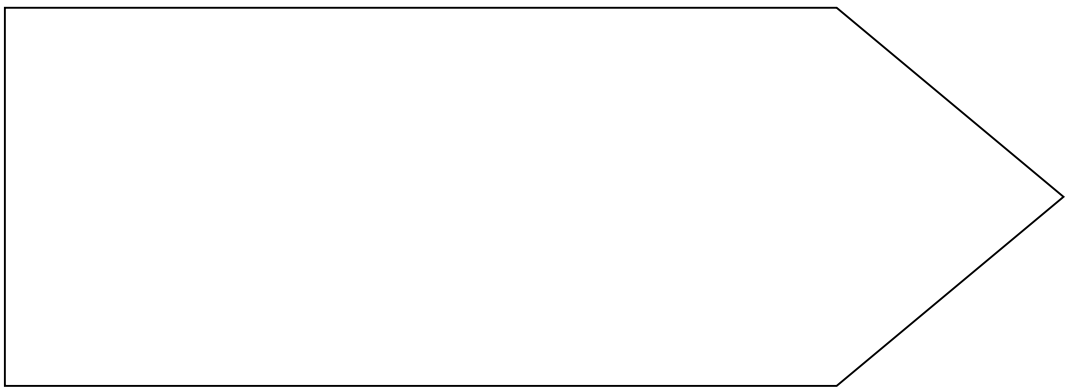
D | cut 1
140.00 x 50.00 mm



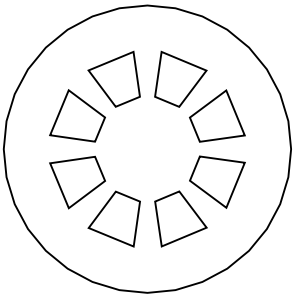
MR | cut 1
34.00 x 32.00 mm



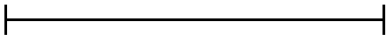
H0 | cut 1
140.00 x 50.00 mm



PLO | cut 1
38.00 x 38.00 mm



Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue



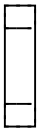
50 mm calibration

Print at 100% / Actual size. Do not fit to page. Original paper craft template.

Side-wheel Paddle Steamer

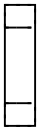
paddle-steamer / 1.0.0 / A4 / Template page 3

BL7 | cut 1
4.00 x 16.00 mm



BL8 | cut 1
4.00 x 16.00 mm

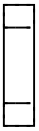
BR7 | cut 1
4.00 x 16.00 mm



BR8 | cut 1
4.00 x 16.00 mm

BL1 | cut 1
4.00 x 16.00 mm

BL2 | cut 1
4.00 x 16.00 mm



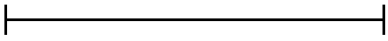
BL3 | cut 1
4.00 x 16.00 mm

BL4 | cut 1
4.00 x 16.00 mm

BL5 | cut 1
4.00 x 16.00 mm

BL6 | cut 1
4.00 x 16.00 mm

Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue



50 mm calibration

Print at 100% / Actual size. Do not fit to page. Original paper craft template.

Side-wheel Paddle Steamer

paddle-steamer / 1.0.0 / A4 / Assembly instructions

Finished size: 140 x 88 x 79 mm

Materials: 180-220 gsm cardstock; PVA glue; Scissors or craft knife; Ruler and scoring tool

Original exact piecewise-rigid paper nets; every hull tab, wheel blade and mounting box is supplied.

Static dry display only. Nonfloating and nonrotating; no axle or hidden supports.

Zero-thickness idealization: paper thickness, glue layers and crease allowance are not simulated. Window faces offset 0.05 mm for visibility.

Physical print/cut/assembly verification pending. Pierced cheeks and small blade tabs require careful handling.

Part inventory (cut each instance once):

H0: Flat hull bottom

H1: Hull edge 1

H2: Hull edge 2

H3: Hull edge 3

H4: Hull edge 4

H5: Hull edge 5

D: Pointed promenade deck

C: Cabin roof walls and feet

WL1: Cabin window

WL2: Cabin window

WL3: Cabin window

WL4: Cabin window

WR1: Cabin window

WR2: Cabin window

WR3: Cabin window

WR4: Cabin window

S: Square smokestack

MR: Fixed wheel mounting box

PRI: Pierced paddle cheek

PRO: Pierced paddle cheek

BR1: Paddle blade with end tabs

BR2: Paddle blade with end tabs

BR3: Paddle blade with end tabs

BR4: Paddle blade with end tabs

BR5: Paddle blade with end tabs

Side-wheel Paddle Steamer

BR6: Paddle blade with end tabs

BR7: Paddle blade with end tabs

BR8: Paddle blade with end tabs

ML: Fixed wheel mounting box

PLI: Pierced paddle cheek

PLO: Pierced paddle cheek

BL1: Paddle blade with end tabs

BL2: Paddle blade with end tabs

BL3: Paddle blade with end tabs

BL4: Paddle blade with end tabs

BL5: Paddle blade with end tabs

BL6: Paddle blade with end tabs

BL7: Paddle blade with end tabs

BL8: Paddle blade with end tabs

1. Cut and form the hull [H0, H1, H2, H3, H4, H5]: Print at 100%; check the 50 mm ruler. Cut all pieces and window openings. Score dashed lines. H0 is a 140 x 50 mm flat-bottom hull with a pointed bow. Fold the two 4 mm tabs of H1-H5 inward 90 degrees; the 22 mm wall remains vertical. Glue lower tabs onto H0 along its matching edges, in order from the long starboard side around the bow to the stern. Hold square and let dry.

2. Close the hull [D]: Glue D onto all five upper hull tabs at height 22 mm, matching the pointed bow and square stern. The deck has the same 140 x 50 mm perimeter as the bottom. Dry flat before adding the cabin.

3. Raise the passenger cabin [C]: C has a 60 x 30 mm roof, four 25 mm walls and 4 mm feet. Fold walls down 90 degrees from the roof; reverse-fold feet outward 90 degrees. Glue all feet to D: cabin spans x=35 to 95 mm from the stern, centered across the deck (15 mm each side of centerline). The open underside faces the deck. Roof and glued feet hold the meeting wall edges; no hidden frame is required.

4. Add cabin windows [WL1, WL2, WL3, WL4, WR1, WR2, WR3, WR4]: Glue the eight 8 x 8 mm blue panels flat to the two long cabin walls, four per side. Their lower edges are 9 mm above the deck; left edges are 6, 19, 32 and 45 mm from the cabin stern end. These are solid decorative panels, not structural openings.

5. Mount the smokestack [S]: Fold S into a capped 10 x 10 x 32 mm square smokestack: walls down 90 degrees and 3 mm feet outward. Glue feet to the cabin roof, stack centered at x=74 mm from stern on the centerline. Its top reaches 79 mm above the table. This is an unlit decorative stack.

6. Fit R wheel mount [MR]: Fold MR into a 10 x 8 mm capped box projecting 9 mm, with 3 mm outward feet. Glue the feet directly to the outside long hull wall. Center the mount at x=75 mm from stern, z=22 mm: its body spans heights 18-26 mm. The upper foot extends above the deck edge; glue its lower contact portion and the side/bottom feet to the hull. Let cure fully. The outer 10 x 8 mm cap is the fixed wheel attachment face.

7. Build R paddle wheel [PRI, PRO, BR1, BR2, BR3, BR4, BR5, BR6, BR7, BR8]: Cut the eight openings in each PR cheek. Each wheel is 38 mm diameter and 10 mm wide. Fold the two 3 mm end tabs of BR1-8 at 90 degrees to their 4 x 10 mm blade bodies. Glue one tab of each blade to the inner cheek at radii 14-18 mm, equally spaced every 45 degrees. Start at the foremost radius and proceed around the wheel. Tabs lie tangentially on the solid outer rim; the blade bodies project 10 mm perpendicular to the cheek. Glue the outer cheek onto the other tabs, with its openings aligned to the inner cheek. Allow to dry before mounting.

8. Attach R fixed paddle [MR, PRI, PRO]: Glue the solid central hub of inner cheek PRI directly onto the outer cap of MR. Wheel

center is x=75 mm, z=22 mm; inner and outer cheeks stand 34 and 44 mm from the centerline. Keep wheel vertical. There is no axle, pin, rotation or floating function; do not force the wheel.

9. Fit L wheel mount [ML]: Fold ML into a 10 x 8 mm capped box projecting 9 mm, with 3 mm outward feet. Glue the feet directly to the outside long hull wall. Center the mount at x=75 mm from stern, z=22 mm: its body spans heights 18-26 mm. The upper foot extends above the deck edge; glue its lower contact portion and the side/bottom feet to the hull. Let cure fully. The outer 10 x 8 mm cap is the fixed wheel attachment face.

10. Build L paddle wheel [PLI, PLO, BL1, BL2, BL3, BL4, BL5, BL6, BL7, BL8]: Cut the eight openings in each PL cheek. Each wheel is 38 mm diameter and 10 mm wide. Fold the two 3 mm end tabs of BL1-8 at 90 degrees to their 4 x 10 mm blade bodies. Glue one tab of each blade to the inner cheek at radii 14-18 mm, equally spaced every 45 degrees. Start at the foremost radius and proceed around the wheel. Tabs lie tangentially on the solid outer rim; the blade bodies project 10 mm perpendicular to the cheek. Glue the outer cheek onto the other tabs, with its openings aligned to the inner cheek. Allow to dry before mounting.

11. Attach L fixed paddle [ML, PLI, PLO]: Glue the solid central hub of inner cheek PLI directly onto the outer cap of ML. Wheel center is x=75 mm, z=22 mm; inner and outer cheeks stand 34 and 44 mm from the centerline. Keep wheel vertical. There is no axle, pin, rotation or floating function; do not force the wheel.

12. Dry display [H0, D]: Stand the flat hull bottom on a dry level shelf. Both wheel bottoms clear the table by 3 mm. Let all glue cure before handling; lift by the hull, never by the wheels or stack. Static dry display only: nonfloating, nonrotating, no flame or water. Physical assembly remains pending.