

Cutting a round workpiece on the bandsaw without proper support is a dangerous proposition. Woodturners often want to cut apart or trim a tenon off of turned spindles, cylinders, cones, and pod-shaped forms. Using a handsaw is always safe, but that can be slow and sometimes not even possible. It's tempting, therefore, to use a bandsaw. But without the aid of a jig or other holding method, fingers can be lost.

I often turn pods using green wood, cut them apart, and then carve out the wood inside or use the two sections to make art objects. Years ago, Chris Weiland, a furniture maker from Pennsylvania, showed me an easy-to-make jig that safely holds a round, cone-shaped, or oval object in order to cut it apart using the bandsaw. Unlike multi-use V-jigs or wooden clamps, this jig is a customized, one-use affair, made from inexpensive materials.

Physics and fingers

The reason it is dangerous to cut round forms on the bandsaw is that the blade will enter the wood at a point above the surface of the bandsaw table—it is always safest to have the wood resting flat on the table, right where the blade starts to cut. If not, the blade will pull the wood down, round objects will spin forward, and a finger could be dragged into the blade.

A dowel as small as 1/4" (6mm) diameter could even break a bandsaw blade. I experienced this firsthand years ago,



Round forms should be held securely in a jig during bandsawing to prevent the workpiece from rolling into the blade. Position your hands at the outer edges of the jig, away from the intended cutline.

A JIG for Bandsawing ROUND OBJECTS

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when I was all-too-casually cutting a length off a dowel. It happened instantly, but fortunately my fingers were well to the side of the blade as it pulled the dowel forward, jammed the wood, then broke the blade. The dowel snapped in two and was not cut cleanly.

For cutting straightforward, small objects such as dowels, clamping them into a wooden hand clamp would work just fine, as would a V-jig, both of which should be kept handy near your

bandsaw to help you avoid the temptation of making "just a quick cut." For other, more challenging-to-cut objects, the jig described in this article makes the process safer with customized support.

Materials

You will need a hot-melt glue gun, glue, scrap wood such as thin plywood, wedges, and masking tape (*Photo 1*). The size of the plywood and

Bandsaw jig materials



Materials needed: scrap wood, wedges, hot-melt glue gun, glue, and masking tape.

Secure mounting



Workpiece is glued and taped to the wedges and carrier, ready to be cut apart on the bandsaw. Note the intended cut line for this pod form (along the sidegrain). The jig can also be used to cut across the grain to remove a tenon.



Round form safely cut



4 The author's pod cut in half on a curved line. The tenons at each end can be cut off after the pod is split.

wedges will depend on the size of the object you are cutting.

For your bandsaw, make sure the blade is sharp and is the correct width. For tight curves and small objects, a ¼"-wide blade will generally work. My bandsaw is usually fitted with a ⅜"- (10mm-) wide blade, which works well with most small and large pieces of wood.

Make the jig

Cut the scrap-wood base to just about the length of and slightly wider than the workpiece (in this case, a pod form). The base should be made large enough to accommodate support wedges for your workpiece and allow room for your fingers to safely guide and push the assembly through the cut. The base also should be able to rest flat on the bandsaw table at the start of the cut.

Cut at least six wedges, more for larger, rounder, or odd-shaped objects. At least one wedge will be placed at the front, back, and sides of the pod. The front and back wedges support the pod as the wood enters and exits the bandsaw blade. Support in these areas is essential.

Place the workpiece onto the plywood and determine where you will make the cut, adjusting the position as needed. Hot-melt glue the first wedge into place. I usually start with a wedge on one of the ends. Using plenty of glue, secure the rest of the wedges into place. You will be gluing the wedges to the scrap-wood base *and* to the object itself. Note that if the workpiece is exceptionally wet, hot-melt glue might not adhere to its surface well enough to hold.

For added safety, especially with larger objects, wrap the assembly with masking tape. But be aware the tape alone will not prevent a round workpiece from rolling during a bandsaw cut, so do not rely on it as the only hold-down method (Photos 2, 3).

The last step is to mark the cutline onto the workpiece.

Cut the pod

Always keep your hands and fingers well to the side of the bandsaw blade and do not push the jig

with your fingers aimed toward the blade (see *opening image*). Let the blade cut at its own speed—there is no need to push the assembly aggressively. Depending on the size of the wood and jig, you might want to use push sticks. I start the cut at the center of the end of the workpiece, which will mean lining up the jig to the correct angle for the curve of the cutline.

With a sharp blade, the cut will be made easily and safely in any direction—whether you are cutting off a tenon or stub or splitting the workpiece in half (Photos 4–6). After the object is cut, break the jig away from the workpiece. If the glue stubbornly remains, it can be heated with a hairdryer to ease its removal.

I use these pods in a variety of creative ways. If they are turned from green wood, I carve out the interiors right away to avoid cracking as the wood dries. ■

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Betty J. Scarpino, *Journey*, 2007, Maple, paint, 5" × 14" × 3" (13cm × 36cm × 8cm)

Photo: Shawn Spence
Private Collection



Betty J. Scarpino, *River Rocks*, 2007, Maple, rocks, particle board, paint, 4" × 11" × 14" (10cm × 28cm × 36cm)