

Cindy Drozda "The Fine Art of Woodturning"

P.O. Box 19065 - Boulder, CO 80308 - voice/cell: 303-449-7170 cindy@cindydrozda.com - www.cindydrozda.com

The Twisted Triangle Box - Turning Steps

**This design starts with a dry blank 3" x 3" x 3 1/2", 75mm x 75mm x 88mm
It is possible to do this project in different sizes.**

1. Layout top and bottom of box, referring to the Layout Diagram and Layout Steps.
2. Mount blank between centers, round down to just over the Blue (major) diameter.
3. Part in to Red (solid) diameters on ends to create reference diameters, about 1/4" long. Darken the tenon with a marker to make it easier to see.
4. Turn multi-axis triangle using the 3 centers on the Green diameter. Cut until each side contacts Red diameter.
5. Sand the triangular outside of the box completely
6. Cut chucking tenons on both ends.
7. Chuck on bottom, part off the 1-1/4"/32mm long piece that will be made into the top of the box.
8. Hollow, sand & finish inside of box. Create lid recess, or be sure the sides of the box are straight/parallel.
9. Chuck on lid, cut tenon to fit recess in box.
10. Finish the bottom of the bottom of box.
11. Hollow, sand & finish inside of lid
12. Jam fit lid onto waste block to shape and sand the top, creating inlay if desired.
13. Sign your work!

Depending on your skill level, or personal choice, this project can be customized. Here are some suggestions:

If you are new to making boxes:

1. A successful box may be more important than doing a multi-axis one.
2. Eliminate the inlay in the lid, and plan to do that on the next box.
3. Start with a round blank, and make a box with straight sides.
4. Make a shorter box.
5. True up the drilled bottom near the opening, where the lid fits, but leave the drill surface on the rest of it.
6. Give yourself a break on the jam fits. Don't force yourself to rely upon a jam fit without the tailstock. Use a waste block to jam fit so you can re-do it if necessary

For the next challenge:

1. Do the inlay in the lid, and/or
2. Do the Multi-Axis exterior.
3. A straight Multi-Axis shape is less challenging than a twisted one.
4. Clean up the entire inside of the box bottom
5. Decorate the inside of the lid, and/or the bottom of the box.

Accept more of a challenge:

1. Do a more complicated top and/or bottom shape on the outside of the box. The undercut top and pointed top that I like to do is much more challenging.
2. Make a deeper box. More toolrest overhang is more challenging.
3. Experiment with the Multi-Axis layout. Try different sizes, tapered sides, non-equilateral triangles, etc.
4. Make a box with 2, 4, or 6 sides.
5. Experiment with box top/bottom proportions.
6. Use different amounts of layout offset for varying degrees of twist. A deeper box will look better with more layout offset.
7. Choose a more difficult wood.
8. Demand a high level of finishing without tool marks or torn grain.