## Inside-Out Christmas Ornament

Spindle Blank suggested range: 1 1/2" X 1 1/2" X 7" up to 2" X 2" X 9"

Lets get the math out of the way:

Calculate the **FPD** (First Profile Dia). (Blank Square + Cut Width) X = 0.666 = FPD

Calculate the CW (Cove Width). FPD  $\times 0.866 = CW$ 

Record FPD and CW (Well I have to).

- 1 The Blank needs to be true and square with good gluing surfaces.
- 2 Mark centers. (These should be as accurate as possible, I drill with a small center drill)
- 3 Mount Between Centers. I use a Oneway safe-drive and live center.
- 4 Make a mark 1/3 of the length + 1/2" in from the end.

Now mark 2 lines a CW apart centered on the first mark around the blank,

5 - Cut a cove between the lines (on the flats not corners) down to **FPD**.

NOTE I like to cut the outer edges of the cove close to 90 deg to the corner.

Also, be careful not to splinter the outside corner.

(A splinter may be glued back on a corner to save the part)

- 6 Sand and finish the cove.
- 7 Mark centerlines along 2 adjacent faces lengthwise for sawing into 4 parts.
- 8 Cut along the lines to make 4 pieces, Debur. (I use a bandsaw for a narrow Cut Width) I stop the first cut 1/2" from the end and make the 2nd cut, then finish the first.
- 9 Rotate each piece 180 deg so what was the outside corner is now the inside.
- 10 Glue in pairs, lining up the good faces and the ends of the coves.
- 11 Cut groove at the glue-line for a decoration to be inserted. (tree, ball, etc)
- 12 Glue the decoration in the groove of one pair.
- 13 Let glue set up a little.
- 14 Glue the 2 pairs together aligning the glue lines and cove ends.
- 15 Let glue set overnight.
- 16 Cut or sand ends flat, Mark centers using glue lines.
- 17 Drill centers with center-drill to suit your drive & Live center.
- 18 Mount between centers and turn a 3/4" tenon on the short end. The tenon needs to fit your chucking setup.
- 19 Mount in collet (chuck) and support long end with a live center.
- 20 Turn the profile. Remove the bulk from the long end on the live center first. Take gentle cuts with a sharp tool, stopping often to check.

Complete end removing the center hole and finish the end.

- 21 Mount the soft-touch reverse center to support the finial.
- 22 Working towards the top complete the profile. Take your time.
- 23 when you still have 3/8' or so on the drive end, sand & finish the surface.
- 24 Secure the bottom to the soft-touch with stretch plastic or painters tape.
- 25 Part off.
- 26 Hand finish the top. Drill and fit a loop to hang the ornament.
- 27 Buff or finish as desired.

Richard Ford....

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