

Hollow form with threaded Corian cap and finial
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Hollow Form - 4-6" tall, 5/8" to 1" hole in top

Finial

Mount ~1-1/2" square, 4"-5" long piece of wood (pear, walnut, cherry, ebony) between centers
Turn finial as you desire, leaving 1/4" diameter tenon on the bottom
Tenon should be about as long as your male threaded pieces from below, 1/8" - 3/16"

Male threads for gluing into bottom of finial

Starting material - pear or boxwood 3-5" long
Turn round between centers and reduce to 3/4" on one end
Insert 3/4" end into Beall collet and turn remainder to ~15mm (~19/32") diameter
Drill 1/4" hole down the center

Insert EZ Threading Jig cutter in headstock
Mount workpiece (still in Beall collet) onto EZ Threading Jig
Insert EZ Threading jig into banjo
Retract feeding thread almost all the way
Move banjo so workpiece almost touches cutter
Align workpiece parallel to bed ways
Move depth wheel until the cutter just touches workpiece
Back the feedscrew so it clears cutter
Advance feed stew 1/2 to 3/4 turn - this sets the depth of cut
Cut threads at 2,500 rpm by advancing feedscrew slowly and smoothly
Cut into sections 1/8" - 3/16" long with flush cut saw
Leave a remnant of 2-3 threads on the workpiece and 'square off' the headstock end, for later use as a holder for the Corian cap

Corian caps with female threads

Cut 7/16" thick Corian solid surface into 1.5" x 1.5" squares
"Resaw" the 1.5x1.5 squares onto 2 thin pieces ~3/16" thick
Mount a piece in 4-jaw chuck
Optional - mount a similar sized piece of wood on headstock side to bring Corian out to edge of jaws
Drill 17/32" hole in center of Corian
Tap with 5/8" 16tpi tap (this matches the EZ Threader threads) [9mm wrench]
When tapping, bring tailstock up gently to the end of the tap to help keep it aligned

Using thin parting tool, cut a groove ~1/8" deep so as to leave a tenon around the threads to match the vessel opening

Cut another 1/8" groove representing the maximum outer diameter of cap
Cut the underside of the Corian cap so the tenon fits down into vessel opening, shaping it to match to some degree the top of the vessel - vessel can be brought up to Corian to test
Remove from jaws

Remount the Beall collet on headstock containing remnant of 2-3 threads from cutting the male tenon
Mount Corian cap workpiece onto the tenon, with top toward tailstock
Shape as desired
Both sides of Corian cap can be refined using the threaded holder
Sand and pPolish on Beall buffing system with white diamond

Glue male threads onto tenon on the bottom of finial
Glue Corian cap into opening and screw on finial

Materials & Tools list

Hollowing - Hunter #5 Badger carbide tipped tools

Turning - D-way tools, including Boxmaster negative rake scrapers

Beall collet system

Chefwarekits EZ Threading Pro Jig

5/8" 16-tpi tap

https://www.amazon.com/gp/product/B00FXM9LYQ/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

Corian® Solid Surface Deep Nocturne

<https://coriandesignsamples.colors2u.net/product/corian-solid-surface-deep-nocturne/>

Wood burner - "beta" high-power system from Jacques Vesery

Homemade burning tips - nichrome wire (16 - 21 gauge - use mostly 18 & 20 gauge, Amazon)

Anvil for making homemade burning tips

https://www.amazon.com/gp/product/B078851T7H/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

Paint - Golden "Fluid acrylics" from Plaza Art or Dick Blick

Gilder's cream - "Goldfinger" brand

https://www.amazon.com/gp/product/B0027IU3IM/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1 or <https://www.gilderspaste.com/>