

South Coast Wood Turners 11/8/14

Demonstrator – Michael Meredith

### Threading and Finish

Minimum Hand Tools Needed for hand Threading:

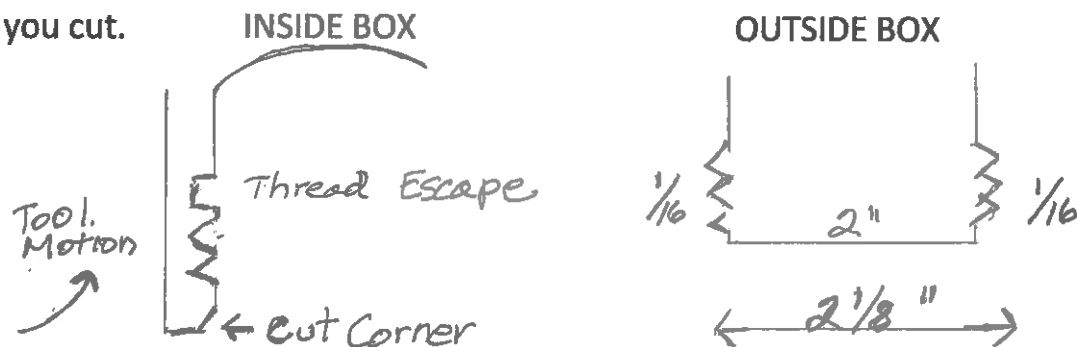
1 inside cutter

1 outside cutter – pair costs about \$85.00

1 tool retainer – can be home made

The greater the number of (TPI's) threads per inch, the slower the tool moves across the threading site. First tool should be at least 18 TPI

Start by making 2" standard box – cut corner on the inside edge of box. The wall must be flat or 90 degrees to the bottom. Sizing of outside of box using 16 TPI cutting tool on a 2" box would be 2 and 1/8<sup>th</sup>. This is calculated by 1/16" for inside and 1/16" for outside plus 2" = 2 1/8<sup>th</sup>. Put a slight notch on the inside of threading area so that you can remove the tool without tearing out the threads you cut.



Cutting motion should be arced from a stationary thumb secured to the tool rest – start cutting with the second thread. Keep arm/hand loose on tool – don't freeze up. Let the tool cut and back off when you get to the end of the area to thread so you don't scrape off your threads. This is the reason for cutting a notch on the inside of the threading area. The arc plus the cut off corner should allow you to sneak up on the thread start. You will need to make several passes to attain full thread. You only need 1 thread and that may not need to be a complete circle. Lathe speed should be 100-200 rpm's.

Threading is something you must do for yourself. There is no magic. You will probably lose several threads until you find the right motion and speed for you to thread at. Takes patience and trial and error.

The wood you use should be as hard as you can find. Mike named several woods including cocobolo, iron wood and black wood that are better than most. If you use a soft wood, you may make threads using a generous amount of epoxy on the inside and outside of your box and let it dry – then cut your threads. Mike can't use CA glue but that is also a glue that can be used to cut threads into. If administered properly, it is very difficult to see that the threads are made of glue rather than wood.

Helpful DVD's on Threading:

Alan Batty, John Burkley, and Scrouples.

Finishing: Mike's normal sanding starts at about 220 grt. However, using 80 grt. to start with may be appropriate for most of us. Mike starts with Doctor's Walnut Finishing Oil dripped on to either the object or the sandpaper sanding at a slow speed. The oil and sandpaper should produce a slurry on the object you are finishing. The combination of the oil and heat produced by the sandpaper makes the oil penetrate the wood. Mike has a patent on his oil because of the emulsion that he has obtained with his mix. The walnut oil will remain clear and not turn rancid because he has removed the protein in the walnut oil. Multiple layers may be made and each layer penetrates deeper into the wood preserving it better. Mike suggested that one use a Klingspor box of sandpaper that has a cloth back for sanding with oil. After obtaining a satisfactory finish apply either a coat of his gloss friction polish or pens plus to add to the luster. The difference between his walnut oil finish and other finishes like Danish is the removal of the protein from the walnut oil.