

2020 Mallet Challenge – inspired by a post from Robert Atkinson on the Blue Spruce Toolworks Curly Maple Carver’s Mallet. I had been following Blue Spruce tools for some time and had thought that someday I would try to make a mallet using the same steel core idea, *the Challenge made it happen.*

I decided that a 25mm / 12mm x 135mm steel core (330g) would probably work (seen below) and had two made. The first step was to mount wood for the mallet head between centers and put a dovetail tendon on one end and rough it out to round. Then I mounted the blank in a 4 jaw chuck and set up a 25mm carbide forstner bit in an ER16 short straight collet chuck mounted in a MT2/ER32 in the tailstock to drill out the headstock (see photo for the setup) which allowed me to drill deeper than the length of the drill. Then I glued in the steel core with epoxy, and once it was set mounted the handle shaft in the headstock with a MT2/ER25 collet holder with a 12mm collet. Turned the mallet head to final dimensions and finish.

Next I mounted a 1 ¼” square blank in my Pen Jaws and bored it out to 11mm and finished with a 12mm straight reamer to get a perfect fit to the handle shaft. I mounted a short stub 12mm shaft in the MT2/ER25 collet holder with a 12mm collet in the headstock as a drive center and a live center in the tailstock. I went with a more conventional handle shape than the one used by Blue Spruce, since I like having a knob at the end of the handle, which keeps the handle from slipping out of your hand when using a more relaxed grip as one tends to use when carving. I made the aluminum accents out of some 1/8” flat stock drilled out to 11mm and reamed to 12mm. These blanks were held in a Taig lathe 1” arbor shaft with a turned down 12mm stub and cap washer to hold it in place.

The first mallet is a beech head with a padauk handle, weighing in at 700 g. The second mallet is hard maple (HSH) with a roasted curly maple handle, weighing in at 720g. Although the maple head was much larger than the beech head it was only 20g heavier.

If I were doing this again I would opt for a smaller diameter steel core, probably 16mm or 19mm to make a slightly lighter mallet for finer carving. The current mallets are great for heavy carving and mortising



- 1) Steel core (25mm x 75mm/12mm x 65)
- 2) Drilling operation



3) handle finished on 12mm mandrel ; 4) side view



5) end view detail; 6) beech/paduak mallet; 7) maple/roasted curly maple