

The BC Woodworks

Crafting a fine tool handle.

Hello, my name is Brian Cockerill.

Today I would like to talk to you about replacing tool handles.

Many tools get thrown out or left in a box to rust when the handles get broken or become unserviceable. Replacement handles are a satisfying and rewarding job that may be enjoyed and provide service for perhaps another hundred years. I have tools that are over a hundred years old and still going, to think I've added my touch to that tool and it could still be working in another century.

One example I have here is a brand new turning tool, namely a 3/8th inch spindle gouge.

The production principles for most handles are about the same differing only by size and overall dimensions.

Kit needed to complete this exercise:

Scrolling 4 jaw chuck

Set of jaws - to suit size of tenon

Roughing gouge

Spindle gouge or skew chisel

Ferrule

Drill chuck and appropriate bit (in this case - 13mm)

Sanding sheets (120 - 240grit)

Finish

Turning tool handle.

Starting with a blank measuring 2x2x14" mark both ends for centre. Mount on the lathe between centres and proceed to rough out a cylinder using the spindle roughing gouge.

Cut a tenon to suit the jaws of your chuck.

Mount work in the chuck and rotate the spindle to check for true and adjust as necessary.

True up the end grain of the spindle and use this opportunity to sand and finish the end, then using the toe of your skew chisel, mark the centre point for your drill to start in.

Measure the length of chisels tang to be inserted for the drilling depth.

Drill out the hole to depth in increments making sure to clear the shavings regularly. Remove the cylinder from the jaws and return to using spur drive and live centres.

The rest of the turning is now done between centres and is good cause for some skew practice.

Start by marking the length of your ferrule , then using a parting tool remove excess wood to create a snug fit for the ferrule.

Shape your handle as desired, I would advise you check the size and shape mostly with your hand as this is where it is going to be when finished.

Starting with the transition from ferrule to handle create a palm swell and then working your way to the butt of the handle creating a taper that swells out again. (Essentially a large cove)

Work the end of the handle down to final shape leaving a small nub at the end.

Sand the handle up to desired grit and apply sealer and finish as per usual. Either part off the nub or cut it off with a small saw, tidy up the nub with a chisel or a knife. Then sand and finish the end to blend in.

Mounting the steel in the handle

Mix up some five minute epoxy resin and apply to the inside of the hole. Insert your new chisel in its new handle, twisting and pressing home, rotate to desired grain alignment. Clean up any squeeze out and allow to cure.

Depending on the drill used, a tight fit may be achieved without the need for glue. This may be of benefit in the future life of this tool, a damaged handle can be removed and remade or a worn out chisel can be inserted into the existing handle.

Almost any type of handle can be produced using this method, be it for a tool or another type of handle. Some considerations to take into account are governing factors ie tang shape and dimensions, use and ergonomics.