Home-Made Tools

 Hollowing-Out Tools
  Tool Handles
  HSS cutters
  Allen wrench cutters

 Grooving Tools

 Hollow Form Caliper

 Hammered Texturing with Dremel Engraver

 Sanding/Buffering Discs for Dremel Tool
Making handles for hollowing-out tools
Tool Handle Construction

- Select straight-grained wood billet
- Dimension “a” is sized to accommodate tool shaft and hand size
- On a Table Saw, make 4 passes (cuts) at 90° to each other. Then flip stock end-for-end and make 4 additional passes. Sketch shows last (8th) cut.

Fennell’s Tool Handle

1-1/8” – 29mm 5/16” – 8mm 7/16” – 11mm
Cutting the 1-1/8” (29mm) blank
Making the first cut

Mark the center on one end for lathe set-up to drill shaft hole
Make 4 cuts—one on each edge
Flip blank end-for-end – make four more cuts
Finished handle
Next step – drill for tool shaft
Drilling on the lathe using 4-jaw chuck
Use slightly oversized drill bit to allow for epoxy
Tool handles, shaft & HSS Cutter blank
Tool Bits held in place with CA glue
Hollowing out Tool
Hollowing out tools from Allen-head wrenches

Very Inexpensive
Less than $1 to make
Relative Wear Resistance of Tool Steels
(Compared to M2 HSS)

Source: Crucible Materials Corporation

Tool Steel Types ( * woodturning tools available in this material)
Tools for creating grooves
Four-flute Hand Taps

- Grind opposite flutes off to create thin section of teeth
- Break off 3-4 teeth
- Attach with CA glue
Grooving tools made from hand taps

Break off 3 or 4 teeth and attach to old file with CA glue

Single point diamond-shaped tool for accentuating lines
Masur Birch Vessel with Grooved Surface Texture
Grooved outer surface & Carved Away
Hollow Form Caliper

To measure wall thickness in difficult area
Use to measure wall thickness around shoulder of hollow forms

Coat hanger wire easily bent into different shapes

Wall thickness measured here

Wall thickness indicated here
Wall Thickness Caliper

A unique tool to measure the wall thickness near the opening and around the shoulder of a hollow form vessel.
Hammered Texturing
Using Dremel Engraver and Router Speed Control

Use blunt nail in lieu of carbide engraving insert
Sanding/Buffing Mandrels & Discs
Mandrels for sanding/buffing
Sanding discs & abrasive pads for Dremel Tool

Tools needed:
Double-sided masking tape, Leather punch, high-quality sandpaper, abrasive pads, mandrels
Mandrels for Dremel-Type Rotary Tool
Thanks!

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