

## WOODTURNING GUIDELINES FOR BASIC SKILLS ASSESSMENT.

The guidelines must be read and understood by trainees in conjunction with approved Statement of Procedures for Lathe Use. Importantly, the safety requirements set out therein must be followed and adhered to at all times. These guidelines will add to the general safety requirements in specific circumstances to cover particular tasks. The guidelines herein will be supplied to learning woodturners by supervisors. It is not intended to set out how supervisors should teach, rather an indication of what they need to cover in a basic skills assessment.

Course duration.

- Those learning woodturning must complete 4 weeks of supervised training. This can occur on Thursdays or Saturdays or a combination of both. Other days are by special arrangement. During this period the trainee will be closely supervised and taught the fundamentals of woodturning. Trainees will be encouraged to view a select number of DVD's (provided by HMS) and suggestions made about certain U-tube options and to practise regularly. Some flexibility may be necessary for partly experienced trainees following initial assessment by Supervisor.

Outcomes.

- At the conclusion of training the trainee will be assessed on overall competency and if skill and performance are satisfactory, the trainee will be allowed to continue without close supervision, but with a degree of supervision and on the understanding that they should always ask for supervisory assistance rather than attempting a project that may be beyond their skill level.

Setting Up.

Trainee with Supervisor oversight:

- to ensure floor area adjacent to lathe is clear of any trip hazards.
- to ensure trainee uses face shield at all times.
- to explain stance and grip. Use of body position and feet. Keep tools locked into body.
- to select timber for turning and inspect for cracks or any voids. (If found reject use given trainee status).
- to mount piece. Spindle vs. faceplate. Chuck differences; drive and live centres; glue chucks (and their use). Headstock/Tailstock locking – piece is firm at spur end and live centre tight. Tool rest height and locking – depends on size of piece. Marking out and punch centre for spindle turning. Ensure spindle lock is off. Check all the basics before turning on lathe (to ensure all tight). Hand check 360 rotation for safety and gap to toolrest.
- to ensure safe speed of operation, dependent upon piece selected. Out of balance and vibration to be explained. Slower safe speed until piece in balance.
- to stand to side of piece on start-up. Finger on stop button. Check for noises.
- to select appropriate tool for the job. Tool on tool rest before contact with wood.

## Tools and Lathe Accessories.

- tools and uses to be explained. Fundamentals – bowl gouge/s, detail gouge/s, spindle roughing gouge, parting tool, skew chisel and scrapers. Use of all available callipers and gauges. Explain (4) jaw chucks and various jaws, drive and live centres and use of (heated) glue chucks using hot melt glue, including how, when and why they are used.

## Spindle turning.

- Use of roughing gouge from square to round. Scallop off ends. Work entire length with gouge on its back, back and forth until round.
- Use of detail gouge to shape and make beads and coves.
- Use of Skew Chisel. (3) components; long point, short point, cutting edge. Explain and practice smoothing or “planing” cut, the “V” cut and cutting beads as an alternate to spindle detail gouge using the short point of the skew.

## Faceplate turning.

- Stock preparation, including use of glue chucks and alternate methods, including use of wood screw in 4 jaw chuck and making spigots. How to drill hole for wood screw. Use of forstner bits for drilling to depth, e.g for inside of bowls. Use and purpose of CA and like glues.
- Setting up as set out above but note differences when using wood screw and ensure that jaws sit properly around spigot and that the piece sits tight against the jaws.
- Check lathe speed. Keep speed lower until in balance.
- True outside edge. Presentation of gouge. Watch gap between tool-rest and piece.
- True face of piece. Use of bowl gouge on its side and scraper.
- Make spigot to fit scroll chuck or glue chuck. (suggest - 50mm minimum and dovetail edge).
- Shape outside of bowl with bowl gouge cutting on lower edge. Keep an eye on profile.
- Adjust toolrest regularly to ensure finger gap between wood and toolrest.
- Light cuts to finish piece.

## Sanding.

- Remove tool rest. Lower speed to 500 rpms max.
- Explain grits and how to proceed. 120 or 150, 180, 240m 320.
- Ensure dust mask is used and dust extractor is operating.
- Finish outside.

## Re-chuck bowl for inside turning.

- Unscrew from woodscrew or glue chuck procedure.
- Re-chuck to spigot or glue chuck.
- Check for speed and whether it is running true.
- Show how to true face and use forstner bit in Jacobs Chuck to drill to depth on the lathe.
- Turn inside of bowl. Turn from outside in to required drilled depth. Flute facing centre – cutting with lower leading edge.

- Turn to shape.
- Remove tool-rest and sand as before. Use of rotary or hand sander and sanding grits.
- Removal of glue chuck with hot iron or heat-gun, cleaning of base of wood (using old chisel on pegboard) and removal of any residue glue with turps. Return cooled glue chuck to pegboard.