

Oneway Coring System

Reasons for coring:

1. Reduce the amount of time and effort involved in hollowing the bowl with gouges, etc
2. Save precious wood
3. Make multiple bowls from one source
4. Saves tool wear, sharpening of those tools, energy used to run lathe, etc
5. Saves cleanup

Bowl size:

1. Determined by the thickness of each bowl to get the most out of the blank
2. Also based on whether it will be twice turned as in the case of wet turned then dried for later finish turning.
3. Also if you want to create a bowl with a shape other than the basic curve created by the tool you'll need to leave extra wood to accommodate.

Easy-Core Base Set - The unit needed is determined by the swing of the lathe. Any size lathe from 14" to 26" swing and flat bed ways can be accommodated with the Easy-Core Coring System.

Base Set includes: the Base; Front & Rear Post; Short Tool Handle; Screws & Washers; and an Instructional DVD and costs around \$185. Note: Knives and Clamp Block Sets sold separately.

Clamp Block - Required for attaching the Base Unit to your lathe. To determine the size of the Clamp Block needed, measure the gap between the bed ways. Clamp Block sold separately at around \$18.

Knife Sets - The size of the sets determine what size bowl blanks can be cored. There are four knife sets available for the system. These Knife Sets are purchased separately and range from \$149 - \$188. Knife Sets include: a knife; a knife support finger and a cutter.

Cutter (knife) capacity - Bowl Size

1. #1 cutter (9" knife) = 5 to 9 ½ inches
2. #2 cutter (11.5" knife) = 7 ½ to 12 ¼
3. #3 cutter (13" knife) = 10 to 15
4. #4 cutter (16" knife) = 15 to 17 ½

Cutter & Sharpening Jig - The Cutter for the knife sets is replaceable and easily sharpened on a bench grinder platform with the Sharpening Jig (#32743) or by hand on a stone. The cutter is made from HSS CPM M4 - \$24. The cutter produces a 3/8 kerf.

Setup:

The long edge of the base of tool holder is bolted perpendicular to the lathe bed.

Two tool posts are bolted to this base. The permanently bolted post holds the cutter arm and the handle. The moveable post holds the support finger.

The distance of the tool holder from the headstock is based on the cutter capacity, the thickness of the bowl desired and the number of bowls to be cored. A sample method follows.

1. Measure distance from face of headstock to base of bowl.
2. Determine thickness of the base of bowl.
3. Distance to inside of base of bowl = #1 + #2
4. With cutter handle perpendicular to bed ways measure distance from edge of base plate facing headstock to edge of cutter facing the bowl.
5. #3 + #4 = distance to set base plate from headstock face for the cutter set being used. A different cutter set would require a different #3 measurement. A different lathe chuck would require a new #1 measurement, etc.
6. Cutter height adjustment = headstock center point. Adjusting screw on bottom of cutter post.
7. Base plate should also be square with lathe bed and positioned so cutter will start where coring will begin.

How Does the Easy-Core Work? –

Connect the detachable tool handle to the knife shaft.

The tailstock (with an extension) can be used while coring.

When the entry cut is made, the support finger is positioned at the face of the bowl supporting the cutter blade. Lathe speed approximately 500 rpm.

The cutter is on a fixed arc and it becomes a simple matter of deepening the cut by exerting pressure with the handle. After progressing 1-2 inches into the groove, the cutter is removed and the lathe stopped to re-position the support finger by introducing it into the groove.

This procedure is repeated until the knife reaches maximum depth. The core is then removed by tapping the edges or a bit of easy prying.