

# USERS REVIEW OF HOLLOWING SYSTEMS

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Overview of my experiences.

References: AAW American Woodturner, Oct 2014, vol 29 no 5

Page 28; Low cost self made hollowing system

Page 32; David Ellsworth large hollowing forms

Page 62; Lyle Jamieson advertisement

## SIMPLE:

Straight handheld scrapers. From short blades (6") with 1' handles to Ellsworths 4' to 5' handles.

Diameter of tool determines effective depth over tool rest.

Pros: Most turners already have basic scrapers and are familiar with their use. Relatively inexpensive. Even long handled tools are easy to make.

Cons: Require good tool technique to avoid serious catches. Limit to depth dependent on tool diameter, length of tool over toolrest and handle length. Unable to make undercuts.

Other blade configuration. Hook tools, Soren Berger tool, carbide "Hunter" tools.

Pros: Better for cutting end grain, stay sharper than scraper blade.

Con: More aggressive, requires better tool skills. Catches can be severe.

Curved tools. Same as straight tools except the shank is bent. Usually in a sweep that results in the cutting tip being in line with the tool handle.

Pros: Allows undercuts and inside curves through smaller openings.

Cons: Unable to see tool tip and resulting cutter action. Requires exact tool technique with strict attention to tool orientation to avoid serious catches.

ARM BRACE Dennis Stewart System. Now sold by Robert Sorby. Craft Supplies, Cost \$100+ depending on tools.

Pros: . Gave turner more leverage and twist control than simple straight handle tools.

Cons: Tool becomes attached to body which results in more serious injury in case of a catch. Requires more attention to tool orientation and control.

One of the problems with hollowing is the buildup of shavings inside the vessel. These shavings are flung to the outside surface and will interfere with the cutting action. When enough of these shavings accumulate they will "grab" the tool which acts like a "catch" either pulling the tool out of the turners hands or throwing the tool into the side of the turning vessel. When this happens the turner must retract the tool through the shavings, which is tricky, or hold the tool steady with one hand and turn the lathe off. Again, tricky and potentially dangerous.

RIGID SYSTEMS All of these systems removed the tool from the turners hands and incorporated it into some type of holding system that, once adjusted to proper cutting orientation, took the stress of catches out of hollow form turning.

Shaving buildup with these systems as well. However, because the tool is fixed in a ridged system the turner can withdraw the tool without the chance of an injury from a catch. Or simply withdraw the tool to a noncutting position and safely turn the lathe off.

CAPTIVE BAR SYSTEM. Donald Derry system ([derrytools.com](http://derrytools.com)) Cost \$200+

John Nichols type home built Cost < \$100

Pros: Simple design, Relatively inexpensive, easy to set up.

Con: ½" bar limit to about 6" depth. 5/8" bar limit to 10" depth.

Bar may bind in holder due to chip buildup.

ROLLER BAR SYSTEM. Carter Roller Bar System. Craft Supplies. Cost \$315

Pros: Larger tool post and tool diameter. Rollers eliminate chip buildup problem. 5/8" bar = 12" depth, 1" bar =18" depth

Cons: More expensive, a little more setup required.

"D" HANDLE SYSTEM Lyle Jamison lylejamieson.com. Cost \$400 for ¾" bar, \$500 for 1 ½" bar, includes lazer system

Pros Rigid system, easy to use, full range of tools.

Cons. More expensive, setup more involved, more "stuff" to manipulate.

ARTICULATING ARM SYSTEM, Trent Bosch Stabilizer system, trentbosch.com

Cost \$350 + tools

This system utilizes an articulating arm system in a compact package.

Pros; Compact design, simple setup, easy to use.

Cons; relatively expensive, some pinch point dangers.

MEASURING DEVICES Part of the intrigue of hollow vessels is the wall thickness. There are several devices for the turner to use to measure the wall thickness as the vessel is being turned. They include:

Your fingers, good for shallow forms with large enough openings to get your finger in.

Bent wire calipers, work but are a pain, in my opinion.

Regular calipers, work but they measure "after the fact".

Light transmission, work on green translucent wood.

Lazer, the first system that gave the turner information of where the cutter was BEFORE the cut. Needs constant adjustment to make sure the lazer light is perpendicular to the cutting point.

Video cameras, Trent Bosch Visualizer system. trentbosch.com Cost \$650.

The first system that actually depicts where the cutter is at any. Measure before as well as after the cut.

Pros Gives the turner a true image of where the cutter is at all times. Once set it does not require readjustment to maintain dimension. Adaptable to any other system or tool.

Cons; Expensive! Takes some setup time and adjustment of equipment.

I would appreciate your comments on this information and or presentation.

Was it useful to you? Did you learn anything? What could I have done to make it better?

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