

# Apple Valley Woodturners

## Put a lid on it

Decorative boxes with threaded lids were on display at the July 20 meeting of the Apple Valley Woodturners.

Art Jensen, who has bounced back from a serious injury to his thumb, was the guest demonstrator.

Jensen, a high energy man with a good sense of humor, is known for his highly decorated threaded lidded boxes.

For his lidded boxes, Jensen prefers Desert Ironwood because of its extreme hardness it allows for sharp, crisp threading. At the meeting, he used another hardwood, olivewood, which is also known for its hardness.

Jensen brought seasoned blanks for his demonstration. The boxes are turned on a standard lathe. He uses a special hollowing tool, and a Bedan tool for sizing the inside of the box.

Jensen sizes the box and the lid with a Robert Sorby thread-sizing gauge. Sizing is very important since he must leave enough thickness in the wood to accommodate the threading.

Once the box is turned to the correct size, Jensen moves to a Bonnie Klein threading lathe. When the box is chucked on the lathe, Jensen rotates it by hand, into a spinning cutter. The lathe can be set up to advance at a certain rate, which represents the number of threads per inch. As Jensen rotates the box, the lathe advances the box on the cutter at the desired rate.

The process is identical to the way a metal lathe threads.

After Jensen demonstrated the procedure on the olivewood box, he offered an ironwood blank to Don Riggs, and directed Riggs through the process again.

(Robert Sorby, and a number of other tool manufacturers offer hand thread chasers, although it appears this is a dying art.)



Art Jensen sizes the inside of his box before he begins the process of turning the threads.





## Wood Dust: A concern for all woodworkers

When assessing the potential for adverse health effects from dust ingestion, the key questions involve how much, how big, and how long. As with many health effects, there is not a consensus on quantitative limits. However, experts agree that the less dust ingested the less likelihood of health problems.

Chronic inhalation of wood dust may damage the lung's cleaning system. When this happens, a vicious circle begins as more dust collects and further damages the lungs. The body responds with an inflammatory response. The bronchial airways become red, swollen, and painful. Swelling decreases the diameter of the airways and produces shortness of breath. Woodworkers who are affected tend to develop symptoms similar to those with chronic bronchitis and emphysema. While inhaling wood dust is not as harmful as smoking, it can be dangerous.

Dust particles can be classified into two groups: those smaller than 10 microns in diameter and those greater than 10 microns (24,500 microns equals 1 inch). Particles less than 10 are respirable (small enough to negotiate the tiny airways that reach deep into the lungs). Particles greater than 10 microns tend to get trapped in the larger airways. It is worth remembering that you can only see non-respirable dust.

Per the American Conference of Governmental Industrial Hygienist, the maximum level of airborne respirable particles should average less than 5 milligrams of dust per cubic meter of shop space in 8 hours. Other studies suggest 2 milligrams per cubic meter.

To put this in perspective, consider a shop located in a typical two car garage

21'x27'x9' => 170 cubic meters

At 2 milligrams per cubic meter => 1/3 gram => 1/4 teaspoon

Perhaps the 2 milligram limit is not realistic, but this example puts the challenge in perspective.

Strategies to avoid problems with dust include:

- 1- Reduce dust generation. Larger particles are less hazardous because they settle out more quickly and are more easily captured by a dust collection system. Hand sanding produces fine dust. However, power sanding, including sanding on a turning lathe, is most responsible for creating lingering dust clouds in the shop. Using sharp tools and cutting rather than scraping techniques will also reduce dust generation.
- 2- Capture dust before it goes airborne. Using a dust collection system with appropriate dust pick up devices will help. However, a dust collection systems isn't a substitute for a dust respirator. Most systems come with inexpensive cotton sateen bags. These capture dust particles down to 10 microns. Typical air flow to bag surface area is about 20 cubic feet per min(CFM) /sq. ft. of bag surface. Knit polyester captures dust particles down to 5 microns. Typically these bags allow approximately 50 CFM per sq. ft. of bag surface area.
- 3- Use an air cleaner.
- 4- Use a good respirator and dust mask.

## From the woodchuck

How about that Jensen!

His boxes were so decorated one of the attendees thought he was using an ornamental turning lathe. Just shows what skill can accomplish.

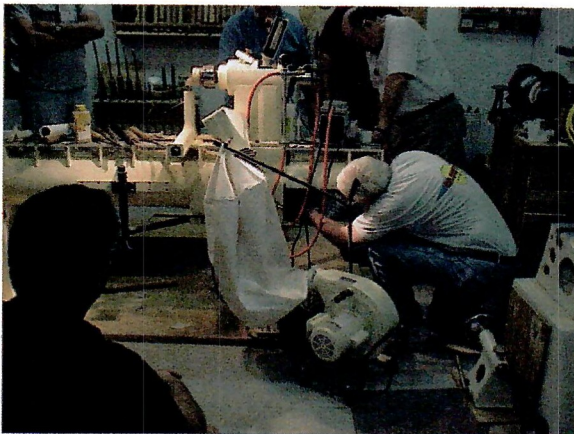
Looks like we are going to have more hands on sessions in the future. So be prepared, bring your tools and some wood.

I still have some hackberry piled up behind the house, it's free for the taking. Remember to love your neighbor but not your neighbor's wife.

If anyone is interested in Jet equipment we may be able to get a bigger discount if we buy more at one time.

Anyone who missed out on the wood sealer let me know and I will order more.

Keep the chips a flying



What in the world is he up to now?

## Show and Tell



Some very nice pieces were on display at the meeting. Threaded boxes, inlaid boxes, clocks mounted in spheres, bias turnings and some nicely done turkey feet

## Meeting notes

It was voted upon that every other meeting we would have hands on sessions. This will begin at the next meeting. So don't forget your equipment



## AVW Demonstrates

This past week AVW members Tim Gregory, Ken Darr, Don Riggs , Gene and Dorothy Gillespie Showed up at the Frederick county fair on member Robert McFarland's behalf to demonstrate his equipment.

Although the fair attendance was down due to the heat, we were still able to entertain a small crowd

This is what supporting those who support us is all about.

## Club picnic

I guess there will be no picnic this year. Nobody seemed to have any interest in it.

Too bad I just threw ten bushels of sweet corn to the pigs.

## For Sale

Shopsmith lathe

Call Bill Pfahl

1-540-869-2379

Turkey feet

Call Robert Van Meter

## Next meeting

August 17 at the home of Dick Krehling

142 McClure Way

Winchester Va

1-540-542-6716

Support those who support  
us

## McFarland's Saw Mill

587 Round Hill Rd

Winchester Va.

667-2272

Jet , Powermatic Dealer

## The Cutting Edge

7123 Southwest Fwy

Houston, Texas

1-800-790-7980

## The Woodworking Shop

Hickory, NC

1-800-228-0000

Coleman Fourshee, general manager