Trent Bosch Demonstrates for CMW
July 17, 2010
By Bob Gunther
Photographs by Bob Heltman

Overview:

Trent Bosch has been woodturning professionally for the past 19 years. His home is in Ft. Collins, Colorado. He began exploring the art of woodturning while pursuing a Fine Arts degree at Colorado State University. Since graduating he has fully devoted his creative efforts to forming one-of-a-kind sculptural woodturnings. He has a love for teaching, sharing freely with others the knowledge and techniques he has developed. His work is displayed in numerous fine art galleries, the permanent collections of museums and craft centers as well as in many private collections worldwide. Trent has taught and demonstrated techniques for turning and sculpting wood throughout the United States and abroad. He teaches on a regular basis at the John C. Campbell Folk School and at the Arrowmont School of Arts and Crafts. He has been a past demonstrator at CMW and at the NC Woodturning Symposium in 2007. Trent is an active member of the AAW, currently serving as chair for the Professional Outreach Program (POP).

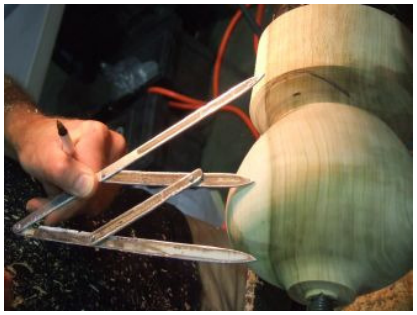
Morning Session:

Trent began his demo with a slide presentation of samples of his work. His primary focus is hollow form turning and carving. He showed his "Vessels of Illusion" where one hollow form was steamed and fitted into another and then returned to shape, thus creating a very interesting and intriguing piece. Trent also uses coloring and texturing in creating his pieces. Examples of sand blasting, piercing and multi-axis hollowing were also shown. Trent showed his "Cactus Series" where bronze spikes were put in the wood as cactus spines. He showed stands made of copper grounding wire that accentuated the design of the pieces they held. For some of Trent's favorite pieces, he makes a mold and produces bronze replicas.

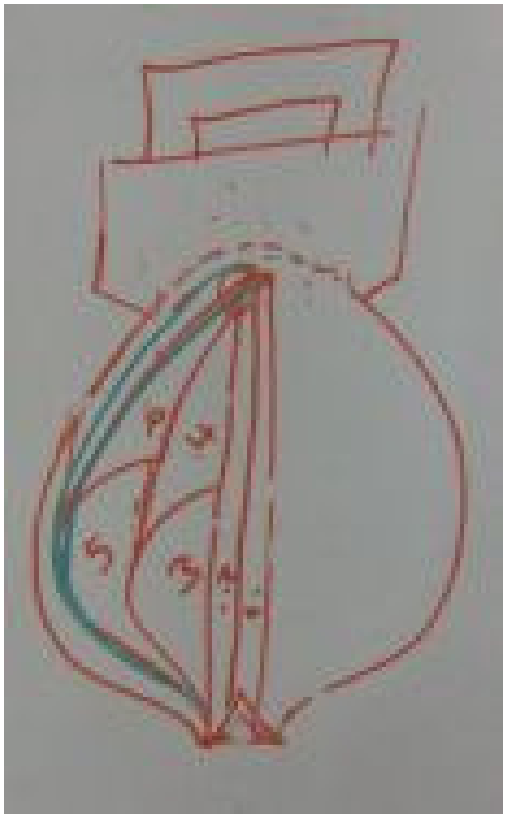
The first demo project was a hollow form using green cherry wood. The 7" x 7" x 9" long piece was placed between centers. It had been rounded into a cylinder prior to turning. A sweptback ground bowl gouge was used to initiate the turning process. Trent holds the tool handle against his body for support and stability while turning. He shaped the tailstock end into a tenon. When turning the tenon, one must be sure to have a good fit with flat surfaces against the chuck. The tenon size should be a little larger than the diameter of the jaws when fully closed. This provides the most contact of the jaws with the wood. A fingernail ground spindle gouge was used to clean up the tenon prior to placement in the jaws.

Trent removed the piece from between centers and placed it in the chuck and brought the tailstock up for added support.

He began shaping using the bowl gouge cutting from a large diameter to a smaller one and riding the bevel. Trent first shaped the upper, top, or open end of the vessel and then the lower, base, or tenon end. He left a considerable amount of wood on the base for support. Then he did further shaping to give a pleasing shape to the piece. Shear scraping was used to fine tune the shape and produce the desired form. While shear scraping, Trent held the tool handle at a 45-degree angle to produce a good surface and eliminate tear-out. He used a gauge to give the 1/3: 2/3 relationship to the top versus the bottom of the piece. These distances were measured from the high portion of the side of the vessel. Where the shaped or turned portion of the vessel meets the unturned base area, Trent drew a line depicting the vessel shape as it projects into the base area. This permitted better determining where the inside of the bottom will be.



Then he removed the tailstock and began hollowing after checking the tightness of the chuck. Because the piece was end-grain it will warp when drying, but will have less tendency to crack than side-grain work. Wall thickness needs to be consistent. Up to this point, Trent did no sanding because of the large mass of wood and its high moisture content. When hollowing, the vessel opening was first drilled to the determined final vessel depth. The drill hole was then opened up and hollowing done in steps or stages using the straight tool followed by the angled one. He used a spindle gouge to make a "V" cut so that the drill bit could be used. A gun drill was used to drill into the piece. The bit was connected to a compressor so that shavings could be removed as the depth of the hole progressed down to the desired level. Trent used a straight hollowing tool with an M-2 steel cutting tip to begin the process. Trent ground the tip on the edge of the grinding wheel. The right edge of the wheel was used to grind the left edge of the tool and visa versa. Cutting was done with the tool rest on center.



Trent Bosch's demonstrated stages for hollowing

He slowly enlarged the opening using a pivoting motion of the tool. Trent felt for the center-drilled hole as he advanced the cutter. This cut with the straight tool completed the 1st and 2nd cutting stages. Stage 3 and 4 were also done with the straight tool. Stages 5 and 6 were completed using the bent tool. When using the

bent tool it is essential that the bent portion be beyond the tool rest to prevent torque and damage to the vessel opening. Shavings need to be frequently blown out so that the tool tip is not grabbed or displaced. Wall thickness can be somewhat judged by the sound of the cutting as the wall gets thinner. One can also determine the thickness using one's fingers on the upper wall areas and a caliper or thickness gauge for the deeper areas. A wall thickness of about ¼ inch is ideal, especially if any carving is to be done. A teardrop shaped cutter can be used to clean up any ridges that remain on the interior after hollowing. Trent does not sand the interior. This ended the morning session.

Afternoon Session:

Trent continued with the cherry hollow form started in the morning session. He further shaped the lower portion. The depth of the vessel was checked several times during the shaping process. Shear scraping blended the surfaces. The bottom or base of the vessel was shaped round and would not have a flat or pedestal type base. This way the piece would lie on its side in a very informal or casual position. Sanding could be done at this time.

The chuck with the turning still attached was removed from the lathe and placed on a carving stand. The stand used was a pneumatic one that could be positioned at any angle using a foot pedal to turn the air pressure on and off. Once positioned surface design features were drawn with a pencil. An area of sapwood was outlined and several leaf formations drawn. A reciprocating carver using Flex-Cut cutters was used to carve the details on the above outlined areas. An air grinder tool was then used to further accent these areas, especially the sapwood area. This gave the impression of a vessel within a vessel. An angle grinder was used for further shaping. A tri-cutter produced an undercut appearance.

The pneumatic carving stand was changed out to a manual one. The leaves were sawn out using an air body saw with an 18 teeth per inch portion of a hacksaw blade. The reciprocating carving tool was used to further outline the leaf areas. A die grinder further outlined these areas. A small air powered drum sander even further added to the leaf shaping.

Next, a face-grain, hard maple, 11" diameter and 2" thick platter blank was placed between centers. The backside of the platter was turned and a tenon formed. A shear cut was used to refine the surface. The outer surface

was trued up. The piece was removed from between centers and placed in the chuck. The tailstock was brought up for added support. The face of the platter was turned using the bowl gouge in various positions (i.e. shear cut, push cut, etc.). The tailstock was removed and the center of the platter face turned. A small bowl was formed in the center. Because the platter would become a "flower" design this bowl formation would be the center of the flower and the rim would become the petals. The "flower," still attached to the chuck, was placed in the carving stand. A scalloped design was drawn on the rim to simulate the petals. The reciprocating saw was used to cut out the pattern and the carver was used to make the grooves between the petals. An air sander was then used to smooth and refine the petal shapes.

For the final part of his demonstration Trent placed an 11" diameter and 5" thick piece of poplar on a screw center. The foot of the bowl was shaped and a tenon made. The tenon was cleaned up using a spindle gouge. The top of the bowl was dressed and the edge defined. Two beads about 1 ½" apart were turned on the outside of the bowl near the rim. A diamond shaped tool was used to form the beads. Space between the beads could be carved or textured.

The piece was removed from the screw chuck and the tenon placed in the jaws. The tailstock was removed and the bowl hollowed. It was scooped out from the center using concentric cuts. When enough of the bowl was hollowed out it was used as a jam chuck so that the earlier turned hollow form could have the base turned down to a small nub. The hollow form would be sanded and parted off.

Back to the bowl: The bowl's interior was further opened up. One can stop when the thickness is 1/10th of its diameter. It can be dried using a kiln or other method or taken to completion. Trent thinned the top 2" of the bowl and finished off the surface in this area. He left the edge somewhat undercut. The lower portion of the bowl was then turned and the upper thinned portion not returned to.

The bowl was put in the carving stand. The reciprocating carver was used to carve various patterns in the area between the beads. A grinder was also used to make designs as was a reciprocating saw pushed against the wood.

This completed an interesting, informative and enjoyable demonstration.