

Avelino Samuel

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St. John, Virgin Islands
340-514-6002
binosam@pennswoods.net

“I try to create objects that showcase the beauty of wood through different shapes, finishes, and surfaces. Sometimes this is experienced by allowing the material to be the dominant voice. In other instances, the material (wood) is worked to accent its character. This may take the form of carving, burning, or coloring ... all in an effort to create an object that appeals to the eye and tactile senses.”

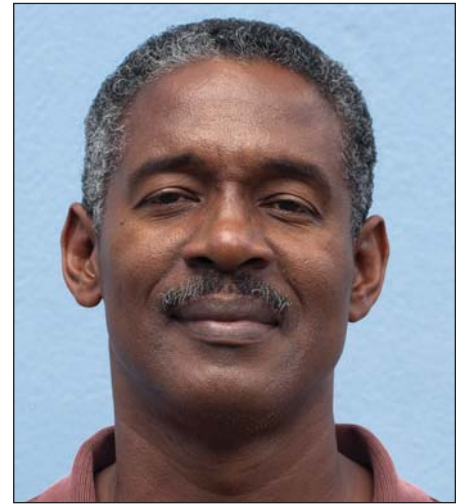
Avelino was born and raised in Coral Bay, St. John, in an environment that laid the basis for his development as an accomplished woodturner. In this lush, tropical setting, he became acquainted with native trees and learned firsthand to appreciate their beauty and usefulness to mankind. In an environment that supported and nurtured industriousness, he learned from an early age to handle tools and, with his keenness for form and function, began to make objects such as bows and arrows, afro picks and other hair implements, and small ornamental pieces.

Avelino's decision to pursue a career that involved woodworking came early. By the end of high school, he knew he would seek higher

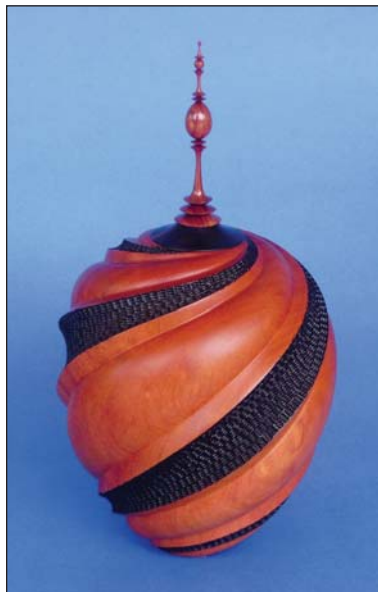


education and enrolled at the then College of the Virgin Islands. He later transferred to North Carolina Agricultural & Technical State University, where he earned a bachelors in Industrial Arts. After receiving his masters in Industrial Education from Eastern Michigan University, he returned to St. John, where he taught for 30 years. His job as a teacher facilitated his full engagement in his craft and active interest in passing it on to others. Although retired, he continues to volunteer to teach woodturning to young children twice weekly.

Avelino has used his summers to continue his woodturning education and has attended numerous symposiums from which he has acquired new techniques and perfected old ones. He has demonstrated at the AAW's



international symposiums (2004, 2008), participated in its Youth Turning Program and its Turners Without Borders program, the Arrowmont School of Arts and Crafts (Gatlinburg TN), John C. Campbell Folk School (Brasstown NC), and at the Ohio Valley Symposium in Cincinnati. He has conducted demonstrations in Seattle, Tacoma, Olympia (WA), Portland OR, and Charlotte NC.



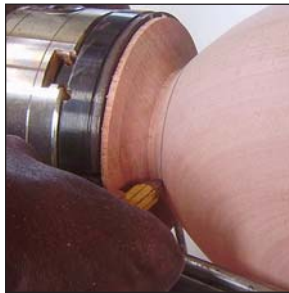
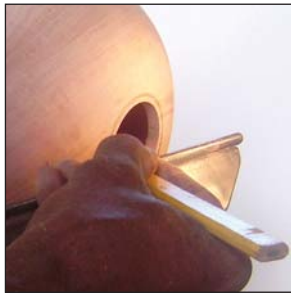
Spiral-Carved Hollow Vessels - Layout

There is more than one way to lay out a spiral carved vessel. It depends on how you want the spirals to look. Many people like their spirals to turn into the opening at the top and into the base at the bottom. I like mine to be tangent to the hole at the top and tangent to the base on the bottom. Here's how.

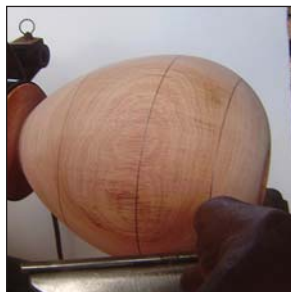
After you have turned your vessel to shape and hollowed it, sand it with 100 or 120 grit to remove any unevenness. This will make it easier for the pencil to draw the layout lines. Begin by holding the pencil against the toolrest and rotating the vessel by spinning the hand wheel to draw a radial line at the largest diameter of the vessel.



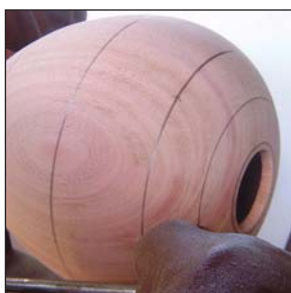
Draw a radial line approximately 1/8" from the edge of the opening at the top. Draw another radial line approximately 1/2" from the bottom.



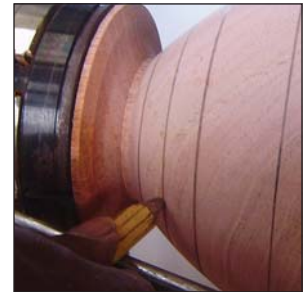
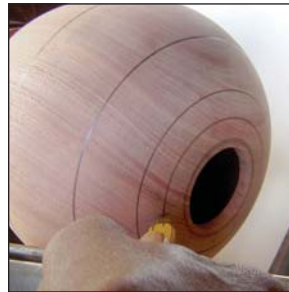
Draw radial lines midway between the largest diameter and the top and the largest diameter and the bottom.



Your vessel will now be divided into four sections. To make drawing the spiral lines easier, draw a radial line in the middle of the first section at the top and one in the middle of the last section at the bottom.



Two additional lines may be added if desired.



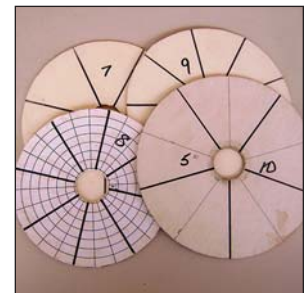
The radial lines are now complete.



You now ready to draw the segment lines, but there are some factors to consider. How large is the diameter of the vessel? Typically, 5-6 segments will work well for a vessel approximately 6" in diameter and 7-8 segments for a vessel 8" in diameter.

Are you going to do an alternate pattern with the segments? If you are, you need to choose an even number of segments. If you like bold segments, use less segments. Remember, with each additional segment, there is additional work and time involved. If you are doing your first spiral vessel, keep it in the 6" diameter range with 5-6 segments.

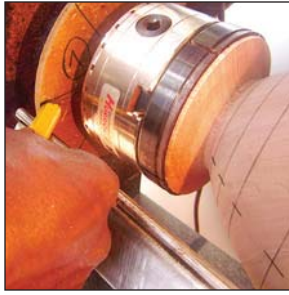
There are many ways to equally divide the segments on the vessel. You can use the index on the lathe, the index on the chuck, the jaws of the chuck, and dials. Dials that fit over the spindle are the most flexible. You can make them with any number of segments, but indexes usually don't allow you 5, 7, 9, 10, 11, 13, 14, 15, and many others. You can make the dials from poster board, but 1/8"- 1/4" plywood is more durable.



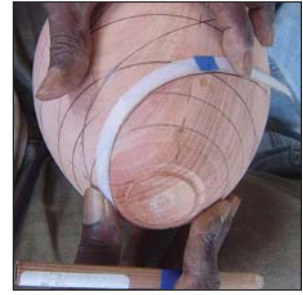
To draw the segment lines, you will need a jig that allows you to draw lines on the center axis of your lathe. You can use a platform mounted in the toolrest or make one that slides on the bed. For spiral carved vessels, you may use the toolrest to guide the pencil if your hands are reasonably steady.

Mount the dial between the chuck-faceplate and the head of the lathe.

With your jig, draw a line for each segment from the bottom to the top of the vessel.



Don't forget your eraser. Do the same procedure for the bottom.



The intersection on the segment and radial lines will be used to draw the spiral lines. You can start the layout on the lathe, but I prefer to do it in my lap. Now it's time to turn off the tenon of the vessel. Continue the segment lines to the base of the vessel.



Now your layout is complete.



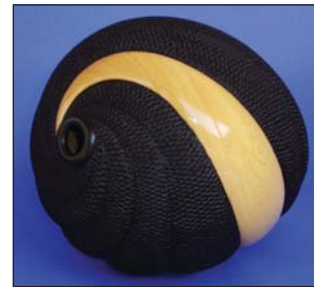
Battens and flexible French curves will be necessary to draw the spiral layout. The battens and the flexible curves can be cut from plastic bottles.



Begin the spiral layout by drawing lines from the middle top to the middle bottom line using a straight batten. Lines are offset by two segments.



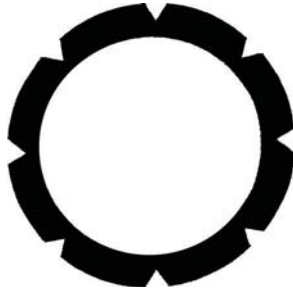
Next, draw the curved portion at the top of the vessel. This will require some trial and error to find the best curve. You will need to draw two lines to determine if you picked the correct curves.



Carving a Spiral

STEP 1

Before you begin carving, check the thickness of the wood. You may cut along the carving lines with a V-groove carving tool. Try to achieve a thickness of 1/8" to 3/16" at the bottom of the groove line.



As you carve the first groove, check often to ensure there is enough material remaining. The first groove now becomes a visual gauge that may be used to check subsequent grooves. You still need to confirm the depth of the grooves with a measuring device, but you won't need to check as often. You are trying to achieve an illusion, so small discrepancies in the depth of the groove will seldom be visible.

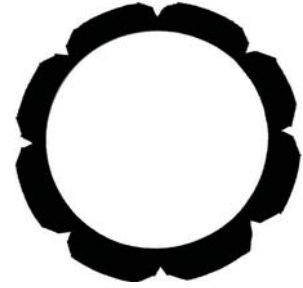
STEP 2

Now you are ready to remove the corners of the V-grooves. Use a flat chisel in your carver. Begin by removing small amounts of material at first. More material will be removed from the wide areas of the carving and less from the narrow sections at the top and bottom of the carving. Do not hesitate to practice carving on a flat board with sections of smaller and intermediate widths of the carving.

This exercise will help determine how much material to remove. Note that the area on both

sides of the bulge and the bulge itself require making test cuts to determine the direction of the grain.

On one side of the groove, the cut will begin before the high point and the reverse in the opposite direction. If you have limited experience, be more conservative. As you gain experience, you will be able to remove more material and reduce your carving time.



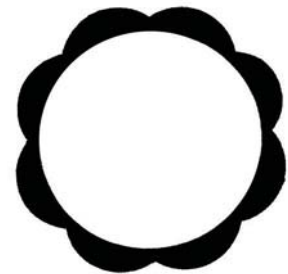
STEP 3

At the top and bottom of the vessel, the curves of the carving are more severe, making it more difficult to control the plane. If you begin to cut into the adjacent section, stop.

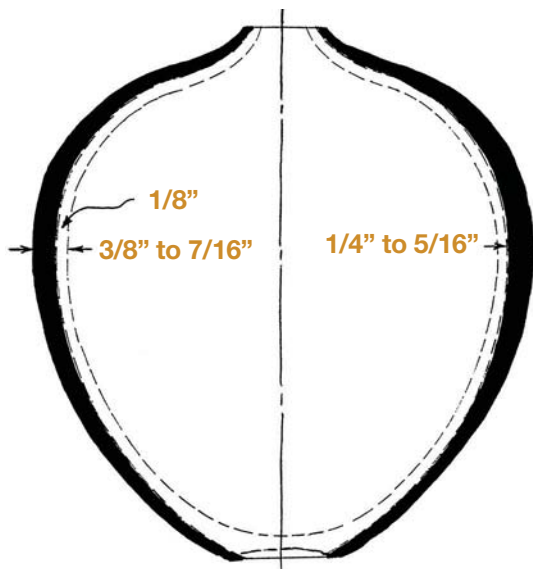
You may shape this area with a V-shaped sanding board, because much material will not need to be removed. Pay close attention to the direction of the grain to reduce tear-out.

Make test cuts to determine how far you can plane before changing the direction of the planing.

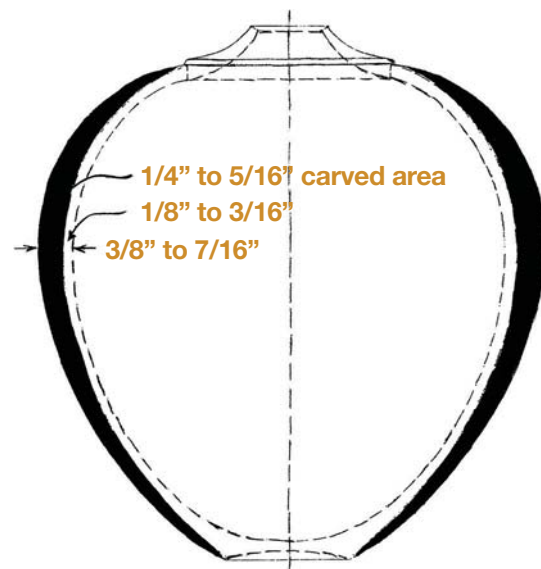
If you start a cut and a splinter or a tear-out begins, stop and glue the splinter or tear-out with CA glue.



For straight-carved vessels



For spiral-carved vessels



Although the bottom of the groove thickness is important, it is more important that there is a gradual decrease in the depth of the groove (in both directions) because the groove approaches the top and bottom of the piece.