

TEXTURING AND SPIRALING

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Add visual and tactile appeal to bowls, platters, and spindle turnings in just moments using texturing and spiraling tools. By changing the cutter, speed, pressure, and angle, you can produce a variety of details ranging from spirals, diamonds or crosshatching, orange peel, and striations. Sorby and Crown both make texturing and spiraling tools (*Photo 1*), including minitools for delicate work.

Sorby and Crown sell a texturing tool that comes without an indexing rest. You can buy the rest separately and one or more spiraling wheels to turn the tool into a “texturing and spiraling system.”

Both texturing and spiraling tools texture wood. That is, they change the appearance and feel of its surface.

The distinction between texturing and spiraling is based on the cutting wheel used, which determines the look of the texture.

Technique tips

For the best results, use dry hardwoods that have close, even grain, such as cherry, maple, and my favorite, Bradford pear. Prepare the surface by sanding at least to 240 grit.

Texturing thin walls can cause flexing, so turn beads and apply texture on the outside before you finish hollowing the interior of a bowl or platter to ensure the surface will run true.

Graphite from a pencil lightly applied to the turning wood will define the placement of border rings and also help verify that the surface is running true, which will prevent a texturing tool

from skipping. Pencil marks disappear when V grooves are cut.

Frame areas of texturing and spiraling by adding a bead or shallow V groove on each side to make the texture stand out (*Photo 2*).

The wheels, while referred to as cutters, are actually scrapers. As scrapers, both texturing and spiraling tools are used in a trailing mode with the toolrest below center. Raise the tool handle above the height of the cutter to bring it into the work on, or slightly below, center. Lathe speed is not critical, but keep it around 400 to 600 rpm.

Keep the toolrest parallel with the area to be spiraled or textured, and the tool handle perpendicular to the wood’s surface. To texture narrow bands, use the toolrest to pivot the

shaft of the tool in a small arc. When texturing larger areas, slide the shaft if the tool sideways along the toolrest.

To prevent loss of detail, avoid sanding after texturing, except lightly with 320-grit abrasive to remove torn fibers, or use a brass-bristle detail brush.

Faceplate vs. spindle texturing/spiraling

Texturing and spiraling wheels can be used on faceplate projects—such as the side of a bowl or its rim—or on spindle projects, where the direction of the grain is running parallel to the lathe bed, for items such as tool handles, acorn ornaments, boxes, or hollow vases. The basics of tool technique are similar.

It is easy to get a consistent pattern without tearout on the side of spindles; however, on faceplate work, the variance between side grain and endgrain can cause torn fibers with spiraling, but has little effect on texturing. I recommend practicing on spindles before moving on to faceplate work.

Texturing wheel

A *texturing wheel* has teeth that come to a point (*Photo 3*). These points leave small indentations in the wood. Patterns of indentations can be



1 There are large and small texturing and spiraling tools. I drilled and tapped a round bar of steel to make a separate holder for the large texturing wheel (top) so I would not have to change out cutters as often.



2 Use a bead, V cut, or raised band to frame the texturing.

varied, but the look is different than marks made by a spiraling wheel.

If you have a spiraling system, remove the adjustable indexing rest, which is only used for spiraling. Start by positioning the tool on the toolrest with the wheel vertical (*Photo 4*). Slowly lift the handle until the texturing wheel is pressed into the wood. Hold tightly while pivoting the cutter sideways to produce a line pattern instead of random dots.

Lifting the cutter from the surface and re-engaging it gives an orange-peel pattern. Tilting the cutter angle gives a different look, one with striations

where the lines are close together. Push the wheel into the wood and lift it several times for a random pattern.

Add color by burnishing the texture with a scrap of oily wood such as cocobolo, which will leave a dark residue (*Photo 5*). You will need to increase the lathe speed a little.

Spiraling wheel

A spiraling wheel looks like a gear and comes in several sizes (*Photo 6*). They range from fewer and larger teeth—more suitable for larger patterns and coarser wood—to ones with more and finer teeth that cut better in dense, ▶



3 A texturing wheel has teeth that come to a point. I tapped a piece of steel rod and used a cap screw to hold this texturing wheel to reduce the need to change cutters.



4 Hold the texturing wheel vertical to texture the outside of a bowl. Engage cutter and lift the handle while the wood rotates at about 500 rpm. Pivot the cutter sideways to produce a line pattern instead of random dots.



5 Burnishing the texture with oily wood will leave a dark residue.



6

Spiraling cutters look like gears. The adjustable indexing rest makes it easy to control the cutting angle and to accurately deepen cuts.



7

For spiraling on bowls, adjust the indexing saddle for a cutting angle of 15 to 20 degrees (about 1 on the index), engage the cutter, lift the tool handle, and move the tool along the toolrest.



8

If the trial-start results in striations, clean off the surface and try again.



9

A clean crisp spiral.



10

These rope patterns on a spindle illustrate what you can do with different size spiraling wheels over a bead.



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Use the edge of the spiral cutter to add a pattern to a bowl rim.

close-grained wood. Spiraling can produce patterns with parallel lines similar to threads.

The teeth on a spiraling wheel have beveled edges on one side, so install the wheel with the beveled edges up.

The spiraling tool has an adjustable indexing rest that clamps onto the tool's shaft and has numbers or notches on it to orient it to a line on the top of the tool shaft for consistency in setting the angle for texturing. Set the angle, and then tighten the indexing rest onto the shaft of the tool. In addition to setting the cutting angle, the indexing rest—positioned on the toolrest—allows accurately replicating the cutter angle when you restart the tool to deepen the cuts. It also allows you to reverse the angle for a diamond or crosshatch pattern.

For spiraling on face grain—bowls and platters—an angle of 15 to 20 degrees is about right (*Photo 7*). For the large tool, this is a number between 0 and 1 on the indexing rest. Steeper angles cut more aggressively and tend to cause excessive tearout.

Cutting a crisp spiral pattern on the outside of a bowl requires an area that is relatively flat so make sure that the circumference at the top and bottom of the band do not vary much. The softer the wood and coarser the grain, the coarser the cutter needed.

Make a light trial cut with a narrow pass, one or two spirals wide. Stop and examine to determine if you are getting a clean spiral pattern or striations. If you are getting striations (which can also look good) but want a crisp spiral pattern, the circumference of the work is not evenly divisible by the distance between the teeth (*Photo 8*). Clean the area with a gouge and try again until you get a clean pattern. This can take several attempts—the circumference of the bowl might need to be reduced to almost as much as the distance between two teeth—2mm to 11mm—depending on the size of the wheel. Then, when

you get a crisp spiral, finish the band to its full width (*Photo 9*).

A rope pattern (a spiral) can be an attractive embellishment. On the outside of a bowl (or practice on a spindle), mark the area of the bead with a V cut on each side, and then spiral between the V cuts. Use a spindle gouge to go back and shape each side of the bead. Pick up the spiraling cut again and continue the spiral over each side of the bead (*Photo 10*). Do not press too hard or move the tool too fast or the cutter will tend to “jump the track” when extending the spiral cut from the top of the bead to the sides of the bead. You might want to overlay some orange peel texture with the texturing tool to add to the rope look.

Spiraling wheels can also be used for textures other than spirals. For instance, by using the edge of the wheel without traversing or pivoting the handle, an interesting embellishment can be added to the rim of a bowl (*Photo 11*). For this cut, I remove the indexing rest because it gets in the way.

Try combining techniques. Colored pencils or colored waxes add attention-getting highlights (*Photo 12*). The options are limitless.

Endgrain texturing

Use either the texturing wheel or a spiraling wheel to create a variety



of whorl designs on endgrain. Spiraling or texturing on endgrain can be an alternative to chattering and works well on box lids—inside or on top. Lifting the wheel from the wood and cutting again adds yet another pattern, and scrolling back and forth tends to deepen the same whorls (*Photo 13a, 13b*). When texturing small endgrain items, an angle closer to 30 to 40 degrees works well.

Experiment and have fun. If the results are disappointing, cut off the texturing and try again. Keep in mind, though: Sometimes less is more; don't overdo it! ■

Mike Peace started turning shortly after retiring in 2007 and enjoys a wide variety of turning from ornaments to hollow forms. Mike is active in three woodturning chapters in the Atlanta area. You can see pictures of Mike's work or see his previously published magazine articles at MikePeacewoodturning.blogspot.com.



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Adjusting the angle of the cutter, and lifting and re-engaging it, changes the effect from a line pattern to an orange peel to striations. Color with a felt-tip pen to add highlights.



13a

On the endgrain face of this spindle, I textured the outside edge with a spiraling wheel and the inside area with a texturing wheel.



13b