

WOODTURNING

FUNdamentals

AAW
EDUCATION

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PROJECTS AND TECHNIQUES

Simple Feature Design

Robin Costelle

Parting is Such Sweet Sorrow

Mark Palma

Two-Part Goblet

Bob Rosand

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Honing Your Tools

Mark Baker

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Food Safe Finishes

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Stress Cracks

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TECHNIQUES

Rubbing Out a Finish

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Reduce Sanding

Larry Miller

Sharpening 101

Jim Conway

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SAFE TURNING IS FUN TURNING.

An accident at the lathe can occur with blinding suddenness. Respiratory and health problems can develop over time. Take appropriate precautions when you turn. Use face shields, safety glasses, and dust masks. Follow all manufacturers' safety guidelines. For more about woodturning safety, visit AAW's website at woodturner.org.



Cover photo: Thomas Jones

WELCOME

A Note from the Executive Director

AAW Video Source

Our newest service, [AAW Video Source](#), was unveiled at the AAW Symposium in Atlanta June 9-12. AAW Video Source offers access to useful woodturning videos (existing in the public domain), which have been pre-screened by the AAW for quality content and production, as well as safety. The videos are searchable by topic area. [Check out AAW Video Source here.](#)

We'll be adding more videos to AAW Video Source regularly and your participation will help keep the site relevant. If you would like to recommend a video, please send it (or send a link) to info@aawvideosource.org. The video will be reviewed for quality and safety, and if approved, it will be included in the video website.

Safety Note: Some videos have safety concerns noted to the right of the video title and duration. Remember that turning safety is the responsibility of each turner. No technique, practice, or method is safe for each and every turner. What is safe for one turner may be dangerous for another. Do not attempt any activity that is risky for you.

As always, *Woodturning FUNDamentals* invites you to submit your questions, tips, projects, and problems. Every turner develops techniques that work and also runs into frustrating obstacles from time to time. You're not alone. Please send your submissions to us at linda@woodturner.org.

I welcome your suggestions and concerns.

Respectfully,
Phil McDonald
Executive Director
phil@woodturner.org



[Click here to access AAW Video Source.](#)

SIMPLE FEATURE DESIGN

Only takes a couple of contrasting laminated boards to construct.

Robin Costelle

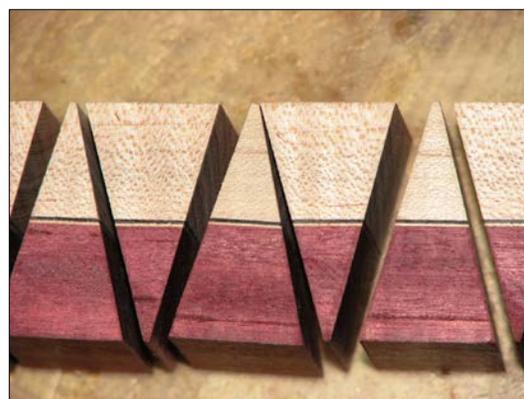


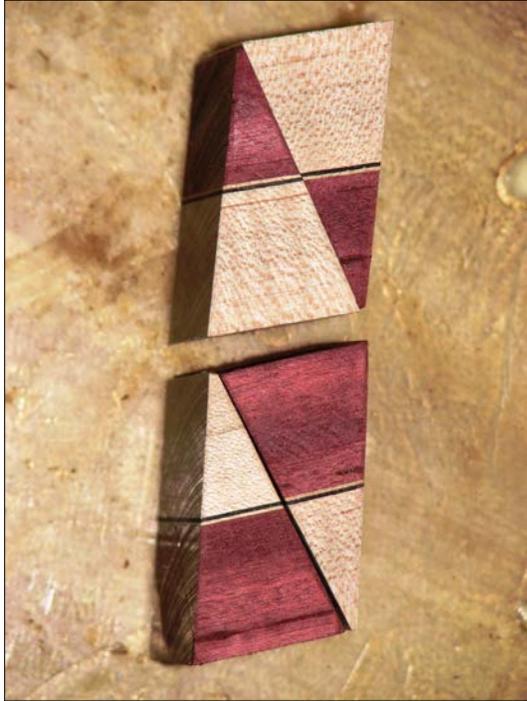
Now by matching up every other cut wedge, we can start our design. Just invert each piece with a similar one and our pattern begins to emerge.

This is a simple design only takes a couple of contrasting laminated boards to construct. I'm thinking of some different modifications to this type of pattern, but that may have to wait for the next installment.

First off, as I said, I started with contrasting boards. The thickness of my boards were the standard 3/4". The width and length of the boards are now forgotten, and would be different from another for each vessel anyway, so I'll leave that up to you. I also used a couple of contrasting veneers for details.

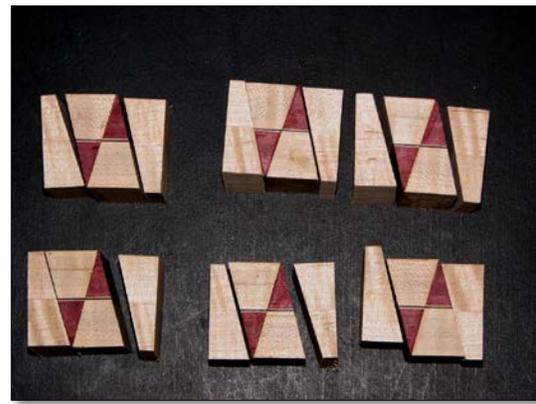
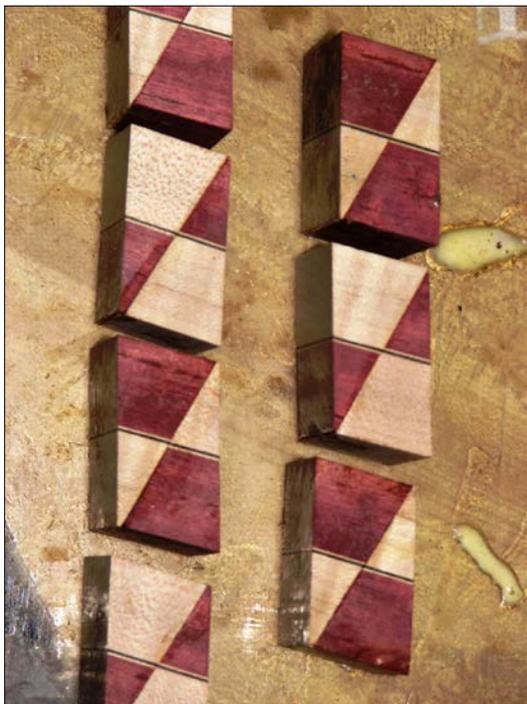
I cut these wedges at 15 degrees.



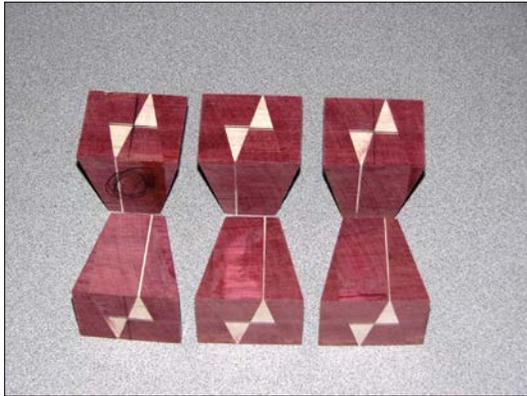


Here I have all my pieces sanded and glued together and now all I have to do is add a couple of strips of corresponding woods to each end and cut to my final dimensions.

Below are the pieces of maple and purpleheart that I cut to complete the segment. I try to use thick enough pieces so that when I cut the angles of the segments, I won't cut into the actual design.



Again, a bit of sanding and gluing and I have my block complete and will only need to cut the angles to construct my ring. Below you can see my completed segments and these can be glued up just like a standard ring.



Just a simple, but effective, design with many possible modification opportunities.

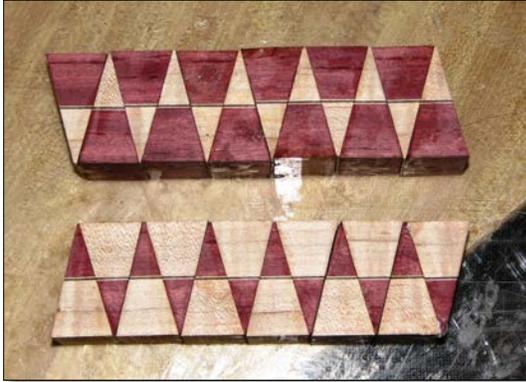
I hope this helps, but more than that, I hope it helps you discover more designs of your own with different wood choices and lamination patterns.

Good luck and have fun!



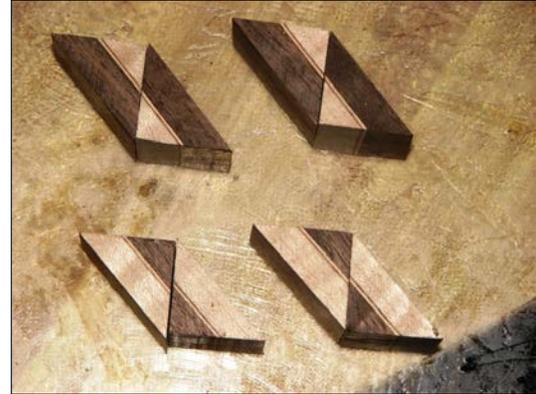
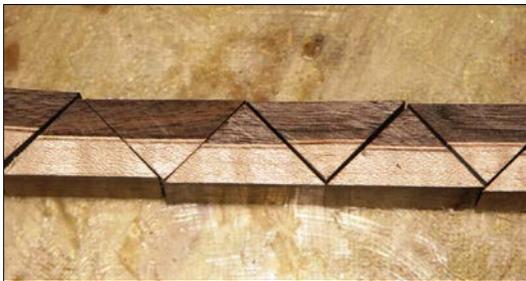
Here are some photos of some other designs I was playing around with just to give you an idea of how these can be modified to form new features.



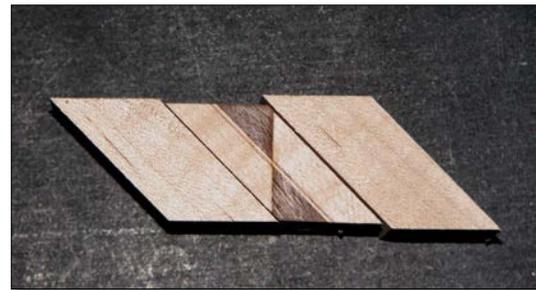


Here is another easy modification for this technique. All I've done here is cut the laminated board at 45 degrees instead of the 15.

Then I arranged them as shown below.



Add a couple of pieces of maple to each side of the design and cut into the appropriate size segment. Notice that these designs are rotated 45 degrees from the previous purpleheart pieces.



Below is the final piece with this style of pattern. Nothing fancy—just a neat little hollow form with a nice clean feature.



~ Robin Costelle, Fern Creek, Kentucky
 Robin has been a hobby woodturner since 2003, running the gamut from pens and bowls to large complex segmented vessels and beautiful hollow forms. He also has dabbled in pottery, musical instrument making, and furniture. Robin is a member of the Louisville Area Woodturners. He has been teaching and demonstrating for several years in and around his home state of Kentucky.

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PARTING IS SUCH SWEET SORROW

Using a Parting Tool to its Full Potential

Mark Palma

I wasn't one of the popular kids in high school. (Well, if I want to be honest, I could expand that list to grade school, middle school, college, grad school and law school, but who's counting?) Randy, my best friend had a black Chevelle 396 with four on the floor and mag wheels. My station wagon, with rust and a 307 auto, just didn't seem to be the same. That view was shared by my classmates, especially the girls. I could drive one of the pickup trucks from my Dad's hardware store, but somehow a rolling billboard for "Palma's Appliance and Television" didn't seem to make me more popular.

In many ways the parting tool is a lot like my station wagon was in high school; it got me from point A to point B but wasn't very sexy in its approach. The parting tool, like my station wagon, is the unassuming workhorse in the shop. We all have one but may only use a small portion of its capabilities.



Examples of parting tools

Types of Parting Tools

Parting tools come in many forms, but all forms have some similar properties: they all have two meeting surfaces to create a sharp edge, and are generally taller in their profile than they are wide (with the Bedan being the possible exception). Here are some types of parting tools that appear in our workshops:

- Straight side (comes in various widths)
- Diamond side (also available in many widths)
- Wide side (normally wider at the top, compared to its lower edge)
- Thin or knife style
- Thick (Bedan), and
- Carbide.



The same parting tool cut allows you to cut the end of a cylinder or to make a tenon

What Can a Parting Tool Do?

Parting tools can do a lot for us in our turnings. Here is the usual list we see:

- Cutting off a piece from the lathe (“parting off”)
- Cutting a tenon on a spindle
- Cutting a shoulder
- Squaring the end of a spindle



Make clearance when you are using the parting tool

But wait, there’s more!¹:

- Turning small beads
- Cutting grooves for wire burning or for other purposes
- Cutting a dovetail for your chuck
- Undercutting an area
- Sizing a project by marking critical diameters
- Making space
- Making clearance next to a chuck
- Defining an area for embellishments
- Being used as a mini skew

¹ Did you know you have Ed Valenti, the inventor of the infomercial to thank for this phrase? He also brought you the Ginsu Steak Knife, and the entire shopping channel concept.

Sharpening a Parting Tool

Each type of parting tool may have a little different cutting angle so pay attention to your particular tool. Here are some general guidelines:

- Use a light touch at the grinding wheel. It is very easy to burn the edge as a parting tool is generally a thin piece of metal, and is easily overheated.
- Keep your parting tool “in balance.” Parting tools are the meeting of two bevels. Exercise caution to avoid changing the shape of the tool. Diamond tools should meet in the center of the diamond and not above or below the wide spot of the tool.
- Side grinding lets you hollow grind the parting tool to achieve two points. When I hollow grind, I set my grinding wheel’s tool rest so that the parting tool is flat at center. I grind one side lightly, then flip the tool over and evenly grind the other side.
- Keep the tool sharp and the corners square. Do not round them over.

Using a Parting Tool

- The parting tool is both a bevel-riding tool and a scraping tool.
- Many turners only use it as a scraping tool and miss its full potential. If a turner pushes the tool into the work (scraping) and forgets the benefit of bevel-riding (peeling), a rough surface often results.

- Create clearance (I use a guideline of 1.5 times the width of a tool as a minimum) to prevent burning and binding.
- Cut short of your final line and sneak up on the final line. Stay to the waste side of the line and exercise patience when parting.
- Your last cut should be a small fraction of the parting tool's width, not a full cut.
- Make your last cut a single continuous cut down to the final diameter. Stopping and starting results in ridges.
- When cutting (or parting off) turn down your lathe speed before the last little cut. With a sharp tool you can turn down your rpm's and still get a great overall result.
- Have a plan as to how to use one hand, catch your work, and turn the lathe off safely. I rehearse the cut in my head so that my end result is a safe, stress free job of cutting off the piece from the lathe.
- Use your tail stock for support whenever possible. When parting between centers, use your dominant hand to control the tool and your non-dominant hand to catch the work, and hold it against the tail stock as it is cut off. Just hold it in position until your non-dominant hand can shut off the lathe and then extract the piece from between centers. It may not be dramatic, but it makes one piece into two.
- When parting unsupported work, it is even more important to have a plan. You may need to cover your bed ways with a towel to create a soft surface or landing pad. I turn down the lathe speed, get ready and make one confident cut. When your work diameter reaches the point of no return, don't panic! Just follow your rehearsed plan and go through with the cut.
- If it comes between you doing something unsafe and wrecking the piece, write it off and have a better plan next time. Your off switch is your friend. Use it before you need to write off the piece.
- Look at the grain in your wood before you start a cut. With small growth rings or straight tight grain running between centers, you can get down to one or two growth rings in some cases. When the growth rings are not running parallel to centers, you may have instability issues and tear-out if you try to cut off the piece. In this latter setting, you may have to either (i) part the piece off long and hand cut off the remaining nub, or (ii) stop the lathe and cut the piece off manually with a handsaw.
- Do not use the parting tool (or a skew for that matter) as a carving tool to take off the nub. Use a sharp knife, carving tool or rotary tool to remove the final nub.

Parting Tool Safety

- Have a safe handle on your parting tool; an unhandled parting tool is dangerous.
- Homemade parting tools are great. I make them from power hacksaw blades. Add wooden handles (as you would scales on a knife blade). I find they work very well.
- Butter knives and other similar utensils do work, but be safe about it. They have their limits. I prefer making mine from power hacksaw blades or metal lathe cut-off blades.
- Wear a face shield when parting off work. If anything comes loose, let's keep our teeth and pretty face intact.
- Use round tips on your calipers when sizing.
- Be careful when reaching over spinning work as part of any parting operation when you are sizing or parting under power.
- Watch your lathe speed as your diameter decreases. Recognize you have less inherent wood to support your work.
- If it doesn't feel safe, don't do it. Find another way that feels safe.

I hope this article expands your parting tool's repertoire and makes it almost as cool as Randy's 1969 Chevelle!

~ Mark Palma, Cameron, Wisconsin

Mark Palma is a tax lawyer by day and a woodworker whenever he finds that "spare" time that isn't spoken for. He thanks his family for allowing him to have a shop, a tool allowance, wood stash, and the time to pursue his addictive hobby.



Using a parting tool to size work to make a spindle



Example how to part of your work



Photo of finished project

Two-Part Goblet

Toast your woodturning skills

By Bob Rosand



About a year ago, we were invited to attend the bat mitzvah of a friend's daughter. Unfortunately, we were unable to attend because of prior commitments, but we wanted to send a meaningful gift.

The gift we came up with was a kiddush cup. Kiddush is a ceremony held at the beginning of many Jewish holy days, including the bat mitzvah (females) and bar mitzvah (males). The kiddush cup or wine goblet is used during that ceremony.

Traditionally, kiddush cups are made of gold or silver and many are etched with images of grapes to represent wine. They may include images of birds or animals, people's names, or Old Testament verses.

As a woodturner, I turned the kiddush cup from wood. Using pyrography tools, I burned Mimi's name on the goblet in Hebrew. My wife, Susan, painted the stem portion of the goblet.

If you turn a goblet, it may be made out of a single piece of wood. Or you may turn the goblet in two sections—bowl and stem/foot—as I did. For this project, the bowl section was turned from maple burl and the stem was turned from cherry.

Get started

For tools, you'll need a $\frac{3}{8}$ " bowl gouge or $\frac{3}{8}$ " spindle gouge, $\frac{1}{2}$ " or $\frac{3}{4}$ " roundnose scraper, $\frac{1}{2}$ " skew,



The cherry stem, *left*, and maple bowl, *right*, are shown mounted to waste blocks. Be sure to choose straight-grained stock.

roughing-out gouge, and parting tool. You'll also need a 4-jaw self-centering scroll chuck.

For the bowl, I chose a piece of 3¼×4" maple burl. For the stem, I selected a piece of 2½×4½" cherry. You'll simplify your lathe work on the stem by choosing straight-grained turning stock.

begin hollowing the interior. After you true up the top, bore a 1½" Forstner bit almost to the bottom of the bowl section. The more material you remove with the drill bit, the less you have to remove with the gouge.

Begin hollowing with the small bowl gouge. Don't hollow too deep. Why? As you go deeper, the wall becomes flexible and chatter develops. After you get a finish cut on that top third, proceed with the middle third.

Once you have hollowed the vessel about two-thirds of the way down, return to the outside and continue refining the bottom section of the goblet. When you're satisfied with the shape, remove more material from the inside. You may need to do this two or three times until the wall thickness is consistent and you have hollowed as deep as necessary. As you get near the bottom of the interior of the bowl section, you will no longer get a smooth cut because you can no longer rub the bevel of the gouge. When this happens, switch to a roundnose scraper to finish the bottom of the interior of the goblet.

When you are satisfied with the depth and wall thickness of the goblet section, sand the inside and outside of the bowl. To prevent the bowl section from popping off the waste block,

Continued

Turn the bowl

When you turn the bowl section of the goblet, think of the project as just a bowl. The walls are steeper and thinner, and, in this case, you need to turn a tenon on the bottom to fit into the stem. But nonetheless, it's still a bowl. Using a ⅜" bowl gouge or ⅜" spindle gouge, true up the sides of the bowl, then true up what will become the top. (If you don't true the blank, you will get a fair amount of vibration.)

Begin to define the shape of the bowl section with the gouge. You need to leave enough material at what will become the base of the bowl so that you can hollow it without getting a lot of vibration. Once you can see the shape of the bowl emerging,

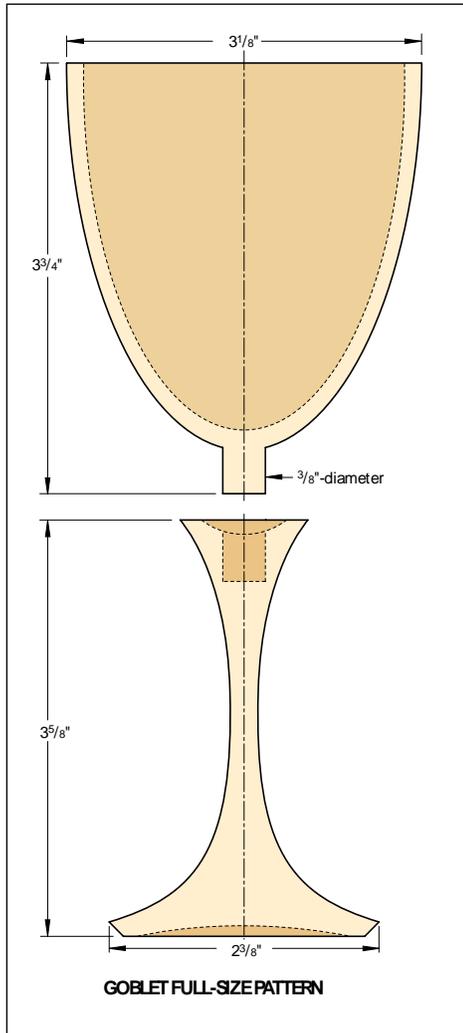


Illustration: Roxanne LeMoine

The illustration above provides rough dimensions for a goblet.

Photos: Bob Rosand





After turning the stem (still supported by the tailcenter), sand the piece smooth with progressive grits of 150-, 180-, and 220-grit papers.



After sanding the stem, begin hogging off stock with a spindle gouge to prepare the base of the stem.

support the piece with your hand while sanding. With the spindle gouge, refine the base a bit more and turn a $\frac{3}{8}$ " tenon about $\frac{1}{2}$ " long. This tenon will fit into the stem and base.

Turn the stem and foot

Turn the stem of the goblet from a piece of straight-grained cherry. Glue this turning stock to a waste block, then mount in a self-centering scroll chuck. To be safe, bring up the tailcenter, then use the roughing-out gouge to turn the stem to a cylinder.

Remove the tailcenter and

true up what will be the top of the stem. Using a small spindle gouge, turn a recess for the bowl base. Then drill a $\frac{3}{8}$ " hole $\frac{1}{2}$ " deep for the bowl tenon. Check the fit. If the recess isn't deep enough, use the spindle gouge to make it deeper. When you are satisfied with the fit, bring up the tailcenter again for support.

Use the parting tool to define what will be the base of the goblet stem (for this goblet, $3\frac{3}{4}$ "). The finished width of the base will be about $2\frac{3}{8}$ ". Using a combination of the roughing-out gouge and spindle gouge, turn the stem of the goblet. The finished diameter of the stem should be about $\frac{5}{16}$ ", depending on esthetics and your skill level. After you sand the goblet, part the goblet stem from the waste block.

You could use a parting tool to separate the stem and base from the waste block, but that would leave an unfinished base. Attempting to sand the base flat on a belt sander—which is what I used to do—won't guarantee that the finished goblet will sit level.

The method I prefer is to remove waste from below the foot

of the stem with a spindle gouge. This gives me enough clearance to use the spindle gouge to undercut the foot slightly. When I've reduced the tenon to about $\frac{1}{4}$ ", I use the long point of a skew to carefully cut away the remaining tenon.

After parting off the stem, sand the bottom with a sanding disc as shown *below*.

Apply the finish

For most of my turned pieces, I apply three or four coats of a

penetrating finish. I generally dip a wad of 0000 steel wool into Waterlox, then rub the piece and wipe it dry with an old T-shirt.

There are other finish options. In my opinion, the one drawback to salad-bowl finish is the gloss finish, but you can soften this with steel wool. You might also try "Good Stuff" made by Bally Block and Michigan Maple Block Co. I found this gel urethane at my local lumberyard as well as at Grizzly Imports. I really like the feel of the finished wood after using this product.



Use a spindle gouge to eliminate waste wood between the foot and your chuck. After doing this, you can undercut the foot to create a pleasing, stable base.



To sand the base of the foot, chuck a small sanding disc into your 4-jaw chuck.

If you are concerned about liquid penetrating the bowl section, consider purchasing the glass-bowl sections of the goblet from turning supply companies. Then, you can focus your attention on turning stems.

After applying finish and buffing, epoxy the two parts with cyanoacrylate (CA) glue or 5-minute epoxy.

Bob Rosand
Bloomsburg, Pennsylvania.



TECHNIQUES

Rubbing Out a Finish

Herm de Vries

There is no big secret to rubbing out a finish. The process is a bit laborious, because it is usually done “off the lathe” but I think the results are worth it.

Basically, the object of the process is to level out the finish you have applied so that after giving it that final buffing it will look and feel like glass or marble. That is the comment I hear most often about some of my pieces. “They look like marble”. Some people are surprised to find out the piece is made of wood. I was recently in a gallery in Victoria, British Columbia, and several of the pieces in the gallery, selling for thousands of dollars had that look and feel. The gallery owner told me that many people do not realize the beautiful pieces are actually made of wood and have to be convinced.

OK – here’s how to do it (or at least how I do it).

This will work with any hard finish, like a lacquer, varnish or urethane. I have done it with all three, but mostly with urethane because I like the UV protection in the product and prefer water borne because it keeps the color of the wood fairly natural. I also use a high gloss product since the semi-glosses have grain hiding silica in them. I am going to dull the gloss anyway.

I usually use three coats, and sometimes apply it over Danish oil after the oil has dried for a week or so. After the first coat has dried, sand with 250 grit to remove any raised grain and follow it with a light sanding of 400 grit. Then apply the second coat. Let it dry and examine it very carefully under a bright light to check for runs. Sometimes, I will sand it lightly with 400 grit to help the third coat adhere. If there are any runs, slice them off carefully with a very sharp chisel as soon as you can handle the piece and then level the spot carefully with the 400 grit when the finish is completely dry. Then apply the third coat. All the coats are light coats and are applied with a foam brush.



Wait at least a week before rubbing out the finish. Assemble some 600 grit wet/dry sandpaper (or finer if you want) and have a tray of water with just 3 or 4 drops of dish soap in it. Dip the paper and begin the sanding process using circular strokes first then followed with sanding with the grain.

Use light pressure, especially with varnish or lacquer. It's pretty hard to sand through a dried urethane finish with 600 grit paper, except where there is a sharp edge. Be careful at the edges. This is pretty easy work, and rubbing with a lot of pressure is not necessary.

A milky kind of slurry will form. That's OK; it's the finish being levelled off. After a half minute or so, wipe off the slurry with a cloth and dry off the small section you've been working on. Look across the surface under a bright light and you will see a dull sheen with a few bright lines through it that are brush marks. When those are mostly gone, you are finished rubbing. The surface will be very smooth but quite dull.



Now dip a piece of extra fine steel wool in some paste wax (I use a carnauba wax, or sometimes a beeswax/mineral oil mix) and buff down the surface using the wax as a lubricant. Don't put on too much wax – just enough so you can feel it on the surface. Turn the steel wool pad from time to time to get fresh wool, because it will matte up pretty

quickly. When you're finished, buff it off with a soft cloth and I think you'll be pleased with the soft sheen finish.

Now, if you want a high gloss, you can get that by replacing the steel wool rub with a rottenstone rub. I use mineral oil as a lubricant and a soft cloth pad, but believe me, it is a LOT of work. However, the feel of the piece is worth it. Again, don't rub hard, but expect to rub a lot.

A couple of cautionary notes. Steel wool snags, and if you have ANY rough spots or tear out, the wax will clog in the torn grain and the steel wool will embed itself in the grain. In dark wood it may escape notice, but in light wood it will look dirty. If you have to go over end grain, do it carefully. If you see the end grain getting a dirty look, stop. You might be able to use one of the superfine "Scotch-Brite" types of pads sold by Lee Valley Tools (#54K07.01) in place of the steel wool.

Rottenstone is also hard to use on a porous, open-grain wood. It is black and will show up in the torn grain craters, although most of it will come off again with the final buffing.

~ Herm de Vries
Winnipeg, Manitoba, Canada

TECHNIQUES TO REDUCE SANDING

And the Best Tip: Always Use Quality Wood

Larry Miller



Preparing for the Project

- Check tool rest for any nicks – file smooth, sand lightly and apply a light coat of paste wax – the smoother the tool rest supporting surface, the smoother the cut
- Remove all sharp corners on the bottom of square edged tools – lightly pass across the grinder to chamfer those edges that come in contact with the tool rest – tool steel is harder than tool rest steel and can cause nicks in the tool rest you just refined
- Sand the steel on your tools with 150-220 grit to provide a really smooth surface
- Sharpen gouges and then hone to a razor edge. Alternative to honing is to use a leather strop or make a strop from bass wood
- Grind the heel off gouges to reduce burnishing

- Sharpen scrapers by first honing top edge flat before grinding to put the burr on – a scraping burr lasts only about 15-20 seconds so sharpen often. The same applies for gouges when used to shear scrape – they dull more quickly.
- Sharpen skewers on the grinder and then hone to a razor edge
- I use an 80 grit grinder for shaping tools and sharpening for rough turning only. I use a 180 grit diamond wheel to put a sharp edge on finishing tools but then take them to my Tormek leather strop or a homemade basswood strop or hand held honing stone to make them razor sharp.

Turning the Project

- Turn as fast as is safe and comfortable for your level of ability – the faster the speed, the smoother the cut. Or, actually the slower the rate of tool feed results in smoother cuts, but usually, it's easier to speed up the lathe.
- Concentrate on gliding/riding the bevel and focus on the “horizon” of the project for smooth/consistent cuts
- Use cutting tools to slice the wood instead of scrapers where possible

- Cut with a grain supported cut (most often referred to as “cutting downhill” which is perfectly clear on spindles but is somewhat misleading on bowls which have alternating side/face grain as the wood turns. On the outside of bowls, a smoother cut is made by going “uphill” or from the bottom to the top)
- Some tearout can be fixed by spraying soapy water or oil on endgrain – if using oil, be sure it’s compatible with the finish you expect to apply.
- Clean up “ridge” cuts by re-cutting with focus on steady solid consistent tool work or use a negative rake scraper or regular scraper on edge to gently remove them



- Hiding the blemishes (or the dang thing just won’t go smooth)
- Use your imagination. For example: burn lines, texture, chatter, pierce, pyrography, dye, carve, decorative beads/coves, etc.

- Sand into submission, throw it away, or give to someone you don’t like.

And the best tip: Always use quality wood.

~ Larry Miller, Olympia Woodturners, AAW Symposium Youth Room Coordinator

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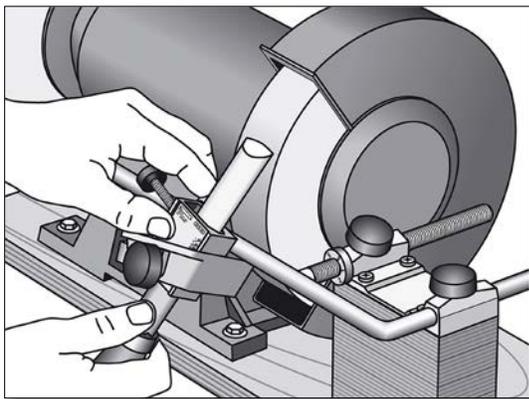
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TECHNIQUES: SHARPENING 101

Sharp is not just a state of mind.

Jim Conway

Sharp is not just a state of mind. You've now spent many hours and untold energy searching, looking and fretting about which lathe to buy as your starter. You've collected some decent gouges to get started. You're standing in front of your lathe trying to make your final, smooth cut that will require very little sanding just like you heard in a demo. It's not going so well. You feel like you are carrying a sheet of plywood in a wind storm. Those beautiful cuts that you envisioned are just not happening.



You go to your mentor and ask for help. He/she takes your gouge and inspects it, saying. "This is not a gouge. It is a screwdriver. A gouge must have a sharp edge on it."

"But it is sharp!" you cry in defense. "Well, there is sharp and there is 'shaarrp!'"

Your mentor goes over to his/her grinder, attaches our gouge to an apparatus, makes a few measurements, and begins to lightly grind your gouge. Within moments, you now have a very sharp, correctly shaped bowl gouge.

"Wow! That was fast. And it looks perfect."

"Easy when you have the right tools," he/she says.

"So, tell me about your grinder. Is it a special kind?"

"The grinder itself is not so special. This one happens to be a variable speed 8" grinder. The RPMs are about 2000 to 3500, which gives you a lot of flexibility. I usually grind at the lower end of the speed. The important aspect is the diameter of the wheel. Being 8" rather than 6 gives you less of a 'hollow' grind than with the larger diameter wheel."

"What about the wheels? What's different about them? Why don't you have a guard on the wheel? you ask."

The reply is, "Those are CBN wheels, especially made for sharpening HSS tools. Not good for sharpening carbon steel, though. They are perfectly balanced metal wheels with a Cubic Boron Nitride bonded to the surface. It's a perfect match to the HSS tools because it doesn't heat up like other

abrasives. It also doesn't wear down like your standard aluminum oxide wheels, so you don't have to constantly dress the wheel and the diameter remains constant for the life of the wheel."

"The reason that I don't have a guard over the CBN wheel is that there is no danger of it 'exploding' like the oxide wheels might, which is why you have the guard in the first place."

"Wow! That sounds great. How much are these CBN wheels?" you ask.

"Oh, they run just under \$200 in most places. We actually have a member who sells these and that's what he charges."

"GAH! Two Hundred Bucks per wheel?!?!" You're in shock. "And you've got TWO of them. Holy cow. Your grinder must have cost you between \$500 and \$600 with both wheels."

"Well, that's true, but you don't need to go the CBN wheels in the beginning. What you DO need, however, is a good sharpening system. With the sharpening system, you can use the regular wheels and do just fine. You'll be grinding your gouges down faster, but your initial cost won't be as much. You could ease into it later and buy just one wheel. Your grinder will work just fine with one CBN and one oxide wheel."

"OK. So I see you've got two grits. What grit should I get when I buy a CBN?"

"Most vendors offer 80 and 180 grit wheels, but it doesn't matter which one you get, if you're only getting one. The 80 will be more aggressive but either one will do everything you want it to do."

"The one thing you have to learn as a new turner is not to spend so much time on the grinder and **to not press down so hard when you're sharpening**. You need to sharpen often, but you don't have to make multiple passes on your gouge to accomplish a good grind. That's where a sharpening system along with a CBN wheel will help your tools last a long time."

"So tell me about the sharpening systems," you say.

"Well, the Wolverine system by Oneway is probably the most popular. But there are others like the Sharp Fast, the Tru-Grind, and the Sorby ProEdge system. All of them will accomplish the same thing, which is to give you a 'precision and repeatable' grind. That's the key. If you can get the same grind each time and spend little time doing it, you have a good system."

"When I took my first turning class, the instructor was trying to help us save money by showing us how to free-hand sharpen our gouges. I could tell from the get-go that free-hand was pretty hit and miss. Then I saw a demo on sharpening systems. I knew that if I was going to have the 'same' grind on a tool every time, I'd have to get one of these jigs. It has been a time and frustration saver for me."

"One thing I have noticed, though, is that there are several sharpening systems and jigs that use the same or similar clamping base used by Wolverine. Not saying it's the best, but it does give you some versatility."

"Another thing I'd like to mention is that to get that consistent grind, you might need some guides that a lot of turners use. They come in various angles, like this." He shows me several red swoopy angle 'thingies.' "You place the point end in the cradle and then move the bar in and out until the two other points are resting on your wheel. Then you'll have that angle precisely dialed in to the system. I saw one the other day that had an adjustable angle on it so that you could select an infinite number of angles. I think it was on Ron Brown's website."

You stand there, deep in thought.

"So, are you OK with all of this? Got any questions?"

"Yeah," you say. "I'm just wondering where I'm going to come up with all the money for all of this."

"That's easy. Don't be in big hurry. Just figure out what you need the most and then buy one thing at a time. Before too long, you'll have all you need."

"Do any of the older turners sell some of their tools?"

"Only when they die, son. Only when they die."

All tools are hammers, except for chisels, as those are screw drivers.

~ Jim Conway, Olympic Peninsula Woodturners

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SAFETY TIP

Risks of Reverse Turning

I got my first lathe over a quarter of a century ago. It was an old, gray Delta with its name, “Joe,” painted in red on the front. Joe had three speeds that I could change, with some grunting, by lifting up the motor and moving the belt on the pulleys. Joe only spun in one direction. I had a lot of fun with Joe, and formed a lot of my lathe habits turning on him.

A few years ago I got a much newer lathe. It didn't have a name, but it could turn in reverse. I thought that was pretty cool, although I wasn't sure why. I did some reading and learned that, by alternating forward and reverse when I sanded bowls, I might get smoother results.

I decided to try my first reverse sanding on a small bowl that was mounted on a four-jaw chuck. I held the sandpaper close to the bowl, flipped the switch to reverse expectantly, and watched the chuck and bowl cheerfully and speedily unscrew themselves from the spindle and go flying off the backside of the lathe. That wasn't what I had in mind.

Working on Joe hadn't prepared me for this possibility, and the reading I did on reverse sanding hadn't mentioned it. I did some more reading and discovered that my lathe spindle had a groove right behind its threads, and my chuck had a grub screw in

about the same spot. Joe and its chuck hadn't had those. If I screwed the grub screw in the chuck into the groove on the spindle, the grub screw would keep the chuck from unscrewing when I put the lathe in reverse.

Having the chuck and the bowl stay on the lathe when I put the lathe in reverse was much better than watching the chuck and bowl go flying off the lathe.

Consequently I tried to form a new habit (one that I didn't need with Joe): always tightening the grub screw whenever I used the four-jaw chuck. I figure I should always tighten it, because when I put the chuck on the lathe I may leave it on for a while, and I don't know when I put the chuck on whether I might want to switch the lathe to reverse before I take the chuck off.

This is a wonderful time to be a woodturner; the equipment just keeps getting more versatile. If you are lucky enough to be sampling some of that great new equipment, take a moment to see if it presents new risks. If it does, take another moment to figure out how you can protect yourself against them.

~ Harvey Rogers
Portland, Oregon
Safety Officer
Cascade Woodturners Association

LATHE SPEED

Always check the speed of the lathe before turning it on. Use slower speeds for larger diameters or rough pieces and higher speeds for smaller diameters and pieces that are balanced. Always start a piece at a slower speed until the workpiece is balanced. If the lathe is shaking or vibrating, lower the speed. If the workpiece vibrates, always stop the machine to verify why. Ensure the lathe speed is compatible with the size of the blank.

Get a Good Start at the Lathe

By Bob Rosand

People just getting started in turning usually have as many questions as a new runner hoping to finish a 5k race:

- What's the best chuck on the market?
- What kind of tools should I buy?
- What grit is best for sharpening?
- Should I buy a sharpening jig?
- What's the best way to sand?

If you teach or demonstrate frequently, you've heard all these questions many times over.

Sharpening

1 What grit do you recommend for sharpening tools?

Alan Lacer wrote an excellent article on sharpening, which appeared in the Fall 2003 issue of *American Woodturner*.



1 Regular use of a wheel dresser will true your wheel and expose fresh grinding surfaces.

Pitch the gray wheels that accompany most grinders and sharpen with a 60- or 80-grit aluminum oxide wheel. Although Alan and others advocate honing, I find it unnecessary for most woods and projects I turn. I go directly from the sharpening wheel to the lathe.

Over the years, I've discovered that a Oneway diamond-tip wheel dresser tears up the wheel less than a star wheel dresser. If used properly, the diamond-tip dresser prepares a true wheel and your lathe tool will not bounce (a problem with hand-held dressers).

2 What speed grinder do you recommend?

Instead of the better-known 3,500-rpm grinder for general woodworking, I prefer to sharpen lathe tools with a 1,725-rpm grinder, sometimes

referred to as a slow-speed grinder. The slow-speed grinder removes metal at a slower rate and allows me to work with the edge of the tool a bit (it's also more forgiving of errors). When I first started turning, I shortened the life of many tools by attempting to sharpen at 3,500 rpm. Don't make the same mistake.

3 Should I buy a sharpening jig or should I learn freehand sharpening?

I often repeat Bonnie Klein's answer: "If you turn a lot, you probably don't need a grinding jig. But if you only turn a couple of days a week, it's well worth it."

I'll go one step further: Even though I learned freehand sharpening first (jigs weren't commonly available then), I now use a sharpening jig all the time.

If you use a jig for sharpening, keep in mind that it will not sharpen the tool for you and you still need to know what you want the grind to look like.

4 I just want to turn. Why is sharpening so important?

John Jordan has popularized this saying: "If you can't sharpen, you can't turn." I think that John is



3 If you don't turn frequently, a sharpening jig may become your best friend.

absolutely right. You'll never become a proficient turner without first learning to sharpen your tools. And it's not only about speed and proficiency: A dull tool is far more dangerous than a sharp tool.

Before you get too excited about turning, I suggest investing a few hours of time (and money, if necessary) standing shoulder to shoulder with an expert sharpener.

Buying tools

5 What set of tools should I buy?

My answer is don't buy a set. Every set I've seen seems to include one or two tools that you don't need. It's better to buy individual tools and learn how to use them.

When you shop for tools, make sure you buy high-speed steel (HSS) tools. They hold an edge better than the carbon-steel tools that used to be popular. If you stumble across some garage-sale bargains or inherit a set from a relative's estate, chances are those are carbon steel. (Some deceptive marketers actually pass off new carbon steel as HSS. If the price seems too good to be true, be careful.)

There is nothing wrong with carbon steel, but if you are just starting out and have difficulties sharpening, you will probably blue

the steel, removing the temper. The great thing about HSS is that you can blue the edge and the tool will still stay sharp. (The blued edge dulls instantly.)

I've also had people tell me that they purchased yard-sale tools (old, worn-out carbon-steel tools) to practice on until they got better at turning. The problem with this is that as a novice turner, you're compounding your problems: Now you have some inferior tools that you're not sure how to use.

Buy the best tools you can afford, even if you buy only one tool at a time.

Another reason I dislike tool sets is the uniformity of handles. A matched set of tools looks great hanging on your wall, but when you are turning and the chips cover the bed of your lathe, it's difficult to identify each tool. Virtually all of my tools have different handles, and I can identify each one amid the chips when I am hard at work.

6 What tools should I start with?

I'd suggest a $\frac{3}{4}$ " spindle roughing gouge, a $\frac{3}{8}$ " spindle gouge, a $\frac{1}{2}$ " skew, and a diamond parting tool. If you want to turn bowls, select a $\frac{3}{8}$ " or $\frac{1}{2}$ " bowl gouge, although my personal favorite is a $\frac{3}{8}$ " bowl gouge. The next tools I would add are a $\frac{1}{2}$ " roundnose scraper and $\frac{1}{2}$ " squarenose scraper.

Setting up a turning area

7 What's the best lathe height?

Your lathe may be set to the proper height, but I doubt it. Measure the distance from the floor to your elbow. That should be the same as the distance from the floor to the centerline of the headstock. If you have to raise your lathe, I recommend reading the Del Stubbs article, "Tuning Up Your Lathe" (Spring 1995 issue of *American Woodturner*). Del discusses how to fabricate a solid base for your lathe so that it doesn't walk around the shop when you are turning. If your lathe is too high, build a stable platform that you can stand on and not trip over.

8 How much light do I need?

I've done countless demonstrations in shops with pitiful lighting. I don't recommend traditional fluorescent lighting because of the strobe effect it causes. (This is less noticeable with newer ballasts.) I prefer incandescent light. At my small lathe, I have three 100-watt bulbs overhead and one swing-arm lamp that I can focus on my work.



5 With distinctive handles, you'll quickly locate the next tool for your turning task.



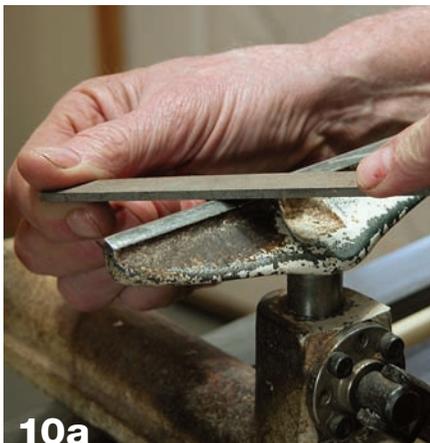
6 From left: $\frac{1}{2}$ " bowl gouge, $\frac{3}{8}$ " bowl gouge, diamond parting tool, $\frac{3}{8}$ " spindle gouge, $\frac{1}{2}$ " skew, $\frac{3}{4}$ " spindle roughing gouge, $\frac{1}{2}$ " squarenose scraper, $\frac{1}{2}$ " roundnose scraper.

9 What's the big deal about a face shield?

Always wear a face shield! When I first started turning, I did not wear a face shield or safety glasses of any kind. What a fool. After scratching my cornea numerous times and stopping to flush chips out of my eyes on many occasions, I won't even turn on the lathe today without a face shield.

10 How much upkeep does a lathe require?

Every day, spend a few minutes doing some lathe maintenance. Feel around the bed of the lathe for rough spots and file them off. If the tool



Tune up your tool rest by regularly filing (top) and then sanding (bottom) the surface.

rest is new, file it and round over the edges. If the rest is old, file out the nicks and dings, and then smooth with 220-grit sandpaper. Rub a little paraffin (canning wax) on the surface of the tool rest. You'll be amazed at how it helps the tools slide.

Turning

11 How high should the tool rest be?

I cut right at the centerline. So when I'm using a cutting tool, the handle needs to be down in relation to the tool rest. That means that the tool rest needs to be a little below the centerline of the lathe. If it is set just at the centerline, you will have to lift up on the handle to complete the cut because you always complete the cut at the centerline. If you switch to a smaller tool, you will need to raise the tool rest a little.

With a little experience, tool-rest height becomes intuitive and you find yourself making only slight adjustments as you are turning. If you have to raise the tool handle every time you finish a cut, you probably need to lower the tool rest.

If you are using a scraper, the handle needs to be up in relation to the tool rest. Scrapers are almost always used this way. Using a scraper with the tool handle down is asking for a big catch.



Set your tool-rest height slightly below center with the tool on center.

12 How close should I put the tool rest to the wood?

Keep the tool rest as close to the work as you can. Turning is a bit of a leverage game, and if you extend the tool too far over the tool rest, you are asking for trouble. If you are roughing a square block into a cylinder, bring the tool rest as close to the work as you can and rotate the piece to see that it does not bind. Start the lathe, rough the block partially, then shut off the lathe and move the tool rest closer to the work and repeat.

Moving the tool rest while the lathe is running can result in broken tool rests and possible injury.

13 At what speed should I turn?

I doubt you'll find any turning instructors who will offer up a firm answer to this question.

Variables include your skill level, what wood you are turning, even the kind of lathe you own. But if you have to ask that question, you should slow down a bit. On the other hand, it's possible to turn too slow, but that's far less dangerous than turning too fast. A good rule of practice is to reduce the speed, turn on the lathe, increase the speed gradually just to the point of vibration, and then back off a bit. (This is easy with a variable-speed lathe.) As the piece comes into round, slowly increase the speed. Your comfort level will change with time and experience. Finally, it's safest to stand to the side of the lathe when you turn it on.

14 When am I ready to turn big bowls and platters?

I often get this question at hands-on workshops. I have no problem with bigger bowls, but the techniques to

turn a 6" bowl are the same as the techniques to turn a 24" bowl. If you are just learning and blow up a small bowl with an oops, you have far less time, energy, and money invested in the small bowl than you would in the large bowl. Plus, it's a lot safer turning smaller pieces

Start small and work your way up. Some people have made a career of turning small items.

15 What is the best chuck?

Pull back on those reins; there will be plenty of chances to plunk down money on a 4-jaw scroll chuck after you get your chops. After you've turned for a bit, you'll know exactly what kind of chuck you need.

Don't buy any chuck until you know what kind of turning you like to do. If you want to turn small items (up to 10"), a chuck such as the Oneway Talon or Penn State Barracuda 2N is ideal. But until you settle on what you like to turn, use a faceplate. It's a lot less expensive and you can do almost everything with a faceplate that you can do with a chuck.

For example, if you want to turn a weed pot, you can use a small chuck with #2 jaws, turn a shoulder on your turning stock, and grasp the weed-pot stock with the jaws.

You can turn the same project with a faceplate. After attaching a wasteblock to the faceplate with screws, use cyanoacrylate (CA) glue to adhere the turning stock to the wasteblock.

Sanding and finishing

16 What grit sandpaper is that?

I wish I had a dollar for each time I've been asked this question during a demonstration. How I sand depends upon what I am turning.

If I'm turning a weed pot or a ring holder, I might start with 120- or 150-grit sandpaper and work up to 600 grit. On a good day, I might start with 180 or 220 grit. However, when I first started turning I generally started with 80 grit or even 60 grit. But now that my skills are better, I can cut better and I have less tear-out, so I can start turning with a higher grit. I do like to use a good quality sandpaper. I'm particularly fond of the gold sandpaper from Klingspor (800-645-5555; klingspor.com), but I also use a blue zirconia paper from Red Hill Corp. (800-822-4003; Supergrit.com). Norton and 3M also make outstanding sandpapers for efficient removal.

If I am sanding something like a bowl or a platter, I sand a little differently. I generally start by hand-sanding with 120 or 150 grit with the lathe running (slowly) to about 220 or 320 grit. I then shut off the lathe, drop down to 180 or 220 grit, and use 3" sanding discs in a drill to finish the piece at least to 600 grit.

As a general rule, I like to slow the lathe down a bit when I am sanding, because it generates less heat. For protection, I often use a foam pad between the sandpaper and my fingers. I sand at the highest grit possible, but won't hesitate to drop down to a lower grit if necessary. The problem with sanding with lower grits is that you can easily sand away those fine details in your turning.

Finally, don't be stingy by trying to reuse sandpaper. If it's still cutting okay, fine, but if it's loaded up or clogged, throw it away and use fresh sandpaper.

17 What's the best finish to apply?

New woodturners shouldn't worry about a finished project! I know that sounds odd, but when you're just

Start Easy

When I lead hands-on workshops, I limit students to small projects and usually bring sufficient material to complete three of the same projects (three birdhouses, three ornaments). I always tell the students not to worry about finishing the first project, but to go through the process, learn from their mistakes, and improve the next project. Most people are determined to complete their first project, but those who learn from their mistakes and get on to the next project are usually happiest with their results.

Finally, don't use valuable wood for practice sessions. Go out to the firewood pile and turn that wood until you are competent with the tools. Years ago, at one of the early symposiums, another turner and I purchased some beautiful redwood burl slabs. When we saw David Ellsworth, we asked him what we should do with it. His response was, "Put it away until you know the answer to that question."

starting, your job is to have fun at woodturning. You need to get used to the tools, how they work, and what they will do. When you have mastered the tools, then you can start looking at finished projects.

I like the feel and look of an oil finish such as Waterlox. If I am in a rush, I may resort to a spray lacquer, let the piece dry, and then buff it. For things like my Christmas ornaments, I hang them in a row and spray them with a Deft satin lacquer.

Bob Rosand
Bloomsburg, PA

SHOP TIP

Handy Woodturning Hints



The best thing I ever did was to look at my gouges as consumables, like sandpaper. Then I quit worrying about grinding away the steel and using up my gouge. This had several benefits. I sharpened as often as needed. This had two benefits. First, of course, I always had a sharp tool which made cutting easier and reduced the stress of using the tool. Second, it rapidly sped up the learning curve of sharpening. This actually increased my tool life because the better I got at sharpening, the less metal I removed each time I went to the grinder.



If you wait until you think your tool is dull you waited too long. Stop and sharpen any time it seems like you have trouble controlling the tool.

Learn to glide the bevel not ride the bevel. I think most of us push on the bevel of the tool. The term “ride the bevel” kind of reinforces this. In reality you should have very light pressure on the bevel so the tool glides easily. This helps you learn to control the cut and more importantly “feel” the cut so that you are letting the tool cut instead forcing the cut.

The most important tip. Practice, practice, practice. Don’t be afraid to put a scrap piece of wood on the lathe and just turn, practicing different cuts. This teaches control and helps you relax before the real project.

~John Lucas
Sparta, TN

SHOP TIP

Sawdust Samples

When turning different species of wood, I used to marvel at the many colors of shavings piled on top of each other and lying all over the floor. Then a friend, Bill Berry of Gulf Coast Woodturners, suggested that I sweep up the shavings before starting a new turning project and keep some of the finer sawdust to use as filler in the event that the turning blank has or develops a crack.

Now I do sweep up the shavings from each project, discard the heavier bits, and put the finer particles in a plastic container. I find that I often use these shavings to fill in all sorts of cracks and checks. I especially like to use ebony or blackwood, even on lighter-colored woods. The contrast is striking. Then, of course, you'll find that your imagination will run wild and a visit to the key-making shop will get you a big bag full of brass shavings. Or, use those coffee grounds that have gone through the coffee pot and have been dried.

To use the sawdust, partially pack the crack with shavings then apply a layer of thin cyanoacrylate (CA) glue. Don't use an accelerator or the CA will bubble and crystalize. Apply another layer of sawdust and CA glue and as many layers as needed to make the sawdust stand a bit proud of the surface of the turning. You can then either cut away or sand away the excess sawdust and CA glue.



Containers showing different colors



The crack-filling process



A piece with cracks filled ready to turn

~ Janice Levi
Groesbeck, TX

ASK THE EXPERT

Help! I've got a question for the expert.

Q: Sealing Vessels

May I ask you, when I make a wooden drinking vessel, what would you seal it with? I have asked about twelve turners and they mostly say, "You cannot seal them to make it safe to drink from." I just want the vessels to drink wine or beer from. Is that possible? I was informed you might know.

~ John Forster (England)

A: Sealing Wood for Food Grade

Thanks for your message. This is a common question about finishing for food grade surfaces.

Depending upon the wood used, (fine grain hardwoods, such as hard maple, beech, and similar dense woods), sealing the wood for use with liquids can be accomplished with food grade finishes. Some will require continual maintenance (such as oil finishes), while others (film finishes) may be attempted which require less upkeep, but may have other concerns regarding de-lamination due to natural wood movement.



Barbara Dill

Oil-Based Finishes: Wooden vessels have been used for centuries without sealing them (raw wood), but likely were also replaced frequently. Beer, and certainly red wine, will likely stain the raw wood with continued use. You might try turning vessels in maple or beech, and sealing them with multiple applications of natural oil finishes (e.g. tung oil, linseed oil, walnut oil), diluting the oil significantly in the early coats to encourage penetration. Multiple coats would be advised, allowing the oil to fully cure between applications. Such a surface would be water resistant, but not waterproof. It likely will require maintenance and additional applications of oil periodically throughout the life of the vessel. Increased water resistance might be improved with the frequent application of carnauba wax between uses (fully food safe).

There is no guarantee that the vessel will maintain its shape if used with liquids that remain in contact with the wood for extended periods. This might be considered for "short-lived" vessels.

Chemically Reactive Film Finishes:

Turners have been successful using food-grade epoxy products to provide protection to woods used in drinking and eating vessels. You would need to find a local source for food-grade epoxy products, and follow the manufacturer's mixing instructions for resin to hardener proportions. If the mixed epoxy can be diluted with a solvent, this may improve penetration and adhesion of the finish to the wood (do not sand too smooth, perhaps stopping at 120 or 180 grit to improve adhesion of the surface epoxy film). This forms one of the most durable surface finishes possible with applied materials, and if food grade epoxy is used, this should provide a safe surface finish. If the wood moves appreciably, there is the possibility that the epoxy film finish may de-laminate from the wood.

Use of evaporative film finishes, such as shellac or lacquer, is not advised. Note that, at least in theory, fully cured polyurethane finishes are reported to also be food safe, but are likely not as durable as epoxy finishes (it is essentially a coat of plastic), or as easily repaired and rejuvenated as are oil finishes (which are not surface films, but penetrate and cure within the wood itself). I have heard of people using multiple coats of polyurethane finish on platters and serving plates; these are not used as

cutting surfaces (with knives), but only for serving prepared foods.

I hope I have given you some options to pursue to finish the vessels you turn. If you have additional questions, let me know.

~ Rob Wallace, Ames, Iowa
AAW Board of Advisers

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ASK THE EXPERT

Help! I've got a question for the expert.

Q ■ What to do when you
■ get stress cracks.

Many times when turning an end-grain lidded box, I find I get stress fractures on the lid. I have tried to sand easier and fill the cracks with CA glue, but still have small cracks that I can feel. I almost always start with green wood, rough turn it, and let it dry before final turning. Many times I get close to the pith (nice figure to the wood there) and it is almost always left over from something else.

I do not mind the look of the cracks, but do not like the feel of the minor cracks. What am I doing wrong?

~Don Turcotte

A: **Stress cracks and hot air**
■ That's a hard one to diagnose.
■ My first guess is that the cracks are already there just really small. How are you drying your boxes. Slow and steady is best but it's also a very good idea to look really closely at the wood you select before turning. Those cracks might be there.

What I do when it's a suspect piece is to slice a thin slice off the end and then try to break it. If it breaks easily then there is a crack you can't see. Keep cutting until you get to good wood and then cut out your blank. I have made boxes using the corner cut-offs from larger bowls. I rough

turn them and then seal all end-grain areas and then put them up to dry. Mine usually set far longer than it really takes to dry because I have so many other projects. So I can't really give an answer to how long it takes to dry.

If the wood isn't completely dry bringing it into the shop can cause checking. I've had pieces that I thought were pretty dry but when I started turning and the heater kicks on, that warm air in motion seems to cause checking if I'm not careful. I cut a bowl blank from a log that had been sitting in a heated basement for a year. It measured 16% on my cheap moisture meter. It started cracking almost immediately after sitting in the shop for a day. I'm pretty sure it was the hot air coming from my heater. Probably if I had put it on a lower shelf away from the direct heat, it would have been OK.

Heat fractures do occur with sanding, but it sounds like you are trying to avoid that. Try really slowing the lathe down and keep the sandpaper moving. It shouldn't even get very warm to the touch if it's fresh paper and you're using a light touch.

~ John Lucas, a retired photographer, has been working in wood for about 35 years and also dabbles in metalworking. He also enjoys modifying machines, making tools, and sharing his knowledge through written articles and videos. He has taught classes at John C. Campbell Folk School, Arrowmont, and The Appalachian Center for Crafts. Sparta, TN

VIDEO: TIP FOR HONING TOOLS

Video Tip: Honing Your Tools



- Honing Your Tools, a tip from Mark Baker (TRT 2:56).
- Video link: <http://vimeo.com/132440201>
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

A Note About Safety

An accident at the lathe can happen with blinding suddenness. Respiratory and other problems can build over years. Take the appropriate precautions when you turn. Among the most important of these is the use of face shields, safety glasses, and dust masks. It is important to observe all manufacturers' safety guidelines. Following manufacturer's safety guidelines and information will help you continue to enjoy woodturning years into the future.

MEMBER GALLERY



Pacific Madrone 5 1/4" x 10 1/4"



Pacific Madrone 5 3/8" x 13 5/8"

Dale Larson

Gresham, OR

After turning for 37 years, I most enjoy producing functional bowls from our beautiful Northwest hardwoods like big leaf maple and Pacific madrone burl. Joining the AAW in 1989 has truly opened the world to me, allowing me to travel around the United States and five foreign countries. And it has brought woodturners from around the world to my shop. Teaching woodturning has helped me become a better woodturner. Woodturning has been a good path to follow in life.



Franck Johannesen

Sarasota, FL

My interest in woodworking began at a very early age while helping my grandfather build wooden rowboats in Norway. The process of steambending planks to be fastened with copper rivets is still fascinating today. Of all the careers I have had (engineer, optician, tree farmer) none has been as satisfying as woodturning, fascinating on many levels. Creating new shapes, reading wood grain, selling, and teaching are rewarding and challenging at the same time. The woodturning community is composed of many people, all wishing to help one another achieve greater expression of artistic objects.

Submissions

Want to share your work in *Woodturning FUNDamentals*? Please send your high-resolution images along with title, size, and materials used to linda@woodturner.org.

Want to “pay it forward”? *Woodturning FUNDamentals* welcomes other content including tips, projects, and informational articles. Please send your content ideas to linda@woodturner.org. The deadline for submissions for the October issue of *Woodturning FUNDamentals* is August 19, 2016.

Please note: All content submitted may be subject to edit.

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