

Kurt's clinic

Kurt Hertzog answers some readers' questions

So many tools to chose from

Question: I'm puzzled by the huge variety of tools available. As a beginner, I'm not certain what I need, which steels or carbides, tool lengths and sizes, and brand names I should add to my kit. I'm borrowing tools from my friends now but will soon be buying my own as I can afford. Help me please.

Answer: You have several advantages right now. You have friends willing to share which gives you a 'try before you buy' environment and resource(s) for advice. Your tool retailer can offer advice but remember their knowledge and incentives may not always be in your best interests. I suggest you use the tools you are borrowing to determine which are your go-to tools. Much of this will be coloured by the type of turning you are doing now. This will likely change and expand as you grow. Spindle turning needs are different to bowl turning needs, but there is overlap as well. It is rare that a hobby turner is solely one or the other, while pros may be more focused.

On steels vs carbides...They both have their advantages. With steels, you'll need to have a sharpening system and the ability to sharpen your tools. I highly recommend you do this even if you have some carbide tools. With carbides, you rotate the cutter head until it is spent and then either touch it up on a diamond hone or replace it. This is attractive to new turners afraid of or unwilling to learn sharpening. Even with carbide cutter tools, I'm certain you'll have some in your kit now or in the future that will need traditional sharpening. Which steels? Your choice. Other than the old-time high carbon steels, you can't go wrong with any of the high-speed steels and beyond. The trade-off of higher price for added edge retention time is your decision. Brand names again is your choice. Most major brands offer high-quality tools that will last a lifetime. I recommend that you avoid cheaping out. Your slightly higher price for quality tools will be advantageous now and in the future. Don't be afraid to buy used tools from your fellow turners or club members. There is little to go wrong with these tools and



Left: Starting spindle turning kit of spindle gouge, parting tool, and roughing spindle gouge. **Right:** Starting bowl kit of a parting tool, spindle gouge, and bowl gouge

you can save an appreciable amount of money. You'll find that the tools you are using now will guide you as to sizes and lengths. I always recommend that you can use larger, heavier tools to your advantage for nearly everything as long as you can fit the cutter into your application. Smaller tools will not upscale. While working on smaller work they will limit your ability to overhang the rest and dampen vibration. Go big until it won't fit.

To my mind, the absolute simplest kit for a spindle starter is a parting tool, spindle gouge, and spindle roughing gouge; all of the appropriate size for your current planned work. For the bowl (faceplate) turner, a minimal kit will usually include a parting tool, spindle gouge, and bowl gouge. Many might ask, why a parting tool and spindle gouge? Many bowls and faceplate work start between centres. A parting tool and spindle gouge are always handy for this and always valuable for detailing and fitting in where your bowl gouge might not. Besides, they will always be useful for any spindle work that creeps in. Buy the best quality you can and go slowly. You'll find that your true needs are only a few good tools rather than a rack full. The truth is that the magic is never in any tool but rather in the hands of the user.

The Ellsworth gouge

Question: I hear so much about the Ellsworth gouge. Is it as good as the hype? What is so great about it?

Answer: The Ellsworth gouge is a signature tool offered by Crown tool company. On that tool, the grind is the Irish grind that David Ellsworth was exposed to on visits to Ireland many years ago. When he popularised that grind in the US, it picked up and has largely retained his name. In essence, it is a swept-back wing bowl gouge that, by virtue of the long wings and faring of the two sides at the nose, is a very versatile tool. I learned the hard way that taking any run-of-the-mill bowl gouge and grinding this particular grind doesn't always work well. The Ellsworth signature tools have a very specific parabolic flute shape. This flute shape interfaces with the wing grind at the top of the wing to produce a specific angle. Other flute shapes will create aggressive catchy edges that aren't as user friendly. The beauty of this particular tool and grind is that it will let you perform seven different cuts depending on the presentation of the tool. I own several of his signature gouges and have had the opportunity to study at David's week-long workshops several times. While I enjoy using this very versatile tool, I still have other bowl gouges ground in different manners for other bowl needs as well as various sizes for work of different scales.



My bowl gouge kit contains (L to R) a fingernail grind bowl gouge, an Ellsworth gouge, a standard grind bowl gouge, and a bottom cutting bowl gouge

PHOTOGRAPHS BY KURT HERTZOG

Do I need a diamond-shaped tool?

Question: My turning mates are telling me that my parting tool is burned and I should buy a diamond-shaped parting tool. They say it won't burn. Can you explain why I need a diamond-shaped tool?

Answer: Your traditional tool is getting discoloured and burned by cutting too deeply into the turning without any side wall clearance. As you plunge deeper, the sides of the tool get very hot due to the friction from the wood in contact. The deeper you go, the more surface you present to overheat. This can be a dangerous situation since the work may grab the tool and throw it if the cut is deep and the heating excessive. There are two solutions. As your mates suggest, a diamond-shaped parting tool presents only a very small surface to the side walls of the cut and reduces the heating considerably. I'm not a fan of these tools since they are usually wider than needed and can be a bit of a pain to sharpen to get the front cutting intersection coincident with the diamond. It isn't terribly difficult but I find a straight-walled parting tool more desirable overall provided you alter your technique very slightly. Rather than a single deep cut, make two cuts alternately. Stair step into the work with one cut slightly moved aside from the first. Cut a ways in and then start a



A diamond shape parting tool cuts its own clearance but does need to have the grind meet at the diamond feature on the shaft. Not needed on the standard tool

second cut spaced a half cutter width or so to the side and cut there. Cut past your first cut in depth, stop, and pick up and advance the first cut. As you

progress with this stair step method, you'll be cutting your own clearance and removing the overheating of the side walls by friction.



I favour straight-walled parting tools and my kit contains a 1.5mm, a 3mm, and a 10mm beading/parting tool for larger work



You can prevent side wall burning of a straight-walled parting tool by stair stepping your parting cuts, providing clearance width as you cut deeper

Send your questions to Kurt's email: kurt@kurthertzog.com