

# Kurt's clinic

Kurt Hertzog answers readers' questions

I'm thinking about buying a chainsaw to cut wood for turning, especially bowl blanks. Do you have any suggestions on features and brands?

I can offer some suggestions but bear in mind that everyone's needs vary, so your selection must be tailored to your specific requirements. My first suggestion is that if you are new to using a chainsaw, be sure to get instructions on proper use, PPE, and safety measures. Saws are loud, throw chips, and don't care what they cut. Your eyes, ears, and body parts need to be properly protected. A moment's inattention or sometimes poor luck can cause serious injuries (or worse).

The first order of business is my standard disclaimer. While I'll tell you the brands that I have bought, please don't take that as a product endorsement – it's just my personal experience. With regards to brands and sizes, I can tell you what I have purchased, use and why. Without being too simplistic, in my opinion I lump chainsaws into two categories. The first category is the big box store brands that are mass-marketed to the 'casual' user. These are most often marketed based on price. Nothing wrong with that, but bear in mind these brands are mostly used for light duty and infrequent use. I bought my first chainsaw when we lived in the city. Our house had several large pine trees and a couple of cherry trees. The occasional tree branch trimming with a handsaw was not only cumbersome but the pine tree trimmings are sticky.

I bought a small Homelite chainsaw with a 16in bar at a big box retailer for tree trimming and yard work. It was bought before I began woodturning. That or one of the many similar brands might serve your needs. My Homelite is still in use after 40-plus years. Other than plug and chain replacements, it runs great and routinely starts on the first or second pull. Our current house has no trees on the property, so all my chainsaw use is for my woodturning needs. The Homelite is used for quick, light-duty cuts on smaller logs as needed. I keep it because it is light, easily loaded in the truck, starts and runs reliably, and serves well for light work.

The second category is the more professional-level saw. These brands aren't usually available in the mass-marketing outlets but rather through specialty shops. In the US, these are sold and serviced in

the higher-end gardening, better hardware and outdoor equipment stores. My needs for a saw outgrew my Homelite once I started woodturning. Not only the need for more horsepower but potentially optional bar sizes and heavier-duty use. My current workhorse chainsaw is a Stihl Farm Boss. I've owned it for 20 or so years and it serves me well. I currently only own one bar and chain size for it, but this and other pro-level brands offer a wide selection of lengths and other options. The pro-level saw dealers offer sales, service and repair. Service and repair aren't often available at the big box stores selling the home user saws. The professional-level saw needs this since they often see heavy-duty use daily. The sawyer using their equipment to make a living can ill

afford to have delays in maintenance or repairs to anything in their equipment inventory. I have friends who own/operate tree services or are professional arborists. They use or speak highly of Stihl, Husqvarna and Echo. Other brands may fill your needs.

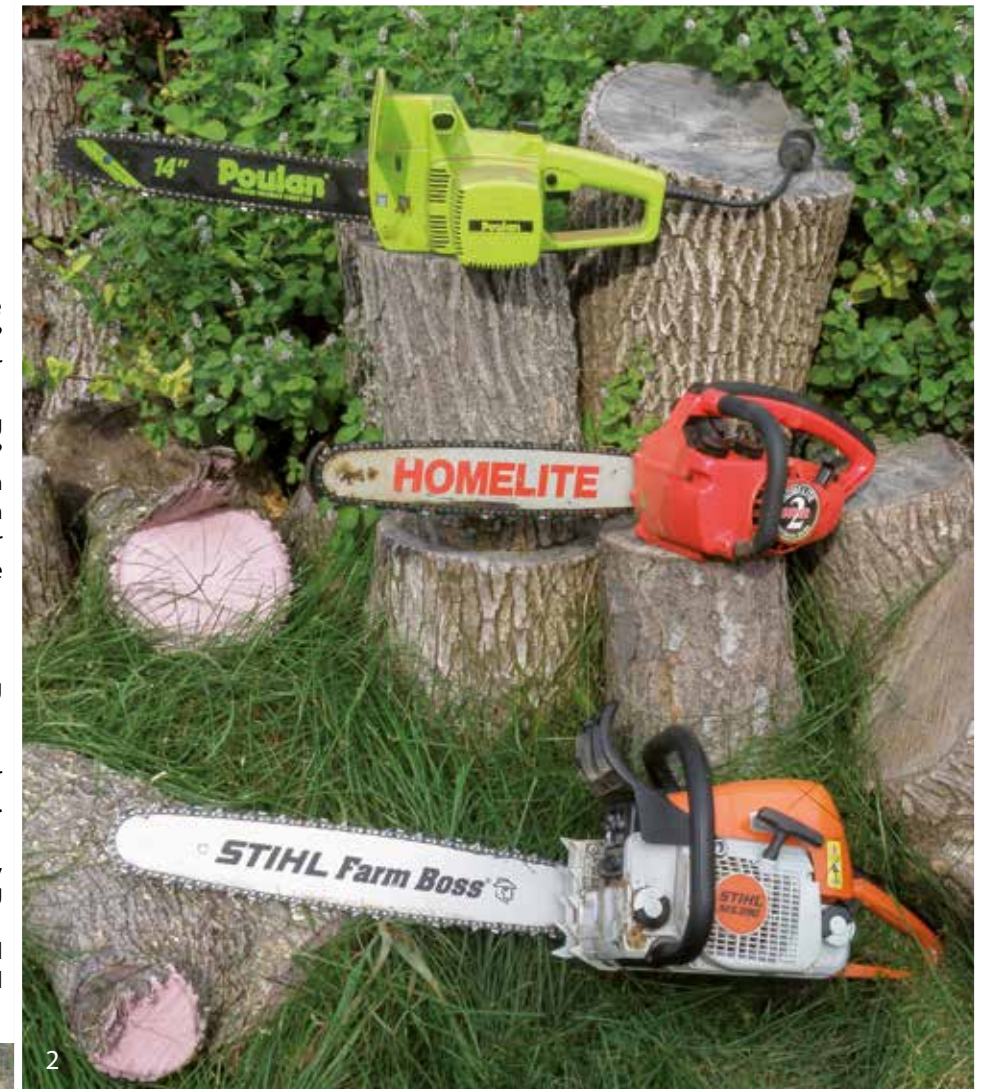
My third saw is a Poulan corded electric. Small and quiet. I can run it inside the shop or garage and other than the mess, there's no excessive noise or any exhaust. There are times when a quick cut or two is all that is needed. I don't like to run a gas-powered saw in the basement or garage, even with the doors open. Hence the small electric. Mine isn't for continuous use or large, heavy cuts but works great for small work. Questions

to answer as you prepare to shop. What are you cutting? What is it typically, and how big? Where are you cutting? In your yard, a timber yard, a logging road, or a remote (carry-in) site? How often will you use your saw? Cutting all day or just some trim cuts intermittently? Do you need gas or electric? If gas, how much horsepower will you need? What bar length will serve your needs. If electric, will corded or battery-powered work? As you answer those questions, sort out your budget, optional equipment and potential need for repair/maintenance from someone else. If you are in the gas market, remember you'll be mixing gas and oil.

A dedicated gas can will be needed for your mixed gas as well the ability to fuel the saw. Either gas or electric will need bar oil. For your protection be certain to include earmuffs, facescreen, helmet, steel-toed shoes, sawing gloves and chaps are wise. Two features that I suggest you look for are a bar oil level window and tool-less tensioner. Not critical but certainly very convenient. The proper



PHOTOGRAPHY BY KURT HERTZOG



saw blade file and the knowledge on how to use it will be necessary. Chainsaws are like any other cutting tool. Touching up any cutting edge is far easier than sharpening. Dull tools of any sort are dangerous. Keep your saw blade sharp.

General advice that I always include in buying tools or equipment. Don't be afraid to buy used if you have someone knowledgeable you trust who can help you vet well-cared-for used equipment. Select and buy based on value, not price. The lowest price may not be the best selection overall. If the \$99 electric chainsaw (corded or battery) from the big box retailer answers your needs, great. If the \$399 gas, lower-tier pro saw from a specialty shop does it, go for that. In the market, as I look now, you can get quality name, corded or battery powered saws for under \$100 or spend up to \$600 or more for the gas powered, pro saws. Whether you buy new or used, proper care will not only give you long life and serviceability but also help retain resale value. A quick look on eBay shows my well-used but cared-for Homelite saw selling for well more than twice what I paid for it. And that's after I've had 40 years of use.

1 Don't overlook your PPE relevant to chainsaw use as you plan your saw purchase. Helmet with screen and muffs along with chaps and gloves 2 My humble stable of chainsaws. You may need only one for your needs. Not a product endorsement but I have had excellent service from these 3 If your needs take you to the 'professional' level of saws, you'll have selections from small to large with something certain to fill your needs 4 Likely not needed by any woodturner, the pro lines have equipment from the basics to the very specialised. Here, an extendable, long-reach saw 5 When you shop for your saw, consider your current and likely future needs. The difference in price for a more powerful saw may not be much



◀ I see some lathes come with reverse and some don't. Do I need reverse? What would I use it for?

Reverse direction is offered on some lathes but not all. Do you need it? In my opinion, it is nice to have but not necessary. I use reverse on my lathe when power sanding bowls and vessels. My technique is to power sand while rotating forward and then reverse direction and power sand in that direction. I'm certainly not an expert at it but I feel that it helps provide a better scratch pattern. Remember, most bowls are face-grain turnings so the side walls, inside and out, have a face-grain, cross-grain, and end-grain pattern that repeats. Cross grain and end grain are typically more difficult to sand well.

I feel that alternating directions during the sanding process provides better results. I've seen some turners that stand on the backside of the lathe and reverse things to cut with the lathe running in reverse. If you use reverse on a lathe, be aware that when you do any rapid deceleration, such as when you turn the lathe off or rapidly slow the speed, your workholding device will want to unthread. Be certain to tighten down the grub screws in the collar of your chuck. Don't agonise over the absence of a reverse direction capability if you don't have it. Many turners, from beginner to pros, have produced great work on lathes that only turn in the forward direction.



6 I find having reverse on my lathes handy for power sanding. Not critical but a nice feature if it comes with your lathe

I keep seeing ads for a Lichtenberg wood burning machine on social media sites. What is it really doing? Do you have any experience with it?

I have seen the same advertisements on Facebook, at least. They may be posted elsewhere also, but I've not seen them. Please don't construe anything in my answer as an endorsement or encouragement. It is only my answer to your question. The Lichtenberg process was invented by Georg Lichtenberg in 1777. The physics professor demonstrated the process to his students and peers. He then documented it in the book *Concerning the New Method of Investigating the Nature and Movement of Electric Fluid*. His initial work was with glass, resin and ebonite. The process has been experimented with for the past 200 years by photographers to physicists.

Most recently, it was the focus of a master's thesis at McGill University in Montreal in 1979. The lightning-like designs made by electrostatic charges have been awe-inspiring in a variety of mediums. It is sometimes called 'captured lightning'. In the past couple of years, the process has been of interest to artists using wood. The electroerosion is simply a wetted wood surface randomly patterned between two high-voltage electrodes. As I've noted many times in past columns, be wary of the

'experts' on YouTube or other platforms that are uncontrolled and unvetted. Many self-professed experts showed the process using dicey homebuilt systems. These systems were fashioned around repurposed transformers from scrapped microwave ovens. Not only were they high voltage but capable of dangerously high currents. Without much proper knowledge and cobbled-together wiring, etc., their set-ups were inappropriate.

There were fatalities associated with these home-built systems that were also improperly used. To my knowledge, there were no incidents involving woodturners. The accidents involved artists and thrill seekers. Because of the potential liability, the American Association of Woodturners banned all facets of Lichtenberg burning. Its total ban includes no discussion, teaching, or demonstration of the topic at anything associated with the AAW in any manner. Nothing on the topic is allowed in its publications, symposia, or meetings of any chapter that is the AAW. Also banned is the display of any works created using the process.

Do I have experience with the process? Yes, I tried it before the AAW ban. I used a commercial unit specifically built for the process by a company with extensive experience in high-voltage equipment and safety. I had faith in the efficacy and safety of the equipment since I knew the product designer and owner of the company. He had nearly 50 years of high-voltage experience, including extensive high-voltage experience from his career in the US military. I dabbled with the process for a while, producing some very interesting effects. Once the AAW adopted its total ban on anything related to the process, I stopped experimenting with it. From my perspective, there wasn't much to be gained in pursuing it if I couldn't ever say a word about it or display the results to the woodturning community. To my knowledge, the total ban still exists in the AAW. Regarding the equipment being offered for sale via the advertisements on social media, I am not familiar at all other than seeing their ads. They seem to be pushing it hard. If you decide to participate, do your due diligence and be aware of all the safety aspects and potential use limitations depending on your affiliations and turning circles.

7 Lichtenberg wood burning, sometimes called fractal burning, is electrically burning wood using a dielectric between high-voltage probes  
8 Practice piece experimenting with deep burning to create contouring. The surface of the cherry was wetted with an electrolyte of water and baking soda

