

## Sharpening Lathe Tools

Collected from: <http://www.buzzle.com/articles/sharpening-wood-lathe-tools.html>

### Sharpening Wood Lathe Tools

There are certain simple steps to sharpen a wood lathe tool. The sharpening technique is different for different lathe tools. Get all the basic knowledge to keep wood lathe tools sharp at all times.



Making useful and beautiful articles out of wood is called [wood carving](#). The most popular products of wood carving are [wooden toys](#), wood cutlery and household decorative pieces. Small pieces of [wooden furniture](#) like stools and pet tables can also be whittled. In order to give the desired shape and size to these items, a sharp wood lathe tool is required. A wood lathe tool needs to be sharpened every now and then. Some tools need to be sharpened from both the sides while some have only one sharp side. Services are available for sharpening wood lathe tools, but it would be just wonderful if this simple work could be done at home. Though sharpening wood lathe tools is quite time-consuming, it is interesting to do. Knowledge of the various steps and techniques involved is very important. Read on to get a brief idea of both.

- Search for a good tool grinder. A 3500 RPM grinder is known to be the best. Purchase one and set it up at a suitable place.
- Put 25 pounds of sand into the grinder. The sand acts as a shock absorber. It is needed to keep the grinder stable while working. Generally, grinders are provided with doors to keep the sand bags. In case the grinder is without doors, keep containers of sand around the legs for stabilization.
- The tool grinder comes with a wheel. This wheel can always be replaced with one that you feel will work better with the wood lathe tools. According to experienced wood lathe suppliers, aluminum soft bond wheel made up of 60 bit aluminum oxide is best. You can easily get wood lathe tool grinder wheels from wood lathe suppliers.

- The grinder wheel needs to be cleaned and rounded frequently. This is necessary for good sharpening. There are tools specially designed for rounding and cleaning the grinder wheel. Rounding of the grinder wheel is best done with a diamond dresser. For cleaning, a star dresser is considered to be the best. Therefore, purchase these tools. Put on the grinder. Sprinkle some water on the wheel. This minimizes sparking.
- To sharpen a dull blade, set a gouge tool at a 4-degree angle against the grinder wheel. While working, you need to keep moving the gouge tool up and down, with a little pressure.
- Tool grinders can sharpen spindle gouges as well. The procedure is the same as above, but the spindle gouge is placed at 70-degrees across the grinder wheel.
- A Bowl grinder is also placed at 70-degree angle, while a round tool is set at 45-degree angle against the grinder wheel. This is also followed by the same process of moving the wheel up and down.

There are a number of delicate tools that cannot be sharpened with machines. They need to be sharpened by hand. Skews, scrapers and parting tools are some examples. To carry out sharpening by hand, you need to purchase a 1000 grit sanding stone. Hold the stone in one hand and the tool at a 45-degree angle in the other hand. Apply light pressure and scrape the tool back and forth on the sanding stone.

Wood lathe tool sharpening, if done regularly, would help you to carry out [wood working](#) even more effectively and efficiently. Sharpening, if done at home, has an added advantage of being cost-effective. Having a wood lathe sharpening grinder at home would help you to take care of your wood lathe tools on a regular basis so you can work on your wood-carving projects whenever you wish.

Collected from: <http://aroundthewoods.com/sharp.shtml>

## ***Wood Turning Tools Sharpening Jig***

**"We do not sharpen because a wood turning tool is dull, we sharpen because it is not sharp enough."**

**Sharpening wood turning tools** quickly and consistently is a constant problem for a wood turner. We stand in front of a machine that throws wood at us at about 75 miles an hour and stop it with sharp tools. A typical gouge cuts more wood in a few minutes than a hand plane does in an hour. Also the wood we work with is often straight from a log with bark still on it and sometimes sand and rocks from when it was felled. There may even be imbedded metal where a tree has grown over a nail or spike, not to mention horse shoes and other objects turners have found. A working edge has to be obtained quickly and easily and then back to the work.

The carver's razor edge obtained from finer and finer grits of stones followed by a leather strop is not for us. It just does not last. Instead we tend to go from the **grinder** to the work. Therefore I start with the grinder. My particular sharpening system starts with a typical, mass market tool grinder, 3500 rpm, mounted to a secure stand. My stand has 20 pounds of sand in the bottom to absorb vibration and give stability.

I first replace one of the **abrasive wheels** with an aluminum oxide, 60 grit, soft bond wheel. In my case the left for no other reason than it first held the included coarse wheel and I wanted to leave on the medium grit. The new wheel can be obtained from most wood turning suppliers. It just gives a cooler grind that is less likely to burn the high speed steel our tools are made from and gives an edge that is plenty sharp for the work we do.

In order to properly sharpen a tool, the grinder wheel must be round and clean. I use a diamond dresser to round the wheel and a star wheel dresser to clean it. While I may clean the wheel fairly often, sometimes daily, I usually round it about every three months. When the wheel looks glazed with steel, clean it and when a tool bounces on the wheel, round it.

I removed the grinding table that came on the grinder and replaced it with a home made **sharpening jig**. Jigs are great for reproducing a grind time after time. They let you get a consistent edge and bevel and get back to work. While I started by learning to freehand grind, I am better with a jig and use it consistently. Having said that, parting tools, scrapers and skews are easily sharpened by hand because they are straight edges or simple curves.

Here you can see the grinder on a stand and the jig I have made at the left wheel. There is also a Veritas grinding platform in front of the jig. A gift I received, it is an excellent replacement for the usual inadequate grinding platforms included with the grinders. Hanging from the side are various holders for the gouges or tools. I found it easier to make separate holders for different tools than to make an adjustable holder. It only takes a few minutes to make a holder.



The jig consists of those holders and a movable arm to pivot the tool. You can see that the arm is adjusted with a bolt in a slot. I keep meaning to change to a thumbscrew but this works so well I have never bothered. Set the distance for the tool to protrude from the holder, tighten the eyebolt (cheaper than thumbscrews and have a larger gripping surface for your fingers), set the end of the holder rod in the pivot, rock and turn. I have not timed it but I am probably back at the lathe with a sharp tool in less than a minute.

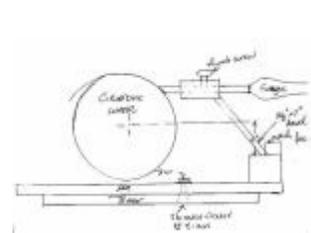
Here you see the 1/2" holder in which the 1/2" refers to the maximum size of shaft it takes. With it are a typically sharpened bowl gouge and Oland tool.



Here is a 60 degree holder and the typical spindle gouge grind it gives. I did not mark the gouge size on the holder as I seldom use spindle gouges and use this holder for 1/4" to 1/2" spindle gouges. I could do the same for the bowl gouges or Oland tools but prefer to have one for each size shaft as I use the Oland tools a lot and am too lazy to want to keep turning the eye bolt in and out.



This is a rough sketch I did some time ago for someone who wanted to set up the system. It is kept under the "one of these days I will take the time to do it right" set of ideas. The system is not complicated and the sketch should give enough information to duplicate it. I made it out of scrap plywood and hot glue. One of these days I may improve it, but it works so well that I am hesitant to "fix" it.



To use the jig for a roughing gouge or for a bowl gouge ground straight across:

1. draw the jig arm back
2. rest the end of the handle in the jig arm
3. set the length of the arm such that the tool contacts the stone at 45 degrees
4. lock the arm in place
5. rotate the tool in the arm as the wheel turns



To use the jig for a spindle gouge:

1. insert the tool in a 60 degree holder
2. with the end of the holder in the jig arm, adjust the arm until the tool meets the wheel at 60 degrees



3. pivot the tool back and forth over the moving wheel



To use the jig for a bowl gouge with drawn back wings:

1. insert the tool in a 45 degree holder.
2. with the end of the holder in the jig arm, adjust the arm until the tool meets the wheel at 70 degrees
3. pivot the tool back and forth over the moving wheel



To use the jig for an Oland Tool:

1. insert the tool in a 45 degree holder.
2. with the end of the holder in the jig arm, adjust the arm until the tool meets the wheel at 45 degrees
3. pivot the tool back and forth over the moving wheel. The video is a bit choppy. I normally do not sharpen with the camera in my left hand.



Normally I sharpen a skew by hand but if you are new to sharpening the jig can be used. Note that the long point will have a longer bevel than the short, but this does not hurt the cutting with the skew.



1. set the tool handle in the end of the jig arm
2. with the end of the holder in the jig arm, adjust the arm until the short bevel of the tool meets the wheel at 60 degrees
3. move the tool back and forth over the moving wheel until the sparks come over the dge
4. flip the tool and sharpen the other side



In response to some questions about the procedures on this page I rewrote a lot of the material and added some videos and pictures for greater explanation. You can find it at the the [new sharpening page](#).

If you make one please [let me know](#) how it turned out.



