

# Sharpening

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**# 1 rule:**

**Sharpen, Sharpen,  
Sharpen!**

My estimate is that 95% of woodturners don't sharpen enough

# Dull Tools are Dangerous

Sharp tools are safer than dull tools. Many failures and possible injury result from a dull cutting edge because the tool can no longer function as it was intended.

# How sharp is sharp and how dull is dull?

A dull tool requires more effort and force on the part of the operator. Moreover, a dull tool may not grab the work material properly and as a result may kick back, hitting the operator

It takes practice to learn what a sharp tool feels like and conversely what a dull tool feels like.

# How to think of sharp

A brand new razor cuts very cleanly without nicking

My new wife once used my razor without my knowledge. I ran it across my face and I thought I was going to SHRED my face. It was still sharp, but the wrong kind of sharp.

What do you do when the razor starts to get dull? You buy a new one.

# Cutting wood fibers is like shaving

Do you know what it feels like when you try to shave a week long beard? It sure hurts doesn't it?

By taking thin slow cuts on wood with a SHARP gouge, you will get a clean cut with little or no tear out

**How do I learn what a sharp tool feels like?**

It is simple. Sharpen every finish cut and sharpen three to four times as often as you normally do on rough cuts.

# So what is sharp?

Scientifically, the sharpest edge is only one molecule wide.

So for the average woodturner,  
sharpen with the best  
method/equipment that you can  
afford

The next part of the equation is: How long does sharp stay sharp?

As soon as you start a cut, the tool starts to dull

The quality of the steel of the tool, the hardness of the wood, the volume of wood being removed, and speed of the rotation of the material all have an affect on how long a tool stays sharp



# What tool steel is best?

Many woodturners do fine with C2 High Speed Steel, others swear by C4 or C42, for others it may be V10 or V15.

One thing to keep in mind is that the harder the steel gets and more carbide particles that are in that steel, may mean that you may need better sharpening wheels/equipment

# My opinion is:

Sharpen every finish cut and sharpen a lot more often in between cuts and then the quality of the HSS isn't as important

For the most part, it is what you get used to as far as tool quality, flute shape and bevel angle which equates to the predictability of the cut