Power-Honing skews and gouges

There is another approach that can be used in combination with hand-honing or a substitute for it: power-honing. This is most often done with a motorized wheel or even a wheel mounted on a lathe arbor. Wheel materials include felt, stitched cotton, leather, cardboard, rubberized abrasive, plywood, and MDF. For turning tools, I tend to stay away from the softer surfaces (felt, leather, cloth and cardboard). With our heavy-weight tools and too much pressure, I run the risk of rolling over my edge. My first choice is also a frugal one: medium density fiberboard (MDF) charged with a buffing compound that cuts high-speed steel.

Make your own MDF wheel

You can glue up the MDF wheel from discarded cutoff scraps from a nearby cabinet shop. I make the wheel diameter approximately the size of the grinding wheels in my shop so that the hollow ground area is simpler to feel. Since I grind on an 8" wheel grinder, my MDF flat wheels are 7" to 7 1/2" in diameter and 1 1/2" wide (two 3/4" pieces glued together). I mount the wheel on an arbor and turn the wheel to a round flat disc.

Here are some suggestions to mount your disc: arbor-mounted directly onto a 1/4 or 1/3 hp 1725 motor, pillow block and shaft, or left on an arbor that mounts on the lathe. It's best you avoid mounting the wheel on the lathe you'll be working on, as it is not practical to remove work from the lathe to hone.

> Power-honing is a quick process. If a little is good, more must be great is the wrong approach.

Watch for a "mud trail," shown above, when power-honing at an MDF wheel charged with honing compound.

Whatever system you choose, set up to hone with the **wheel turning away from you**. Remember, honing is quick operation. I find that high speed is not necessary–I prefer a 600 to 1,000 rpm.

Choose a buffing compound rated for stainless steel. I've had great luck with the Dico brand and Zam, a green honing compound. Whatever you use, watch for the honing compound to turn black as you hone; this indicates that you are removing some metal and not simply polishing the tool surface.

Honing techniques at the wheel

The actual technique is straightforward and similar to hand honing. With the wheel moving away from you, charge it with honing compound, place the heel of the bevel towards the top of the wheel–cutting edge up.

Gently lower the bevel onto the wheel until you have that same two point or full contact of the bevel on the wheel. Again, do not focus on the edge, as you will round it over in a nano second. When I see the blackened mud trail just coming under the edge, I stop (see photo *at left*).

Personally, the only tool I routinely power-hone is the skew chisel–its long edge benefits from this treatment. Occasionally I power-hone the outside bevel of gouges when I have a particularly difficult piece of wood. In that case I either use the slipstone to hone the inside flute, or I have MDF wheels with turned beads that fit the inside flute of my gouges .