

Diamond Whetstone Honing & Polishing with DWS/KIT/B

- 1. All new Trend bench stones require a breaking in period. Use an old plane blade and lapping fluid and work the stone in. Use minimal pressure and let the diamond do the work.
- 2. To create a keen edge the back side of a chisel or plane blade must be flat. No plane blade is flat out of the box. The first step is to get the back side flat. You can tell that the plane blade is acceptably flat when you have a consistent flatness across the edge of the chisel.
- **3.** Flattening of chisels or plane blades can be quick, or it can require some work. You will discover how flat your chisel/plane blade is when you apply it to a precision flat stone. Typically, new plane blades will only need flattening on 1000 grit side. Blades or chisels that need to be restored, may need an extended period of flattening of 300 grit side first, followed by 1000 grit side for polishing. Regardless of the stage, do not use pressure. Let the diamond do the work and use an adequate amount of lapping fluid.
- The next step is front side sharpening. This can be achieved free hand or using a honing guide. If doing this free hand, take short controlled strokes so that the chisel or plane blade does not round or dip. When by using a honing guide, it is important to use a honing guide like the Trend DWS/HG/SET that incorporates horizontal clamping, (keep the tool square to the sharpening surface) and a wide and sturdy roller guide. Again only use the pressure of holding the honing guide on the diamond stone. Do not press down.
- **5.** Dry chisel or plane blade with cotton cloth to remove lapping fluid. Apply honing compound and strop on leather for a few strokes. Then strop on clean leather for few strokes. Repeat process until you have achieved a polished mirror finish.
- Dry the diamond stone down with a soft cotton rag. Clean any residue off of the stone with a cleaning block. Wipe clean.

Flattening Water Stone or Oil Stone

- 1. One of the great drawbacks of water and oil stones are that they do not stay true. The advantages of diamond sharpening are:
 - a) guickness of cut.
 - b) flatness over time.
 - c) longevity of stone.
- 2. Draw multiple diagonal pencil lines on a water stone.
- 3. Place diamond stone on non-slip mat and apply generous amount of lapping fluid.
- 4. Move water stone back and forth with minimal pressure on the diamond stone - (with the weight of the water/oil stone only).
- **5.** After a few moments. lift the water stone and notice if it has a flat bottom. If bottom is not yet flat, you may need to apply further lapping fluid and continue the flattening process.
- **6.** Apply lapping fluid again and gently loosen build up from diamond stone. Remove build up on stone with soft cloth. Remove residue with cleaning block and stone will return to optimal performance after a session with the cleaning block.





Trend Machinery & Cutting Tools Ltd. 7351 West Friendly Avenue, Suit A,

Greensboro, NC 27410 Tel: 336 292 5051 technical@trend-usa.com www.trend-usa.com



