

Diamond delight



I don't know about diamonds being a girl's best friend, but they are certainly becoming a great aid to woodworkers, and now T & J Tools have developed a diamond-coated sharpening disc that can be fitted into a lathe or Jacobs chuck to provide powered honing.

The disc is basically a 127mm- (5in) diameter by 7.5mm- ($\frac{3}{16}$ in) thick steel disc with diamond-coated face.

The disc is fitted into the chuck by means of a very solid 12.5mm- ($\frac{1}{2}$ in) diameter arbor welded to the back of the disc.

The diamond coating on the disc I tried is 45 micron, and an even finer grade is available for carving tools.

The manufacturers recommend that the disc is run at the slowest possible lathe speed and lubricated with fine oil such as 3 in 1. I ran my



PHOTOGRAPHS BY TERRY PORTER

test disc at 250rpm fitted into a woodturning chuck, which I found ideal. I also tried it at 420, the minimum speed for many lathes, and found it to work well, but you need to keep out of the line of fire of the lubricating oil being thrown off by centrifugal force! For accurate honing it is essential that the disc runs true.

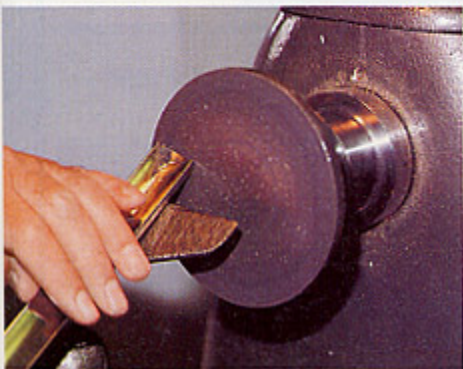
LEFT It's very easy to roll a gouge to obtain a fine honed finish

RIGHT: You can sharpen in the upper quadrant with a non-trailing action, but I think the cutting action of the turning tool would degrade the wheel more rapidly

In use

What a delight! Because the disc is rotating slowly and the diamonds cut so effectively it is very easy to hone under full control with no fear whatsoever of burning the tool. I simply angled the toolrest in the most suitable position and was away.

I sharpened in a lower quadrant of the disc with a trailing action. Because



of the slow speed and the lubrication it is very easy to roll a gouge and achieve a fine, smooth finish to any profile you have originally ground. Any small facets left from the original grinding are quickly eliminated to leave a sharp edge and smooth bevel.

With skew chisels it is easy to hone straight across or with a curved cutting edge. I tried scrapers with the top surface downwards and was able to raise a very fine, even burr.

The diamond disc gives a very sharp edge, is easy to use, is well made and, given it's covered with diamonds, is

reasonably priced. With this diamond coating, its longevity must be pretty good! It also stays dead flat with use unlike the hollowing that can occur with conventional sharpening stones.

Another plus is that with 'power



Likes

- Diamond coated
- Solidly made
- Easy to use
- Gives a fine edge
- Suitable for all standard turning tools
- Extends tool life



Dislikes

- None really, but:
- Needs driving power source separate from lathe

Price and availability

Price: £49.95 + p&p

Available from: T & J Tools, 14 Main Street, Willoughby, Warwickshire, CV23 8BH

Tel: 01788 890121

Mobile: 07752 874437

Email: info@tjtools.co.uk

Website: www.tjtools.co.uk

honin' eliminating the need to regrind, except for reshaping, tools will last longer.

The only drawback I can see is that you have to mount it in your lathe and do your honing prior to turning, or pop it in an electric drill mounted somewhere. If you have a second lathe lying dormant then your problem is solved. T & J Tools are currently working on a motorised version of the disc, which would be an excellent solution.

Terry Porter