



ALAN HOLTHAM REVIEW

New Trend CraftPro Diamond stones

Diamond 'stones' have more or less become the norm for sharpening these days. Gone are the days of struggling with slow cutting and messy oilstones or soft Japanese stones that require constant flattening.

Diamond stones cut very much faster, I have seen figures quoted for them being up to 25 times faster and I couldn't really disagree. They are also cleaner, they last forever and stay flat. The only downside is that good quality diamond stones have always been very expensive and despite their undoubted performance they have been a hard-to-justify purchase for the less frequent user.

Recognising this dilemma, Trend have just introduced a range of less expensive diamond stones under their CraftPro brand. These are designed for the user who wants a decent and reliable product without going to the expense of the full blown professional quality stones.

However, these should not be confused with the very cheap diamond products you often come across in the discount stores. I have looked at these before and found them severely lacking in terms of quality of manufacture, consistency and flatness. The CraftPro range neatly treads the middle ground by offering an affordable, value for money product that will bring the world of diamond sharpening within reach of a much wider audience.

I tested three stones, a 6 x 2 3/8" bench stone, a 4" pocket stone with folding handles and a credit card stone. They all share the same double sided construction, one side being a coarse 360 grit, the other being fine at 600grit, though I have to admit that purely by feel there did seem to be some difference between the same grits on the various stones, but this could just be down to the newness. They are made by using nickel to bond monocrystalline diamonds onto a steel base, there are no flimsy thin metal backings with these stones. For the technically minded about particle size the 360 grit equate to 40 micron and the 600 grit to 25 micron.

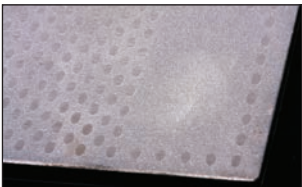
Ideally, diamond stones should always be used with a dedicated honing fluid to maximise the cutting efficiency and minimise the risk of them rusting. I used the Trend Lapping Fluid for my tests, I consider the minimal expense of this to be more than repaid in terms

of the durability and performance of the stone.

Bench stone. This bench stone is the one I was particularly interested in as I have recently come back to using a lot of hand tools and need something to condition and then maintain the edge. The coarse side has a continuous pattern of diamonds, whilst the fine side has them arranged in a mesh pattern. I am never quite sure why this arrangement is used, the argument being that it collects and holds the metal residue. Whatever the reason, and the cynic in me says it actually means you need to use less diamonds to manufacture it, it still works well and this stone also incorporates a solid area of diamonds at one end of the mesh arrangement.

The moulded plastic base is very rigid and has non slip feet that do actually hold it firm on the bench without the need for clamping, which makes it much easier and quicker to use. I also liked the clear cover for this stone so if you leave it out on the bench it isn't going to get it clogged with fine dust and shavings. One thing you will notice with diamond sharpening is that the stones require far less pressure to make them cut, which takes some getting used to after a lifetime pressing on ineffective oilstones!

I was a little disappointed to find that the coarse side of this stone was not perfectly flat. It was slightly convex across the width and concave across the length. I don't think this is particularly significant, unless you want to sharpen a lot of very wide blades as the movement of the blade over the stone should minimise the discrepancy, but I thought it should have been better. However, the fine side was spot-on for flatness which is probably more important. As with all diamond stones they are a bit over aggressive to start with,



but this soon eases off with a little use. My first test with a plane blade reminded me just how good these stones are. After just a few strokes on the fine side you can produce a super sharp micro bevel that is dead square, though if you want to play around with the side pressures and produce a slightly convex blade then a diamond stone will do it in seconds.

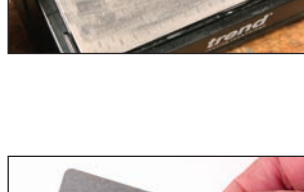
As a more demanding test I took a rather tatty 1" bevel edge chisel with significant nick at one end. Normally I would start with the grinder to restore this sort of damage, but after about 15 seconds on the coarse bench stone the nick had disappeared, which took me totally by surprise. This was indeed an impressive performance. It took so little time and effort and none of that danger of damaging the edge by overheating on the grinder. I then had a perfect edge that just required a few strokes on the fine side to remove the burr and end up razor sharp.

If you have any doubts about their ability to remove metal just look at the amount of 'swarf' left in the mesh of the fine stone after just a few strokes. These are amazingly powerful abraders! However to maintain full cutting performance it is worth cleaning any excess resin and dirt off the tool before sharpening. If necessary, you can buy a rubberised cleaning block to keep the stones in tip top shape.

Credit card stone. This has all the properties of the bench stone, though both sides have a continuous pattern of diamonds and as the name suggests it is much smaller at 82mm x 50mm and just 0.8mm thick. There is no indication which face is which grade, you just have to rely on feel, which is easy when they are new, but may be less so when they have worn a bit. It is perfect for sharpening router cutters, ideally working off the edge of the bench to maintain a flat edge, and unless the edge is badly worn I would only use the fine side or you will soon roughen the carbide, such is their abrasive power.

I also found this card shape ideal for sharpening scissors, something I am notoriously bad at, and also spindle moulding cutters by honing on the flat face.

My only slight criticism of this stone is that it would be better if it had a wallet of some sort for clean storage, but I am sure I can find something suitable.



4" pocket stone. I have to admit to being slightly reluctant to use this stone as I have tried this style before and always found the handles to be sadly lacking in rigidity. However I was pleasantly surprised with this one, as once opened out the handle was much firmer than I remembered and I felt much more confident in its use. Also the way the handles fold back over provides excellent clean storage and reduces the stone to the handy pocket size of its title. On this stone both of the faces have the oval mesh design but they are clearly marked with the grade.

There are dozens of uses for this type of stone but I tried knife sharpening, which worked well as I much prefer a flat honing face rather than the more conventional round 'steel'. The handle on the stone also makes it easier to access more awkward sharpening situations such as sawblades, which can now be touched up in situ rather than have to remove them from the machine, but again do only use the fine side for TCT.

Verdict. *I was genuinely surprised by the cutting ability of these stones. Admittedly they were all brand new when I started, but I actually think they improve after a little use. They certainly represent excellent value for money when you look at some of the more 'professional' alternatives and apart from the slight issue of flatness on the bench stone they are hard to fault. For a relatively modest outlay you can now very easily equip a workshop with an effective stone for all sharpening situations.*



PROS

Sheer performance, speed and ease of use, low cost.



CONS

Flatness of bench stone. No grit marking on credit card stone.

Cost

- Bench Stone **£29.90 + Vat**
- Credit Card Stone **£9.90 + Vat**
- Folding Pocket Stone **£14.90 + Vat.**



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