How to obtain a mirror edge?

Posted by mark76 - 12 Jan 2012 18:21

I am about to buy the Wicked Edge system, probably from the German reseller. Living in Europe, that avoids me having to pay high import taxes and transport costs.

I'll buy at least the base package, with the 100/200 stones and the 400/600 stones, as well as a pre-drilled base, which the German guy seems to make himself. I'll likely also order the 800/1000 stones.

From there on, I'm so not sure. If I base myself on the grit table on this site, I could either get the strops with 5/3.5 micron stropping paste for polishing after sharpening at 1000 grid. And then even finer stropping stuff, if I wanted to.

Or instead I could get the 1200/1600 stones. If I wanted to do stropping afterwards, I'd have to start with 1 micron stropping spray (since 1600 grit translates to 2.85 microns). And again, I could go even lower if I wanted to.

My goal would be really to obtain a mirror edge. Which of the two approaches would you recommend? Start stropping after the 1000 grid stones or also use the 1200/1600 stones? Is stropping even necessary after using the 1600 stones?

In this respect I am a bit confused by the video in which Clay sharpens a knife with a somewhat convex edge (the CRK Sebenza – which I own and want to sharpen to perfection) and starts stropping already at 10 microns (presumably after finally sharpening at 800 or 1000 grid) and then moves down to "only" 5 microns. Using this he is able to get a mirror finish. But according to some other messages you need stropping at smaller micron sizes for a mirror edge.

So basically my questions boil down to: if I want to obtain a mirror edge, what would I do after having sharpened my knife on a 1000 grid diamond stone:

* Start stropping at 5 microns, then 3.5 microns and possibly even less microns, e.g. 1 micron?

* Continue sharpening at 1200 and 1600 grid, and then stop? (Not strop
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* Continue sharpening at 1200 and 1600 grid, and then strop at 1 micron or even lower?

* Or an entirely different strategy, for example what Craig showed in his Sebenza video?

And a related question: how far do you need to go with sharpening/polishing in terms of micron size in order to get a mirror edge?

I know there are also Shosera stones out, by let’s leave them out of this equation, for the time being, not to make this already complex discussion overcomplicated.

Thanks a lot for your answers!

P.S. I posted a similar message in a reply in another threat. That one was quite old, so maybe that was why nobody replied. Nevertheless, sorry for posting two quite similar messages. It is just that I want to order a WE this weekend and I still need some advice.

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Re: How to obtain a mirror edge?
Posted by Dmlevitt - 12 Jan 2012 19:53

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I get a nice mirror edge using the 5 micron strop. The 1000 grit stones give the edge a beautiful 'glow' but not quite mirror. I have not used the 1200/1600 stones.

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Re: How to obtain a mirror edge?
Posted by DonLlewellyn - 12 Jan 2012 23:50

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I use the 1200/1600 stones and get a mirror finish everytime after stropping to 3.5 microns. Sweet!

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Re: How to obtain a mirror edge?
Posted by jendeindustries - 13 Jan 2012 00:37

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There's mirror finishes, and then there are mirror finishes!

In general, you'll get a "hazy" mirror at the 2K level (8 microns), a basic/light mirror at 3K (6 microns) and a full mirror at the 4K-6K range (4 microns to 3 microns) and a "bright" mirror from 8K and finer (2 microns and smaller).

This is loose reference, since the abrasive, technique and way the abrasive breaks down will all affect the resulting level of mirror.

If you are going for absolute perfection in your mirror (with little or no errant scratches), I personally recommend the diamond compounds and/or Choseras over the ceramics. Even the diamonds and Choseras make different mirrors, though!

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Re: How to obtain a mirror edge?

Posted by mark76 - 13 Jan 2012 04:56

Thanks all! I'm looking forward more and more!

I'll also get the 1200/1600 stones. I only don't quite understand the following:

DonLlewellyn wrote:

I use the 1200/1600 stones and get a mirror finish everytime after stropping to 3.5 microns. Sweet!

According to grits comparison chart on this site, 1600 grit translates to 2.85 microns. If you then strop with 3.5 micron stuff, aren't you actually dulling the blade, rather than making it sharper? Wouldn't it make more sense to strop with 1 micron stuff?

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Re: How to obtain a mirror edge?

Posted by DonLlewellyn - 14 Jan 2012 22:52

I don't know, but it sure buffs up the edge.

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Re: How to obtain a mirror edge?

Posted by mark76 - 15 Jan 2012 13:13

Anyone got any ideas on this? What is the best particle size to start stropping with after the 1600 grit stones if I use the diamond paste/spray?

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Re: How to obtain a mirror edge?
Posted by Salguod - 16 Jan 2012 19:39

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Call me dense, but I'm just looking at the Grit Comparison Chart here on the WEPS site. From the pictures, the stropped edges look to have a better polish than the water stones. So why get the ceramics and water stones at all? Why not just come off the 1000 diamonds and go to the 5 and 3.5 micron strops? Then go to the 1 and .5 micron strops if you want an even better polish.

Or am I missing something?

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Re: How to obtain a mirror edge?
Posted by leomitch - 16 Jan 2012 21:55

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Hi Doug!

It is difficult to answer the question with a yes or no. Some metals respond better to diamonds than they do to the stones and even between the Choseras and the Shaptons you will get different results. The stropping definitely adds to the polish and also tends to convex your edge the more you do it.

So here goes...once you get beyond the 1000 grit stones you enter the area where extreme sharpeners dream of polishing molecules so their edges shine like the sun and slice through things like a hot knife through butter. I believe it isn't necessary to go beyond the strops as you ask, but after I sent my 4 knives to Clay for the sharpening test using the Shaptons and Chosera stones, I have to admit the edges he developed with those stones, paddles and strops altogether were of a very high order mirror finish and were as sharp as anything I have ever seen in 6 decades of looking bar scalpels made of obsidian used in surgery. Hmm! Now that I mention that, I will have one of those used on me soon and twice in the next 6 months. Then I will personally find out how sharp is sharp.

I don't know if I even came lose to answering your difficult question, but I hope this helped.

Best regards

Leo

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Re: How to obtain a mirror edge?
Posted by Salguod - 16 Jan 2012 22:19

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Thanks for the answer Leo! So do you think that the harder and high-tech steels like ZDP-189 are better with diamonds, and the more conventional steels are better with water-stones? Or is it more complicated than that?

Hope the surgery goes well for you my friend! Insist that they use something sharp. 😀
Have some Lagavulin on hand for your recovery! Best wishes, my friend!

Doug

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