Super polished edges

Posted by wickededge - 07 Aug 2011 12:31

This is one of my Benchmade Strykers:

and attached is one of the Kershaw Blur that Curtis Womack gave me.

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Re: Super polished edges

Posted by babo - 27 Dec 2011 08:34

This is the progression I am currently following.

<u>Stone Microns</u>

100 Diamond 122

200 Diamond 69.5

400 Diamond 22

600 Diamond 16

800 Diamond 12

1000 Diamond 7

1,200 Ceramic 5

1,600 Ceramic 2.85

Polishing tapes 1

Question:

Assume that you keep the knives and stones clean of all dust and grit from the various stones. What would I gain from the Chosera or Shapton stones other than getting to 0.48 microns? The same question goes for the strops and compounds? The ceramics are equal to or finer than the stropping compounds so what other benefit is there?

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Re: Super polished edges
Posted by TonyJ - 27 Dec 2011 16:16

I tried the 1 and .3 micron lapping film yesterday. Great edge and finish.

I don't have a definitive answer to your question. It seems logical to suggest that grit is grit and that if you get there with ceramics or whatever then the result will be the same. However when you start talking about stones/films and strops then there are variables such as surface flexibility and pliability to take into account.

I too would be interested in an answer.

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Re: Super polished edges
Posted by babo - 27 Dec 2011 16:22

Hence, the reason for forums....dialog.

I agree that there are other factors other than grit alone, that's why I'm asking for input from the more knowledgeable forum members.

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Re: Super polished edges
Posted by wickededge - 27 Dec 2011 16:37

I think the concept that "grit is grit" is essentially correct. I would add that hardness and friability of grit are important factors in determining the depth of the scratches and how those extend out to the final edge as teeth. Some abrasive manufacturers actually rate their products with an AR (average roughness) scale to describe the peaks and valleys of the surface rather than the particle size. Other factors are the substrate pliability which can mitigate the effects of super hard abrasives like diamonds

and can also modify the geometry of the edge, providing curvature. Additionally, leather has the very unique function of burnishing; smoothing the surface of the steel through plastic deformation. I'd translate all that to say that grit for grit, the scratch widths should be the same, the depth will vary based on hardness and friability of the abrasive, giving the final edge more or less teeth. A flexible substrate like leather will give curvature and only leather or super hard, super smooth metal will burnish the surface. The leather with a good micro-abrasive is an unbeatable finish IMHO for most applications except when you want a very toothy edge.

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Re: Super polished edges
Posted by Deputy115 - 13 Mar 2012 18:59

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a couple polished edges .. not the best pics, but you get the idea

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0101.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0100.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0091.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0099.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0098.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0097.jpg

s1244.photobucket.com/albums/gg572/Deput...current=IMAG0096.jpg

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Re: Super polished edges
Posted by wickededge - 13 Mar 2012 19:14

These look great, thank you for posting them! I hope you don't mind that I posted them to our Facebook page.

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Re: Super polished edges
Posted by Deputy115 - 13 Mar 2012 19:22

Hey Thanks Clay ! I don't mind at all if you use the pics. I'm learning how to polish the blades , but not up to the standards as some on here ... hint hint but I'm working on it.

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Re: Super polished edges
Posted by wickededge - 16 Mar 2012 12:20

I took a few pics of the finished Swingblade:

zoom

zoom

zoom

zoom

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Re: Super polished edges
Posted by wickededge - 28 Mar 2012 18:28

I had a great time making snacks and taking photographs of this sharpened knife. Edge angle is 20 degrees per side, finished at .5 microns with diamonds on leather strops. Steel is AUS-8.

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Re: Super polished edges
Posted by wickededge - 29 Mar 2012 11:34

Here is a Wicked Edge sharpened knife photo sent in by Brad Lawson:

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