Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 11:46

Here is a fun study I started this morning - I'm taking a series of identical blades through the different stones I have. I started with the 50# diamonds and so far have progressed up through the 1um strops. So, without further hesitation, here are the images:

50# Diamond Stone

Zoom

80# Diamond Stone

Zoom

It's difficult to clean the edge of the blade since it's so toothy and snags just about everything it touches. There is some residue on the edge, especially in the 50# image.

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:14

Next step were the 100# and 200# diamond stones. It's worth noting a couple of things:

1) All of my stones are very well worn in after many hundreds of sharpenings, so they're not nearly as aggressive as they were when new. I'll do another progression soon with brand new stones for comparison.

2) My 200# stones are more aggressive than my 100# stones because of the two, the 100# stones have gotten much more wear since I generally use them to take off the bulk of metal when I'm cutting the bevels in. By the time I switch to the 200# stones, I'm already in refining mode and so they don't get much work, especially since I tend to spend more time with the 400# and 600# stones for refining the edge. In the future, I might switch back and forth between the 100# and 200# stones for re-profiling before moving on to the higher grit stones.

100# Diamond Stone

Zoom

100# Diamond Stone

Zoom

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:20

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Onward to the 400# and 600# stones:

400# Diamond Stone

Zoom

600# Diamond Stone

Zoom

My 400# and 600# stones are so well worn in now that they give nearly a mirror edge to the naked eye at a casual glance. You can't read fine print in the reflection, but you can make out your surroundings and easily see whose sneaking up on you.

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:25

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Next came the 800# and 1000# diamond stones. These stones have seen less use than my 600# stones

since I often play around with jumping straight from the 600# stones to strops, ceramics or waterstones. I need to spend more time getting these stones properly broken in:

800# Diamond Stone

Zoom

1000# Diamond Stone

Zoom

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:29

Next the Superfine Ceramics:

Superfine Ceramic - 1200#

Zoom

Superfine Ceramci - 1600#

Zoom

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:41

Now the Micro-Fine Stones:

Micro-Fine (Coarse)

Zoom

Micro-Fine (Fine)

Zoom

I've been intrigued by the small burr continuing along throughout the progression. I've been using edge trailing strokes which suggests another study to come. I've been especially conscious of stroke pressure, using a whisper-lite tough to finish each stone. Even so, I'm still seeing a tiny burr. From here, I moved onto some strops...

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:47

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For this portion, I lowered the angle by 2 degrees per side to try and limit the amount of rounding that would occur. I used 1um Diamond on Cow Leather Strops. The first go round was just ten very light strokes per side:

Zoom

I did another 50 strokes per side with the 1um strops, this time with more pressure and was a little surprised to see some rounding considering I was working a full two degrees lower per side:

Zoom

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 12:50

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The next phase will be to continue on through the strops at least as far as .25um on kangaroo and get a perfect edge (I hope.) From there, I'll probably do a descending progression so that we're looking at the grits from a clean slate and aren't seeing scratches left over from coarser stones.

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Re: Ascending Stone Progression at 800x

Posted by cbwx34 - 17 Aug 2012 13:02

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wickededge wrote:

You can't read fine print in the reflection, but you can make out your surroundings and easily see whose sneaking up on you.

That's funny.

wickededge wrote:

For this portion, I lowered the angle by 2 degrees per side to try and limit the amount of rounding that would occur. I used 1um Diamond on Cow Leather Strops. The first go round was just ten very light strokes per side:

I did another 50 strokes per side with the 1um strops, this time with more pressure and was a little surprised to see some rounding considering I was working a full two degrees lower per]

At some point, I'd like to see an edge stropped at a higher angle (4-5 degrees like in Verhoeven's sharpening study) after the stones or ceramics, to see what it looks like. One theory is that it doesn't actually round over the edge, because the way the leather contacts the edge changes. Maybe?

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Re: Ascending Stone Progression at 800x

Posted by wickededge - 17 Aug 2012 16:32

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cbwx34 wrote:

At some point, I'd like to see an edge stropped at a higher angle (4-5 degrees like in Verhoeven's sharpening study) after the stones or ceramics, to see what it looks like. One theory is that it doesn't actually round over the edge, because the way the leather contacts the edge changes. Maybe?

Sure, I'll flatten the bevels back out and give it a go.

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