Stock stone/strop progression (Lots of Pics!!)

Posted by razoredgeknives - 20 Feb 2012 19:36

Hey guys, quick question... I can't seem to find any info to this effect... when going through the process of sharpening a straight razor I have found that the jump between the 1k stock diamond to the 14m pasted strops is too large... after 500 strokes per side w/ the 14m strop it has not removed any of the scratches. Which leads me to my question, what is the logical progression if I am sticking with all stock stones/strops (i.e. no chosera/shapton stones)? I just ordered the 1200/1600 ceramic stones as an "in-between" before I go to the 14m strops. Any suggestions or should I be good?

According to the grit chart in the sticky, it would actually be a step back going from the 1k to the 14m pasted strop (as the 1k is supposed to be 7m).

Thanks for your help!

** Updated **

I compiled this as a reference for those of you who are interested in the progression photos but not all the discussion in between. I left my original OP above so you can see the problem I was having.

Tom's series (pg. 1 - scroll down)

Tom from Jende industries does a series of photos trying to re-create the problem I was having (which he does successfully). In this series he jumps between the 1k stock diamond stones to the 14m WE pasted strops. H**e found that the jump between the 1k stock diamond stones to the 14m strops is too large of a leap.** After 600-800 passes/side, and after adjusting the angle to where he was only hitting the very edge of the edge w/ the strops, he finally made some progress.

Clay's Series (pg. 2-6)

Pg. 3 – Clay does a series of photos going from the 10k chosera stones polishing all the way down to

.125m on CBN strops (final photo post # 2025). Pg. 4 - After having a nice mirror polish on the edge, he backs out to the 3.5m pasted strops to check out the scratch pattern left by that paste, and then goes even further out to the 5m pasted strops, which were really effective. On Pg. 6 Clay goes to the following progression: 10>14>10>5>3.5>1>.5>.25>1 microns. He did this while changing directions with each different grit so you could really see what each grit is doing… This was an excellent series!

Clay's Series (pg. 7-9)

Here clay conducts an edge progression with all stock stones on Aus 8 steel, starting with 100 grit and going all the way up. He actually re-starts the progression in post #2059 (pg. 14 after taking a little detour (i.e. jumping straight from the 600 grit stock to the 14m paste). He re-starts it with the 600 grit and, on Pg. 9, goes up through the stock ceramics (1200/1600) and then jumps to the 14m pasted strops from there. He goes all the way down to the 3.5m pasted strops. This does seem like much softer steel then we are used to, however (keep this in mind).

Another one of Clay's series (different thread) - You can check out this other thread started by Mark76 , in which Clay shows photos of an edge at 510x while playing around with lapping films, strops, and paste vs. spray. Excellent info! See what happens to your edge w/ each subsequent grit!

Stone Comparison (pg. 11) – new stones vs. broke in stones

A picture (by Holymolar) similar to **Clay's microscope setup** on how to consistently recapture the same exact spot on an edge when sharpening (Pg. 14 , post # 2185).

My Series =) (pg. 16 , post # 2409) – I progressed up from the 5k/10k choseras all the way to .5m Hand American sprayed leather strops. I post my observations here.

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Re: Stock stone/strop progression
Posted by BassLakeDan - 02 Apr 2012 14:26

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razoredgeknives wrote:

wickededge wrote:

Yes, more experiments! .. lapping film,...leather ...balsa strops.

For lighting, I just use the lights of the scope itself and I rotate the scope until I get the lighting angle desired and then keep it there for the entire series. I do the photography with the knife blade flat on a piece of photo paper onto which I've traced the outline of the blade so I can get it back in the same way every time.

... experiments on the lapping film ..e nanocloth.. kangaroo leather that Ken had mentioned. I know you have the settup and the materials, so if you get time, I'm sure we would all love that! (but I also know your busy too... just whenever you get time, I'm putting in a request now lol).

I just want to chime in here and vote YES on experiments with substrate materials as it relates to "stropping" .. I suspect, that if we gather enough information about all this, that leather is going to drop way down on the list of a materials of choice. But we shall see. As I mentioned elsewhere in other posts and other topic threads I have been experimenting for years with various types of woods. I have found some that give excellent results, and really do not use leather strops at all any more.

Also, I want to say to you guys *just excellent photographs..* keep them coming !

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Re: Stock stone/strop progression

Posted by mark76 - 02 Apr 2012 14:45

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This is a fast growing thread! And an interesting topic!

I just posted my stropping pictures of the 5 micron and 3.5 micron diamond pastes on my blog . Basically, these pastes seem to work as the 14 micron and 10 micron pastes: a lot of burnishing and little abrasion. And they work both on leather and balsa.

I also wanted to know how wide the scratches are made by the 3.5 micron diamond paste. To do so, I did what I proposed to Clay in another thread. (I'm faster .)

I borrowed a better photograph from Clay (hope you don't me using you pictures, Clay) and I cut out a

picture of a 25 micron x 25 micron piece of the edge from the photograph. I then counted the number scratches: about 25 on a 25x25 micron area. That makes these scratches about 1 micron wide.

Now I don't feel like going through the entire thread again, but I thought Tom already coined this width somewhere. Tom, if you did, you really have a straight eye! By the way, where are you? Come back!

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Re: Stock stone/strop progression
Posted by jendeindustries - 07 Apr 2012 00:42

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I'm still here! Things have gotten busy in a good way, and unfortunately it cuts into my forum time. I'd like to say just how impressed I am with the level of informative discussion being generated in my absence, though!

Josh- your pictures are excellent!

I particularly like Picture #10 off the 10K Chosera - that's about what I get.

I know you kept reversing the strokes after that, and I really think that the crossed scratches in picture #29 is the result of .5 HA diamond spray enhancing all the left over scratches from all the changing directions, and not contamination. Look closely at pictures #14 through #17 with the 3.5 micron paste, and you see those 3.5 scratches throughout the rest of the progression. By the .5 HA, you can see consistent scratches - errant scratches would more likely be contamination.

In the discussion of diminishing returns, I generally don't change the scratch directions after 8K-10K. I employ the sub-micron pastes/sprays in a stropping direction solely to "polish the grooves" just as the .5 HA diamond did, and not to establish that grit in full.

I'll be putting up a WEPS Chosera stone video soon that shows what I mean.

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Re: Stock stone/strop progression
Posted by razoredgeknives - 08 Apr 2012 15:00

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jendeindustries wrote:

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Can't wait to see the video! Yeah, I can't really tell from my photos... lol, not that great of quality. I will be playing around with it more soon. I re-leathered all my strops w/ top grain out, and re-charged them. Have to see what diff. that makes... I'm also curious if I still need the ceramics since I have the 5k/10k choseras... they seem to be very quick cutting (for that high of a polish) and consitant... will try to post pics of the progression straight from 1k to 5k choseras soon =)

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