S30 V
Posted by Mikedoh - 06 Jan 2013 14:42

Have a benchmade emissary in S30 V. Doesn't get as sharp as other knives I sharpen at ~ the same angle and using the same stone progression . Initial burr is formed, and additional strokes taken with higher grit stones to compensate for toughness of steel. Angle is 21.75 per side, use ceramics (1.4, 1200, 1600. Then Naniwa 8k. Ceramic 0.6.) finish with leather strops with 1 and 0.5 micron diamond paste.

The angle used was same as factory angle or there abouts and set bevel with either 800 or 1000 diamond.

Ideas/tips welcomed.

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Re: S30 V
Posted by PhilipPasteur - 06 Jan 2013 15:51

Hi,

If you do a search on s30V Steel, as I have, I think you will find quite a few people that say the steel doesn't take as good an edge, nor polish as well as some others. I have been playing with some knives with D2 steel at the edge. I had just sharpened a Spyderco Military in S30 V. I was very surprised at how much "apparently" sharper and brighter the D2 gets. I have found S30V does hold an edge quite well over time though.

Phil

BTW, Why are you finising with the ceramic rather than the 8K. I know the ceramic is "rated" at a finer grit. The Naniwa 8K is much more of a polisher though. You might try finishing with it.

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Re: S30 V
Posted by Mikedoh - 06 Jan 2013 17:08

I've finished using the 8k after the ceramics on other knives, but, no, the 0.6 ceramic was the last stone used.

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Re: S30 V
Posted by coryschnaufer - 06 Jan 2013 17:52

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Just to chime in I have quite a few s30v knives and I think that they sharpen up and hold an edge great. I do have to spend more time and they never do polish up as good as my other knives but I think that they are every bit as sharp and to me hold an edge a lot longer than my others in say 154cm or n680 or 5160.

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Re: S30 V
Posted by PhilipPasteur - 06 Jan 2013 18:49

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I guess Mike did not think he was getting the results that you do... and asking for help getting there.

So how do you get your S30V knives sharp? Maybe you can help Mike out.

Phil

coryschnaufer wrote:

Just to chime in I have quite a few s30v knives and I think that they sharpen up and hold an edge great. I do have to spend more time and they never do polish up as good as my other knives but I think that they are every bit as sharp and to me hold an edge a lot longer than my others in say 157cm or n680 or 5160.

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Re: S30 V
Posted by coryschnaufer - 06 Jan 2013 20:46

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I'm sorry if I didn't help out I was just trying to say is if you spend some more time on them they will get there. I was trying to be encouraging. Like you Phil I do a lot of research and there are guys on YouTube getting awesome results on the wicked edge out of S90v which if you look it up like I have is reportedly harder to sharpen than S30v. At the end of the day though all of us use the same product

and will have very similar results if uses properly. I have watched everyone of Clays videos on YouTube umpteen million times and I try to do what he does. It could also very easily be a matter of my standards of sharp vs yours. Like I said before I was just trying to be encouraging sorry if I fell short.

Cory

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Re: S30 V

Posted by Geocyclist - 06 Jan 2013 22:14

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Hey Mike,

How do you measure sharpness? What other steels are you comparing it against? Just curious here. I am working on a CPM M4 blade now and my next will be S30V. (both of these steels are my first on WE). I will be curious how the S30V compares.

Of all my steels, S30V seems to have the dullest finish from the factory.

There are a million ways to measure sharpness, no real right or wrong here. But there are many factors that affect edge performance, steel, angle, grind, application,....

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Re: S30 V

Posted by Mikedoh - 06 Jan 2013 22:47

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Hey Geo

Measure sharpness by laying blade ~ flat on arm and see how we'll it cuts the hair.

Steels: San Mai 3, 8Cr13MoV, 440C, Acuto+, carbonV.

Spent time with polishing strokes. Went over it twice since I didn't like my first results. Still not as sharp. Wondering if others do something extra.

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Re: S30 V
Posted by BluntCut - 07 Jan 2013 00:40

Mikedoh wrote:

Have a benchmade emissary in S30 V. Doesn't get as sharp as other knives I sharpen at ~ the same angle and using the same stone progression . Initial burr is formed, and additional strokes taken with higher grit stones to compensate for toughness of steel. Angle is 21.75 per side, use ceramics (1.4, 1200, 1600. Then Naniwa 8k. Ceramic 0.6.) finish with leather strops with 1 and 0.5 micron diamond paste.

The angle used was same as factory angle or there abouts and set bevel with either 800 or 1000 diamond.

Ideas/tips welcomed.

In my experience, ceramic burnishes high wear resistant (also cobalt alloy) steels. If you are willing to try this progression usinbg what you've: diamond 1k(14um), Naniwa 8K, strop 1um & 0.5um. Instead of Naniwa 8K, 3um diamond would be better. A clean 1K edge should slice newsprint in all directions.

As for sharpness test - I like to push cut newsprint or phonebook paper in all directions (with grain and cross grain). Hair whittle/tree-top/hht/etc. tests depend on hair type, which are varying in high degrees, thus not a good baseline for sharpness testing. Plus, cutting newsprint/phonebook paper will expose weak/wire edge (after fourht or fifth cuts).

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Re: S30 V
Posted by PhilipPasteur - 07 Jan 2013 20:43

PhilipPasteur wrote:

Hi,

If you do a search on s30V Steel, as I have, I think you will find quite a few people that say the steel doesn't take as good an edge, nor polish as well as some others. I have been playing with some knives with D2 steel at the edge. I had just sharpened a Spyderco Military in S30 V. I was very surprised at how much "apparently" sharper and brighter the D2 gets. I have found S30V does hold an edge quite well over time though.

I just wanted to say that I have reconsidered the above. First I dragged out the Spyderco Military that I talked about and went over it again. I had reprofiled this knife at 18 degrees per side. I went back to the 800 stones, as Mike said this is where he started. I went through the 1000 diamonds and the ceramics. I did the ceramics in the order 1200, 1400, 1.4 micron and .6 micron stones. Since I resurfaced my 1.4 micron ceramic, this is how I normally use these stones. I put a fine burr on both side with the 800 grit stones, then ran about 50 strokes per side at each grit level.

I also have 1 micron an 0.5 micron diamond spray (from Ken Schwartz) on the WEPS cow leather strops. I dropped about .75 degrees to around 16.25 degrees and did about 100 strokes per side with both grits. I find the knife to be very sharp. It is not the sharpest knife I have done, but it easily shaves arm hair and push cuts phone book paper in both directions.

I also did some research. The last time I looked and the places I looked all had folks complaining about S30V getting a fine edge and taking a nice polish. This time, everybody was raving about how sharp they get S30V... and how well it keeps an edge... go figure. That will teach me to talk about ancient history

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One thing that came up in more than one discussion was that the Benchmade S30V was harder to get a vey sharp edge on it than other makers. I don't know why... bu that, according to what I read, seemed to be the common wisdom.

So Mike, how many strokes did you do per side. What kind of pressure were you using? Did you examine the edge with magnification to possibly see what is going on? Have you considered reprofiling to maybe 20 degrees per side? A more acute angle on the bevel will allow you to get the blade sharper (I know this is something else that can be discussed at length, but at any rate it can be proven that cutting effort will be reduced).

Knowing exactly what you did might let us make better suggestions about how you might improve your edge.

Phil

BTW, that D2 Kershaw is still "subjectively" noticeably sharper than the Military, and much prettier...

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