Diamond &Ceramic Plates - Microscope progression

Posted by jendeindustries - 12 Feb 2012 06:15

People have been asking about jumps to the Shapton and Chosera stones from the WEPS 800/1K diamond plates and 1200/1600 ceramic plates. Most of what I've written up to this date evolves around the stock 600 as the leaping off point, as it is the highest grit in the package when you purchase your WEPS.

The micron chart used to compare the WEPS, Shaptons and Chosera stones is a very loose guide at best - it only compares abrasive sizes, and does not reveal the maximum results each medium can achieve due to the vast number of combinations of technique, types of scratches, abrasive breakdown, effects of the binder, etc..

So, I've compiled a microscope progression of the 100, 200, 400, 600, 800, 1K diamond plates and the stock 1200/1600 ceramic plates on a knife using my Veho 400.

I will be adding the full Chosera and Shapton Progressions in the next couple of weeks.

It is my hope that this will help visually explain the differences between the choices available for the WEPS.

You can see the Stock diamond and ceramic progression here .

Keep in mind that I am a perfectionist

Enjoy!

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by leomitch - 12 Feb 2012 09:10

Your post is very important and contains information that many memebers will be asking about over and over again. I am going to make this post a sticky so it won't get lost.

Thank you for this and all the wisdom you generously give Tom. Very much appreciated sir.

Best regards

Leo

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by LukasPop - 12 Feb 2012 09:53

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Hi Tom,

nice post, but I'm not sure about the difference between scrubbing and sweeping motions (Maybe it's clear, but English isn't my native language). Does scrubbing mean up and down and sweeping only up, or is there other difference? Thank you.

Best regards

Lukas

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by leomitch - 12 Feb 2012 11:02

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LukasPop wrote:

Hi Tom,

nice post, but I'm not sure about the difference between scrubbing and sweeping motions (Maybe it's clear, but English isn't my native language). Does scrubbing mean up and down and sweeping only up, or is there other difference? Thank you.

Best regards

Lukas

Hi Lukas

A good question! Scrubbing is up and down movement usually with some pressure. Sweeping is a lighter movement up from front to back and/or up from back to front or alternatly both. If you watch one of Clay's videos you will see him use the alternating sweep most often and probably so do most of us. Scrubbing is particularly useful when raising a burr.

Having said this, maybe Tom will jump in and add more or correct me if I have erred.

All the best Lukas

Leo

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by drmatt357 - 12 Feb 2012 12:32

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Great post Tom. This is the kind of visual that feeds my OCD. Well done. I'm eager to see the difference on the whetstone pics because I know you have nothing but time on your hands to do this!

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by LukasPop - 12 Feb 2012 14:17

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Thank you Leo! It's much more clear to me now. I have found following video . I think that in the time about 3:30 you can see nice scrubbing motion.

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Lukas

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by mark76 - 12 Feb 2012 16:14

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Great pictures, Tom! I can see you're good at fiddling and can be patient.

Also very instructive. It's not just the pictures, but also you telling us what to pay attention to. Looking forward to the photographs of your results with the Chosera's and the Shaptons.

Lukas, from the article:

I keep the angles the same, and begin using scrubbing strokes, which are basically straight up and down strokes. Scrubbing cleans up the scratches from the circles, and establishes a very flat bevel angle.

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by LukasPop - 12 Feb 2012 16:33

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mark76 wrote:

Lukas, from the article:

I keep the angles the same, and begin using scrubbing strokes, which are basically straight up and down strokes. Scrubbing cleans up the scratches from the circles, and establishes a very flat bevel angle.

Yes, Mark, but there wasn't similar explanation of "sweeping". Then Leo wrote that sweeping is typical motion used by Clay on his videos. So I think it's clear now.

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by jendeindustries - 12 Feb 2012 17:50

Thanks everyone!

I edited the post to explain the sweeping strokes a little more.

These progressions do take time, especially since everyone will see my pictures, so they must be perfect! But they are good quantitative data that will make for some very good discussions and learning.

After all, this is all about the journey.

BTW - Mark - I was able to tighten the screw on the clip that holds the veho scope to the base. It took out about 90% of the wobble.... I wish I had thought about that sooner!

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Re: Diamond &Ceramic Plates - Microscope progression

Posted by mark76 - 12 Feb 2012 18:03

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jendeindustries wrote:

These progressions do take time

Yes, I learned that the hard way. Your explanation of scratches from low-level grits suddenly becoming apparent again at much higher level grits was very informative in that respect. On the other hand, I also learned not to do too much polishing on every grit size. The first knife I did on the WE got beautifully sharp, but it took me five hours! So if you can give any indications about how long you spent grinding/polishing at a particular grit level (or the number of push strokes, or ...) that would be very helpful.

BTW - Mark - I was able to tighten the screw on the clip that holds the veho scope to the base. It took out about 90% of the wobble.... I wish I had thought about that sooner!

Do you mean you don't take your photographs anymore by setting the microscope directly on top of the blade surface? But instead use the base which you set at, e.g. 1 " from that blade ? If that is possible, it would be a real improvement what we can do with the Veho.

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