ASYMETRICAL SHARPENING QUESTIONS -

Posted by R.JeffreyCoates - 09 Feb 2013 03:45

The more I read the less clear it becomes. I read it is an "Asian knife thing." I read it is the bevel. I read it is the edge/ micro bevel. I read it is done because the entire blade of "some" Asian knives are forged off center. - BUT -

1 What is the purpose?

2 Can you put it on any knife?

3 Should you put it on any knife?

4 which side? - my understanding looking from the top from heel to tip it would be on the right hand side (for a right handed person)

4 70/30 - What is it? Width of bevel or % of inclusive angle on each side of the blade?

5 Does it provide a sharper longer lasting edge? If so why not put it on ALL knives?

Thanks.

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by nicholas6225 - 09 Feb 2013 11:54

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check this video out, it'll answer some of your questions and get you thinking about a lot more

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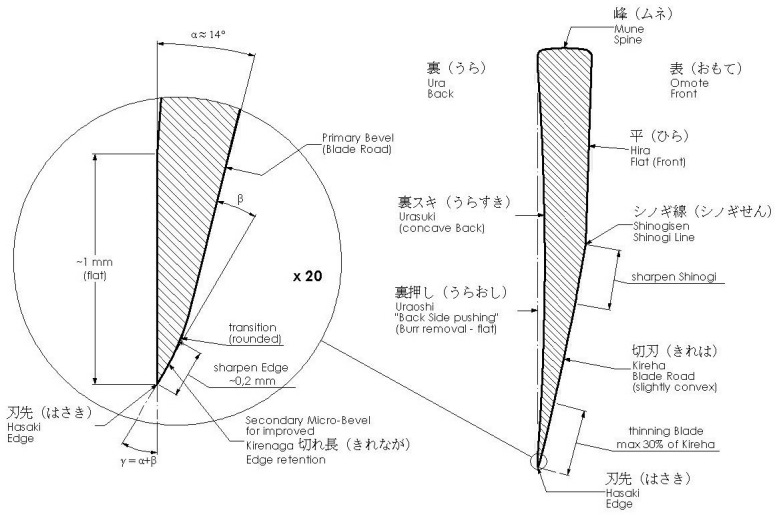
Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by blacksheep25 - 09 Feb 2013 12:00

This this article:

40cooks.wordpress.com/2009/06/19/advance...in-knife-sharpening/



ハマグリ刃の断面図
Cross section diagram of clam shaped blade (hamaguriba)

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by nicholas6225 - 09 Feb 2013 13:41

R.JeffreyCoates wrote:

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5 Does it provide a sharper longer lasting edge? If so why not put it on ALL knives?

1. Its just a different style of knife manufacturing, think of it like a star or square screw driver or screws. They all have their own unique benefits.

2. Yes you can put any kind of edge you want on your knife, but i suggest learning more about the geometry of a knife or practice on crappy knives.

3. It's not recommended to put a asymmetrical edge on a symmetrical grind knife, its considered

destroying the knife, but you might love it and that's all that matters.

4. pictures just make it easier Mac 120mm paring knife

4. 70/30 describes the edge which tells you how to sharpen. there are more kinds of grinds also such as 80/20, 90/10 and as blacksheep posted 100/0 bevel. so what I personally do if I want to sharpen a 70/30 at 30 degrees inclusive angle I sharpen the thin bevel at 21 degrees and the thicker/wider bevel at 9 degrees.

5. Its really a matter of personal opinion, depends on a lot of factors. its all in the eye of the beholder really.

Great questions

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by cbwx34 - 10 Feb 2013 10:31

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1. It's my understanding, that many Japanese knives are designed for a specific task, and the sharpening style aids in this.

2. You can, whether or not it makes a difference is probably up for you to determine.

3. Again it depends on the task, and whether you benefit from it. There are some chefs that will even sharpen their Western Style knives with a bit of asymmetry, and they're good enough they can tell.

4. blacksheep25's diagram is an example for a right handed knife.

5. There's two schools of thought on this. One - that the angles are the same, and the offset is created by sharpening on one side more. Two - that the knives are sharpened at different angles to achieve this. (Nicholas described an example of this). My answer is... let the knife tell you. Mark it with a Sharpie, and you'll be able to determine how it is sharpened. There's also some that say, it doesn't matter, just sharpen it 50/50. Again, my .02, if you can tell it matters, if you can't it doesn't.

6. Not really, again it's more task specific. Part of the reason they seem sharper is a lot are also sharpened at a smaller angle, especially in comparison to "Western Style" knives.

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by R.JeffreyCoates - 12 Feb 2013 00:53

Here is an explanation that I ran across:

The principle advantage to an asymmetrical edge is allowing the knife to take a steeper angle while leaving enough steel behind the edge to support the acute geometry. If you want to achieve the same grind angles on a double bevel, the bevels are going to be much larger and go up the side of the knife quite a bit. It'll be a thinner edge so chipping/rolling becomes an issue; though japanese knives usually chip with the high RHc.

It made sense to me.

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by nicholas6225 - 12 Feb 2013 01:31

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R.JeffreyCoates wrote:

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It made sense to me.

It does make sense to me as well. If you think about what would happen if you of put a very acute 30 to 10 degrees inclusive edge on a western steel knife with a RHC of say 55-58, the steel would be too soft and constantly roll over on when used. you can either have a ferrari for a knife that you need to always be careful with or you can have a honda civic for a knife that you can make crazy sharp every once in a while. I can deal with the chippy blades, they do need more care but man, having a razor blade for a month working in a kitchen makes them really special.

cheers

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by cbwx34 - 12 Feb 2013 14:45

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R.JeffreyCoates wrote:

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It made sense to me.

So, I had to draw this out for it to make sense, and while the statement does seem accurate, I guess my question is, is it really an advantage if, in achieving a lower angle, you end up with a thicker bevel or area behind the edge? Seems to me the point of sharpening at a lower angle is to thin the edge/bevel, not just hit a certain degree.

Maybe I'm missing the point that makes this make sense. 😊

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Re: ASYMETRICAL SHARPENING QUESTIONS -

Posted by wickededge - 12 Feb 2013 17:26

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R.JeffreyCoates wrote:

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It made sense to me.

I'm also trying to make sense of this explanation. Of course the total included angle is the angle of the Kireha, and so the edge has the benefit of all the steel of the included angle behind it on the beveled side. It also follows that the edge has no protection on the side of the flat or Uraoshi so it will be very vulnerable to lateral stress in that direction. The upside is that restoring the edge if it roles to the Uraoshi is very easy since it just takes a little honing and the concave geometry takes care of maintaining the angle if the blade is laid flat on the stone.

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