

BY THE EDITOR

PRODUCT REVIEW

NIREY ELECTRIC KNIFE SHARPENERS

The Quickest Way to a Professional Edge



The Nirey KE-198 is a handsome and effective addition to any benchtop where occasional sharpening of knives is required.

I DON'T KNOW ABOUT YOU but I have suffered from attempting to use knives that are incorrectly sharpened – holes in skins, cut hands and stabbed shins. For years I would go hunting with knives that I thought I had sharpened to a shaving edge, only to lose it half way through skinning a fox or goat. I'd then drag out a diamond hone or steel and get the blade back to some sort of edge to complete the job but I felt, justifiably, that my sharpening skills left a lot to be desired. Without instruction in putting an initial coarse edge of an appropriate angle onto a blade I began to suspect that I was applying too broad an angle to my blades and, over time they developed a round-shouldered edge that would be more use as a wedge than a fine cutting implement. Naturally, an edge of this nature could only hold a touch-up steel or light honing for a very short time, if indeed such measures worked, because half of the time, I was probably only working on the shoulder and not the edge.

It got to such a frustrating point that, having access to

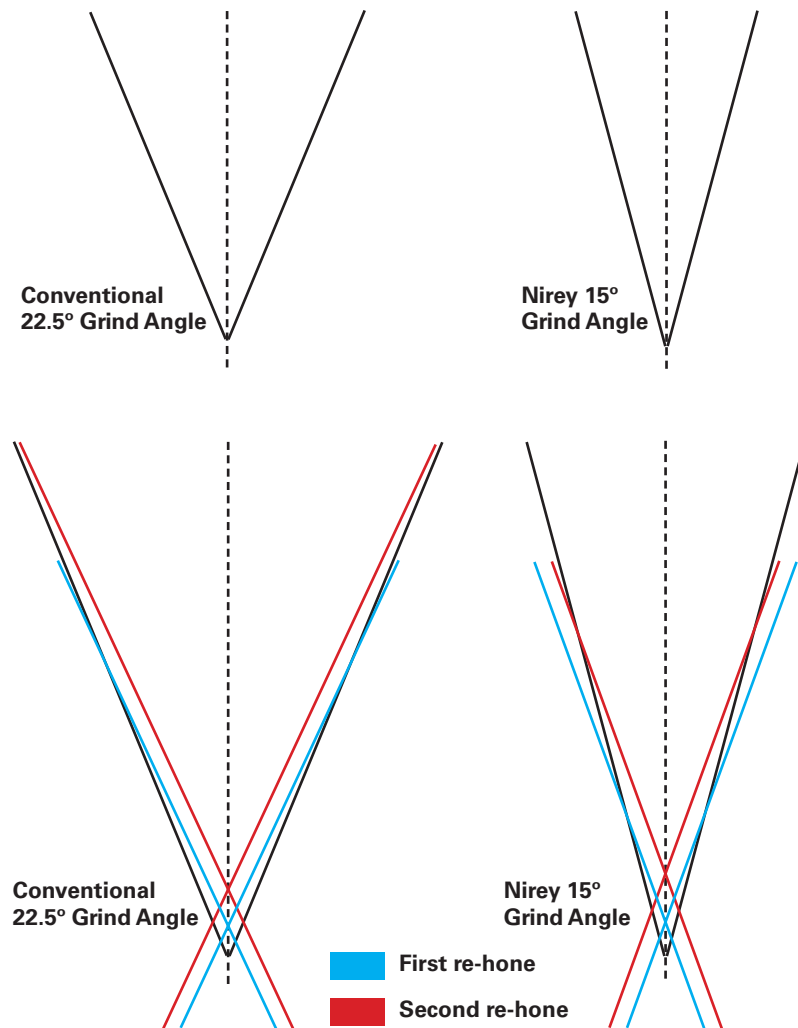
the internet, I began to explore websites which instructed the surfer in correctly applying a correct edge to blades. Now, having something like thirty knives in my household, the prospect of working up correct bevels on all of them with an oilstone was a daunting prospect, so I sent a few of my most beloved knives to a friend with a manual knife sharpener which uses conventional stones which are set in a jig at consistent angles to impart durable shaving sharp edges. When Geoff returned my blades, they were better than they had ever been but he said the effort involved to reset the bevel on these "round shouldered" blades was a time intensive exercise. Don't get me wrong, these manual sharpeners are great tools, but for the task in front of me, it would take me a long time to get my battery of blades in order if I was restricted to using one myself.

While most of my abused knives sat balefully in the shed seeming to mock me every time I entered, I began to wonder how the blokes who blurt around the suburbs on motorbikes selling sharpening services off



Operation of both machines is similar. The user draws the knife back towards them with light pressure to establish a shaving sharp edge.

The Nirey grind angle difference.



Why conventional grind angles lose their edge.

The Nirey grind angle advantage; the slimmer edge can take more effective retouching over a longer period for longer effective edge life.

the back of their bikes did their work. They used motorised abrasive finishing belts of varying levels of smoothness to impart great edges to customers' knives. I wondered if I could set up something semi-permanently that would do the same job but I found out that this would involve tools with a footprint too large for my small shed and expense that I could not hope to justify as a "hobbyist". The idea languished until I was approached by Scott Thornton of Total Knife Care, a long time advertiser in *Sporting Shooter* and a nice fellow incidentally. He asked me if I would like to review his company's Nirey electric knife sharpeners. I nearly jumped down the phone accepting and two of his products duly arrived at the Yaffa office.

Initial inspection of the two products revealed something really interesting to this rank amateur: these sharpeners are like a bench grinder and a finishing machine in a convenient reduced size, thoughtfully constructed so as to safely guard the user from potential injury while taking all the guesswork out of setting grind angles. A quick read of the clearly laid out instruction manuals meant that I could launch into fine edges on all my knives and those of any of the Yaffa staff who brought their blades in from home. As it happened, both machines got a solid workout on nearly 100 knives over about four weeks use. The two Nirey sharpeners serve two distinct markets, the KE-198 for the casual or occasional user and the KE-280 for the sustained professional user.

First up, the basics of knife sharpening a standard double bevel blade are:

1. Establish a primary bevel angle that extends up the blade edge for the greatest distance because it is the most acute angle. That angle, for argument's sake is generally around 20 degrees. The blade, in cross section should look like a 40 degree wedge. The edge should have parallel scratch marks along its length and will, under low magnification, appear serrated.
2. Polish the bevel with a finer abrasive as evenly as possible at the original bevel angle on each side until you have a very straight but smoother edge. At this point, you will probably have a burr or "wire edge" which feels a little rough on one side of the blade.
3. Now you can use a very fine abrasive at a slightly larger angle, say 25 degrees, or a very fine steel (not a diamond hone – it will abrade away some of the work you have just done) and give the blade a few very gentle licks and you should be able to shave your arm hairs with it. If not, go back to stage 2 and refine the edge again. If you are anally retentive, you can then strop the blade on a piece of leather for a really smooth finish.

I'd add that, unless you are very experienced, or are a geometric genius, maintaining those angles manually is almost impossible. This is where Nirey enters the picture.

The **Nirey KE-198** is a simple machine designed for home use and is eminently suitable for the recreational hunter, fisherman or home cook. This is not to say that this quality machine is flimsy; it is a solid, beautifully designed and well executed tool that will give years of



The Nirey KE-280 is a professional tool for sustained and regular use, with replaceable finishing belts easily accessible under the safe and functional polymer cover.

trouble free service. In fact, the Total Knife Care warehouse has one in situ and it has sharpened over 1600 knives, giving the equivalent of 30 years of home use, without missing a beat. This machine is designed for casual use and is a sealed unit which, in all probability, will never wear out and based on their experience, I doubt any recreational user will be doing this any time soon.

The KE-198 is very simple to operate, having four angled slots in a stainless steel guard on the top of the unit. You plug it in, flick the on/off rocker switch and two ultra-hard aluminium oxide coarse and fine grinding wheels spin at 1100 RPM at a grind angle of approximately 15 degrees. These wheels are pressure controlled, so the operator simply draws the blade towards them at a steady rate from heel of blade to tip, working one side and the other alternately on the coarse wheel until the blade feels sharp. You then move the blade over to the fine wheel and repeat the operation as before, this time however, imparting a finer, finishing edge on the blade at a bevel angle of 15 degrees each side.

In practice, I found the machine very easy and, importantly, really safe to use. The first blades I sharpened, although frighteningly sharp, appeared a little rough with obvious grind marks when inspected closely, but, as Scott assured me, the wheels soon settled in and the results were excellent by the time I had reached my third knife. A word of advice, find a few knives that really are very blunt and need their edges seriously reset to wear in the wheels for the first few tries and you will get great results repeatedly. This is a seriously competent and awesomely quick sharpener that will initiate and maintain a great working edge on your knives, no matter how hard the steel or how abused in the past. You could expect to spend all of three to five minutes bringing a really bad blade up to a durable shaving edge. In my opinion it is an absolute bargain for under \$160 *including freight*. The unit is

guaranteed for two years of domestic use.

The **Nirey KE-280** is a substantial step up from the KE-198 and is consequently aimed at the professional user eg chefs, butchers, professional skinners and the like. Unlike the grinding stones in the KE-198, the heart of the KE-280 is a pair of continuous grit belts mounted on flexible drums that spin at 2500 RPM. The unit's housing is substantial, being of attractive dark grey polymer and, like its smaller cousin, protects the user with a well thought out blade access via narrow vertical slots that introduce the belts to the blade at the correct angle. In operation, it is similar to the KE-198, in that the user draws the blade toward them through the slot, however that is where the similarity ends. The KE-280 only has two slots for blade access to two belts of equal abrasive quality, instead of the coarse and fine arrangement in the smaller unit. To gradually increase the grind angle and polish the extremity of the edge, the user must gradually decrease pressure on each successive pass through the slot. With a little practice, anyone can develop the necessary "feel" to place a nicely polished razor-sharp edge on most knife blades. The company supplies replacement and extra belts of varying grits and drums quite cheaply. The idea is that, once belts are worn (normal cycle is four months of commercial use), you retire the worn belts for use as fine edge polishers while using the new belts as normal. In addition, the instructions show how to sharpen scissors or other edged tools with different bevel angles by simply removing the housing. This is something I will be experimenting with when I am confident enough. The Nirey KE-280 carries a one year warranty and sells for just under \$470 posted to any address in Australia.

The Nirey Advantage. Previously, I had mentioned trawling through the web to become more of a theoretical "authority" on knife sharpening. As a consequence, I discovered that most modern steels, particularly high quality stainless and carbon tool steels, are quite hard and very durable. This means that the historic conventional wisdom of sharpening knife blades at a 20-25 degree bevel does not produce the best, most long lasting edge. Rather, a shallower angle is desirable because it gives a longer, shallower shoulder to the blade, which allows it to be alternately worn down and touched up more times and at longer intervals than was historically the practice. With Nirey's 15 degree standard bevel angle, the choice of a more long-lasting edge, is made for you and your knives will last longer. This is illustrated in the diagrams accompanying this article.

In summary, I found both these tools perform as promised and to be of very good quality and engineered to last a lifetime. I can thoroughly recommend both the KE-198 and KE-280 and look forward to passing mine down to my children when I am too old to be playing with sharp things. If you wish to find out more about Nirey electric sharpeners or any of their other products like quality kitchen knives and knife storage devices, call **Total Knife Care on 1300 650 656** or visit **www.totalknifecare.com.au**. ■