

BY KIP  
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ALL PHOTOS COURTESY GRIMSMO KNIVES

# THE Best in the World

Grimsmo Knives turns a commodity item into a labour of love, passion and machine tool technology

## THE PROBLEM

Hardware grade screws and other purchased components reduce the quality of finished products

## THE SOLUTION

Invest in a CNC lathe and machine them in-house



Here's Grimsmo, clowning around in front of his Nakamura-Tome AS200 Y axis mill-turn lathe.

## THE MACHINE: AS200LMYS

- Max. turning diameter: 290 mm (11.4 in.)
- Max. turning length: 570 mm (22.4 in.)
- Bar capacity: 65 mm (2.56 in.)
- Main spindle speed: 4500 rpm
- Sub spindle speed: 6000 rpm
- Turret stations: 24
- Spindle motor: 15 hp/11 kW
- Machine weight: 5000 kg (11,000 lb)

When your goal is to make the best products in the world, success will be difficult to achieve if you fill them with low quality hardware. John Grimsmo recognized this, and even though it was a financial leap of faith for their small company, he and his wife decided to jump in feet first by investing in a twin spindle, Y axis mill-turn CNC lathe from Elliott Matsuura Canada.

## Best of the best

Some might question their decision. After all, in terms of machine tool complexity, mill-turn centres rank near the top, requiring exceptional programming skills and a firm grasp of advanced machining principles. None of that scared Grimsmo, though—he's been tackling the unknown since his teen years.

"I owned two lathes previous to this one, one of which was a little benchtop lathe that I converted to CNC by adding stepper motors and figuring out how to wire up the control on my own," he says. "After that I had a two axis Tormach that I bought for around \$15,000. It made a lot of parts for me, but it was super slow, the accuracy wasn't great, and the finishes weren't all that good either. So I went all in and bought the most capable machine I could afford."

That's how Grimsmo rolls. Ten years ago he left high school and began tinkering in his garage, making car parts on a CNC hobby mill he picked up for \$1,000. He admits that he knew nothing about machining back then, but was intrigued with what he saw, learning everything he could from YouTube and Practical Machinist. And when a friend stopped by to ask the aspiring machinist if he could make a set of replacement knife handles for him, Grimsmo was hooked.

"That was 2011, and I basically didn't sleep for the next three days while I researched and learned everything I could about the knife industry," he says. "Two months later I scraped together \$800, which was all the money in the world at that point, so I could fly to Las Vegas for a big knife show there. My mind was completely blown by what I saw."

### Settle for Excellence

As you might guess from his company's name, Grimsmo makes knives. If you're looking for a replacement for your old Victorinox, however, you've come to the wrong place—a handcrafted Norseman pocket knife complete with titanium handles, ceramic bearings, and carbon fiber inlays sells for a little more than \$1,000. The Rask might be even more, depending on the colour and blade style.

If that seems crazy expensive, consider this: there's a long waiting list for one of his knives, each of which is a small work of art.

Grimsmo Knives today has six employees, including his brother, wife, father-in-law, a college intern and a manufacturing engineer he hired away from “a huge aerospace firm.” There's also a full-time media producer, another seemingly crazy thing.

“Erin was our first real hire outside of family,” Grimsmo explains. “As the business got busier, I didn't have time to film and edit and promote all these videos. It was a big investment to actually hire someone to take care of that for us, but she's been phenomenal. Her work is what lets us keep our pulse on the industry and our name in everybody's mind so they want to buy our stuff.”

### Saga Saturday

“All those videos” is a large part of what brought Grimsmo Knives to where it is today. Grimsmo began documenting his machine shop journey early on, sharing his experiences on YouTube. When he began making knives, he documented that as well with the Knife Making Tuesdays series, followed by Saga



John Grimsmo and his team, proud knifemakers all.

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Saturdays to discuss his latest manufacturing venture, precision writing instruments. His YouTube channel now has 54,000 subscribers, and Grimsmo says he's often recognized in public as a result.

“It gave us a lot of exposure,” he says. “Now when I go to a machine tool show or a knife show, I'm sometimes referred to as ‘that crazy knife guy from YouTube who taught himself how to do stuff.’”

### Making friends

At one such show, Grimsmo was visiting the Methods Machine Tools booth and ran into several people from Renishaw. He invited them to see his shop and ended up buying an OMP40 turret-mounted probe for measuring parts on his new Nakamura-Tome lathe. He also has a DMG Mori DuraVertical 5100 vertical machining centre, his first “real” piece of capital equipment, which the Renishaw people ball bar-inspected for him as part of the deal.





Programming a Y axis mill-turn lathe is no easy task.

When asked why he would buy an expensive mill-turn lathe to produce relatively simple screws and bushings, Grimsmo's answer was predictable: "You can buy screws off the shelf but they're never perfect. Some of them downright suck. We work extremely hard to achieve consistency in our products and the hardware is a big part of it. As for the material, we decided long ago that only titanium components would meet our standards. That's why we make every screw, every pivot, and every pin in-house, where we can control the quality. You need the best if you want to make the best." SMT



Each of the many components in a pocket knife must fit perfectly when you're striving to be the very best.