

Should We Be Afraid of Technology?  
[by Allen Elishewitz](#)

Technology is an ongoing development in every aspect of our lives: it has given us the ability to see at night and brought us from cave dwelling to living in skyscrapers. Technology has better our standard of living, it has made our work easier and our lives better. As technology becomes faster and better, the older processes are left behind. We can see this in the computer industry as the speed of computer increases, the price of the slower computers decreases dramatically. It is the same with manufacturing machines, technology is constantly outdating machines and processes. These machines can then be purchased at a substantially reduced price and at a greater availability. Getting to the point of this column, I would like the readers to realize that the availability of CNC or any computer controlled machine is just a phone call away for most knifemakers. Also, access to industrial job shops, that can hold tolerances necessary for knife manufacturing are becoming more and more available than in the past. I would like to now mention that I am not judging or condemning any knifemaker using any computer controlled machines, I am myself using a laser. What I am concerned about is the customer/collector understanding of what he or she is purchasing.

We go to work everyday to try to save a little money to purchase our next "toy". Every month we eagerly wait for new catalogs, magazines, web sites updates or any type of information to fuel our passion for knives. And then we purchase what we feel at the time to be the next best piece for our collection. But what if that piece was half made on a computer controlled machine? Would it really be worth the \$300 to \$500? Or is it just another pseudo factory knife? To some that is not an issue, the final execution of the knife is. But to others this is a violation of what they believed to be a handmade knife. I can understand why some makers would move towards CNC, as the competition among knifemakers increases the maker must try to get an advantage over his peers. Where do we draw the line? Truly the answer is up to the end consumer. To better educate the consumer, I am going to talk about the two manufacturing machines most commonly used in knifemaking: Laser and CNC mills.

A laser is a machine controlled by a computer to cut out precision parts (+/- .005 - .010). These parts give a knifemaker consistent pieces (blades, liners, locks, bolsters). The knifemaker still has to drill, tap, ream each part and also grind the entire blade and handle. Laser represents only 5 to 8 % of a handmade knife. It only saves the knifemaker about 15 minutes of work. So the old myth that a lasered knife can be just screwed together is false.

A CNC(Computer assisted Numerical Control) mill or machining center (same as CNC mill but with multi-tools changer) can do much more than a laser: This machine can profile, drill, tap, ream, contour and with some programs even do 3D machining. A mill, depending on the quality can hold tolerances between .0002 - .001, this gives reliable, consistent parts which can be interchanged with other knives of the same style. This machine can be quite expensive (from \$7,000 to \$250,000) so not all knifemakers own a CNC mill. That is where the job shops come into the picture, these companies specialize in producing parts no matter what they are. A CNC mill "depending" on the operator can represent from 10 to 80% of a knife. And these knives can look as good or even better than true handmade knives.

With this information, I hope you, the consumer, can ask the maker of your next piece the questions that are relevant to you. But remember the only person that should care if a knife is truly handmade or partially "machine-made" is you.