

# How the Perfect Knife is just like the Best Chocolate you've Ever Had

By Canada Cutlery Inc. (CCI)

**For CCI, crafting the perfect knife is a lot like the process of making the best chocolate.**

As one of the main ingredients, it is essential to only get cocoa from the best trees found in the growing range of the Equator. The cocoa is brought to the factory where professionals run tests to ensure it meets or exceeds safety and quality standards. Then, computers and robotic systems transform the cocoa into one of the world's most adored treats. As one of the largest sectors of the food industry, humans all over the world depend on chocolate for their livelihoods – to show love, perform rituals, cure sickness, bad moods, and much more!

Now, how is this like creating the perfect knife? Just like in the process of making the finest chocolate, there are key ingredients required in the production of steel, a precise “recipe” to follow in manufacturing the knife and as a result, millions of people who depend on having the best quality product.

## The Key Ingredients

It took decades of expensive research by large cutlery manufacturers to develop the right combination of alloys to produce the best grade of professional cutlery stainless steel that is used today. X50CrMoV15 is the ideal combination of high carbon stainless steel, containing the alloys, Chromium, Molybdenum and Vanadium. Just like farmers must grow top quality cocoa to make the best chocolate, it is crucial to use this very specific grade of steel to insure forging, tempering and hardening to the ideal  $57\pm 1$  HRC can be achieved.

A Rockwell hardness of  $57\pm 1$  assures a high quality blade that needs very little maintenance to perform perfectly every time. These key ingredients are of utmost important because they will dictate the durability, strength and longevity of the blade, as well as resistance to rust and corrosion.

## The Special Recipe



The way in which the knife is forged and tempered is as important as the quality of the steel used. The hot drop hand forging process is the ultimate production method used to produce high quality cutlery. It combines the best of the old with the new. The old is the master cutler's skill and expertise and the new is the latest in advanced steel processing technology. Master cutlers must

hammer raw cutlery steel into the desired blade shape. This is just the beginning – the knife will go through many more different processes before it is finished.

The forged blank is re-heated to red hot, and then hardened, tempered by re-heating and various other means such as ice tempering. Specialized techniques, like ice tempering, creates a hardened blade that will help sustain its sharpness for prolonged periods and give the desired effect

for easy re-sharpening. Blades are ground individually to refine the taper and produce the final form of the quillon/guard and bolster. The handle is attached and riveted with special compression rivets and the blade is ground to its final shape. Ground blades are then cleaned and dried ready for trademarks and logos. Final steps include sharpening, honing, cleaning and finally packaging.

Does this sound like a complicated recipe? Well just like chocolate makers, today's cutlery steel manufacturers have fully integrated operations, computerized processes and control procedures that enable them to yield the highest quality medical and cutlery grade steels. Some of these operations involve almost 100% hand work and the dedication and skill of a true craftsman able to blend his skills with modern technology.

## The Final Outcome

To truly test the quality of a piece of chocolate, it is recommended to take a bite and really taste it. A chocolate confection can be very attractive to the eye yet disappoint in its taste and quality. Believe it or not, the same principle applies to knives (just without the tasting)! There are some professional looking knives in the market, which are in fact made from very poor quality steel and/or made using poor production techniques. These knives dull quickly, do not hold an edge and are not reliable in the long-term. For the professional chefs, the hobby chefs, food service workers and everyday cooks, a professional quality knife is something they depend on. The best professional quality knives will make their tasks easier, more productive and for the hobby chef, more fun!



## CCI delivers the Perfect Knife

Key ingredients and a special recipe are essential in order to create the best chocolate and the perfect knife. CCI can guarantee to deliver on all these levels.

- ✓ Crafted in Europe from the highest grade of German cutlery steel
- ✓ X50CrMoV15 steel used on ALL blades, from the smallest to the largest
- ✓ One piece hot drop forging by master cutlers in Europe
- ✓ Dependable customer service and experience

CCI has been supplying professional quality knives and tools to professional chefs, the food service industry and culinary schools throughout North America for more than 60 years! Our years of working with professional chefs will enable us to help you make an informed decision regarding the purchase of the right professional kitchen knives and tools. Take the time to educate yourself before making a purchase. A high quality knife is an investment that should support your culinary passion and give you years of enjoyment and confidence! For more educational information, please visit our website at [www.canadacutlery.com/education.asp](http://www.canadacutlery.com/education.asp).

