

Uddeholm steel for the Meat Processing Industry

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The most commonly used steel grades for the production of cutting tools in the food industry, are not sufficiently durable in order to maintain a sharp edge. Cutting tools and grinding tools must remain stable within the desired tolerance to enable the increase in production and support improved capacity utilisation. Yield losses generally occur in the last part of the production process near to a scheduled stop. This is because the equipment is overloaded and pushed to the maximum, in order to avoid costly interruptions, due to down time through the replacement of tools.

Within the product portfolio, Uddeholm have steel grades that are approved for food processing by Normpac certification and can be hardened to a high hardness. In many cases, for optimum performance, the steel grades have to show a combination of properties such as wear and corrosion resistance as well as toughness. Uddeholm Vanax Super Clean, which is a powder metallurgical produced steel grade, fulfills all of those expectations.

Main advantages found within the properties of Uddeholm Vanax SuperClean

- High hardness 60 HRC results in a high wear resistance
- Low friction makes an easier cut
- Stainless properties in line with AISI 316 L
- High toughness for a 60 HRC hardness steel grade

In a modern food processing facility many slaughter houses with automatic production lines require the cutting tools to remain sharp during an entire production of one day. With a blade made of Uddeholm Vanax SuperClean, you will obtain a tool life that is at least three times longer than comparable blades made of standard steel W. 1.4112. In addition to a much longer running blade life, the total service life of the blade is also extended considerably. This is due to the great edge retention and good durability of the Uddeholm Vanax SuperClean material, which does not need to be re-sharpened as often as other knife materials.

Uddeholm can offer steel grades that are perfect to use as hole-plates and knives within meat grinding machines i.e. for sausage production. The problem found in the production at meat processing companies is that the hole-plates and knives, quite often do not remain sharp during an entire day of full production. This will affect the product quality negatively, if the knives are not replaced. By switching over to an "Uddeholm grinding kit" consisting of knives in Uddeholm Unimax and hole-plates manufactured using Uddeholm Vanax SuperClean, the grinding machines were able to remain sharp for 10 production days, or even more without intermediate re-sharpening. Consequently, many meat-processing companies have achieved a consistently high product quality during the production week and a decrease in energy consumption. The huge reduction in the need to re-sharpen knives as well as hole-plates means that the life cycle of the tools has been extended considerably.

The main advantages outlined for the production companies who process meat are

- Higher output per hour
- Lower energy consumption
- Higher quality of the minced meat



Hole-plates manufactured using Uddeholm Vanax SuperClean

Manufacturing solutions for generations to come

SHAPING THE WORLD®

We are shaping the world together with the global manufacturing industry. Uddeholm manufactures steel that shapes products used in our every day life. We do it sustainably, fair to people and the environment. Enabling us to continue shaping the world – today and for generations to come.