



THE BUILDERS' TOOL

Whether they're building a chalet in Switzerland, a datcha in the Crimea, a log cabin in a Canadian forest or a timber frame home in the Rocky Mountains of Utah, builders from around the world have come to rely on the timber processing centers made by Krüsi, a company based in Appenzell, Switzerland. And for good reason!

Krüsi Maschinenbau SA, Schönengrund, Switzerland

Design and manufacture of a wide range of machines and work centers for processing timber with advanced computerized automation.

Founded

1961

Headquarters

Schönengrund, Switzerland

Founder and Owner

Fritz Krüsi, Builder

CEO

Urs Iseli

Number of employees

30

Motto

"Leading the way in every way!"

Client of Lenze Bachofen

since 2005

Web Site

www.krusi.com

The best kept secret in Appenzell

The market for wooden homes worldwide is booming! Both buyers and architects have rediscovered the benefits of natural wood as an excellent building material, and are putting it to good use by creating rustic and traditional homes as well as innovative and futuristic buildings. When quality of finish and efficiency really matter, builders are likely to choose the timber processing centers manufactured by Krüsi Maschinenbau SA. Krüsi has more than 40 years of experience in the design and manufacture of machines used in the building of wooden homes, and now ranks at the top of the global market.

Saw, cut, mill, drill and plane – all at once

Krüsi's timber processing centers owe their success in part to the excellent quality of Swiss manufacturing, and also to the high level of computer automation built into Krüsi machines. In a traditional production line, operations such as sawing, cutting, milling, drilling and planing are each performed on a dedicated machine. Krüsi timber processing centers, on the other hand, perform all of these operations in one pass. Dovetail mills, ripping sawmills, timber joinery centers – of which 1600 have been sold – modular, expandable log home milling machines, or the "Lignamatic" – the first CNC timber processing center – have all proven successful in the global market. The star of Krüsi's product line is the "Krusimatic" CNC timber joinery machine. It combines a flexible circular saw, a double aggregate for boring holes and cutting mortises by chain, two pivoting mill heads and a marking system. This complex system is able to perform countless tasks.



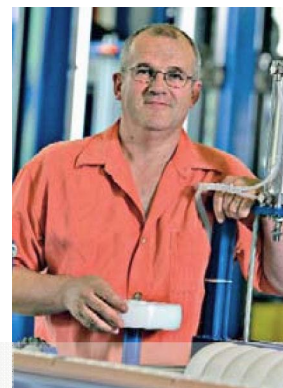
Focus on MCS and ECS

In order to ensure that the machinery made by Krüsi Maschinenbau SA is highly reliable and requires little maintenance, the company is extremely demanding in the quality of the components it selects and purchases. That is why Krüsi relies on compact and reliable drive components made by Lenze Bachofen. In particular, they use MCS synchronous servo motors because of their responsiveness, compact size and optimal rotational flexibility. The motors are controlled by the ECS servo system which was especially designed for highly dynamic multi-axial operations.

Reliable repetitive motions combined with tight tolerances

The benefits of using the ECS servo system from Lenze Bachofen are plainly visible in the operation of the automated Krüsimatic joinery machine. The high responsiveness of the system, its compact dimensions, its flexible configuration, its central power source combined with optimal matching to the MCS motors are well worth pointing out. "This makes it possible to perform almost every processing task in all six positions without having to retrieve or reposition the timber. Because of this feature, the common miscalculations caused by repositioning timber during processing are avoided", says CEO Urs Iseli. Reliable repetitive motions combined with tight tolerances is what timber home builders are really looking for.

View of the Krüsimatic machine control booth. Tailored for multi-axial systems; the ECS servo system provided by Lenze Bachofen allows for automatic timber conveyance as well as accurate positioning of the various processing tools.



"We pay particular attention to maintaining the excellent quality of our products. Therefore, we need to be able to have the drive components of our machinery delivered on short notice anywhere in the world where we are represented. Lenze Bachofen gives us the confidence to achieve this."

Urs Iseli, CEO Krüsi Maschinenbau SA