

Complex free forms in timber constructions

The mosque in Cambridge shows impressive wooden construction at its best. Like the trees of a paradise garden, thirty freely shaped wooden columns rise up and combine to form a huge wattle. The lightness of the supporting structure conceals how demanding it was to construct and manufacture the wooden joints. Kai Strehlke, lecturer at the Bern University of Applied Sciences (BFH), architect and head of digital processes at Blumer Lehmann, developed the most complex knot of the wickerwork together with students of the master class at the BFH. From the first pattern with right-angled axes to the knot curved on both sides with undercut surfaces, the students felt their way around the free-form construction. They milled the final accounts at the BFH under the guidance of Denis Maillard, the lecturer for production engineering. OERTLI provided the CASTOR Finish drill milling cutter and TURBEX Sprint solid hard metal milling cutter. «Often the cutting edges on the face side draw or cause burn marks in the Wood



- not so the CASTOR drill bit from OERTLI.» Although the CNC system for trimming was actually underpowered, the sample knots could be produced perfectly. Because of the high cutting performance of the tools, the machine requires only little force. Anyway, says Maillard, «anyone who invests money in a new machine and lets the old tools work on it does something wrong. The right tools are decisive for quality and performance».



Welcome to the OERTLI team!

Veico Strim

Position: Key Account Manager international



«Finding solutions instead of rolling over problems» is his credo. Veico Strim is convinced that a solution-oriented attitude is the key to good cooperation. From mid-April, Strim will take over the position as Key Account Manager International at OERTLI and will henceforth be responsible for window manufacturers in Austria and Italy. The native South Tyrolean knows his way around Europe's window market. For an international hardware manufacturer, Strim has managed numerous window projects over the last twenty years, first as product manager and finally as sales manager in Western Europe. The 45-year-old family father then explained his job change to his three children as follows: «I want to learn something new again».

Hans Reis

Position: Window expert internal sales



Welcome back to the OERTLI team! Hans Reis returns to OERTLI after six years with the consulting company Tre Innova. Since the 1st of April, the window specialist has been supporting our sales department with tailor-made tool concepts. As a trained carpenter, former salesman for a mechanical engineer and production planner for numerous window projects, Reis provides valuable experience. The window specialist is convinced: «For complex projects such as the planning of a window system, sound specialist knowledge is indispensable - and I can contribute that». Reis understands exactly how common machines are constructed and knows all the tricks and pitfalls. Anyone who is as familiar with how machines, tools and wood interact can optimally adapt a machining concept to these factors.

OERTLI



window news

SPEED WITH OERTLI



LIGNA

Thanks to all
visitors!
Great success
for OERTLI!

SPEED with OERTLI

A proud look back ... with a proud look ahead

OERTLI is the ideal partner for highest productivity and quality. Our products and services have again confirmed this at the past LIGNA 2019.

Not only did we enjoy a sensational number of visitors and extremely interesting discussions, but we were also able to start new joint projects with innovative, progressive wood processing companies. We would like to take this opportunity to express our sincere thanks for the trust you have placed in us.



What is SPEED with OERTLI?

Higher cutting speeds, more feed with constant or optimised surface quality, less reworking and overall savings in working time characterise our innovation. In summary, this results in the OERTLI Speed that our customers can expect with us.

We were able to inspire our audience at LIGNA 2019 with the following innovations:

CASTOR Optimo - our cheetah shows its teeth

A plane head for many applications: Mills quickly and effortlessly through the wood without jamming splinters. The top surface quality minimizes the post-processing effort and thus saves time and money.



OERTLI CAT - faster than its shadow

Cutting speeds up to 120 m/s with an increase in feed rate of 40 % and all this with a constant wave pattern. Long service life and cutting edges that can be resharpener over their entire surface reduce operating costs and increase service life.

OERTLI HPC/HPC+ - on the fast lane

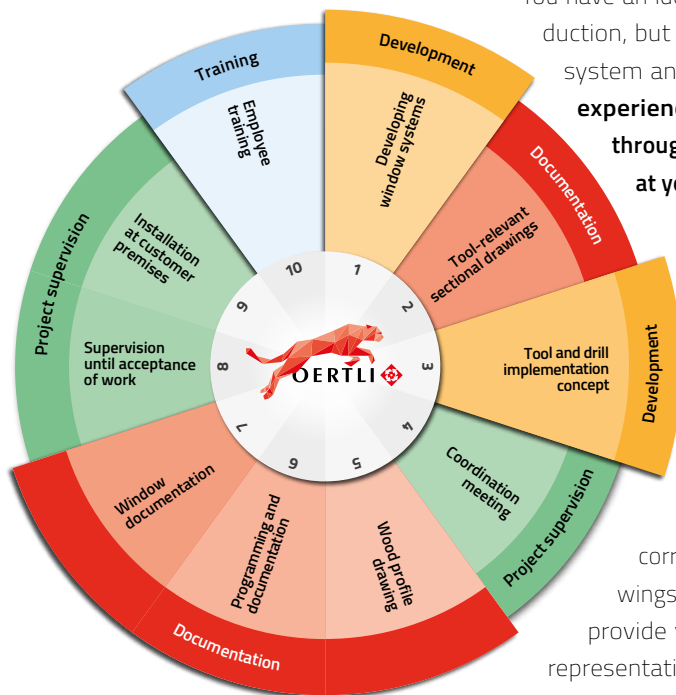
High Performance Cutting - the Formula 1 among window tools. Short processing times, optimum surface quality and lower production costs are the main benefits.

Get ready to speed too!

Do you want to develop a new window system or upgrade your systems? Let our experts guide you through the project without deducting your own resources from your production.

Speedier and more efficient

Project support



You have an idea for window or door production, but have not yet decided on a system and its implementation? Our **experienced experts advise you throughout the entire project, are at your side and accelerate your project** with knowledge from over 90 years of window and door production.

We will be happy to advise you on the development of window systems for your target markets and create the

corresponding sectional drawings for you. We can also provide you with all other representations and data for

simple, quick and clear CNC programming. In addition, you will receive a collected, structured documentation in printed and electronic form. Together with our training you will be able to continue working independently in the future.

This will save you valuable working time and development costs, which you in turn can invest efficiently in your production.



«Our know-how and experience in window production is used more and more.

Complex projects are handled quickly and efficiently together.»

Thomas Malin, OERTLI Werkzeuge AG, Head of Product Management Windows

Producing windows with

a view on the Matterhorn

Zermatt: At an altitude of 1600 metres, at the foot of the probably most famous Swiss peak one does not just hike or ski. For over 60 years, the carpenter Bittel has been producing windows as the only one in this region.

Running such a business here, one must be able to plan precisely. The access road to Zermatt is only open in the low season and then only with special approval. No day of delay had to be risked when in May 2018 a CNC plant for window processing on the narrow mountain road was delivered.



However, it is difficult to find suitable employees for production in the mountain village. For years Bittel had produced the windows on individual machines. «For a few weeks my brother-in-law, who had previously been responsible for manufacturing the windows, had been absent. It wasn't until I stood in for him that I realized how complicated and time-consuming this production was,» says owner Markus Bittel. By converting to fully automatic production, Bittel wanted to ensure that his family business could produce windows in the long term, regardless of the personnel situation.

In 2017, he made the decision to invest in a Conturex Compact from Weinig, equipped with the HPC tool line from OERTLI. He thus skipped two technological generations. The HPC tool line from OERTLI is the most powerful system on the market today: The high-speed tools combine the highest speeds with perfect surface quality. Thanks to backlash-free clamping and a hybrid cutting system, which combines pre-machining and finishing, the speed rate, and correspondingly also the feed speed, can be easily increased by 25 % with the HPC tools - and all that at a constant wave pattern.

OERTLI Connect: Stable, flexible and ready for use from the machine

When selecting the corner connection, Bittel decided for the OERTLI Connect long hole-pivot connection. «The simple dowel connection did not seem stable enough to me,» explains the managing director. Because the windows had to withstand a lot at this altitude: In this exoponated alpine region, the windows have to stand extreme cold, heat, snow and rain. That's why his customers often prefer wood-metal windows. The alpine huts, simple houses in higher mountain regions, are also subject to the regulations for the protection of historical monuments. Here Bittel supplies windows made of larch wood with mounted rungs.



For the managing director, it was clear right from the start that the Swiss tool manufacturer OERTLI would not only supply the tools for the new machine, but would also supervise the project from start to finish. The high delivery reliability was decisive. Bittel neither obtained a counteroffer nor haggled over the price. The window manufacturer is convinced that «price pressure destroys cooperation». He, on the other hand, wanted top performance from everyone involved. «And the interaction of all the project partners was extraordinary,» he says: One week after commissioning, he already produced the first windows.

«The advantages of computer-controlled production are enormous,» reports Bittel. Today he could, for example, produce a wood-metal window in the morning and a sliding door after a snack in the afternoon without having to change anything. This allows orders to be scheduled much more efficiently. Instead of bundling orders, he now produces «just-in-time». And the precision he achieves with the new system is outstanding, the window manufacturer is impressed. Thanks to the high cutting performance of the tools, there are no tears on the wood - which means there is no need

for reworking. «Press the button, glue and glaze the finished scantlings - the windows are done,» Bittel sums up. His goal is to produce flexibly and reliably, has been achieved without question.

