CASE STUDY

STUDENTS MANUFACTURING WINDOWS
WITH COMPASS WINDOW PROCESSOR

The innovative window manufacturing processor from Compass Software enables students to gain practical knowledge in the art of window building at the College of Wood Technology in Melle, Germany. The students Jonah Johanniemann and Benjamin Beening helped to install the window postprocessor in late 2021 and have run the first test processes as part of their final technical exam. The teachers and students are impressed with how well the machine connection works. The module window technology / window manufacturing has been implemented as a permanent topic in the curriculum. Since the motto of the college is "gained in practice, for use in practice".

The partnership between Compass Software and the College of Wood Technology in Melle has existed for more than a decade. Back then, everything started with the CAD stair building software. Students were able to use the software as part of their lessons and could gain knowledge in using CAD stair design software on the computer. Mid 2018, the college purchased an IMA BIMA CX40 CNC machine with 4 axes, which was installed with Compass Software. The machine made

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it possible to manufacture the designed stair parts. The software-machine connection allowed the college to prepare their students better for the realities of professional life and teach them valuable practical skills.

Starting in late 2021, the machine has also been configured to manufacture windows. Compass Software developed a custom interface to transfer CAD data from the ProLogic window design software to the machine. The Compass Software window processor can be connected to external CAD design programs via different interfaces. All customary machines can be connected.

Installation of the Window Postprocessor
The window processor was implemented at the Melle college in October 2021. The installation of the machine on-site was conducted in a partnership with a ProLogic technician, the students Jonah Johanniemann and Benjamin Beening, and two Compass Software technicians. The two students helped with the installation and ran the first test processes as part of their technical exam, which is an extensive project that includes theoretical and practical parts and completes their two-year advanced vocational training to become a certified wood technician.

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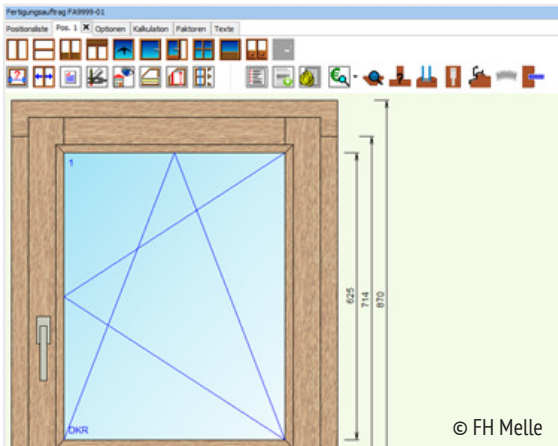
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Students at the Melle College of Wood Technology can now design IV78 wood windows with the ProLogic window software FenOffice and subsequently process them on the CNC machine with Compass Software. The required quality tools were donated by the company Oppold and are cherished ever since for their excellent processing quality.

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During their lessons, students have to initiate the data transfer from the ProLogic software to the Compass Software CAM solution.
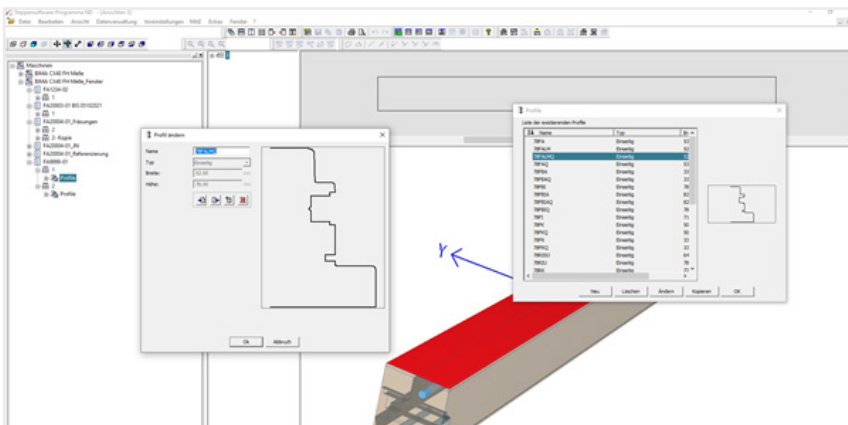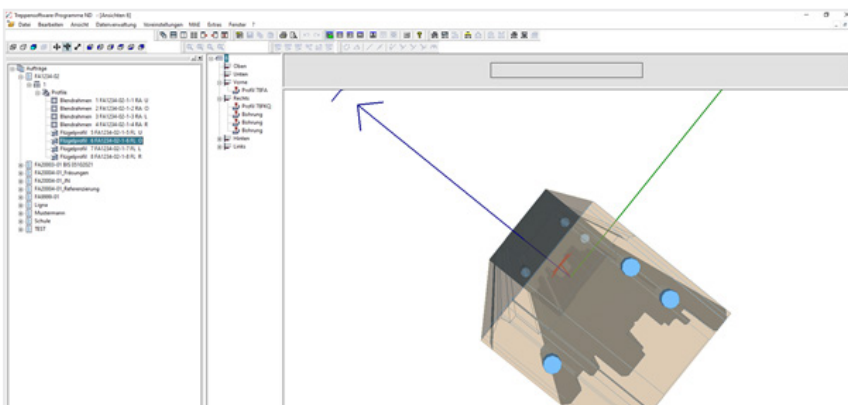

Fast Tool Changes during Practical Instruction

The stair and window manufacturing projects are overseen by the lecturer Martin Kasselmann. The window building class is included in the college's module "Advanced Technical Solutions." During their lessons, students have to initiate the data transfer from the ProLogic software to the Compass Software CAM solution. Afterwards, the students operate the CNC machine to process the IV78 windows.

Martin Kasselmann is thrilled about the seamless transfer of the ProLogic CAD data to the Compass Software window postprocessor and how easily the CNC machine is operated: "Now, I am not only able to show how windows are made in theory, but we can generate our own processing data and run it on the CNC machine. We are ecstatic how well Compass manages the control of the IMA processing center." Thanks to a complete change of all 18 tools in only 30 minutes, it is easy to switch between plate processing and window processing. That is especially important for the practical and versatile lesson plan.

Compass Software at Schools

Compass Software values working with educational institutions very much. The collaboration with the companies ProLogic and the tool manufacturer Oppold during this project was very productive and pleasant. Educating students, who are interested in the wood processing industry, is close to the software company's heart. This is the only way to truly equip students with practical knowledge for their future jobs and to draw interest for the industry in young adults.

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