

CROSS LAMINATED TIMBER PROCESSING

CONTROL OF ALL MACHINES



Cross laminated timber (CLT) is considered the material of the future by building experts around the world. Cross laminated timber plates are enormous solid timber boards that are made from multilayered boards that are laminated together running in crosswise direction. The compression of the individual timber layers makes CLT tremendously robust and sturdy, so that this material can even be used for the construction of high-rises. Furthermore, CLT can be combined well with other materials, such as concrete, steel, and glass.

However, the processing of cross laminated timber on CNC machines poses several challenges that need to be overcome. The sheer massive size of the CLT boards is a problem in itself. Manufacturers have to control special machines that offer the necessary range of motion. Once, plates are positioned on the machine, it is not easy to move them again, due to their weight and size. In practical terms: CNC programs have to be extremely precise and need to be adjusted for each individual case. Compass Software is able to configure CNC data optimally in relation to the machine and the individual customer. Location-specific CNC programs make CLT production possible.



Next to the structural advantages, cross laminated timber has to offer many additional future-proof benefits. Unlike other construction materials, wood is inherently good for the environment and protects the climate. Wood locks in carbon from the air and therewith fights the CO₂ content in the atmosphere – a natural property that is in great demand.

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BTL Import

The CLT solution from Compass Software imports CAD information from all common construction software in BTL format.

Other Interfaces

Other interfaces can be implemented upon request.

Control of All Established Machines

We are able to control CLT-compatible CNC machines from all customary machine manufacturers. CNC data is generated machine related and calibrated to work with the individual processing center. The CLT solution is customized for each individual user.

Generation of Location-Specific CNC Programs

Production of cross laminated timber plates is conducted with specially aligned processing strategies that work according to the size of each individual plate. Processing is attuned to location-specific CNC programs: Compass Software does not calculate the individual CNC programs until

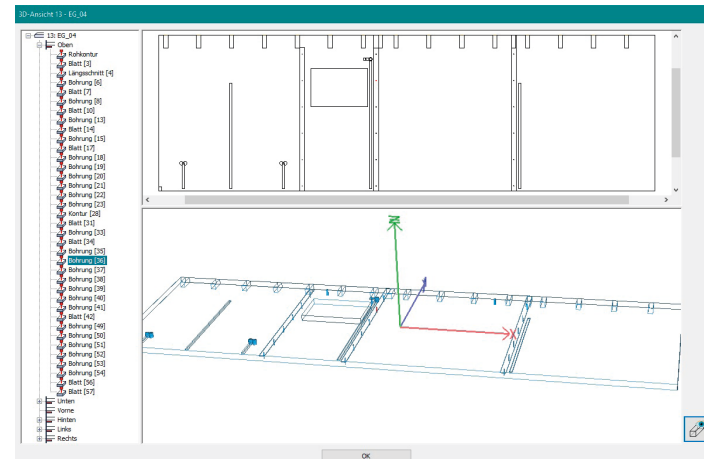
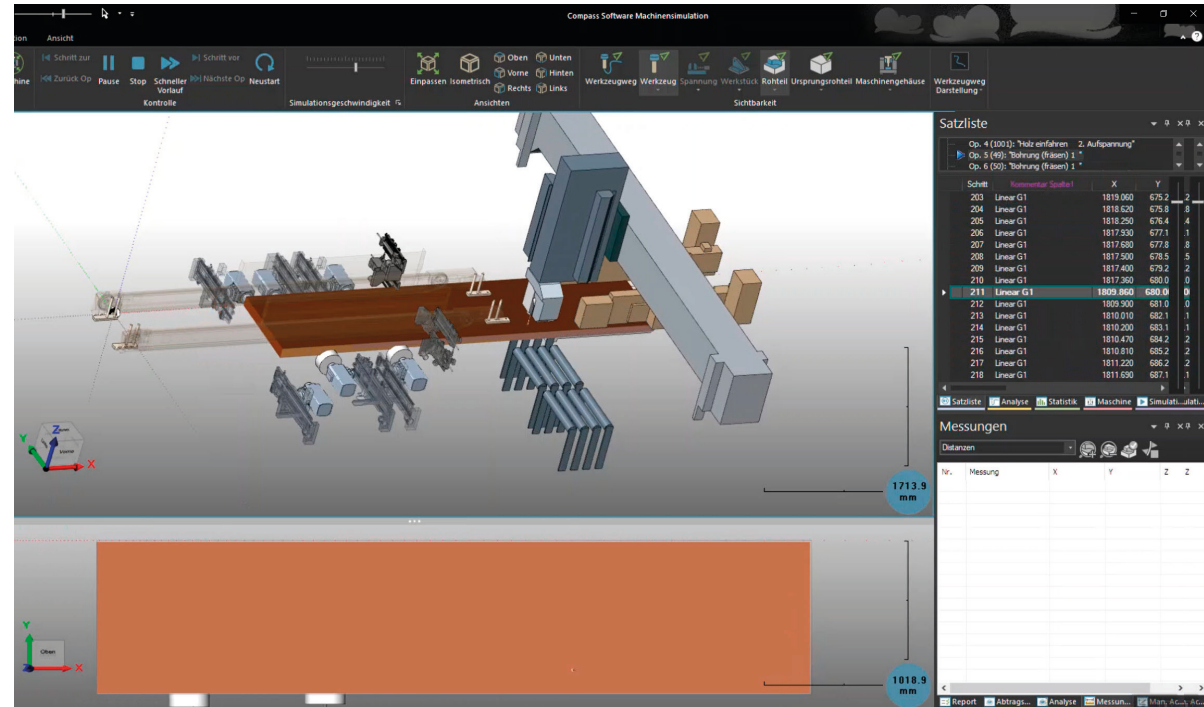
the plate has been positioned on the machine. The CLT plate is scanned with a laser and code is calculated according to those details. This ensures precise processing of all parts on the plate.

Pin Table, Vacuum Cup, and Clamp Calculation

Pin table, vacuum cup, and clamp calculations are possible and are an excellent complement as an additional option.

All processes can be controlled in detail before machining in the processing simulation.

Example Video:
<http://tiny.cc/CS-Simulation>



After scanning the plate, users are able to control details and, if needed, make changes on the machine station.

The highest degree of accuracy during production saves time and money.



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