



CLT APPLICATION SOLUTIONS



Various products where timber lamellas are connected and glued on top of each other. Lamellas are stacked on top of layer below and lamellas are stacked 90 degrees on a prior level. The glue is applied on the horizontal layer.

Advantages

- Applicable for all types of adhesive systems like: PU, EPI and MUF.
- Clear start/stop function of the glue application, thus no glue spill on the front- and back edges.
- Can be used for line speed up to 175 m/min.
- Application widths: any size as specified by the End-User.
- Advanced control system, though easy for the operator to handle.

■ Choice of materials and components

We have designed the equipment for long lasting reliable performance. This means that we use the state of the art materials and components like:

- High-end stainless steel qualities
- Ceramics
- High value rubbers and plastics, like Viton, HEPDM, PTFE and PEAK
- Control systems of Mitsubishi/Siemens
- Operator panel 10" full colour touch screen. 12" or 15" as option.
- Valves for the hydraulic system of Sun.
- Components are standard Mixon stock parts or bespoke components.
- Very advanced coatings to preserve the materials from acid attack.

Application areas

for CLT production

All types of CLT production lines. Effectively the CLT application is nothing else than a “wide application”. The difference between wide applications and CLT is the advanced control system as required for the CLT production.

CLT elements are load bearing constructions and for that reason the adhesive application must be “bullet proof” and production parameters are 100% traceable.

- Panel width up to 3.600 mm
- Panel length: limitless
- Number of layers in CLT element from 3 to 11.
- Adjustable application width, by use of individual valves per section.
- Can be integrated in any OEM production line.

Adhesive systems

Our solutions deal with the following adhesive systems:

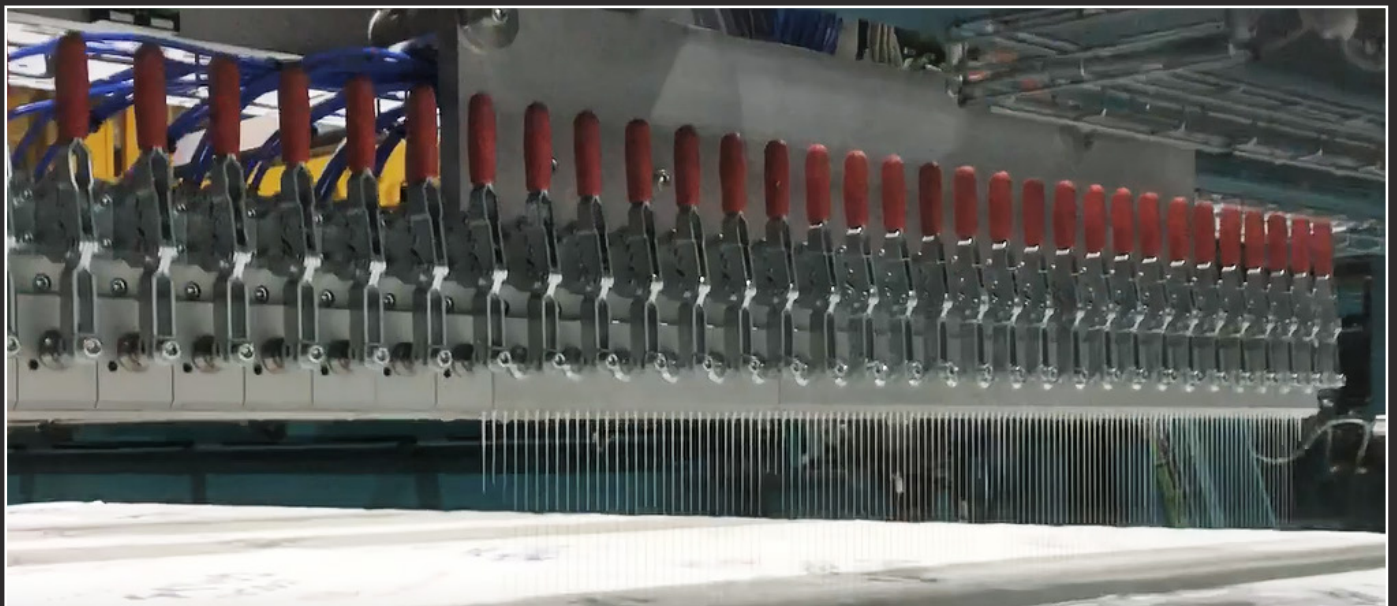
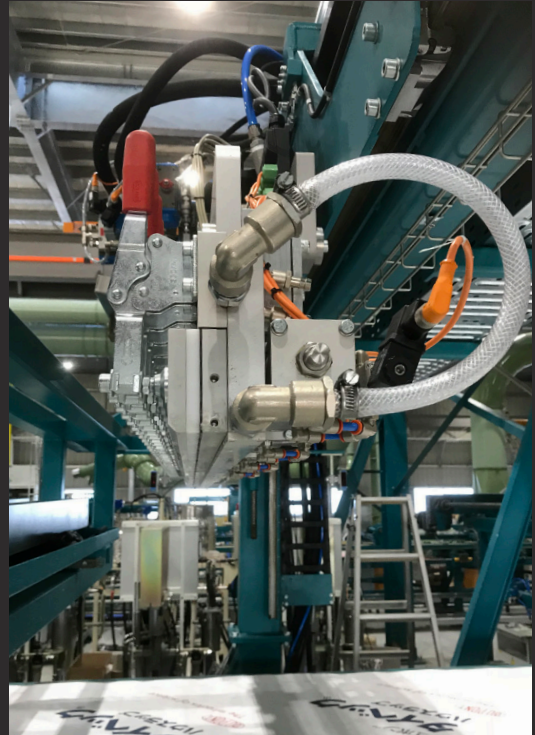
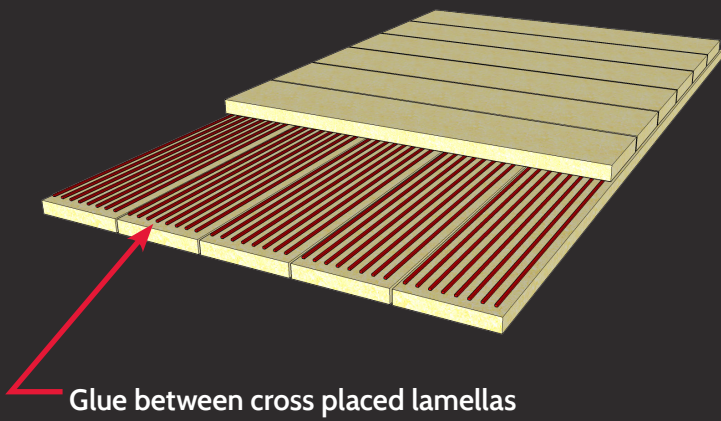
- For typical mono component PU systems.
- As well as for 2 component systems like EPI, PRF in mix-in solutions as also MUF adhesive for separate application.

Mixon 2600H / CLT

for separate glue-lam application

Mixon's system for mixing and dosing for application systems is based on over 30 years of experience.

An advanced system for wide panel CLT production. Exact start/stop of the application towards all edges of the CLT elements.



■ Dosage

The glue and hardener are dosed and pressurized by double working displacement pumps. Either the adhesive will be mixed before application or, if required, the glue and hardener can be applied separately.

The system will apply the adhesive only at those areas which require glue. This is achieved by our unique start/stop system, also for very wide applications.

■ Application

CLT: The application head has a fixed application width AND a part which is equipped with an adjustable application width section.

■ Control system

A separate operator panel placed at the working position of the operator. This will allow all needed application set-points and adjustments. Adjustments will be visible direct for the operator in the 10, 12 or 15 inch wide full color touch screen.

The touch screen is build up with simple “windows-alike” menus for understandable changes of the glue applica-

■ Cleaning

For mono component adhesive systems, the cleaning of the applicator is not required. We assure that the adhesive in the applicator during production stops, is kept away from the air and thus curing cannot start at the applicator head.

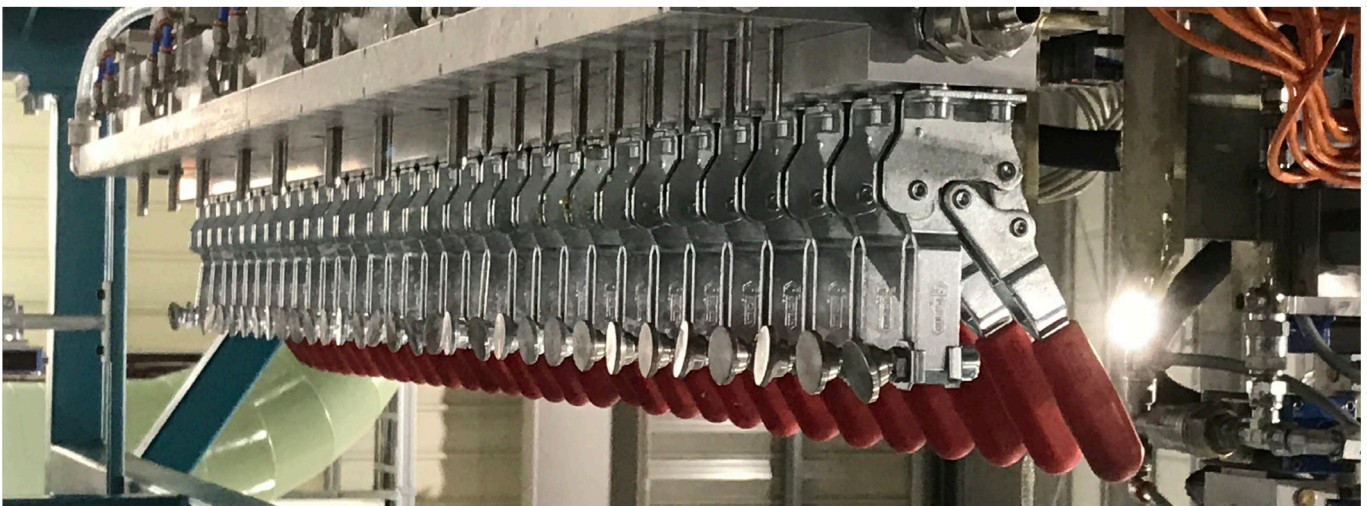
The glue amount on the panels is easy for the operator to adjust. The only input value for the operator is the glue spread in gram per square meter, the automation of the Mixon machine will cover all the set-points in the algorithms of the control system.

Based on the requirements set by the customer we design a system to cover all the needed widths of the CLT elements. The length of the panels of the glue application, which means that here are limitless possibilities.

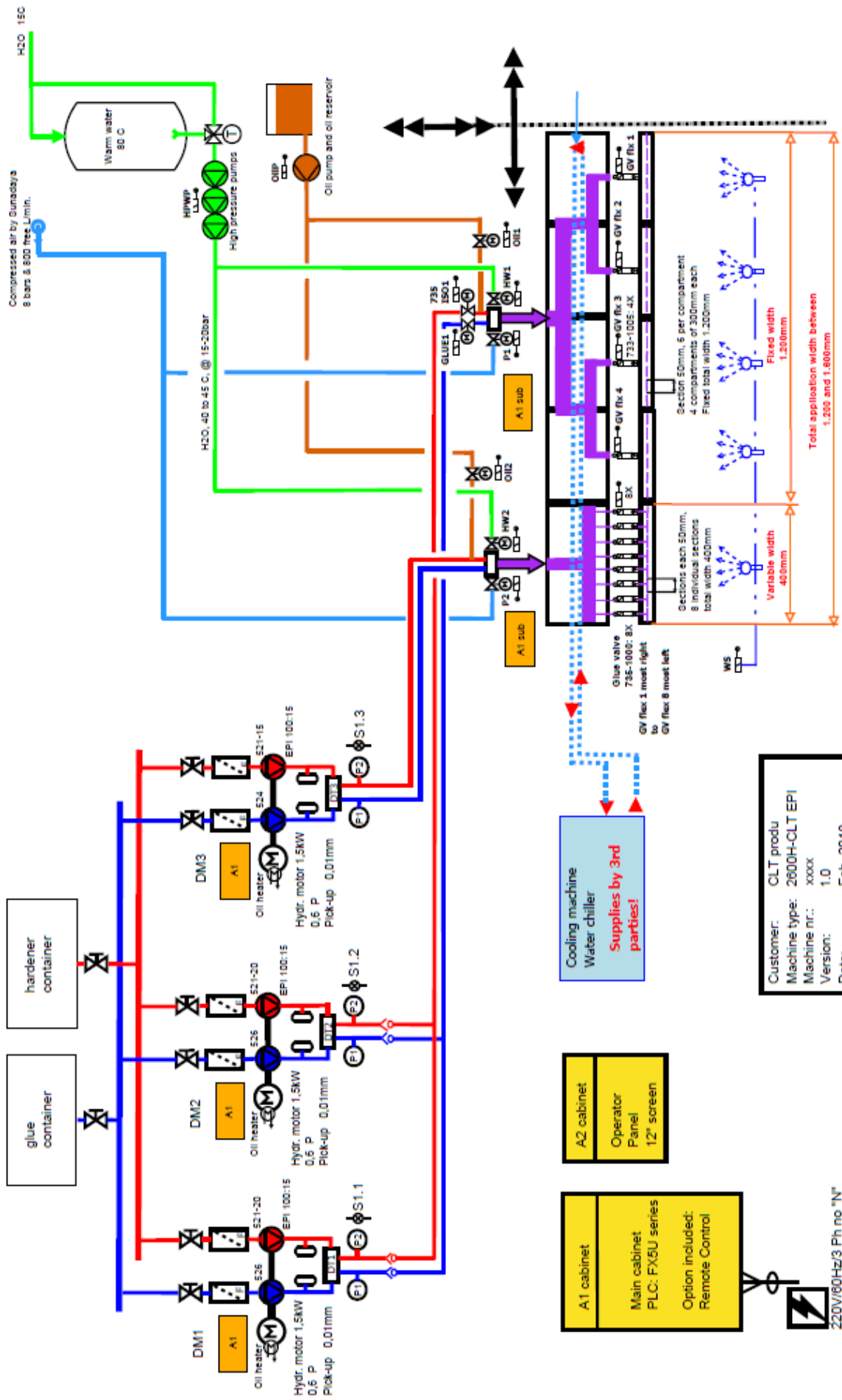
tion. By storing the application set-points in the memory, it's easy to recall the perfect input parameters by changes for let's say timber dimensions.

This receipt handling will in all extent help the operator to quickly adjust the machine to new set-points, without losing valuable time to optimize the production.

For mixed glue systems, we integrate a fully automated cleaning system in the CLT machine. Here we use high pressurized warm water and compressed air to clean all the sections containing mixed glue. The manual cleaning is not required.





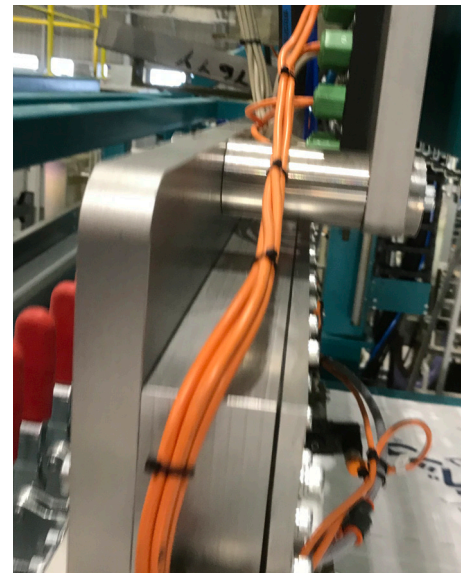


Specifications

of our solutions

■ Machine Performance

Glue type	Glue
Mono component	PUR
Two component mix-in	EPI, PRF, MUF
Two component separate	MUF
Line speed	30 - 175 m/min
Typical glue spread	160 - 400 g/m ²
Panel width	1.200 - 3.600 mm
Width individual application section	50 mm
Panel length	Limitless
Number layers in panel	3 - 11



Mixon | CLT Application | 2600H-CLT series