



GLUELAM APPLICATION SOLUTIONS



Various products where timber lamellas are connected/glued together on top of each other by applying the adhesive on the horizontal part of the timber material. The glue will be applied separately by a continuously running curtain.

Advantages

of separate glue-lam application system

- Will deal with all adhesive systems, applicable for separate application.
- Applicable for fast feeder lines.
- Various safe-guard features, to quality assure the production of load bearing constructions.
- Applicable for various widths.
- All parts available from stock for quick spare-part deliveries.
- Optimize control system to help the operator to produce rational batches.
- PLC system is prepared to exchange data- and production information with third control system (Like Cure-Safe).

■ 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 with integrated full colour touch screen. Standard size 7", can be upgraded to 10" or 12".
- 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 glue-lam, separate application

Various products where timber lamellas are connected/glued together on top of each other by applying the adhesive on the horizontal part of the timber material. The glue will be applied separately by a continuously running curtain.

The products which are produced according the principle are:

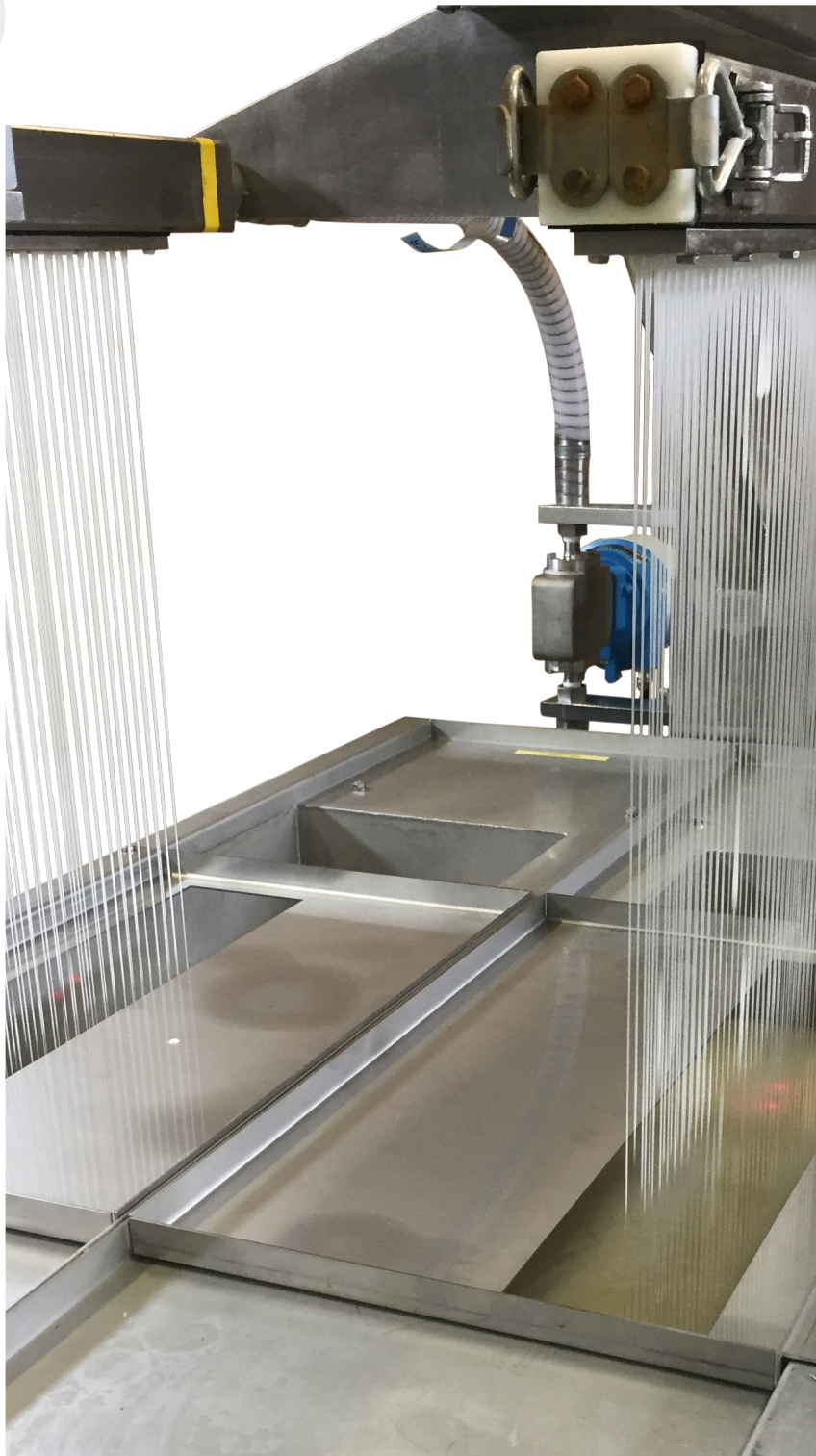
- Glue-lam beams
- Non-bearing glue-lam products
- Other products on demand

Adhesive systems

for separate applications

Our solutions deal with the following adhesive systems:

- · Two component systems, for separate application like MUF systems.



The Mixon 2800

for separate glue-lam application

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

In order to apply the adhesives fast, adequate and reproducible we use our reliable components and have completed the machinery with high-end control systems.

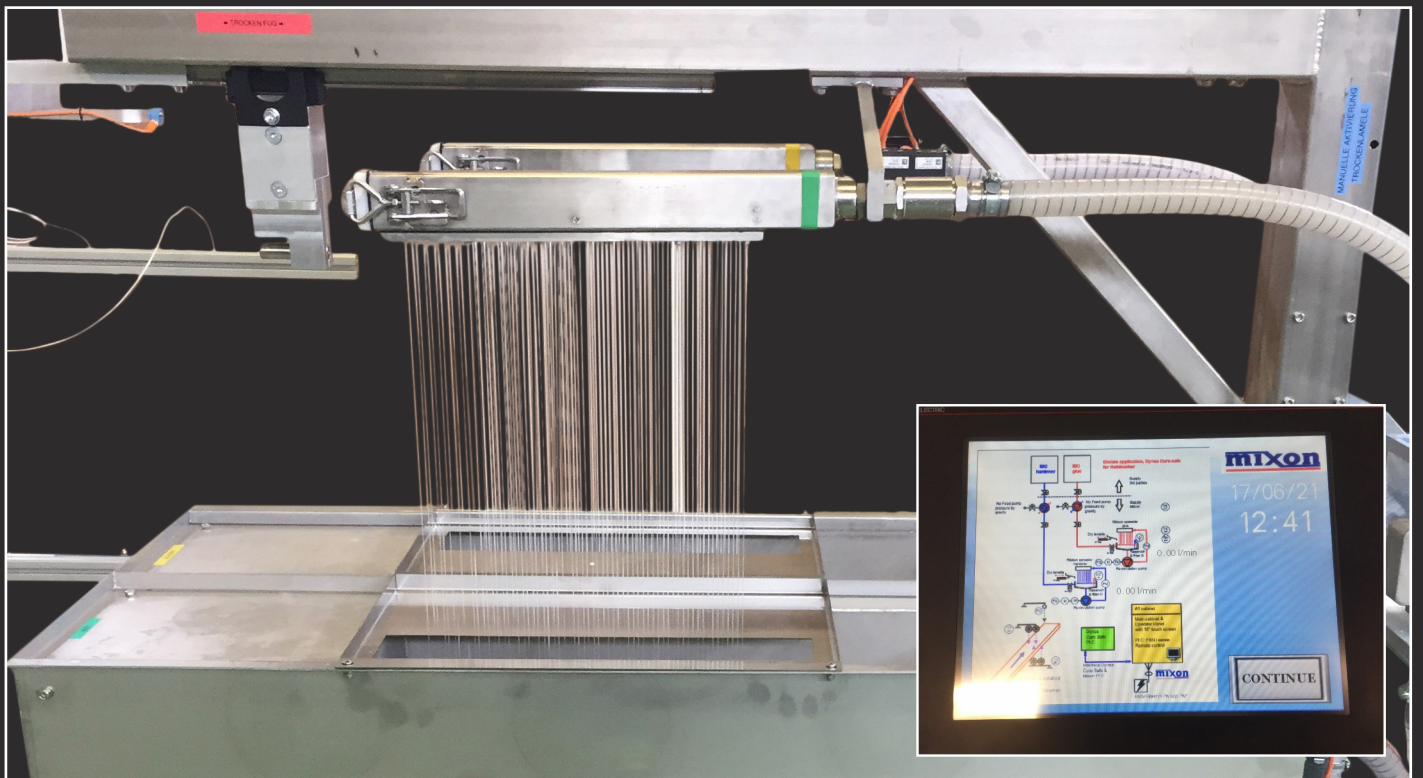


Application of glue



Application of hardener

Adhesive application in strings on the top of the wooden sheet



■ Dosage

The glue and hardener are dosed and regulated by excenter screw pumps.

The glue and hardener are circulated through a spreader pipe in a reservoir. The glue/hardener taken away from the system for application is replaced automatically.

■ Application

The application is achieved by two spreader pipes, normally with a width of 320 mm.

The system runs constantly during the production by two glue curtains. At the end of the day the reservoirs are covered with locks, in order to prevent the adhesive to dehydrate. The spreader pipes can easily be removed from the machine and need to be cleaned with warm water, to prepare for next day's production.

■ Control system

A separate operator panel placed at the working position of the operator, will allow to make all needed application adjustments. Adjustments will be visible direct for the operator.

The panel is equipped with an LCD touch screen, with simple "windows-like" menu's for easy changes of the

■ Cleaning

As the system is designed for the separate application of glue and hardener, the cleaning of the machine is down to

■ Option

- **Master control system:** The machine can work "stand alone" or connected to an intelligent system optimizing all production parameters.
- **Measuring devices:** Various temperature sensors, like infra-red sensors to monitor the lamella temperature and temperature and relative humidity of the production hall. Lamella speed control to adjust automatically the glue spread.
- **Dry lamella function:** Operator can set parameters which lamella during production is without glue.

The level sensors over the reservoirs over-view the required glue/hardener level and will compensate the used adhesive.

The system will supply the glue hardener in the dosage range between 100:50 up to 100:200, all depending on the needed mixing ratio.

For lamellas which should be without glue the machine simply blocks the running curtains, in such a manner that the lamella can pass the machine without application of glue and hardener.

A glue application program helps the operator to apply the glue on either standard sizes glue-lam beams, or on tailor made project beams.

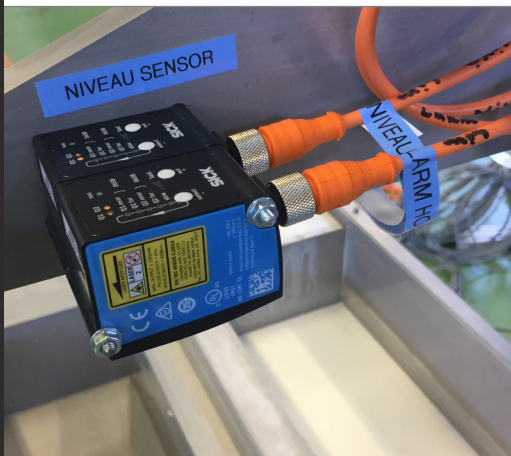
glue operation. By storing the application set-points in the memory, it's easy to recall the perfect input parameters by changes of let's say timber dimensions. This receipt handling will in all extent help the operator to quickly adjust the machine to new set-points, without losing valuable time to optimize the production.

an absolute minimum. Normally not more than 5 minutes per day are needed for some cleaning activities.

- **Glue decrease program:** To optimize the glue use during beam production, parameters can set to decrease the glue amount while applying the adhesive.
- **Remote control:** A network card in the PLC that allows us to enter the PLC from our offices in Sweden.

FAQs

If you have other questions please contact us or find more information on our web site www.mixon.se.

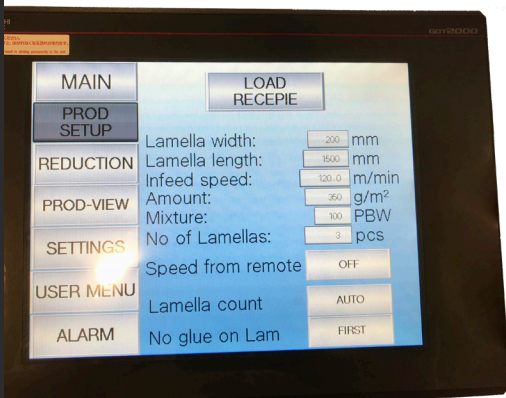


How can I be sure that the machine will supply the required glue spread?

■ The machine is equipped with flow-meters, so the PLC in the system will over-view the applied glue spread.

Each fourth lamella should pass the application system without applying adhesive, can this be arranged?

■ Yes, the control system of our solutions provide the possibility to indicate which lamella should pass by without application.



When I change glue system, do I need to change the whole machine?

■ No normally the range of the mixing ratio will allow the use of a new mixing ratio. In worse case we need to change one or both pumps.



Spare parts, how can Mixon help me?

■ The absolute majority of the components we use in our machines are on stock at Mixon.

After you have placed the spare part order you will normally receive the spares within 24 to 48 hours, of course depending on your coordinates.

Do I need to cool the application, due to production circumstances with a high temperature?

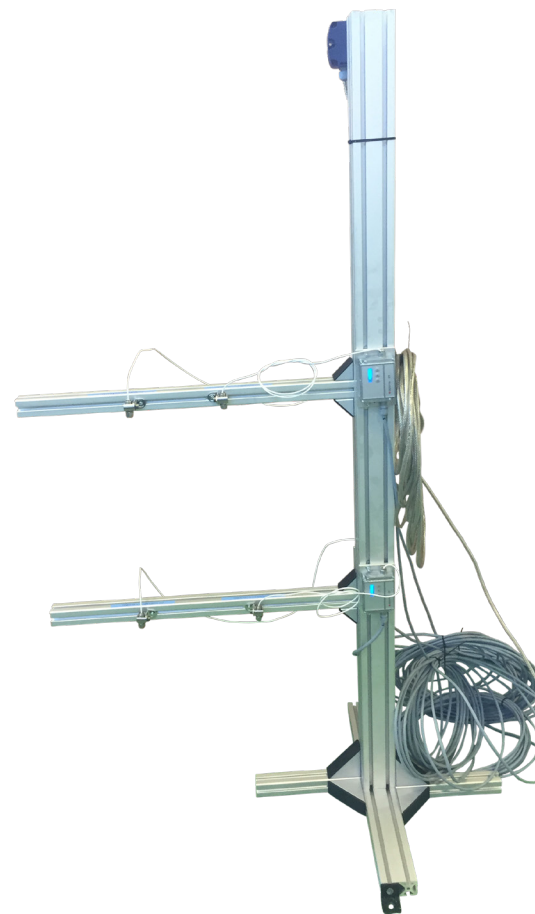
■ No, cooling will not improve the performance of the machine nor the adhesive.



My production is on the other side of the world, what kind of quick assistance can Mixon offer?

■ Normally we can assist direct per phone or email. However we recommend the customer to invest in the option "remote control". This gives us the possibility to look into the program of the PLC by the www. This is a very quick and free service we can offer our customers to address issues.

Further we recommend our customers to agree on an annual preventive service, which normally gives full production availability during one year after the service.



Specifications

of our solutions

■ Glue-Lam Application

Model	Capacity (l/min)	Note
Two component solution separate application		
Mixon 2825E	5,0 - 15,0	Basic version
Mixon 2855R	5,0 - 15,0	Full control system
Mixon 2856R	10,0 - 30,0	Full control system

■ Ratio & Measures

Mixing ratio	100:50 up to 100:200
Application width	Standard 320 mm
Weight	about 180 kg
Dimensions (l x b x h)	1.200 x 600 x 1.200 mm

■ Needed connections

Compressed air	6 bar, 100 l/min
Warm water	40-45 °C, at 6-8 bar
Electricity	400 V/50 Hz/3-phase/ 10 A or 230 V/50 Hz/3-phase/ 16 A

Mixon | Separate Gluelam Application | 2800R Series