



LAMINA START/STOP 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. Usually timber profiles are composed without causing a lot of waste material.

Advantages

of lamina start/stop application system

- Can deal with all types of adhesive systems
- No adhesive spill on front end and back end of the lamella
- Applicable for feeder lines with a speed up to 350 m/min, still with accurate start/stop.
- Applicable for various widths
- All parts available from stock for quick spare-part deliveries
- Optimized control system to help the operator to produce rational batches

■ 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 LCD touch screen
- 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 lamina 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. Usually timber profiles are composed without causing a lot of waste material.

The products which are produced according the principle are:

- Laminated panels up to 350 mm width
- Glue-lam beams
- Window scantling elements
- Other products on demand
- Other customized solution

Adhesive systems

for mixed or separate applications

Our solutions deal with the following adhesive systems:

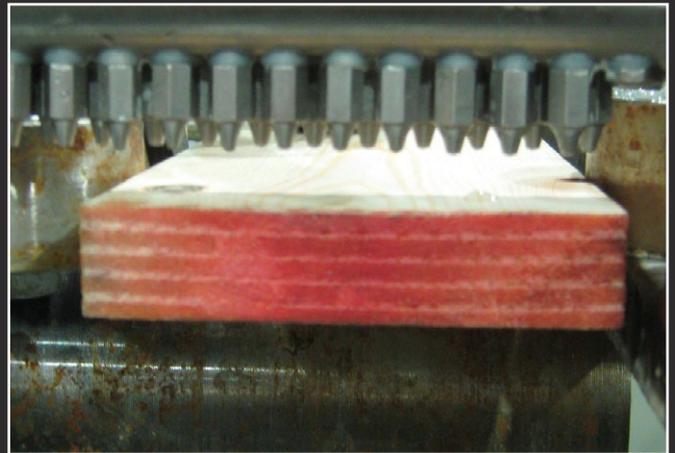
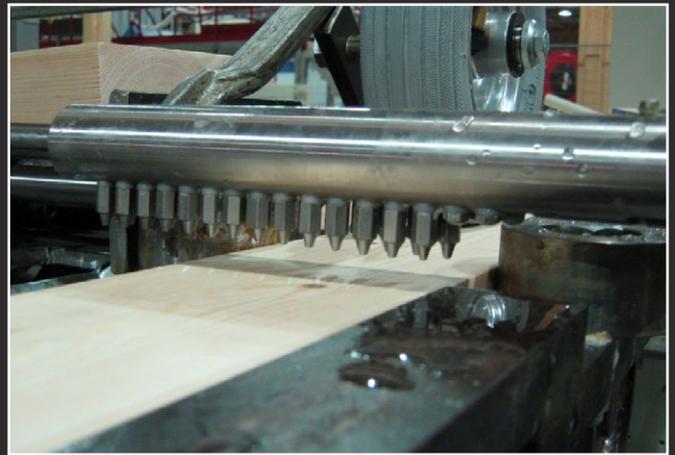
- One component systems like: PVAc, PUR
- Two component systems, in mixed application like: PRF, EPI, MUF, MF, UF, PVAc etc.

The Mixon 2600/2700

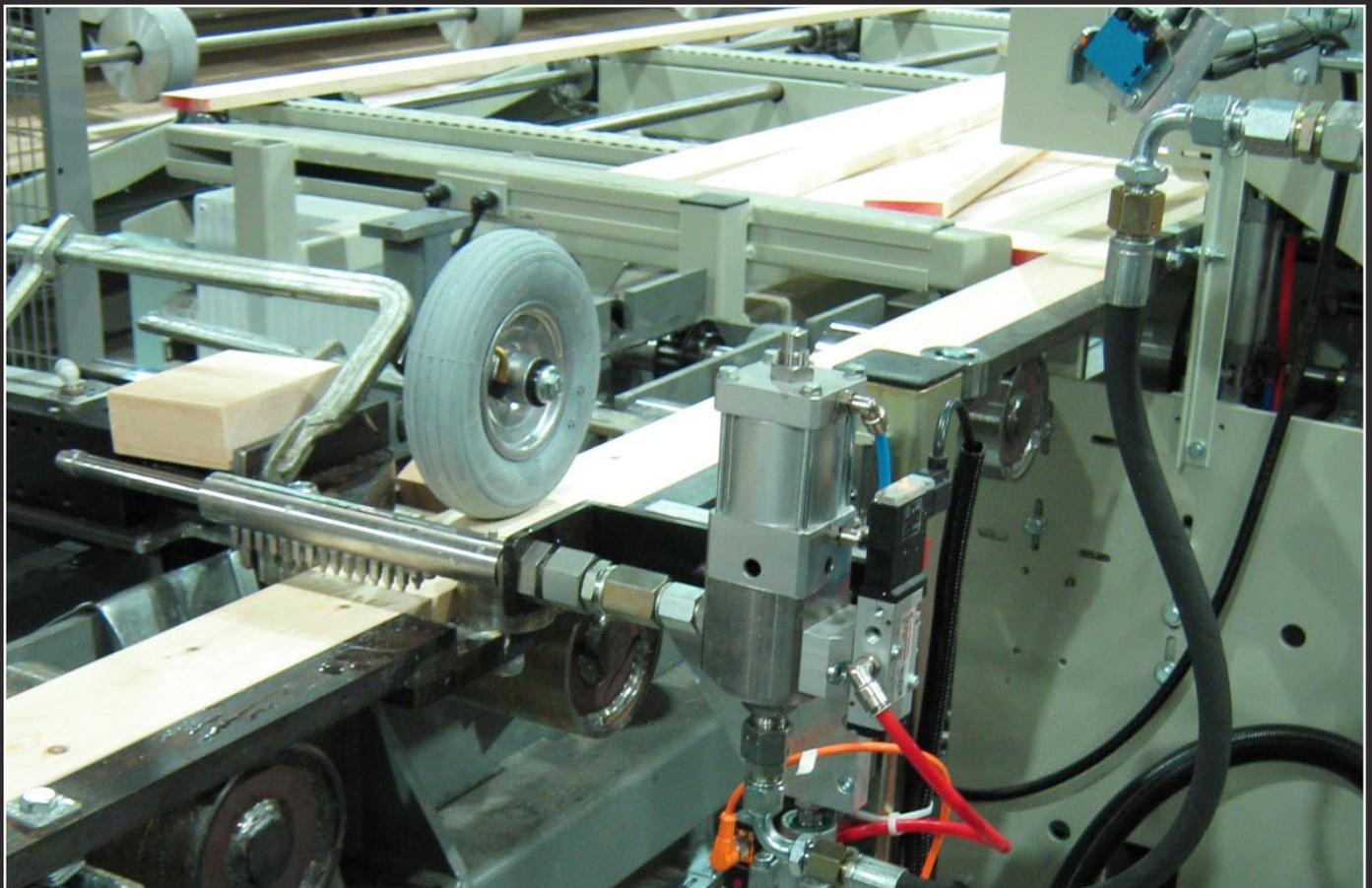
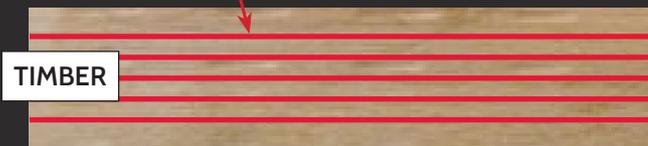
lamina start/stop application solutions

Mixon's system for mixing and dosing for lamina application is based on 26 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.



Adhesive application in strings on the top of the wooden sheet



■ 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 on the top of the lamella, by an advanced start/stop system. Due to the start/stop we prevent that adhesive will be applied on the front- and back end of the lamella.

■ Application

2600: The application head has a fixed position in relation to the lamella. If the lamella is bent in longitudinal direction the adhesive will be partly applied beside the lamella.

2700: The application head will follow the side movement of the lamellas, this assures that the adhesive will always be applied on the required surface and never beside.

Application both systems: Depending on the chosen adhesive system (mixed or separate) the glue will be applied by a spreader pipe with nozzles. The form/dimensions of the nozzles will be designed to meet any kind of adhesive system. The width of the spreader pipe will be in accordance with the width of the product to be glued.

Our solution can be build-in to lines with a speed up to 350 m/min, while assuring the correct start/stop of the applied adhesive.

The pressure in the application system is in the order of 40 to 60 bar, which gives the pre-requisites to achieve fast and accurate adhesive application on the lamella. A correct start and stop of the glue is guaranteed.

The application can meet any kind of horizontal application. By our mix-safe control system we safeguard that the adhesive components are applied on the application area.

■ 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” menus for easy changes of the 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.

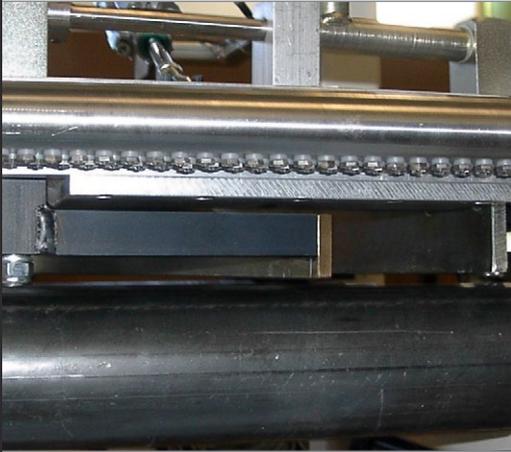
Dosage test equipment for quick and reliable check of the applied adhesive spread and adhesive mixing ratio.

■ Cleaning

The adhesive will be mixed just before the application, which leads to a very limited amount of mixed glue in the dosage machine. A cleaning system of compressed air and warm water will evacuate this mixed glue at the

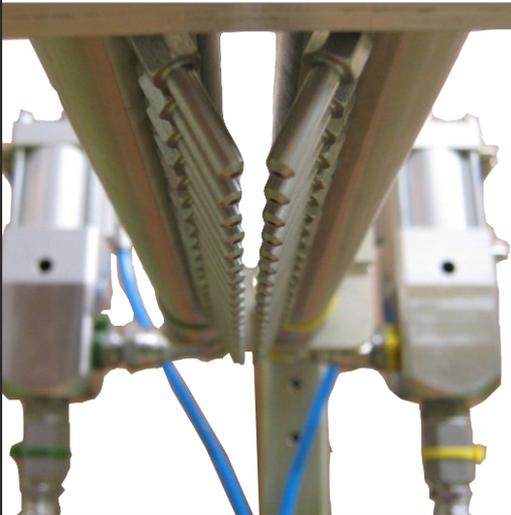
end of the production cycle. For separate application systems the cleaning activities linked to cured adhesive in the machine are fully taken away.

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



My production process does not allow adhesive anywhere else than on the horizontal area, can Mixon's system meet those requirements?

■ Yes, by making the choice of the 2700 solution in combination with a tailor made application head we can assure that the adhesive will be applied fully correct. Especially customers for window scantling use these kind of solutions.



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

■ Yes, the control system of our solutions provide the to 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 we can offer our services by changing one of the pumps. Our standard components can easily be changed for minimum costs, but maximum flexibility.



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?

■ For production environments with large temperature variations we recommend a cooled solution. This in order to guarantee the correct start/stop of the glue application moment.



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 systems

■ Hydraulic 2600

Model	Capacity (l/min)	Model	Capacity (l/min)
Mixed application		Separate application	
Mxon 2653H/1	1,0 - 4,8	Mixon 2653H/1S	1,0 - 4,8
Mixon 2654H/1	1,7 - 8,3	Mixon 2654H/1S	1,7 - 8,3
Mixon 2655H/1	2,7 - 13,2	Mixon 2655H/1S	2,7 - 13,2

■ Ratio & Measures

Mixing ratio	100:10 up to 100:200
Application width	between 35 and 350 mm
Weight	about 250 kg
Dimensions (l x b x h)	1.000 x 800 x 1.800 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

■ Hydraulic 2700

Model	Capacity (l/min)	Model	Capacity (l/min)
Mixed application		Separate application	
Mixon 2753H/1	1,0 - 4,8	Mixon 2753H/1S	1,0 - 4,8
Mixon 2754H/1	1,7 - 8,3	Mixon 2754H/1S	1,7 - 8,3
Mixon 2755H/1	2,7 - 13,2	Mixon 2755H/1S	2,7 - 13,2

■ Ratio & Measures

Mixing ratio	100:10 up to 100:100
Application width	between 35 and 350 mm
Weight	about 250 kg
Dimensions (l x b x h)	1.000 x 800 x 1.800 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 | Lamina Start/Stop Application Solutions | 2600/2700 Series