





EDGE GLUE APPLICATION SOLUTIONS

Mixon | Edge Glue Application Solutions | 2300 Series







Various products where timber lamellas are glued together on the vertical edge of the timber.

Advantages

of our edge glue systems:

- Can deal with all types of adhesive systems
- Can be build-in in any kind of OEM line/press supplier
- Applicable for fast lines with speed up to 360 m/min
- Adhesive application with a start/stop system, means no spill on front- and back end of lamella
- A contact-less application system for long lasting performance
- 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
- Proportional 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 edge glue application

Various products where timber lamellas are glued together on the vertical edge of the timber.

The products which are produced according to the principle are:

- Timber shelves
- Panels for food industry
- Formwork panels for concrete industry
- Solid wood interior panels
- Parquet, bonding of edges of top layer
- Optimization for particle board
- Other customized solution

Adhesive systems

for edge glue application

Our solutions deal with the following adhesive systems:

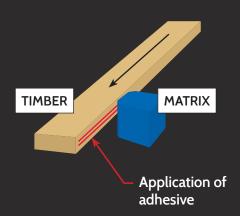
- One component systems like PVAc, PUR
- Two component systems in mixed application like PRF, EPI, MUF, MF, UF, PVAc etc.
- Two component systems in separate application like MUF, MF and UF

The Mixon 2300

for edge glue application

Mixon's system for mixing and dosing for edge glue 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.









Dosage

The glue and hardener are dosed and pressurized by double working displacement pumps. Either the adhesive will be mixed before application or, if the adhesive system will allow it, can be applied separately. This last application method will improve the cleaning of cured adhesive in the machine/application tremendously.

Application

The application head is performing as a contactless system. This means that there is no physical contact between the application matrix and the timber panels.

The pressure in the application system is in the order of 40 to 60 bar, which gives the pre-requisites to spray thin lines of glue on the edge of the lamella. Even for very fast lines up to 350 m/min we can guarantee a 100 % correct start/stop of the glue application per lamella.

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.

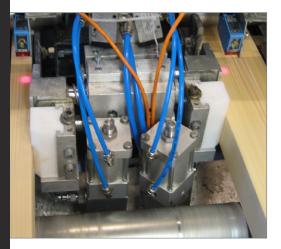
■ Cleaning

The adhesive will be mixed just before the application, which leads to a very limited amount of mixed glue in the dosage machine. Normally this mixed volume is limited to 0,1 liter. A cleaning system of compressed air and warm water will evacuate this mixed glue at the end of the production cycle

(5)

FAQs

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



What kind of solution does Mixon recommend me, bydraulic or pneumatic driven? ■ For high performing, fast application needs the only solution is hydraulic driven.

For less demanding lines a pneumatic, less costly solution, might be an alternative.



I am in need for a special solution for edge glue application, can Mixon help out? ■ Yes, we have all kinds of solutions from standard needs to tailor made solutions where we design the solution according your specific needs.

When I change glue system, do I need to change the whole Mixon solution? ■ 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.



6

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? Depending on each single situation, but if so we can deliver the option cooling of application.

A limited number of components will be cooled to keep the adhesive temperature at low/constant value.



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

Hydraulic

Model	Capacity (l/min)	Model	Capacity (l/min)
One sided mixed application		Two sided mixed application	
Mixon 2351H/1	O,4-1,9	Mixon 2351H/2	0,4 - 1,9
Mixon 2352H/1	0,5-2,5	Mixon 2352H/2	0,5 - 2,5
Mixon 2353H/1	1,0-4,8	Mixon 2353H/2	1,O - 4,8
Mixon 2354H/1	1,7-8,3	Mixon 2354H/2	1,7-8,3

Ratio & Measures

Needed connections

Mixing ratio	100:3 up to 100:200	Compressed air	6 bar, 100 l/min
Application width	between 5 and 200 mm	Warm water	40-45 °C, at 6-8 bar
Weight	about 220 kg	Electricity	400 V/50 Hz/3-phase/ 10 A or
Dimensions (l x b x h)	1.000 x 800 x 1.800 mm		230 V/50 Hz/3-phase/ 16 A

Pneumatic

Model	Capacity (l/min)	Model	Capacity (l/min)
One side mixed application		Two sided mixed application	
Mixon 2351L/1	0,4 - 1,9	not available	-
Mixon 2352L/1	0,5 - 2,5	not available	-
Mixon 2353L/1	1,0-4,8	not available	-
Mixon 2354L/1	1,7-8,3	not available	-

Ratio & Measures

Mixing ratio	100:3 up to 100:100	
Application width	between 5 and 200 mm	
Weight	about 180 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 | Edge Glue Application Solutions | 2300 Series

Traktorgatan 5, SE-442 40 Kungälv, Sweden Phone +46 303 24 66 60