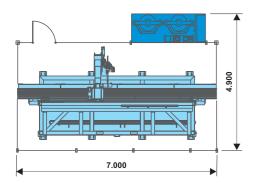


Technical Data

Sash preparation	Pane is mounted in the sash, Sash has already been placed in frame
Window (exterior max.)	2.500 mm x 3.500 mm
Windwo (exterior min.)	400 mm x 400 mm
Profile height max.	125 mm
Time per field 1m x 1,2 m	60 bis 65 s / per field
Operating voltage	230 / 400 V - 50 Hz
Control voltage	24 DC
Operating pressure	6 bar

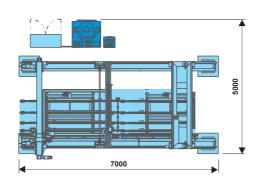
GVA115S

Vertical glass pane gluing machine



GVA115W

Horizontal glass pane gluing machine



The all-round service from LEMUTH - guarantees security for your investment.

You will receive the following services from a single source and harmonised down to the last detail:

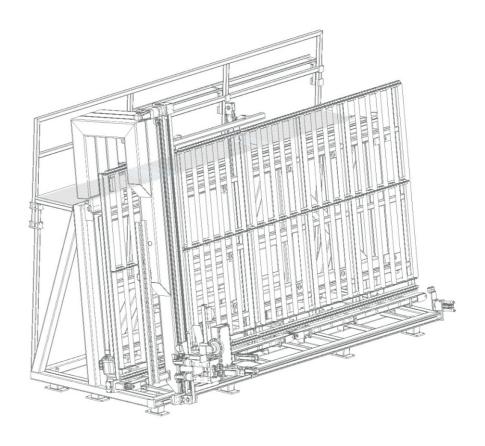
- Project management
- System planning
- Factory planning
- Construction
- •Electrical project management
- Component production
- Installation
- Start-up
- Staff training
- Documentation

And included in the software field:

- PLC programming of the system control
- Programming of the industrial PC interfaces
- Network connection to the company network
- Networking the window construction system

















GVA115
Glass Pane Gluing Machine

Glass Pane Gluing Machine Fully automatic



Precision gluing of panes into sashes

LEMUTH's glass gluing machine guarantees the accurate and neat gluing of panes into the sashes. The composition of the profile to be processed must be adapted accordingly, meaning, the slot between the glass pane and the rebate base of the sash will be reduced to 3-4mm to minimise the amount of glue required. A reduction of the slot is possible since this gluing method does not require using wedges for the glass pane.

Fully automated processing

After the operator has placed the pane in the sashes of the already mounted window on the upstream tilting table, the machine accepts the window for processing. The entire process is fully automated, from loading to the application of glue and finally discharge. Conveyer belts are used for the careful loading of parts onto the tilting table and gluing machine.

High-tech down to the very last detail

Via an automatic plausibility check the machine controls the exact thickness of the glass. Further-more, when using hot melt adhesives, a specific mechanism has been integrated for the alignment of the glue stream. This ensures that the injection nozzle always glides at the optimum injection angle to the profile section. The heated glue nozzle stand-by position prevents the glue from hardening during periods of inactivity. When using silicones or 2-component polyurethanes the nozzle is equipped with a compensating element to balance out any deviations in the profile section. The nozzle glides along the surface of the glass.

Advantages of the new gluing technology

Economic advantages are attained as a result of savings on steel and auxiliary materials such as wedge bridges or screws. Activities such as steel reinforcements on the cutting and machining centre or timeconsuming wedging are no longer necessary and reduce labour costs.

Vertical or horizontal gluing

It is possible to glue in either a vertical or horizontal position.

Gluing of numerous user-defined panels

The machine can process windows with any number of sashes. After the parts have been recognised using a barcode reader the control system processes all the necessary information from the data record for the machining of the parts.

Windows-PC and fast remote-access

A convenient industry PC with windows-XP is available for data input. For fast remote-access there is an integrated modem.

Gluing affords greater stability

Gluing technology delivers a much higher level of stability. The number of subsidences or deformations is noticeably reduced. The gluing of PVC sashes in glazing rebates of up to 2 m also dispenses with the need for steel reinforcements. It is also possible to narrow the profile of the sash itself resulting in an additional savings on materials. The sash is lighter. The greater rigidity of the unit facilitates the production of larger sashes.

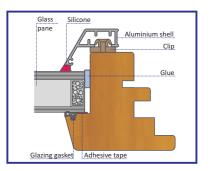
Outstanding thermal insulation

The glued sashes are completely wind proof. Elements with standard glazing improve the insulation value by 20%. Windows with such good characteristics are optimal for use in passive and low-energy houses.

<u>VERTICAL</u> machining position - optimised for <u>gluing in the sash rebate</u>



When the glue is applied in the sash rebate, it is applied between the glass pane edge bond and the sash profile. A gap of approximately 3 mm is required for this application. For the gluing of the glass pane, the sash can already be mounted in the frame. The advantage of this is that the sash can be optimally aligned in the frame. Thanks to the increased rigidity of the sash after gluing, the sash and the frame form a perfect unit.



HORIZONTAL machining position - optimised for gluing in the sash overlap



In this configuration, the glue is usually applied to the inside or the outside of the sash overlap. High-precision handling units fully automatically perform all work processes such as loading the sash, applying the glue and inserting the glass in a precise manner. Because it is mainly wooden sashes that are glued in the overlap, the sash can be aligned precisely at right angles by means of the clamping table. Once the glue has set, the aligned sash will retain its shape permanently.

