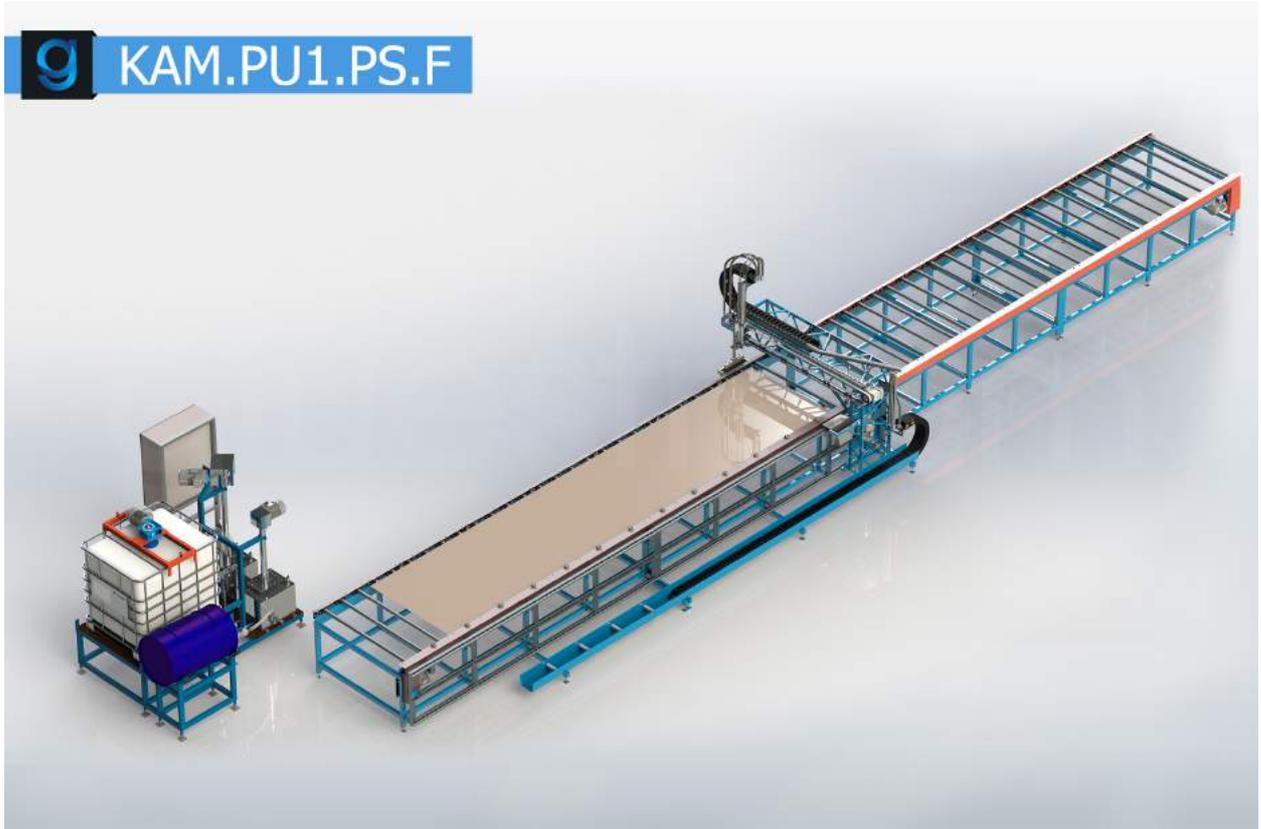


Adhesive applying machine model KAM.PU1.PS.F



KAM.PU1.PS.F, designed for applying 1-component liquid polyurethane adhesives in manufacturing of the glued i-beams.

The machine consists from:

1. Automated transporter, synchronized with adhesive applying system.
2. Adhesive applicator with automatic jets shuttering system;
3. High-precision pumping station;
4. Chemical resistant high pressure hosepipe set;
5. Control panel;
6. Nozzles spare set;

Machinery is equipped with motorized smart automatic feeding system which is able to position and transport the beams according to the technology conditions, leveling their geometrical deviations. Feeding system is designed according to lamella application principle, with a start/stop per lamella. The machine does not require additional drive roller conveyors, it can be matched with any passive roller conveyors.

Adhesive applicator is equipped with automatic nozzle shutter that prevents the reaction of polyurethane adhesive inside of the nozzles.

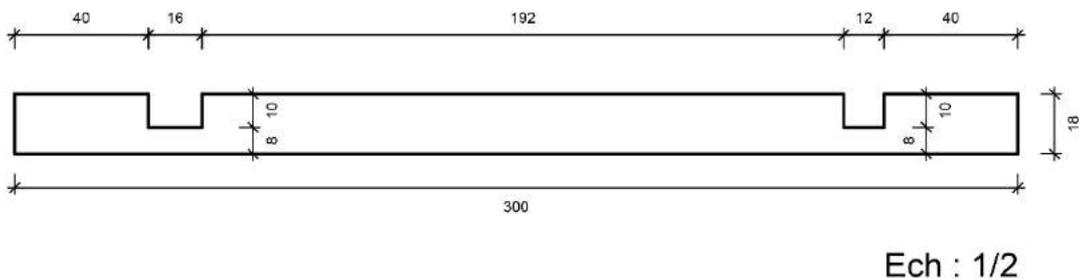
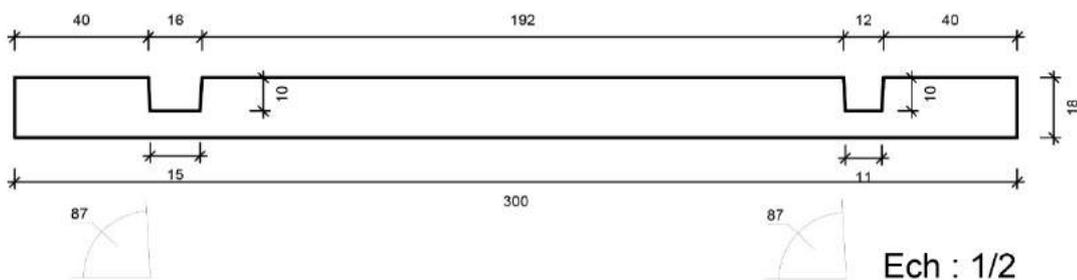
This original function eliminates the need of the regular cleaning and makes the work with machinery more easy and comfortable.

System can be used in automatic and manual modes. The shutter shutdown time can be changed on the control panel. Automatic shutdown occurs during the power failure or



during pause in operation more than 3 minutes (time value can be changed according the characteristics of the adhesive system).

Nozzles are made from special material with no adhesion to PUR, and designed to apply adhesive directly on the sides of the grooves.



Pumping station is designed for adhesive feeding from the main tanks to the applying node. It consists from the frame for IBC container, or 200L drum and gear dosing pump station. For adhesive feeding are used chemical resistant high-pressure hoses.

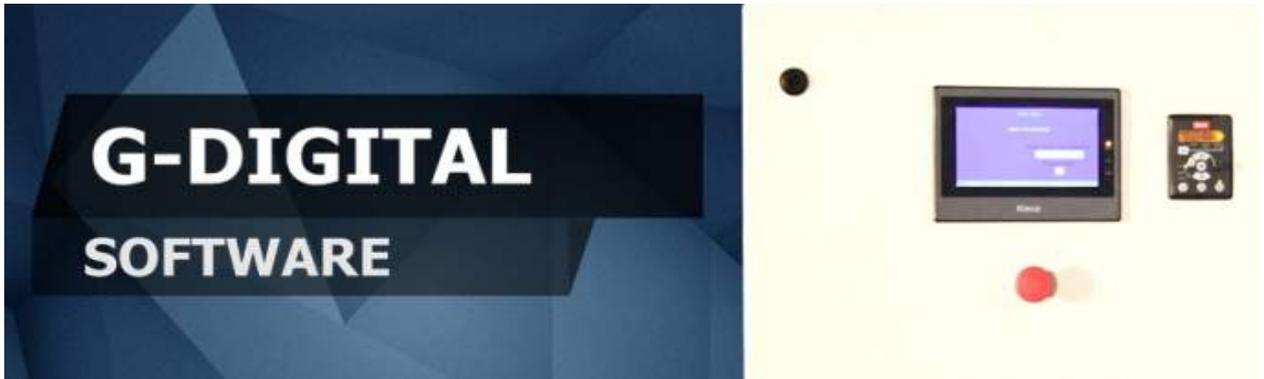
Adhesive dosing pump made of steel with high-precision surface work

area, axial and radial gaps between the working parts of the pump are no more than 6 microns. Absence of sealing rings, gaskets, bushings, bearings allows using various modifications of single component solvent free



polyurethane adhesives without routine technical services.

Adjustment of dosing rate of adhesive provided by the controller and frequency converters with vector operation system (Danfoss, Denmark). If viscosity of the adhesives changes, torque rate of the pump will be corrected automatically, that allows to meter an exact amount of glue with accuracy (± 5 gm/m²) leveling its viscosity difference.



Control system is based on PLC and sensor control panel. Frequency converters are controlling the pump and feeding characteristics.



Gluestream machinery is equipped with remote access module that provides our customers with 24/7 online support. This system helps our clients to get immediately a help in emergency situations, no matter in which part of the world our machinery is situated.

Main technical specification*:

| | |
|---|-------------------------|
| Adhesive system type | Single component PU |
| Adhesive system name | Henkel Purbond |
| Applying, mm | according to the scheme |
| Height of lamella, mm | 20 |
| Minimal length of lamella, mm | 300 |
| Adhesive consumption, gr/m ² | 100-200 |
| Applying speed rate, m/min | 25 - 50 |
| Remote monitoring via internet | Yes |
| Dry lamella function | if required |
| Overall weight, kg | Not more than 400 |
| Power, kW | Not more than 5 |
| Dimensions (LxWxH), mm | 1200x1200x1700 |

*** if there are parameters you need to change, it is discussable.**

Best regards,
Ing. Igor Garasayan,
CEO, Gluestream s.r.o.