

GLUEMIX

The true compact dosing installations for plural component glues, sealants and casting compounds!

WILTEC

STATE OF THE ART

Wiltec has specially developed the state-of-the-art GlueMix product range to facilitate the mixing and dosing of 2 or even 3 component glues, resins, sealants, and casting compounds (potting), in situations that require exactitude of the mixture and the volume to be applied. The GlueMix is universally applicable, for products with an extremely low, as well as a very high viscosity. With the GlueMix product range, all possible mixing ratios can be covered and programmed (1:1 through 100:1).

As we have our own engineering department, we can adjust or integrate customer demands in the area of software, management, and process control. The GlueMix is suitable for both manual and automated applications, and can be used for mixing of, for example, polyurethanes (PU), MS Polymers (MS), SMPs, epoxies, polysulfides, silicones and contact adhesives.

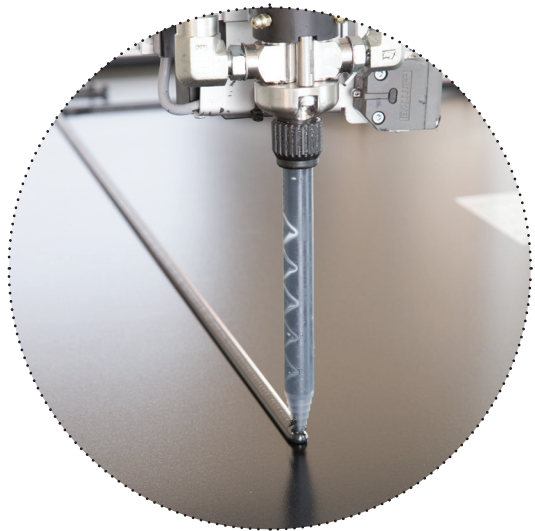


How does it work?

The GlueMix dose is based on volumetric mixing ratios, which means that, regardless of any variations in viscosity, the result will always be consistent.

The GlueMix is fitted with 2 (or 3) gear pumps, which are operated by frequency controlled asynchronous electric motors (the FX has 1 motor that operates 2 gear pumps!). Each motor is fitted with a pulse generator, allowing constant “feedback” control, which keeps the mixing ratio consistent, regardless of load.

The use of gear pumps makes it possible to dose in shots as well as by continuous supply. The gear pumps used are virtually maintenance free.





THE GLUEMIX PRODUCT RANGE

- Fully compliant with CE regulations
- The components that handle materials are made of inox
- Very accurate and utterly reliable

The GlueMix **FX**

The GlueMix FX is the compact dosing installation for mixing two component materials. Due to its limited size, it can be placed on a table in the production line, or on a work bench. The mixing ratio is set (not variably adjustable, controlled by 1 motor) and is set to the correct mixing ratio, based on the material specification, prior to commissioning (mechanically adjustable). It can be used in combination with a manual applicator gun or with an automated applicator gun linked directly to the installation.

The GlueMix **VR & VR-HV**

The GlueMix VR (Variable Ratio) and the GlueMix VR-HV (High Volume) versions, as opposed to the FX version, can be variably adjusted in terms of mixing ratio. Due to the larger pumps, higher quantities per time unit can be generated. The VR-HV version is capable of producing as much as 10 litres per minute. Please see the specifications for more details.

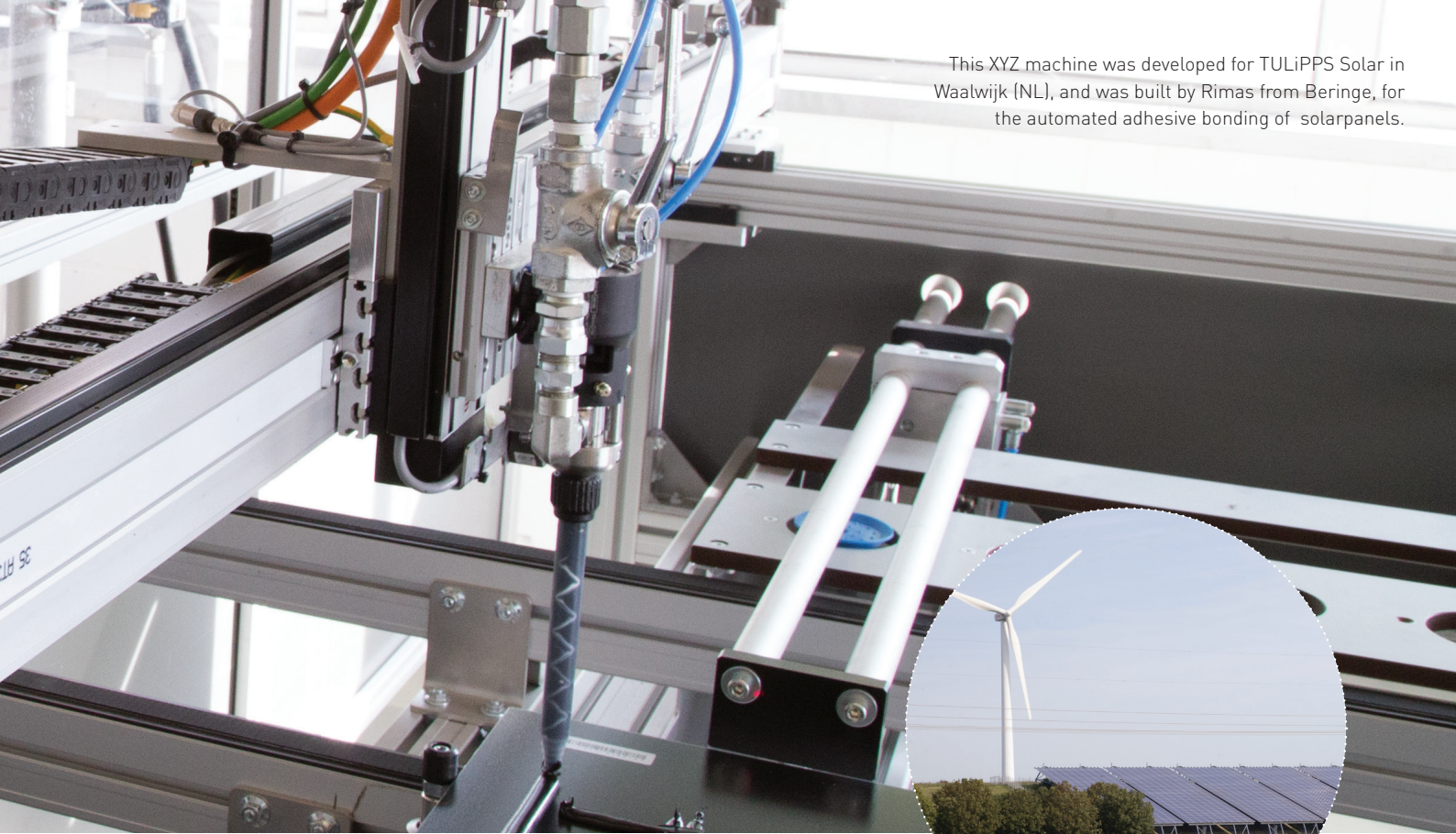
The GlueMix **VR-HP**

The VR-HP (High Pressure) version can sustain pressure of as much as 210 bar. This is especially important for highly viscous materials in combination with a high output demand.

The supply systems

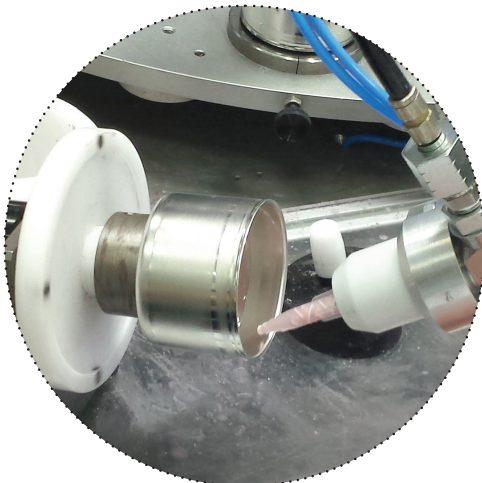
For the GlueMix machines, the required feed of the two components (base material and hardener) can be supplied by gravity cups, pressure tanks with or without agitators, or in combination with supply pumps, like diaphragm, piston, or shovel pumps, straight from the factory packaging (barrels, drums, containers). By use of, for example, hand guns, XYZ tables, or a Wiltec robot, subsequently the products can be accurately applied in the required quantities.

This XYZ machine was developed for TULiPPS Solar in Waalwijk (NL), and was built by Rimas from Beringe, for the automated adhesive bonding of solarpanels.



GlueMix general applications

- Manual or automatic placement of adhesive beads;
- Filling electronic components in synthetic casings;
- Injecting into hollow spaces in synthetic casings or aluminium profiles;
- Dosing of 2K or 3K glues in storage cups and buckets to be processed by using rollers, brushes, or spatulas.



GlueMix product applications

Below a number of practical applications of the GlueMix are set out:

- Production of industrial filters;
- Impregnating synthetic fibre reinforced pipes with resins;
- Adhesive bonding of insulation materials, such as for sandwich panels;
- Adhesive bonding of windows and profiles in the automotive transport sector;
- Adhesive bonding of lighting elements;
- Potting, coating of electronic components, such as sensors;
- Adhesive bonding of stone strips for prefab façade elements;
- Adhesive bonding of aluminium onto synthetics;
- Adhesive bonding of solar panels;
- Adhesive bonding of synthetic windows and doors.

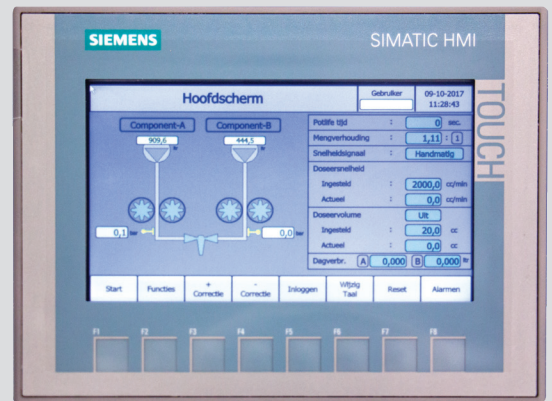
Operating software GlueMix series

The software of the GlueMix is fitted with several important safeguard features as standard:

- Pot-life (processing time) control: before the material hardens, an alarm is activated;
- Level control: provides early warning to prevent air from being sucked in;
- Pressure control: warning if the pressure gets too high or low in relation to the set operating pressure;
- Dosage speed: pump speed is pre-programmed to ensure a consistent result;
- Filling quantity: After reaching the set dosage volume, the machine stops automatically;
- Parameter security: the machine is secured against incorrectly set programs;
- Malfunction alarm: in the event of a malfunction, the machine immediately shuts down and registers the malfunction.

In addition, the VR version also has:

- Automatic purge: gun doses automatically, so that the contents in the mixing pipe remain fresh;
- Flush: A single component can be used for flushing so that the mixing pipe doesn't harden;
- Calibration: for calibrating the pumps so that the mixing ratio remains within the 1% maximum deviation.



Gear pumps

The gear pumps used for the GlueMix are produced with Swiss precision and have a history of many years in the automobile industry, during which they have proven their quality. The pumps have a double (oil-filled) seal, making them virtually maintenance free. The pump-surface is fitted with a hardened layer (Vickers 4000), guaranteeing a long lifespan even when abrasive materials are used.

Compared to other gear pumps, our pumps have an extremely small slack-tolerance, which ensures they produce a very accurate result. The extensive supply programme contains pumps of 0.05 to 100 cc/ per cycle.



Applicator gun

Different types of 2-component applicator guns can be used in combination with the GlueMix. For manual application there is the versatile, lightweight "2K MD2" gun with bottom handle, which can also be used together with a robot or X-Y table. For materials with deviating characteristics, a special applicator gun can be used.

The "Split Nose Piece", developed by Wiltec, can be mounted on the MD2 gun and delays the joining of the 2 components in the mixing pipe. This prevents pollution of the outflow of the gun itself. In addition, a bayonet connector ensures that the cleaning of screw-thread is a thing of the past.



Specifications GlueMix series

GlueMix version	FX	VR	VR-HV, VR-HP
Mixing ratio [1]	1:1 to 1:20	1:1 to 1:100	1:1 to 1:100
Mixing ratio [2]	Fixed	Variable	Variable
Flow	1:1 = 2 to 1.200 cc/min. 4:1 = 750 cc/min.	1:1 = 2 to 3.200 cc/min. 4:1 = 2.000 cc/min.	2 cc/min. to 10 l/min. (= HV version)
Operating pressure (pressure control)	100 bar (max.)	100 bar (max.)	100 bar (VR-HV) 210 bar (VR-HP)
Weight	28 kg	95 kg	110 kg (VR-HV) 100 kg (VR-HP)
Measurements (H x W x D)	420 x 365 x 690 mm	1.150 x 600 x 680 mm	1.150 x 600 x 690 mm
Pot-life control	✓	✓	✓
Purge	Optional	Automatic	Automatic
Rinse	✗	✓	✓
Level control	Static	Static / Level alert	Static / Level alert
Pressure control	✓	✓	✓
Calibration		✓	✓
Dosage speed	Freely adjustable	Freely adjustable	Freely adjustable
Filling quantity	✓	✓	✓
Parameter security	✓	✓	✓
Malfunction alarm	✓	✓	✓
Shut-off safeguard	✓	✓	✓

MORE INFORMATION OR CUSTOMISED ADVICE?

Wiltec has all the expertise required to adapt dosage and mixing systems to your individual product needs. Would you like more information, or no-obligation advice from our specialist? Please let us know!

**WE
ARE
THERE
FOR
YOU.**



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