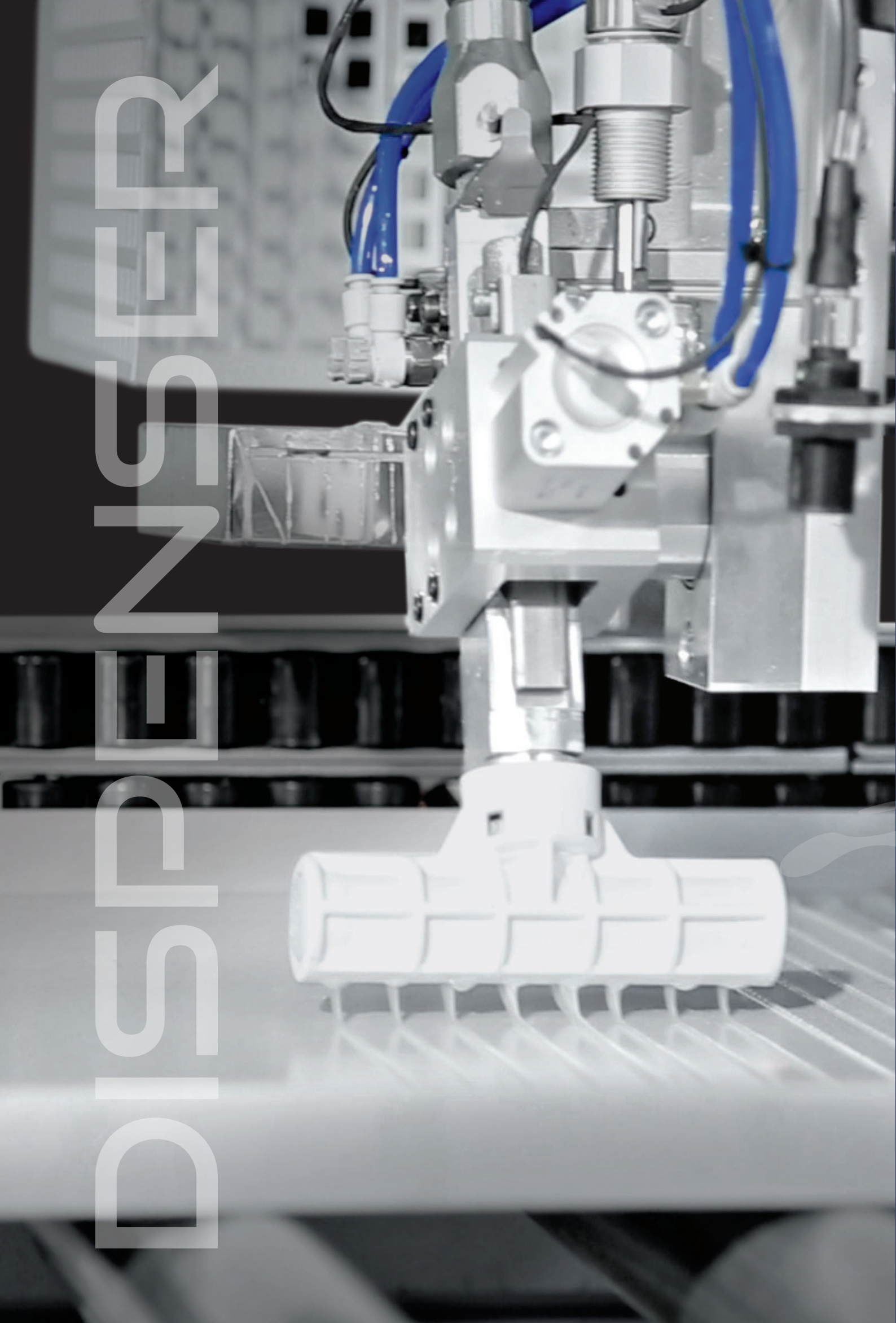


DISPENSER

FOR MONOCOMPONENT
AND BICOMPONENT
ADHESIVE





DISPENSER

MONO COMPONENT ADHESIVE DISPENSER

1K

Europoliuretani is able to offer a wide range of dispensers for the application of polyurethane adhesive.

Our strength lies in our ability to provide standard, simple, complex, automated, manual or customised dispensers that meet the many needs of our customers.

Each distributor has been designed for both manual and automated use suitable for application within a robotised system.

BASIC / EVO / IBC



1K BASIC

MONOCOMPONENT ADHESIVE

FEATURES

POLYURETHANE ADHESIVE DISPENSER



The **1K BASIC** system is suitable for low production quantities and has been designed to be practical, with movable carriage and compact dispenser that allow for ease of handling.

The dispenser has certain technical features that ensure the correct application of the glue and its chemical reaction. The pipes and the base where the glue drum is placed are heated to fluidify and maintain the quality of the chemical. The machine is equipped with a liquid atomising gun that can be used to speed up the reaction of the adhesive once it has been applied to the item.

TECHNICAL ASPECTS

- Chemical packaging capacity: 20 litres, 50 litres.
Changing of the drum: the cover can be lifted manually
- Chemical suitable for the system: with or without additives.
- Piping and drum housing: heated
- Diaphragm pump
- Flow rate up to 25 l/min
- Temperature control/setting: with temperature controllers
- Flow control: with compressed air.
- Version of gun installed: Standard.
- Airbrush: spray for atomisation of liquid.

The drum can be changed easily and quickly: simply lift the lid with the built-in diaphragm pump and replace it with the new one. In this way the system is ready to be used again. A series of gaskets will guarantee a moisture seal to avoid hardening of the glue.



Product replacement



The **1K EVO dispenser** allows the use of loaded glues with a viscosity of more than 5000 cps. There is a potentiometer in the system's electrical cabinet for precise control of the amount of product to be dispensed.



Lifting the pump to replace the drum/barrel.



1k EVO 200-litre dispenser

TECHNICAL ASPECTS

- Chemical packaging capacity: 50 litres, 200 litres.
- Drum change: automatic lifting of the pump with pneumatic column piston.
- Chemical suitable for the system: with and without additives for both types of pumps.
- Drum pipes and housing: heated.
- Pump: gear driven by an electric motor (with flow rate of up to 5 l/min) or piston motor (up to 25 l/min) depending on the viscosity of the product.
- Temperature control/Setting: by means of temperature controllers.
- Flow rate regulation: via potentiometer for motor speed regulation with gear pump; the air pressure is applied to the piston pump.
- Gun version installed: standard replaceable with other models.
- Airbrush: spray by liquid nebulisation.



Watertight sealing system

The system consists of a carbon steel frame which houses both the pumping system with its chemical drum and the electrical panel to control the system. The pumping system takes the chemical from the packaging and conveys the fluid through a special pipe to the dispensing gun. This pipe and glue drum are heated to allow both better fluidisation of the product at cold temperatures and faster reaction of the adhesive itself.

The empty drum in the dispenser can be changed quickly and easily for both the piston pump system and the gear pump system: since the pump system has to be lifted, the machine has been equipped with a column with an air piston that allows the drum to be changed with ease.

With a simple start control, the pump is automatically lifted while waiting for the drum changeover and then goes back into place to resume operation. A special system of gaskets guarantees resistance to humidity to prevent the adhesive from hardening.



Heated base and drum with thermal band

The **1K IBC dispenser** for monocomponent glues, with a capacity of 1000 litres of the chemical product, is suitable for operators in sectors where a large quantity of the product is required. Generally this type of system is combined with automated systems for application of the glue.



TECHNICAL ASPETCS

- Chemical packaging capacity: 1000 litres.
- Chemical suitable for the system: with and without additives.
- Piping: heated.
- Cube housing base: with containment basin.
- Pump: geared with electric motor.
- Temperature control/setting: by means of a temperature controller.
- Flow regulation: through potentiometer for motor speed adjustment.
- Standard gun version installed.
- Airbrush: spray by liquid nebulisation

The cube, in which the polyurethane glue is present, is located on top of a carbon steel frame, whose structure allows it to also act as a containment basin, designed specifically in case of accidental spills of the chemical product. The pumping system, the storage tank and the electrical control panel are housed in the same frame.

The gear pump, which takes the chemical from the cube to start it at the dispensing gun, is driven by an electric motor and in addition it is possible to install a magnetic coupling (optional) between the pump and the motor in order to avoid any physiological leaking of the product from the gaskets.

In the long term, with this option, possible blocking of the pump caused by the reaction of the chemical with the air is avoided.

The 10-litre (heated) tank has been designed to avoid any problem when the product is about to finish. In fact, the tank with its level sensor warns the operator when the remaining chemical is about to run out: this enables replacing of the cube, preventing the air from passing through the circuit and, interacting with the chemical, damaging the machine. The cube is changed simply and intuitively: simply unscrew the pipe connecting the cube, reposition the full load and reconnect the pipe.

The pipe that carries the chemical product to the head of the dispenser is heated to thermostat the product at the correct temperature.

The system is supplied with a liquid spray gun (optional use) to speed up catalysation of the glue once applied to the product.

The control panel houses the thermoregulator for setting/regulating of the pipe temperature, the thermoregulator for the tank and a potentiometer for adjusting the quantity of glue.



DISPENSER FOR BI-COMPONENTI ADHESIVE

2K

This dispenser has been specially designed to mix bi-component polyurethane glues. The increasingly frequent demand for polyurethane glues in the industrial sector, for perfect and lasting bonding, has resulted in the market demanding increasingly reliable, precise and at the same time easy to use machines for optimal mixing of the components.

With its experience in designing foaming machines, Europoliuretani set out to draw on the same know-how for the design of adhesive dispensers.

SERIE 30
SERIE 100

1K DISPENSER FOR MONOCOMPONENT ADHESIVE

DISPENSING GUNS FOR 1K DISPENSER

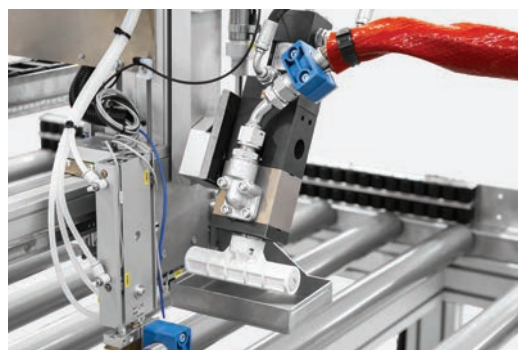
Each monocomponent glue dispenser is supplied with a standard gun that can be replaced with other models on customer request. The choice is mainly made considering the type of work, its grinding wheel and any combined system. Ergonomics, weight, duration and type of system are the characteristics that vary from one to another.



Standard dispenser



Magnet dispenser



Dispenser for automated systems

The **standard dispenser** gun is undoubtedly the lightest and most agile dispenser; periodically it requires replacement of the gaskets.

The **magnet dispenser** gun, the improved version of the standard dispenser, has no seals and is more reliable over time, with a slightly higher weight and different ergonomics.

The **automatic gun** version is only used for those dispensers to which an automated system for large productions will be applied, it is normally connected to a hydraulic control unit.

In all the versions assembly of the easy-to-replace (disposable) distributor comb is envisaged: the disposable comb has a bayonet coupling, simply place it on the tip of the gun, rotate it a few degrees and it is ready for use.

The reverse operation must be performed for replacement.

Other and possible distribution combs can be designed/supplied according to customer requirements.



Replacing the disposable comb of the dispenser

DISPENSER 2K

BI-COMPONENT ADHESIVE

FEATURES

POLYURETHANE ADHESIVE DISPENSER



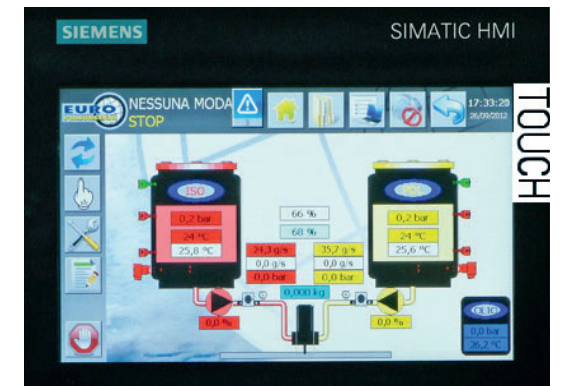
SERIE 30 / SERIE 100

The **2K dispensers** are built in a solid carbon steel frame, on which components of internationally recognised high quality brands are installed. The **2K dispenser** can be configured with 30- or 100- litre tanks and can mix components either with or without additives. If the additives contained within the components are abrasive, Europoliuretani is able to provide a special treatment to the pump to prolong its life.

The gear pumping system takes the chemical from the tanks (the latter can be heated and pressurised up to 2 bar) and sends the fluid to the dispensing gun via a special heated pipe. Thermostatisation of the chemical lines and of the tank improves fluidisation of the product in cold temperature conditions and enables a greater reaction speed of the glue itself. Usually, the machine is supplied with a standard control panel to control the main functions of the machine, but at the customer's request a PLC can be installed to ensure better control of the system through additional applications: it is an example of the possible connection to a robotised system.

ASPETTI TECNICI

- Chemical packaging capacity: 30 or 100 litres.
- Chemical suitable for the system: with and without additives.
- Piping: heated.
- Pump: geared with electric motor.
- Temperature control/setting: by means of a temperature controller or PLC.
- Flow regulation: through potentiometer for motor speed adjustment or PLC.
- Standard gun version installed: with static mixing system.



Version with PLC

MIXING SYSTEM

The static system (the most widely used), involves the use of both plastic and metal mixers. The concept behind this mixing method is that there is no need to wash the mixing chamber once the product has been dispensed because, as there are no moving parts, no blockage can occur.

The metal mixers, based on the reaction time of the chemical, must be washed after a prolonged stop, while the plastic mixers are disposable. The choice of the appropriate type of mixer takes place considering the type of chemical product, i.e. the stoichiometric ratio of the components, the viscosity of the materials and the quantity of product to be dispensed.



Static Mixer



Dispenser 2K serie 100 lt.



Dispenser 2K serie 30 lt.

APPLYING

1K AND 2K DISPENSER

POLYURETHANE
ADESIVE SYSTEMS



MANUAL SPREADING



Applying the adhesive



Nebulisation



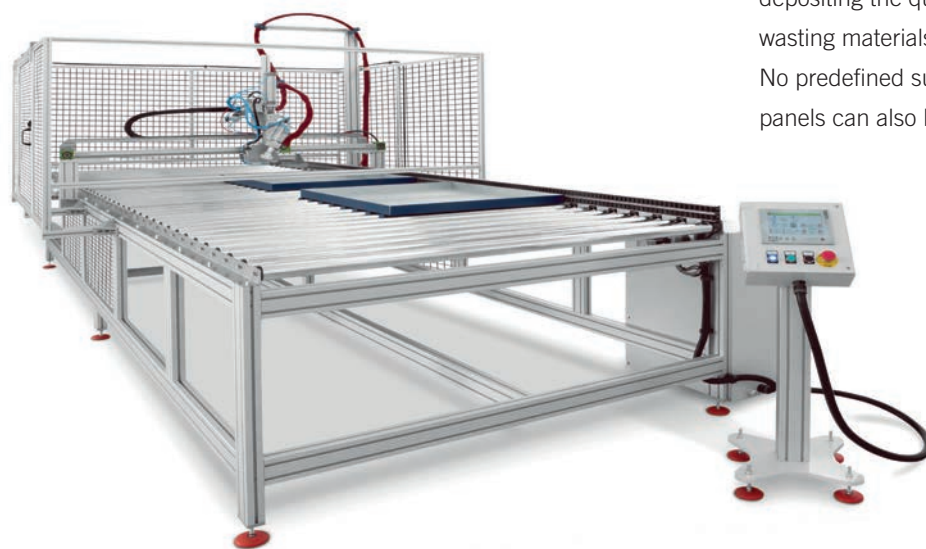
Positioning of the materials to be glued

Europoliuretani also designs and manufactures automated systems for the application of polyurethane glue (monoand bi-component) made to measure to meet the needs and requirements of the customer. Below are two examples of automatic dispensers, customised and designed by Europoliuretani for our customers.

APPLICATION WITH AUTOMATIC ROLLER CONVEYOR

Example of robot for the application of glue on flat panels with or without edge. The operator need only place the panels on the motorised roller table and the system will automatically read the length and width of the panels depositing the quantity of chemical required, without wasting materials and speed in operation.

No predefined support sequence is required and the panels can also be of different sizes.



Example of robot for the application of glue on flat panels with or without edge.

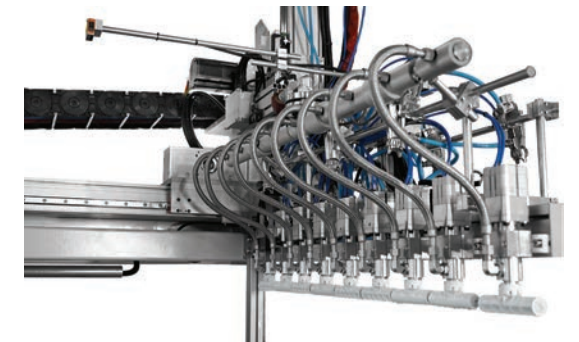


Automated dispenser

EXAMPLE OF APPLICATION WITH CUSTOM ROBOT

The operator will place the large panel on a mobile carriage and position it easily at "point 0" to begin applying the adhesive. Sensors automatically detect the shape of the panel, either linear or arched. The robot moves along both the horizontal and vertical axis, to follow the progress of the panel, either flat or curved.

A feature that makes the system functional is its adaptability to all types of panels. The system envisages both the use of dispensers with "comb", which allow the glue to be distributed homogeneously over the entire surface, and dispensers "without comb". The comb dispenser can be assembled/removed easily via a "click" system as for the manual dispenser.



Example of 3-axis Cartesian robot for glue application



SUPRAFX

POLYURETHANE

ADHESIVE

The SUPRAFX range of Europoliuretani proposes several mono and bicomponent polyurethane glues. SUPRAFX is based on compounds capable of firmly bonding different materials. Once it has permanently hardened it acquires a very strong resistance.

ADVANTAGES

- binds a wide variety of products;
- flexible or rigid;
- slow to fast polymerisation time;
- good chemical resistance and oil resistance;

SUPRAFX
POLYURETHANE
ADHESIVE



SUPRAFX

Suprifax is a line of polyurethane adhesives. It is a reactive compound that adheres perfectly to many substrates and is versatile with excellent performance characteristics.

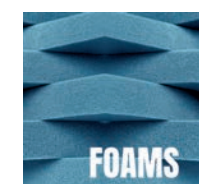
FEATURES

- Resistant to high temperatures
- Weatherproof
- Water-resistant and water-repellent

Bio based

A high-tech polyurethane adhesive with a focus on the environment. We have developed Suprifax to be plant-based using vegetable and/or natural composites.

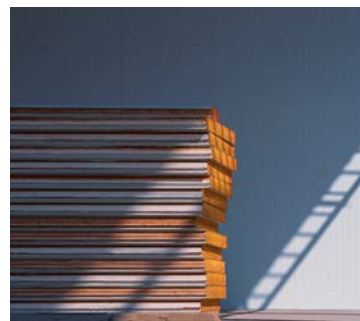
MATERIALS



APPLICATION SECTORS

the main areas of application:

- **HVAC:** heating, ventilation and air conditioning.
- **Transportation:** finsulated and isothermal vans, refrigerated vehicle bodies, caravans, etc.
- **Insulation:** sandwich panels, multi-layer panels, insulated panels, cold rooms, walls for thermal insulation or protection against sound, noise barriers, etc.
- **Furniture:** Furnishings, wall tiles, bathroom furniture, doors.
- **Aeronautics and boating.**
- **Flooring** with parquet, linoleum, tiles, anti-shock tracks, etc.
- **Costruction and building:** roofs, profiles, frames, prefabrication in steelwotk and shipbuilding support, etc.
- **Safety:** fire doors, clean rooms, etc.
- **Pipes**
- Altri.



HEADQUARTERS

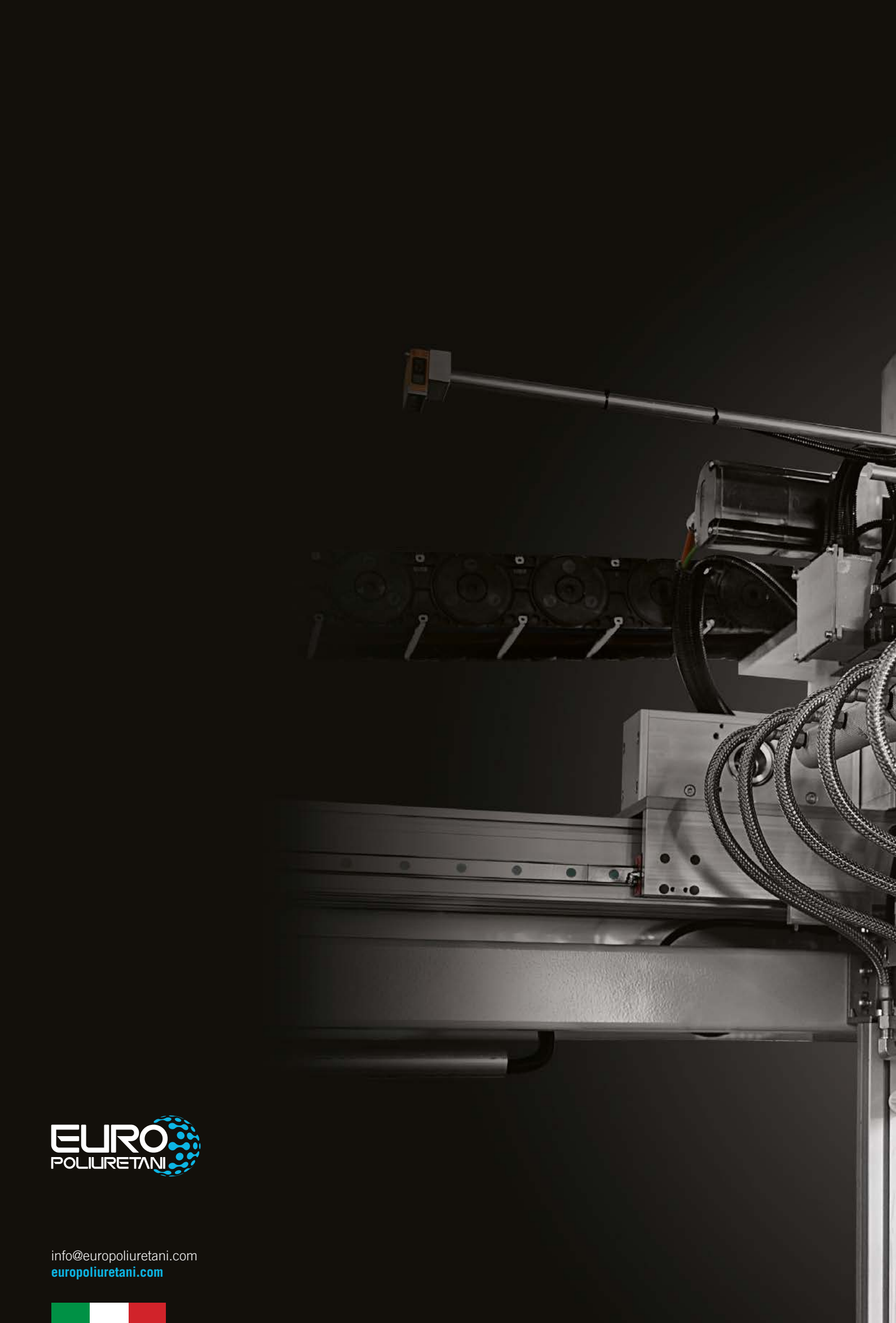


EURO
POLIURETANI

Via Castellana 68
35010 Trebaseleghe
Padova - Italy

T +39 049 9386521
F +39 049 9386910

info@europoliuretani.com
europoliuretani.com



info@europoliuretani.com
europoliuretani.com

