

Sonderhoff presents its new 2C PU adhesives for the automatic gluing of components at Bondexpo

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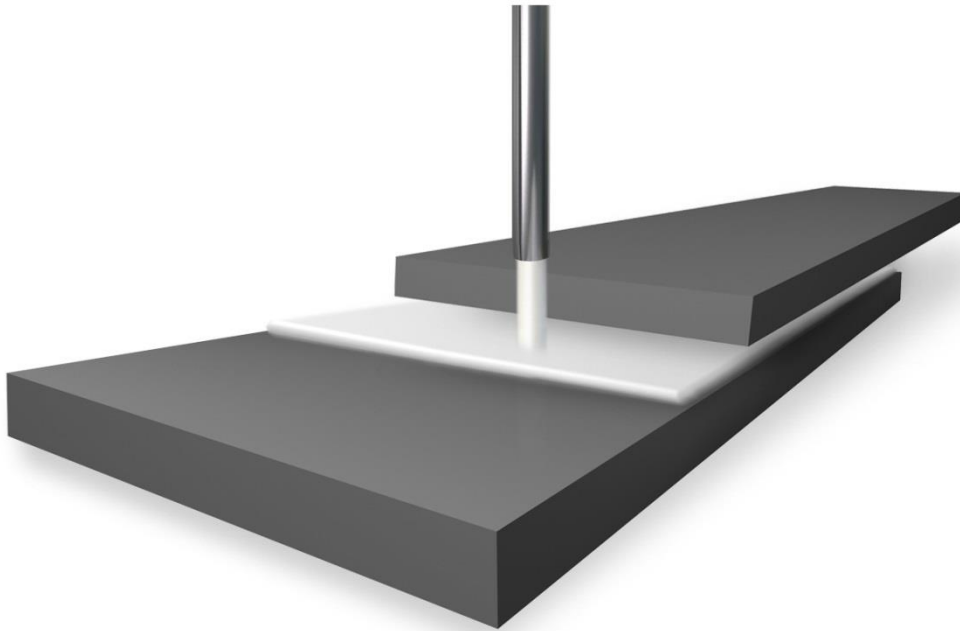
The Sonderhoff Group, which belongs to Henkel AG & Co. KGaA since the beginning of July, uses the 11th Bondexpo from October 9 to 12 to present the new adhesive systems of the Fermaglu® product family. Sonderhoff formulates the two-component polyurethane adhesives for a wide variety of requirements and industries. The scope of parts ranges from switch cabinet construction, electronics, lighting, automotive, air condition, filters, photovoltaic to household appliances.

The gluing process with Fermaglu® will be demonstrated live on the Sonderhoff stand. The SMART dispensing cell, developed by Sonderhoff, automatically applies the 2-component polyurethane adhesive to prepared substrate samples.

Wide range of applications

Polyurethane as the basis for the two-component adhesive systems Fermaglu® offers a large modular system for a recipe assembly adapted to different applications. For instance, the sealant, adhesive and potting specialist Sonderhoff has developed the Fermaglu® adhesives in various degrees of hardness that can be modified according to the customer's requirements. This gives the user exactly the adhesive hardness that matches the expansion behavior of the substrates to be bonded to one another. In the event of possible material stresses due to different expansion behavior of the substrates because of temperature, Fermaglu® has a balancing effect.

The Fermaglu® adhesive systems also offer a wide range of viscosities ranging from liquid to stable. This allows the application of glue beads of different sizes. With Fermaglu®, a broad spectrum of tensile strength and elasticity can be covered that meets the high demands for the different gluing applications. Solid and permanent adhesive bonds are formed under curing at room temperature.



Fermaglu® adhesive systems cure under room temperature to become solid and permanent adhesions

The curing speed is variable over the formulation in wide ranges. The through-hardening can be accelerated by gentle heating in the tempering furnace or by infrared irradiation.

The Fermaglu® adhesive systems have very good adhesion to thermoplastics or thermoset (also fiber-reinforced) plastics, SMC plastic, metal or glass. There are a large number of components in the vehicle construction sector for example: KTL coated metal frames for sliding glass roofs, PMMA or PC with scratch-resistant coatings, gluing of headlight housings, fiberglass sandwich constructions, roof panels, trim and spoilers as well as ABS or PP-based tailgates.

System-2 – the application process with material and machine from a single source

The formed-in-place dosing technology for the gluing of components from different substrates is used in many industrial sectors. Applied with the same mixing and dosing systems from Sonderhoff, it is also the production standard for foam sealing and potting.

Adherence to a precisely defined mixing ratio of the two Fermaglu® material components is a prerequisite for a perfect adhesive result. This is ensured by the mixing and dosing systems from Sonderhoff, which can be integrated very well into fully automatic serial production.

The exact positioning of the mixing head of +/- 0.1 mm above the component ensures a repeatable adhesive application. Precise plant engineering is a prerequisite for this. And a systematic process monitoring with a traceable documentation of each processing step is provided by the dosing system at any time.

The Fermaglu® recipes are designed in such a way that the pot and reaction times can be adjusted flexibly. Thus the adhesives are adapted to different process requirements and production concepts in their reaction behavior.

The System-2-concept from Sonderhoff offers material and machine, which are precisely coordinated with one another, from a single source. This makes it possible to produce optimal adhesions in repeatable quality.