

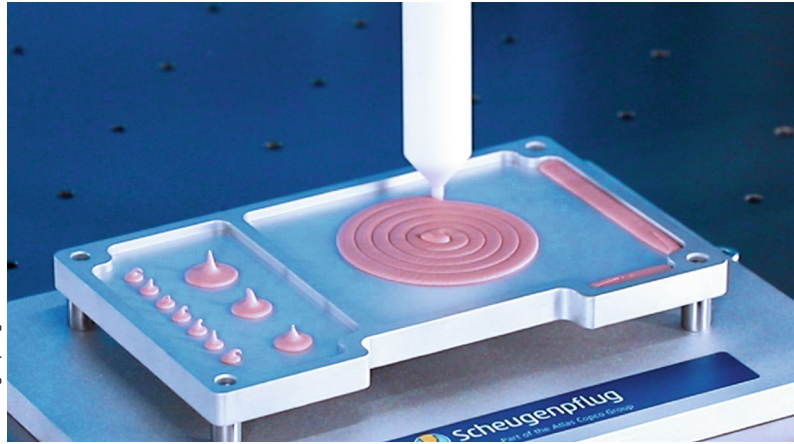
Precise Dispensing at the Highest Speeds

In electronics production, there is a demand for increasingly short cycle times, while at the same time components are becoming smaller and smaller. Scheugenpflug is meeting these demands with two newly developed piston dispensers for dispensing very small quantities and for the highest dispensing speeds. Particularly when highly viscous materials such as thermally conductive heat transfer adhesives for ECUs or battery systems are used, the material usually needs to be dispensed as quickly as possible.

According to the manufacturer, the new model DosP DP2001 can also dispense high-viscosity one-component materials from 0.06 ml to 20 ml and two-component materials from 0.1 to 40 ml up to ten times more quickly than comparable solutions on the market. Powerful servo drives ensure high dispensing speeds and an optimized power transfer. This makes the dispenser, which works without a diaphragm and is particularly pressure stable, suitable for highly automated production lines. To achieve the high dispensing speeds even with high-viscosity thermally conductive heat transfer adhesives, the DosP DP2001 is fitted with a special static mixing tube that can withstand the highest dispensing pressures without plastic deformation.

Highly precise dispensing of even the smallest volumes

The low-volume dispenser DosPL DPL2001 has been specially developed for the smaller and smaller dispensing quantities that are required due to the ongoing miniaturization of electronic components. The dispensing quantity includes one-component materials from 0.003 ml to 2 ml and two-component materials from 0.006 to



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Highest dispensing speeds even with highly abrasive materials

4 ml. This high dispensing accuracy with fast cycle times is made possible by a new displacement-free valve system, which is also suitable for the use of abrasive materials due to its robustness. Both dispensing solutions from Scheugenpflug feature process monitoring and access to relevant process parameters. The sensor technology and software continuously monitor the dispensing pressure for each component. //

More information: www.scheugenpflug-dispensing.com

SLA 3D Printing Resin with a High Level of Detail

Henkel is expanding its range of high-performance photopolymer resins for VAT polymerization processes. The new resin, which is called Loctite 3D IND408, has been specially developed for stereolithography technology (SLA) and enables the production of parts with isotropic properties and low moisture absorption. It can be used at very fast print speeds. According to the manufacturer, the printed parts have fine features and a smooth and glossy surface finish, making them particularly suitable for design visualization. The company also points out its excellent thermal performance at temperatures greater than 100 °C. The resin therefore offers unique properties in the market. The material is currently available in black color. //

More information:
www.loctiteAM.com
www.henkel.de



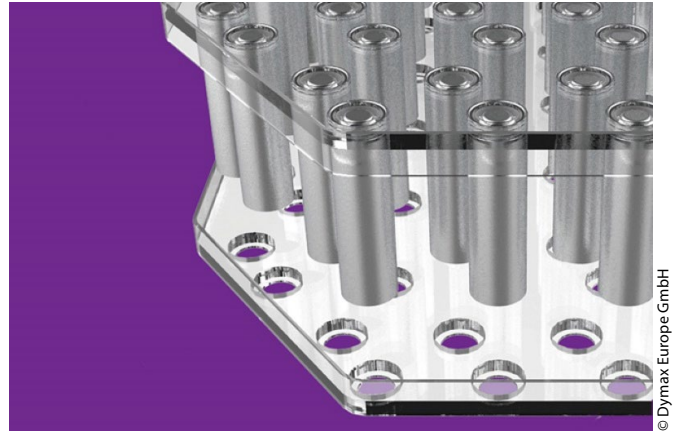
© Henkel

The resin provides fine features and a smooth surface finish.

New Structural Bonding Adhesive for Electric Vehicle Batteries

Dymax has presented its latest adhesive for the assembly of electric vehicle batteries. The extremely low-shrinkage UV adhesive called Dymax 9501-F has been specially designed for fixing cylindrical battery cells to plastic bases and holders and, according to the manufacturer, has excellent bond strength to common substrates such as PC, PC/ABS, nickel-plated steel, and aluminum. It cures tack-free in seconds when exposed to UV or visible light and is also LED curable at a wavelength of 385 nm. As Dymax points out, the fast curing time allows assembled components to be further processed very quickly on the production line, thus increasing throughput capacity and reducing the overall manufacturing and labor costs.

It has also proven to be very reliable in common electric vehicle tests, such as high-temperature, high-humidity, and thermal shock tests. The new adhesive is a solvent-free, one-component acrylated urethane, which is used to replace solvent-based epoxy urethane and silicone materials. This makes the entire production process much more environmentally friendly. With a viscosity of 10,000 mPa·s, the adhesive has a relatively high resistance to flow and stays in place when dispensed onto parts, thus making accurate assembly and on-demand curing easy to achieve. The product is also excellently suited for shallow potting and for



© Dymax Europe GmbH

New structural bonding adhesive for fixing cylindrical battery cells to plastic bases and holders

sealing connectors, thermal switches, and sensors, as well as for tamper-proofing applications. For easy quality inspection, the material fluoresces bright blue in color. // *Further information: www.dymax.de*

Adhesives for Environmentally Friendly Packaging



© Jowat SE

The bio-based adhesives are suitable for various applications in packaging processes.

Jowat is offering bio-based adhesive solutions based on pine resins for environmentally friendly packaging. The product Grow 853.20 has a bio-based raw material content of over 30 %, can be processed at temperatures as low as 120 °C, and also has a low susceptibility to stringing. At 50 %, the proportion of bio-based raw materials in the product Grow 853.22 is even higher.

This adhesive is reportedly suitable for an even broader adhesion spectrum, for difficult surfaces and, due to its high cold flexibility, also for deep freeze environments.

Energy savings of up to 45 %.

The hotmelt adhesive Toptherm 851.99 can already be processed at temperatures

above 99 °C with a broad spectrum of adhesion, which means that energy savings of up to 45 % are possible. It is suitable for temperature-sensitive products such as frozen foods or confectionery. It is also characterized by a high level of stability in the melt as well as clean dispensing, which results in lower maintenance requirements. In addition, according to the manufacturer, it offers up to 80 % less contamination compared to alternative products.

The adhesive Toptherm 256.10 is suitable for tray, carton, and box bonding. It offers clean processing at a high setting speed and is particularly resistant to cold and heat. The hotmelt adhesive is MOAH-free (below the typical detection limit) and is therefore particularly recommended for packaging confectionery, cereals, pasta, and other dry or fatty foods with a prolonged shelf life. //

Further information: www.jowat.com

Waterproofing, Adhesive and Grout Combined

Whether on balconies, arcades, terraces or even in bathrooms or showers: Composite waterproofing with ceramic coverings is frequently used. With MB FL 2K, Remmers now offers a new product for composite waterproofing work. The solution combines the three applications of waterproofing, tile bonding and grouting in one product.

According to the manufacturer, MB FL 2K has high resistance as well as good adhesion and can also be used on different substrates in compliance with standards. With its waterproofing as a mineral sealing slurry tested in accordance with DIN EN 14891, the product is said to enable the safe and uncomplicated waterproofing of a wide variety of surfaces. Thanks to rapid through-drying, work can be continued after just a few hours. It is also possible to work on critical substrates in the renovation of old buildings, such as old tile coverings. In addition, the product meets the requirements for joint mortar in accordance with DIN 13888, and thanks to the waterproofing of the joints, it is also suitable for exterior use. According to Remmers, the light base color of the material can be dyed in other color shades for the greatest possible visual design freedom. //

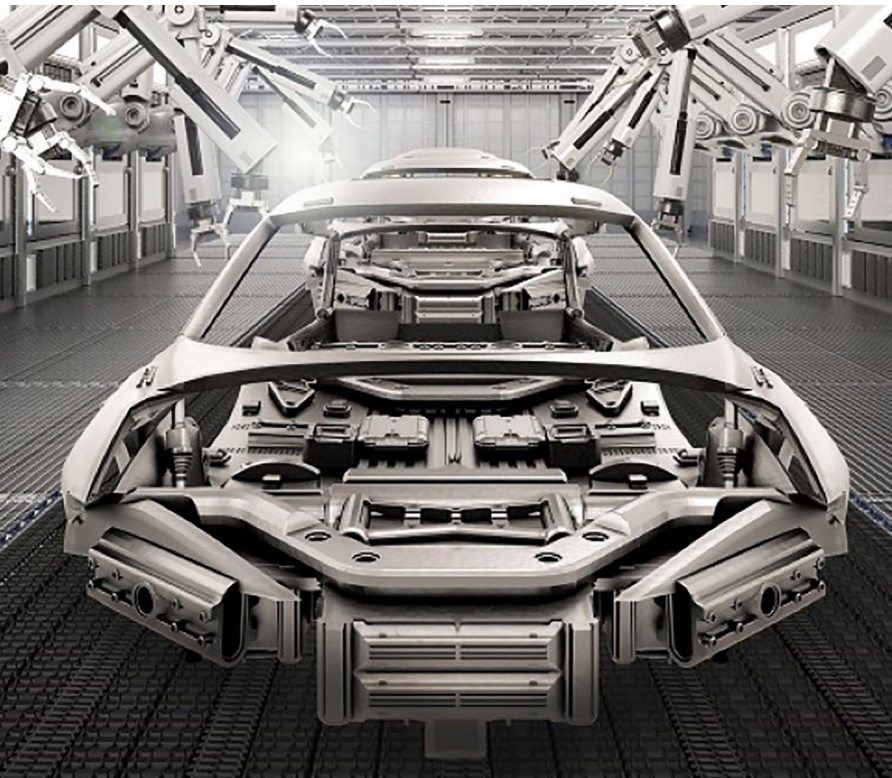
Further information: www.remmers.com



© Remmers

Application of the product MB FL 2K as a tile adhesive

Solvay's Adhesion Promoter Receives Award



© Solvay

Solvay's 'Addibond Polymer', used as a thin adhesion promoter film between aluminum and adhesives in automotive applications, has received the 'Solar Impulse Efficient Solution Label'. The label, created by the Solar Impulse Foundation, recognizes efficient solutions that are both sustainable and profitable.

"Optimized adhesion of metal-to-metal bonds enables vehicle manufacturers to reduce or eliminate the multitude of fasteners, for example nuts, bolts, screws or rivets, in aluminum components – a key factor in lightweighting vehicles for the benefit of increased fuel and energy efficiency," says Dr Marie-Pierre Labeau, Metal Treatment Platform Project Leader at Solvay. "This has led to the need to improve the reliability of metal-to-metal bonds, for which the right surface treatment is critical."

Addibond polymers are designed to exploit the lightweighting potential of aluminum and other light metals in broader applications, such as construction, industrial equipment, electronics and aerospace, he said. At the same time, they meet increased sustainability standards in manufacturing processes, according to Solvay. //

More information: www.solvay.com

Addibond polymer helps replace screws, bolts or rivets.