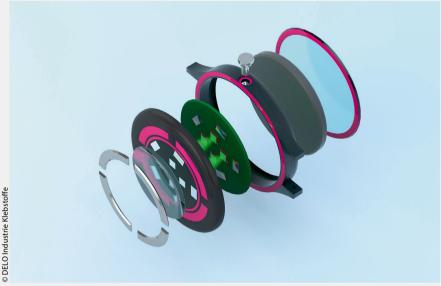
#### **Adhesive**

### New Adhesive for Biosensors in Medical Electronics

The medically compatible adhesive Delo Monopox MG3727 is based on an established product in consumer electronics, which is characterized by low temperature curing and drop resistance. The product is non-cytotoxic and therefore meets standards such as DIN EN ISO 10993-5, which are required for classification as medically compatible.

The new adhesive is particularly suitable for the production of biosensors, including ECG electrodes. It shows good adhesion to stainless steel, which often plays a central role in the construction of such sensors, with a compressive shear strength of 11 MPa. In addition, the 1-component, solvent-free and moisture-resistant product has a low modulus of elasticity of 160 MPa, making it resistant to cracking caused by sudden impacts, such as when a sensor is dropped on the floor. The low glass transition temperature of -52 °C helps the adhesive to maintain its properties over the entire temperature range in which biosensors are used.



Exploded view of an electrode assembly of a biosensor, adhesive colored magenta for illustration purposes.

It takes 10 minutes to fully cure at a low temperature of 90 °C, making it well suited for temperature-sensitive substrates. With a viscosity of 30,000 mPa s,

the product can be easily dispensed using a needle. Thanks to its blue fluorescence, the dispensing accuracy can also be monitored. // www.delo.de

#### **Container pumps**

## New Container Pumps for Lubricants, Adhesives and Sealants

Dopag has developed a new, modular series of container pumps for pumping lubricants, adhesives and sealants. The powerful, double-acting piston pumps convey the material directly, efficiently and without air pockets from the original container.



When developing the series, the focus was on high user-friendliness and flexibility in configuration. It consists of the two product lines Lubriline (LL) for lubricants and Glueline (GL) for adhesives and sealants.

The pumps are available in three versions for the typical container sizes of 30, 80 and 200 liters. The basic design always remains the same, while the other components can be individually configured according to customer requirements. There is a choice of 2-hand operation with additional safety features or 1-hand block control. The pump can also be equipped with various options such as filters, sealing liquid containers, deaeration or homogenization units as well as modules for external control or monitoring.

The container pumps are used in a wide range of metering applications in industry, for example for greasing and oiling in the automotive industry or for bonding components in household appliance production. //

www.dopag.com

The pumps for processing adhesives and sealants are available in container sizes of 30, 80 and 200 liters.

#### Adhesive tape

## Longwear Skin Tape for Blood Glucose Monitoring

Lohmann produces skin-friendly, biocompatible, high-tech adhesive tape products for the medical and healthcare industry, which are tailored to the requirements of sensitive and stressed



From adhesive formulation to cleanroom processing and die-cutting of the final product, wearables for the medical market are manufactured from a single source.

skin – for example that of the elderly, children or athletes. For the growing market of continuous glucose monitoring (CGM), the high-tech adhesive tape manufacturer has developed the DuploMED 85300 self-adhesive skin patch with a wear time of more than 28 days. This reduces costs and improves the environmental footprint, as CGM devices need to be changed less frequently.

The adhesive is breathable, skin-friendly and can be removed painlessly despite its long adhesion. Several wearer studies confirm its high reliability even under adverse external influences such as outdoor sports or heavy exposure to moisture when showering or swimming. From monitoring and healthcare to diagnostics, the medical sector requires cost- and time-efficient solutions that meet the needs of both an ageing population and chronically ill patients. In-house facilities for adhesive formulation, clean room processing, laboratory testing and prototyping, among others, enable the manufacturer to develop applications that meet the growing demand for reliable wearables. //

www.lohmann-tapes.com

# The Biggest Advantages of Battery-Dispensers:

- Fatigue-free
- Highest longevity
- Significant time savings

Don't waste time, performance, or money.

Did you know that sales of manual battery-powered dispensers in Germany account for only 2.8%?







#### **Dosing mixing system**

## Dosing Mixing Unit for Small to Medium Quantities of Synthetic Resin

With the MDM plus, Tartler offers synthetic resin processors a compact system solution for dosing, mixing and applying small to medium quantities of synthetic resin. At the same time, this system is suitable as an entry-level solution for users who have higher mixing quality requirements in the production and processing of modern synthetic resins than can be achieved with manual mixing or systems without volume flow control. For example, it can be used to produce containers or pipes using filament winding or to take advantage of pultrusion, resin transfer molding (RTM) or vacuum infusion on a small scale. "Thanks to numerous modular extensions, such as the volume flow control of mixing ratio and output, even such demanding processes and applications of synthetic resin processing can be realized cost-effectively with this compact system," confirms Managing Director Udo Tartler. The system stands out from the smaller table-top and rack-mounted units in the series thanks to its higher output of up to 6.5 kg/min and the allocation of a separate drive for each material com-



The mixing head of the dosing mixing system can be fitted with rotating disposable plastic mixers. This eliminates the need to use liquid detergents.

ponent (resin, hardener). It has a 7-inch touch panel and can optionally be upgraded with an integrated volume flow control. Other special features of the model include the fill level indicator for both components and the LC5/3 mixing

head. "This mixing head developed by us can be fitted with rotating disposable plastic mixers," explains Tartler. "This eliminates the need to use liquid detergents." //

www.tartler.com

#### **Adhesives**

# Improved UV Spot Curing System



The UV spot curing system for adhesives in the production of microelectronic and optoelectronic assemblies offers, among other things, improved interfaces.

Excelitas Technologies introduces the OmniCure S1500 Pro, a new UV spot curing system for adhesives in the production of microelectronics and optoelectronics. The next generation of the adhesive product offers improved interfaces and control options and delivers high intensity UV radiation with high reliability. Full backward compatibility with existing light guides and radiometers should ensure a seamless transition to the latest generation of equipment. All system functions have been tailored to automated manufacturing processes, for example for high-throughput UV adhesive curing or automated bonding in the production of microelectronic and optoelectronic assemblies.

A high-resolution 4.3-inch LCD touchscreen and the intuitive user interface allow easy operation. The integrated StepCure 2.0 programming tool enables application-specific programming of multiphase curing profiles and the configuration of a PLC output for controlling external functions. The proprietary IntelliLamp 2.0 technology permanently monitors the operating parameters of the lamp to guarantee a long lamp life of at least 2000 h with optimum performance. Users have access to a wide range of lamps and optical filters for different applications and can now replace them themselves. The system is also suitable for cleanroom use. //

www.excelitas.com

#### **Adhesives**

## Transparent and Optically Demanding Bonds

The new structural adhesive Weldyx Acrylate Clear from the manufacturer Gluetec Group is a 2-component acrylate adhesive with a mixing ratio of 1:1. Its broad adhesion spectrum enables easy bonding of a wide range of materials such as plastics, especially PMMA (Plexiglas), metals and composites. Once the reaction is complete, it offers high resistance to material fatigue caused by impact, peeling and pressure as well as a wide range of media. Its high UV sta-

bility increases durability. The aim of product development was to create an adhesive that is particularly resistant to chemicals and weathering and can withstand difficult application environments. Compared to similar structural adhesives, the odor impact for the user has been reduced and the open time has been improved to 1-2 minutes with a hand strength of 4-5 minutes. The adhesive bonds a wide range of substrates to plastics without the need for pre-

treatment with a primer. This makes it suitable for bonding and repairing clear plastics in areas such as advertising technology, POS construction, vehicle construction, assembly and industrial applications. For example, it can be used for bonding neon signs, bonding low-energy plastics in POS manufacturing, repairing polycarbonate headlights or assembling housings and covers for electricity meters. //

www.gluetec-group.com

#### Adhesive application system

## Easy Application of Thermoplastic Hot Melt Adhesives

The new EasyLine product line from Robatech includes the Easy melter, the Rio heated hose and the Twist spray head. The adhesive application system was developed to apply thermoplastic hot melt adhesives easily and safely and to glue trays, folding boxes, paper cups, ice cream cones or similar products. The handy and compact system is designed to combine functional minimalism with practical new features. At 16 kg, the Easy melter is also a lightweight melter.

"A maximum melting capacity of 2.5 kg/h and two heated hose connections are perfectly adequate for simple adhesive applications," confirms André Laubacher, Product Manager responsible at Robatech. "Customers get the functionalities they really need and benefit from fast commissioning and maintenance, as well as an attractive price-performance ratio."

The EasyLine can be connected quickly via plug-and-play connectors. The compact Twist spray head allows easy and flexible installation in machines thanks to the 22.5° adjust-

able head holder in conjunction with the variable positioning of the application nozzles. The adhesive filter is located in the fully insulated plug-in coupling of the heated hose, where it can be easily replaced. This keeps the application head clean and eliminates the need for time-consuming removal and installation. //

www.robatech.com



The adhesive application system has a handy and compact design.

#### **Cartridge System**

## Sustainable 2K Cartridge System

Medmix has been named a winner in the 2024 Big Sustainability Awards presented by the Business Intelligence Group. This achievement complements the company's Big Innovation Award in January 2024 for its Mixpac Greenline 400 ml 1:1 two-component cartridge set.

The Mixpac Greenline two-component cartridge systems are more sustainable products made of post-consumer recycled (PCR) or post-industrial recycled (PIR) materials, significantly reducing  $\rm CO_2$  emissions by up to 66 % without compromising on quality. These recycled plastic-based cartridge systems

include all the advanced design features and benefits of their proven versions made from conventional plastics, ensuring safety and minimizing cross-contamination risks. The Greenline versions maintain the same high-performance standards of the conventional Mixpac cartridges and are designed for seamless integration into existing compatible dispensers offering an eco-conscious solution without the need for process changes, thus bridging the gap between environmental responsibility and industrial efficiency. //

www.medmix.swiss