

Press Information

September 21, 2021

Highest process stability in fully automated processing and dosing of sealing foams, adhesives and potting compounds

World premiere: Henkel presents new generation of dosing machines at Fakuma 2021

Köln – Henkel will be presenting the new DM 502 generation of dosing machines with the newly developed MK 825 PRO mixing head at Fakuma 2021, the world's leading trade fair for industrial plastics processing, from October 12 to 16. The many innovative improvements serve one purpose: maximum process stability in the fully automatic processing and dosing of sealing foams, adhesives and potting compounds. The result is high-quality sealing, bonding or potting of components.

With the Sonderhoff System Solutions (S3), Henkel offers its customers tailor-made sealing, bonding and potting solutions, with material, machine and automation from a single source. For this purpose, the Sonderhoff SMART-M dispensing cell with the new DM 502 dosing machine and the newly developed MK 825 PRO mixing head will be operated live at booth No. 5109 in hall A5 at Fakuma.

The new mixing head has a maintenance-friendly, conical V-design and has been consistently further developed on the basis of the predecessor model MK 600, which has proven itself for 20 years, with many improvements and innovative features. This ensures maximum process stability for fully automatic sealing, bonding and potting with Formed-In-Place (Foam-Gasket) technology.

Broad data basis for optimized process evaluation and control

The sensors installed in the DM 502 dosing machine and the MK 825 PRO mixing head measure a wide range of data for seamless monitoring and compliance with critical process parameters, such as temperature, degree of air loading, sensor-monitored axial position of the agitator shaft, automatic control of the DVS stroke adjustment, and sensor-monitored needle positioning of the dosing valve. This provides the machine operator with a comprehensive database on the entire FIP(FG) application process. It enables fast and precise

data analysis for optimized process evaluation and control as well as predictive monitoring of material application processes and preventive maintenance of wear parts.

Innovative mixing head for the highest demands

In addition to better evaluation options, the new mixing head achieves outstanding dosing and process quality for even better results. In order to ensure an always optimal application process and higher machine availability, the new DM 502 dosing machine and the MK 825 PRO mixing head allow important machine parameters to be measured by integrated sensors:

- automatic positioning and speed control of the agitator in the mixing chamber,
- automatic stroke adjustment of the agitator with stepper motor and position monitoring,
- automatic air loading for optimum cell structure of the foam seal,
- automatic, sensor-monitored position of the dosing needle made of high-performance plastic in the shot and recirculation valve.

In addition, a greatly improved temperature control system has been introduced.

Added value through detailed process monitoring

The data collected via sensors at many points in the dosing system can be of great value for the customer's ongoing production. Sensors measure, for example, the interactions between the stroke setting of the agitator in the DVS-3 nozzle sealing system and the defined output quantity. These factors have a decisive influence on the foam structure of the seal, especially if it is to be very fine-cellular.

The stroke adjustment of the nozzle sealing system (DVS-3) is automatically adjusted via the control system on the MK 825 PRO, and there is also a sensor-monitored axial position of the agitator shaft. The new DM 502 also offers improved valve technology with process monitoring and needles made of high-performance plastic, which closes the dosing valve precisely even with very thin-bodied material.

The dosing pumps specially made for the DM 502 have a speed range that is twice as high and allow a wider discharge range of the dosing quantity from 0.05 g/s to 120 g/s. The newly designed pump flange makes it very easy to change the precision gear pumps. The new design and the arrangement of the modules in the machine cabinet enable significantly simplified maintenance.

High operating comfort through improved visualization

For operation of the DM 502 dosing machine, the multifunctional MP 2 mobile panel with 10.1-inch touchscreen or, as an option, the new CONTROL 3 multi-touch operating panel enlarged to 21.5 inches are offered. A new, user-friendly menu layout with central navigation and a uniform layout of the user interface enable intuitive menu navigation. Most of the designations on the touchscreen fronts have been replaced by universally understandable

symbols, which make menu operation independent from languages. In addition, it is possible to adapt the user interfaces to the different tasks and preferences of the machine operator.

Interactive remote maintenance together with the customer is also possible. For this purpose, Henkel service technicians connect online to the customer's operating panel and use the alarm logs of the DM 502 and the various visualizations of the process data for error analysis.

About Henkel

Henkel operates globally with a well-balanced and diversified portfolio. The company holds leading positions with its three business units in both industrial and consumer businesses thanks to strong brands, innovations and technologies. Henkel Adhesive Technologies is the global leader in the adhesives market – across all industry segments worldwide. In its Laundry & Home Care and Beauty Care businesses, Henkel holds leading positions in many markets and categories around the world. Founded in 1876, Henkel looks back on more than 140 years of success. In 2020, Henkel reported sales of more than 19 billion euros and adjusted operating profit of about 2.6 billion euros. Henkel employs about 53,000 people globally – a passionate and highly diverse team, united by a strong company culture and shared values. As a recognized leader in sustainability, Henkel holds top positions in many international indices and rankings. Henkel's preferred shares are listed in the German stock index DAX. For more information, please visit www.henkel.com.

Photo material is available at www.henkel.com/press

Contact Florian Kampf

Phone +49 221 95 685-285

Email florian.kampf@henkel.com

Sebastian Hinz

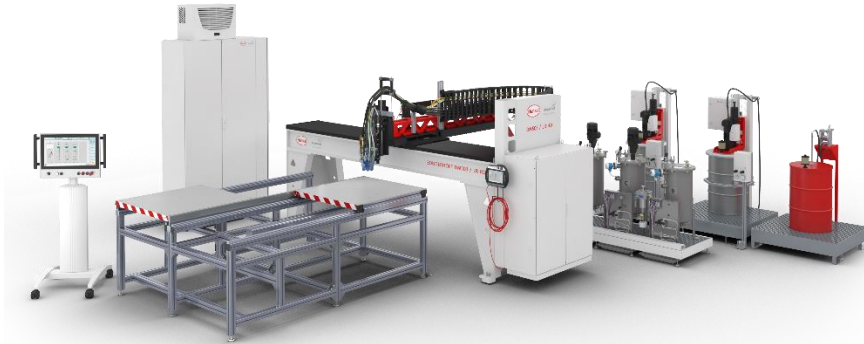
+49 211 797-85 94

sebastian.hinz@henkel.com

The following photo material is available:



The MK 825 PRO mixing head with many innovative improvements for highest process stability



The new dosing machine generation DM 503 for fully automatic processing and dosing of sealing foams, adhesives and potting compounds