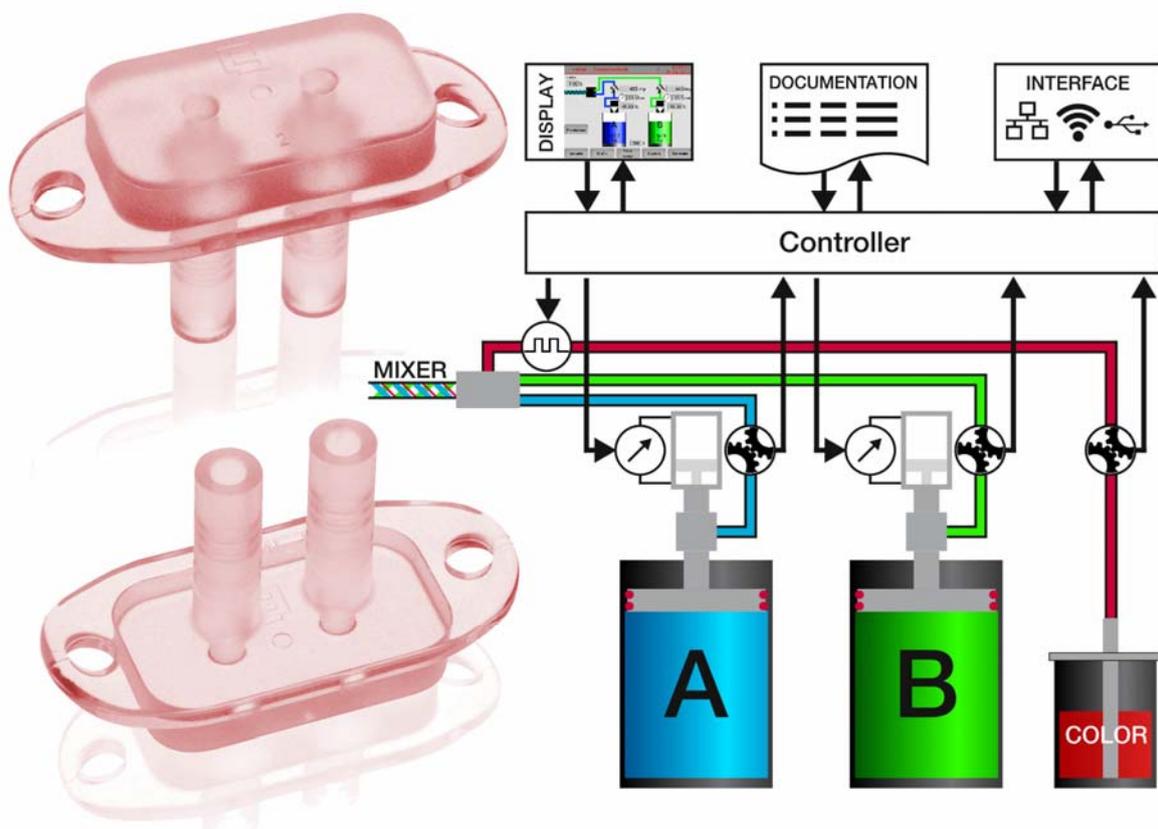


Press Release: **ELMET at MD&M 2016**

Controlled and documented colorant and additive metering supports perfect LSR injection moldings for healthcare applications



Combining a high-resolution flow meter with sensitive control and comprehensive documentation of additive and colorant metering, ELMET meets the stringent demands placed by the health-care industry on liquid silicone rubber injection molding.

Image: © ELMET

Offering/Austria, February 2016 – Manufacturing products for health-care applications entails very stringent requirements on the acquisition, compliance with and documentation of process data. While liquid silicone rubber (LSR) injection molding (LIM) is well established in this field, the metering of additives and colorants has in the past been a potential source of problems because sufficiently sensitive



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control and associated data acquisition capabilities have not been available as standard. With the market launch of a high-precision, automatically controlled multicomponent dosing system, ELMET now enables processors to overcome these obstacles whilst at the same time optimizing their efficiency in adding coloring pigments and additives.

The key element of this ground-breaking solution is a high-resolution flow meter. Integrated as a closed-loop control instrument into the colorant and additive feeding system, it determines the dispensed volume with a resolution of 640,000 increments per liter. On the basis of these precise measurements, the system accurately controls the supply of colorants and additives, in line with the setpoint defined on the touch display. At the same time, the corresponding values are made available for documentation.

Processors of colorless functional additives, including certain active ingredients, will in particular benefit from such precision-controlled metering. Optically imperceptible and hence, potentially undetected deviations from the setpoint, e.g. due to wear, clogging strainers or changing properties (viscosity) of the additive charge, may cause significant extra costs and, in the worst case, may even have an impact on the health of the end user. The ELMET system, based on exact volume measurement, ensures that the necessary metering accuracy is maintained throughout by continually readjusting the feed rate to the originally acquired and stored reference value. As long as this readjustment remains within a certain tolerance range, the operator is informed of this situation so that action can be taken in good time. However, if tolerances are exceeded, the system will automatically discontinue the production process to prevent rejects before they occur, thereby saving costs.

The new flow meter is part of ELMET's feature-packed TOP 3000 S multicomponent dosing system for LSR injection molding applications, which boasts particularly rugged and energy-efficient pneumatic drives and supports the use of both 20-liter and 200-liter drums. The system maintains the mixing ratio of the LSR A and B components unchanged over the entire drum content, ensuring material utilization of over 99%. Its maximum discharge rate is 2.5 l/min, with a rate of colorant addition of



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up to 10%. The associated process data for each individual shot can be exported via an USB, LAN or WLAN interface.

TOP 3000 S is part of ELMET's line-up of proprietary products which also includes fully automatic high-precision injection molds, electronically adjustable valve gates for cold runner systems, and peripherals such as check valves, diving nozzles, screen adapters, etc. On the strength of this portfolio, combined with externally sourced injection molding machines from all the top manufacturers, ELMET can supply complete turnkey LSR processing installations.

ELMET Elastomere Produktions- und Dienstleistungs GmbH of Oftring/Austria, established in 1996, is an internationally successful developer and manufacturer of LSR dosing systems, fully automatic injection molds, valve gate cold decks, and turnkey installations for processing silicones and rubbers. Including the staff of its ELMET North America sales and service organization, the company has some 150 staff.

Further information

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<p>The <u>German and English text</u> of this press release in *.doc format, as well as <u>the illustration in print-quality resolution</u>, are available for download from: www.konsens.de/elmet.html</p>
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