

VERMES Introduces DVS+ for Real-Time Dispensed-Volume Control

Holzkirchen, Germany – October 7, 2026 – VERMES Microdispensing is expanding its Drop Volume System (DVS) with Closed Loop Exact Volume Regulation, creating DVS+. The technology combines in-process measurement of dispensed volumes with optional closed-loop control. It enables users to monitor dispensed volumes during production process, detect deviations and compensate for them by automatically adjusting the valve open time. This supports consistent dispensing even as operating conditions change.

With DVS+ systems, users can measure the actual dispensed volume quickly, precisely and repeatably directly within the running process. The system comprises DVD 31 or DVD 32 sensor units, selected to match the relevant dispensing volume, together with the DVC 30+ controller. Where applications require absolute, relevant volume values, the systems can be mass-calibrated using a reference measurement, for example with a laboratory balance. Calibration ensures traceability of the volume information and thus contributes to quality assurance and the reliable documentation of measurement results.

The DVC 30+ controller extends the existing DVC functionality with an optional control function. Captured measurement data is therefore available not only for process evaluation and optimisation, but also for automatic process control. The controller corrects deviations in dispensed volume by adjusting the valve open time at microsecond resolution. In the case of sudden disturbances, the system returns precisely to the target value in fewer than three triggers. Typical dispensing drift is compensated reliably with the next following trigger. By automatically compensating for operating-related changes and other deviations, the control function helps maintain consistent, reliable results.

CLEVR (Closed Loop Exact Volume Regulation) offers Monitoring and Control operating modes, each available in RAW and Calibrated variants. In the RAW variant, volume measurement and control are based

on relative process values. This is particularly suited to applications that do not require absolute volume output. The Calibrated variant uses a reference measurement to evaluate dispensed volumes directly in application-relevant units. This allows the system to be adapted flexibly to requirements in development, validation and production.

For pulse-sequence dispensing, Fixed Delay and Variable Delay timing modes are also available. With Fixed Delay, the time interval between triggers remains constant. With Variable Delay, the delay is automatically adjusted to the valve open time, keeping the dispensing frequency constant within the pulse sequence. This mode is particularly suited to time-critical and synchronised dispensing processes.

“In microdispensing, it is not enough for every individual droplet to be right. The process must also remain stable and controllable over long operating periods,” says Stefan Hirte, CEO of VERMES Microdispensing. “With DVS+, we make measurement data immediately usable for process monitoring and optimisation: for transparent assessment in Monitoring mode and, where required, for the automatic compensation of volume deviations in Control mode.”

The browser-based user interface supports operation and process monitoring by providing a graphical real-time display of relevant process data. Standard interfaces enable the system to be integrated into existing machine environments. DVS+ systems are compatible with current VERMES dispensing systems and can be incorporated into existing production lines.

The solution is intended for demanding microdispensing applications in automation, electronics and semiconductor manufacturing, as well as medical technology. It is particularly suited to processes that require consistent dispensed volumes, continuous process monitoring and traceable documentation of process data.

About VERMES Microdispensing

VERMES Microdispensing GmbH develops and manufactures jetting microdispensing systems for precision manufacturing. In 2001, the company made a significant mark on microdispensing with the world's first piezo-based,

contact-free dispensing systems. Today, customers worldwide use VERMES systems to apply adhesives, silicones, greases, solder and conductive pastes, solvents, and other demanding fluids with precision, repeatability and process reliability. Its solutions are used in electronics and semiconductor manufacturing, the automotive industry, communications technology, fibre optics, pharmaceuticals and life sciences. From its location in Holzkirchen near Munich and its worldwide subsidiaries, VERMES combines application expertise with in-house development and manufacturing capabilities, supported by an international sales and service network.

More information about VERMES can be found at www.vermes.com

Press Contact

Marco Golla
VERMES Microdispensing GmbH
Rudolf-Diesel-Ring 2
83607 Holzkirchen
Germany
Phone: +49 (0) 80 24-6-44-335

pr@vermes.com
www.vermes.com