# Vismec at K2025 – Product and Innovation Overview

K Show 2025 - Düsseldorf, 8-15 October 2025

Stand location:

Hall 11 G34

Vismec returns to K2025 with a real demo area: ready-to-use solutions to make plastics-processing automation more efficient, modular, and intelligent.

6 new products including next-gen volumetric and gravimetric dosers, high-efficiency dedusters, a redesigned HALO Server for centralized control, and supervision modules including a mobile option.

Native line integration for continuous process, consistent data, fast setup.

Alongside the new products, a selection of recent machines completes the offer for system integration and optimized management of the production process.

We look forward to welcoming you to our booth, where the future of VISMEC technology will be revealed.



### **Rotary dehumidification: THE BENCHMARK**

For almost 20 years we have pushed rotary technology in our sector. Over 30,000 units installed on five continents confirm leadership built on measurable results. At K2025 we present evolutions focused on integration and process control to take dehumidification to the next level.

#### Strengths

- Traceable, high energy savings
- Proven reliability and consistent performance over time
- Full integration with third-party systems, ERP, and the HALO platform
- 5-year warranty on desiccant materials
- 7" industrial-grade touchscreen, intuitive interface



Vismec raises the dosing: continuity, cleanliness, control

In polymer processing the difference comes from stable flow, quick color changes, and reliable data. The new Vismec Flex was built for this: keep the line running, cut waste, simplify the operator's job. For critical recipes and tight tolerances there is Perfecto, the gravimetric "pure control" answer that corrects every single dose in real time. Together they cover 100% of needs, with the same operating logic.

#### What really changes versus competitors

#### 1) Smoother flow without complicating the plant

Double-lead screw: reduces pulsation and increases throughput at the same diameter/pitch.

Two-stage screw sleeve: stable feeding and precise fine dosing even at low percentages. Result: uniform color and reduced scrap without jumping straight to gravimetric.

#### 2) Mechanics that protect the motor

Screw on double bearing and decoupled from axial/overturning loads.

Result: less wear, higher reliability. Many competing systems pass part of the load to the motor.

#### 3) Faster, cleaner color change

Quick-release dosing group.

Residual-purge funnel without removing the unit.

Stainless mixing throat without gaps + exclusive internal cross with guide grooves: no deposits, additive captured and transferred consistently.

Result: shorter downtimes and repeatable quality. Elsewhere "pockets" of material often contaminate the next recipe.

#### 4) Safety and control in plain sight

Precision lower guillotine gate with anti-opening safety.

Magnetic inspection door usable even with material in the hopper.

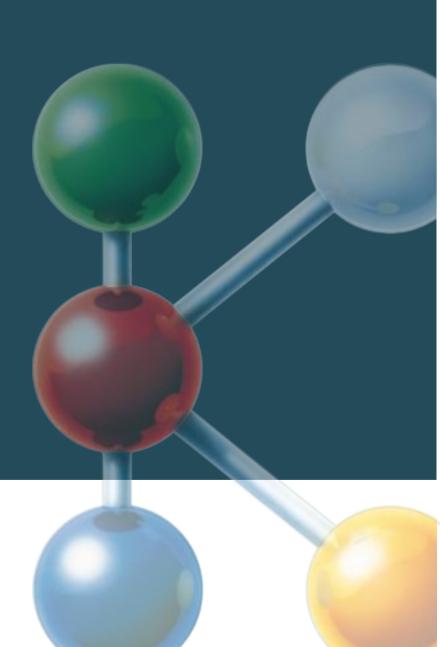
Result: quick interventions and visual checks without disassembly.

#### 5) One platform, two control levels

Flex (high-precision volumetric) for the vast majority of applications.

Perfecto (gravimetric) with C3 load cell + 32-bit ADC, 38,000 samples/s and decoupled mechanics to correct every single dose.

Result: move from "very stable" to "metrologically traceable" without changing ecosystem.



### Vismec Flex — the doser that keeps production flowing

Smooth flow: double-lead screw, low pulsation.

Structural precision: two-stage sleeve, chamber without accumulation points, complete emptying.

Robustness: screw on double bearing, high-torque stepper motor with fast response.

Rapid cleaning: quick release, residual-purge funnel, anti-deposit throat, magnetic door. Consistent mixing: throat with internal cross and dedicated grooves; up to 3 dosers on the same body.

the same body.

Interface: 3.5" magnetic IPS touchscreen; 7" option; control of up to 3 units, including mixed with Perfecto.

#### WHY IT IS BETTER

Fewer pulsations, less motor wear, fewer stagnation points, faster recipe changes. In standard systems these four factors rarely coexist.

### Vismec Perfecto — when you need numbers, not impressions

State-of-the-art weighing: C3-class load cell + 32-bit ADC at 38,000 sps. Per-dose correction: decoupled kinematics for immediate feedback. Same HMI platform: up to 3 Perfectos or mixed Flex+Perfecto on 7".

#### WHY IT IS BETTER

Per-dose correction and a fast measurement chain deliver real stability for small percentages and sensitive recipes. Many competitors stop at moving-average windows; here each dosing act is corrected.

#### **Quick choices**

Standard colors, frequent recipe changes, abrasive/delicate materials → Flex.

Tight tolerances, low percentages, audits and traceability → Perfecto or a mix.

In short: Vismec brings to dosing what production needs every day—stability, cleanliness, control—with a platform that scales with your needs, avoiding typical competitor trade-offs.



### Renewed supervision - new hardware and mobile supervisor

Production-process digitalization is central. To meet this need, Vismec will present at K2O25 a newly redesigned supervision hardware, both technically and aesthetically. Alongside it, a mobile supervisor lets you control and monitor machines remotely, even in complex plants.

The system is based on web-server technology, making it fully cross-platform: usable from PC, tablet, and smartphone without dedicated software, maximizing operational flexibility.

It also integrates an OPC-UA server that ensures a standardized, secure interface with the Industry 4.0 ecosystem. This enables smooth communication with SCADA, MES, and ERP software, boosting interconnection between machines and management systems. The goal is to simplify daily management and increase automation and predictive control, improving overall plant efficiency.

## New Halo Server - centralized control for up to 48 devices

Another key innovation at the show is the new Halo Server, designed to manage and log up to 48 HALO units, even when connected to third-party receivers. The system is highly scalable, customizable, and compatible with major industrial communication protocols.

The new server ensures reliability, security, and full data traceability, giving production managers an effective tool for analysis, diagnostics, and maintenance planning, aligned with current Industry 4.0 standards.





#### Intelligent hopper weight control - visible quality, measurable efficiency

Material handling is not a detail. It determines color uniformity, process stability, scrap, and energy use. Hopper weight control with loader-enable signal modulation gives smaller level oscillations, steadier throughput, and real flow control.

#### How it works in practice

- · On-board HMI: clear interface, parameters at a glance, quick recipes.
- Electrical panel with AUTO / MAN ON / MAN OFF: automate when needed, intervene when you want.
- · Load cells: measurement rules. Weight drives the loader, not the other way around.
- · Hopper/Silo: becomes a measurement and control point.
- · Local supervision from HMI.
- Manual selector on the panel for immediate action.
- Dry contacts for loader enable and alarms: drops into existing plants without upheaval.

#### WHY CHOOSE MODULATION:

- · Dosing precision: loading is proportional to actual weight.
- · Less waste: fewer overfills and reworks.
- Reliability: optimized loading cycles = less mechanical stress.
- Flexibility: switch from manual to automatic in a moment.
- Process stability: flatter level in the hopper, steadier extrusion and injection.

#### **HALO SERVER - the weighing control room**

HALO SERVER centralizes, controls, and documents everything related to weight in your departments. It communicates over Modbus RTU with every HALO device, logs data, and turns it into operating decisions on and injection.

#### What it does differently

- Always-current data: weights from all units collected and historized.
   Active loading control:
- BATCH → stop and restart based on target quantity.
- MAX THROUGHPUT → adjust loading speed to saturate without overshooting.
- Intelligent alarms: deviations, threshold exceedances, speed anomalies. Act before they become scrap.
- · Management of up to 48 receivers.



#### POLYPURE 100 and 300 - high-efficiency dedusting

Granule quality also depends on accurate impurity management. Vismec introduces the new POLYPURE 100 and 300 dedusters, designed respectively for medium-small applications (up to 100 kg/h) and for high-throughput plants (up to 300 kg/h).

At the heart is a separation cyclone sized through theoretical calculations to optimize performance. Concrete benefits:

Reduced pressure drops  $\rightarrow$  lower air consumption and higher energy efficiency.

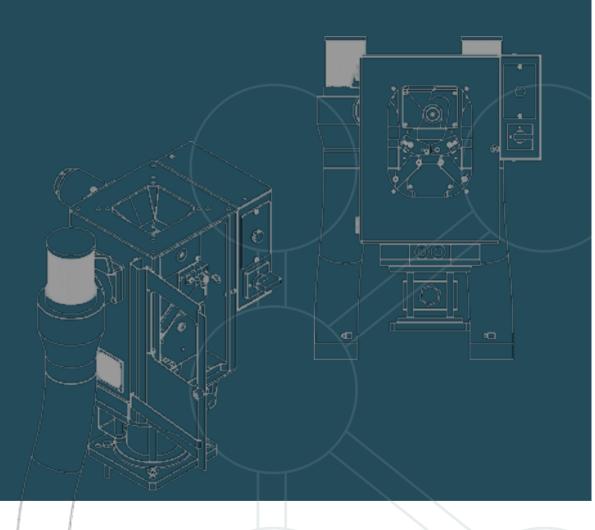
Conical design  $\rightarrow$  better dust separation, less filter buildup, less frequent cleaning.

Dedusting is further enhanced by an extraction system based on the Coanda effect, ensuring a uniform, constant flow and improving process effectiveness.

Together with the advanced filtration system and automatic cleaning unit, POLYPURE delivers:

- higher finished-product quality,
- reduced wear on equipment,
- a more stable and sustainable process.

Thanks to integration with Vismec supervision systems and low energy use, POLYPURE 100 and 300 are reliable, high-performance, easy-to-install solutions designed to raise production standards.



# Complementary technologies on display - Viper and silo control

Beyond the brand-new products, Vismec will also exhibit two recent technologies that round out the offer for automation and optimized material management: the Viper system and the new silo weight/level control.

Viper is designed for efficient extraction of plastic materials from Octabin-type containers, with special attention to solid granules around 2–5 mm in size. The compact, functional design enables continuous, regular pickup of material, minimizing residues and

Thanks to specialized probes and dedicated accessories, Viper can also be configured for challenging materials such as regrind, while maintaining high operational reliability. Its versatility makes it effective for both new plants and upgrades to existing lines.



### Toward more efficient and sustainable production

Participation in K2025 is not only a chance to showcase new solutions. It reaffirms a clear vision: support customers in building more efficient, integrated, and intelligent plants ready to face sustainability and global competitiveness challenges.

With modular, digital, energy-saving technologies, Vismec confirms itself as a best-in-class partner for plastics processors seeking flexible, future-ready solutions.

See you at K2O25 | Düsseldorf | 8-15 October 2O25 Hall 11 Stand G34

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