

SMARTmix TOP 7000 Pro

DOSING TECHNOLOGY

ELMET 
SMART SILICONE SOLUTIONS





ELMET SMARTmix

WE HAVE BEEN
SETTING STANDARDS
FOR OVER 20 YEARS.

COMPETENCE AND INNOVATION

ELMET inspires with smart silicone solutions. This inspiration is backed by 20 years of experience and a great deal of technical know-how in the field of dosing technology. ELMET has always set standards, such as with the TOP 3000 S or the TOP 5000 P. As the market leader, ELMET is taking the next evolutionary step in the complex field of dosing technology with the SMARTmix TOP 7000 Pro, raising LSR liquid silicone injection molding to a new level of development.

DOSING TECHNOLOGY – IN PERFECT FORM

In the LSR injection molding process, also known as the LIM process (liquid injection molding), the liquid 2-component silicone is conveyed from containers to the injection molding machine at room temperature. The decisive quality criterion here is process-stable precision. With the TOP 7000 Pro, highest component quality and reliable process stability are guaranteed. In combination with the precise mixing ratio of silicones and additives and the outstanding cost effectiveness of the system, the TOP 7000 Pro sets a new benchmark.

THE PERFECT MIX

Liquid silicone is a complex material to handle. Perfect handling and processing call for a great deal of know-how and high-end components. Process reliability, precision, efficiency, ease of use and economical handling of the costly raw materials – with the TOP 7000 Pro, ELMET combines many outstanding properties and packs them into a visually and technically convincing system.

PERFECTLY DOSED

WHAT MAKES A STRONG DOSING SYSTEM?

FACTS AND FIGURES AT A GLANCE

- High output: delivery rate up to 2.5 l/min per pump outlet
- Precise: high repetition accuracy in the dosing time, dosing accuracy in the range of hundredths of a second
- Economical: minimum energy requirement, no three-phase AC connection necessary
- Adaptable: Addition of up to 6 additives
- Efficient: minimal residues (drum liner is almost completely emptied), no drum base support necessary, material utilization per drum up to 99.6%
- Full support: Dosing system support on-the-fly with **Premium Connectivity package:**
 1. App
 2. Web portal
 3. Remote support
 4. Support request incl. status report
 5. Info mail for drum change, maintenance messages & malfunctions

PERFECTLY MIXED

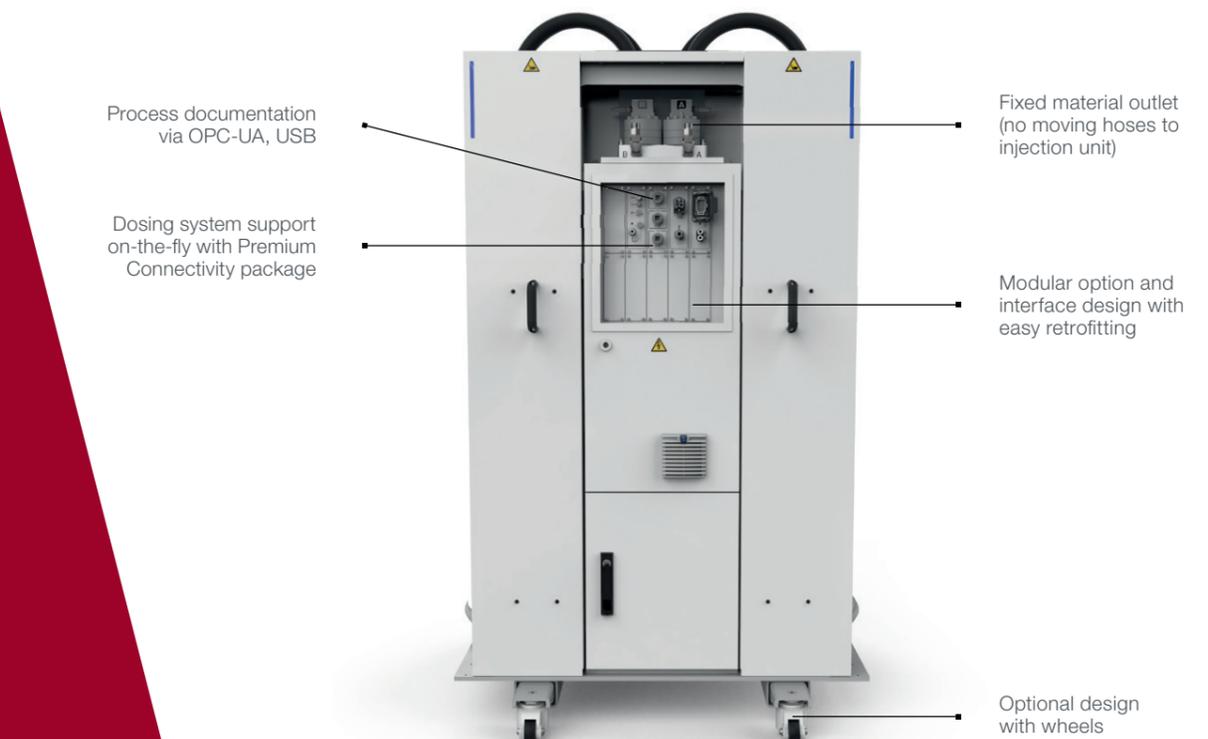
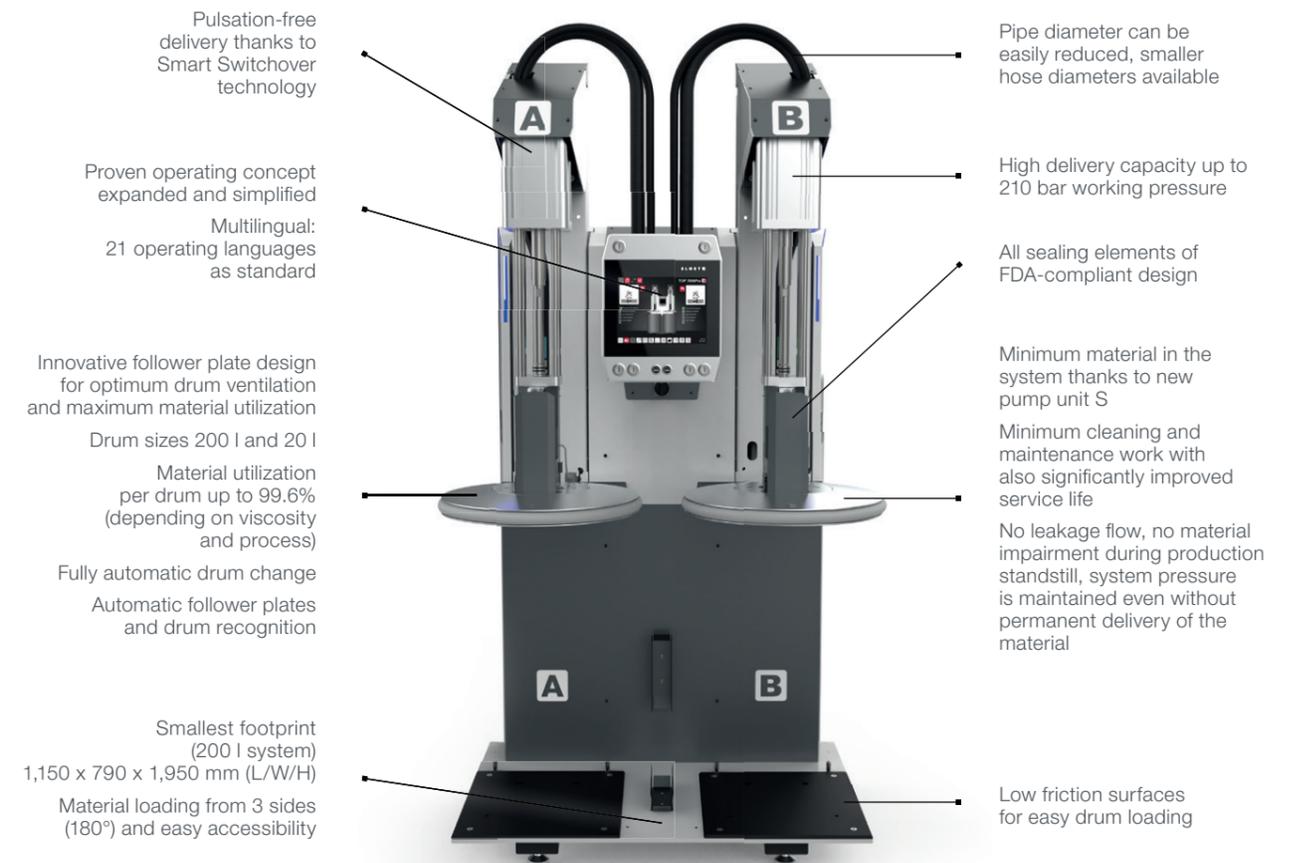
All material flows are volumetrically measured and balanced, thus ensuring a constant mixing ratio. Even materials of different viscosities can therefore be mixed reliably and precisely.

PERFECTLY USED

Filling differences are optimally compensated within the permitted tolerances, resulting in maximum material utilization.

PERFECTLY DELIVERED

Even during repeated filling of the injection unit, the ELMET TOP 7000 Pro ensures extremely high precision. The direction of rotation of the pump unit is always reversed in advance outside the dosing process, thus ensuring accuracy even during critical processes.

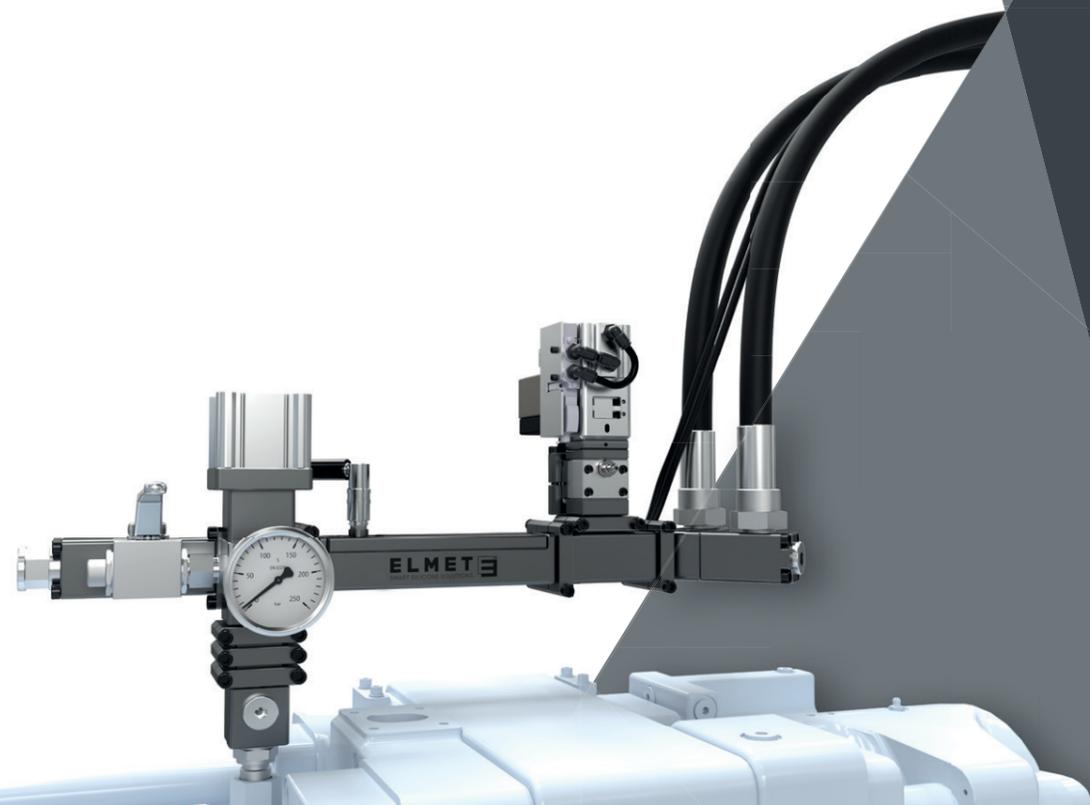


PROCESsing UNIT 40D12

40D12 FOR THE PERFECT MIX

In the processing unit, the A and B components are mixed with the pigment or additive streams. The high pressure of the compressed liquid silicone is flow-optimized thanks to sophisticated technology and kept at a constant, adjustable discharge level by a pressure limiter. ELMET has perfected this technology so that it can even be used in the extrusion process without any issues. Here too, ELMET is setting a new benchmark.

- Modular design
- Integrated cooling
- Laminar flow optimized (no dead corners)
- Simple clamp-connection design
- 45° & 90° connections for easy adaptation to any system
- Up to 6 additive lines can be used per unit
- Simple cleaning
- Minimum material cross-sections with maximum possible throughput
- Economically sophisticated – material minimization in the system



ADDITIVE LINES WITH CONTROLLED ADDITIVE ADDITION AND SOFTWARE OPTIONS

ADDITIVES – FLEXIBLE & PRECISE

Pigments and additives are valuable parameters in the LIM process. ELMET therefore relies on high-precision pigment and additive lines developed in-house. The dosing is adjusted to the actual measured volume flow of the components. Optional control systems can permanently readjust and thus increase the precision even further.

ADDITIVE LINES:

- Additive container 0.7 l
- Additive container 4 l
- Additive pump 20 l

CONTROLLED ADDITIVE ADDITION:

- Flow-meter
- Resolution 1,689,600 increments per liter

SOFTWARE OPTIONS:

- Barcode drum detection
- Remote control via VNC
- OPC-UA | Euromap 82.3
- Fix-Mix mixing ratio
- Premium Connectivity package incl. app for iOS & Android
- Elkem LSR Select





ELMET INSPIRES WITH
SMART SILICONE SOLUTIONS.

www.elmet.com

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