

FREE FLOW – HIGHER EFFICIENCY
Accurate and safe injection
of liquids



STARTER KIT

New: Starter Kit available!

- Enhanced productivity
- Material cost saving
- Energy cost saving
- Contamination free

Liquid Dosing System

New: LDS Starter Kit available!

GET STARTED WITH LIQUID DOSING

With our modular design starter kit, you can now test our Liquid Dosing System without any risk. The kit consists of four modules and is ready for instant use, allowing you to test the system before making that big investment. Designed according to state-of-the-art technology, the Liquid Dosing System does not leave any questions unanswered. It is simple, easy to install, Plug and Play, pre-configured and suitable for one liquid. The starter kit is a complete pre-arranged system, it can be applied to any mixer. Supervision of assembly and training of your specialists is included.

After you have set out on your own exploration journey with this complete new concept you soon will have the need to do more. Easy! You can very easily upgrade and extend the system and develop over time your customised system according to your needs.

And the best: The starter kit includes the brand new soft- and hardware on basis of Siemens' Tia Portal and is connected to MIRA. Learn more about MIRA: www.mira-sense.com

We create solutions!

FULLY AUTOMATED LIQUID DOSING SYSTEM (LDS)

The Liquid Dosing System (LDS) is a robust closed-loop modular system that allows for accurate injection of liquids at high injection flow rates, regardless of the viscosity. Through a specially designed injection valve, it can accommodate six different liquids at each injection point of the mixer, offering a wide variety of benefits.

The system uses volumetric or gravimetric dosing to ensure extremely high levels of accuracy and dosing speed, consistent properties and higher quality of the compounds with high repeatability of test parameters.

By doing so, this eliminates the need for overdosing, which is occasionally considered when using traditional systems in order to compensate consequences out of poor repeatability. This brings up the quality of the compound and repeatability of the entire process and brings down raw material costs and material losses.

The speed of dosing and the ability of feeding the liquids precisely and in sequence could save, on average, 3 – 4 seconds per batch, meaning you can achieve up to 20 additional batches in a day.

The benefits:

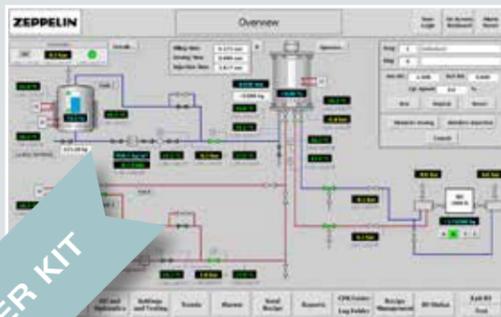
- The fluid injections can be modified for slow, fast or consecutive injections, allowing you to handle multiple liquids in the same batch.
- As the liquid flows through the injection valve, the system allows you to track delivery and record dosage volumes.
- Active closing of the valve ensures no uncontrolled dripping or leakage.
- With its air purging of the injection nozzle feature, it can help prevent cross contamination between different liquids.
- Reduction of overdosing results in substantial savings in raw material costs.
- With a complete insulated system you can achieve significant energy cost reductions – even if you have 80°C material temperature for handling high-viscosity liquids.
- Liquids are locked in the system completely – zero contamination of the outside air with aerosols to protect your people, zero contamination of liquids, enables consistent documentation of traceability, zero material losses.

Why liquid dosing?

The evolving compounding technology has led to the incorporation of several new chemicals, with the majority in liquid form. Because of this, the flow characteristics and chemical composition of such liquids rendered the traditional gravity flow scales obsolete, paving the way for liquid dosing systems made by Zeppelin. This system is recommended for easier handling of non-self-lubricating liquids like silane, and can provide opportunities for the procurement of hitherto dry liquids, wax, 77PPD, LBR, HMMM and stearic acid as it can help to drive down procurement costs of these chemicals and increase the quality of compounds.

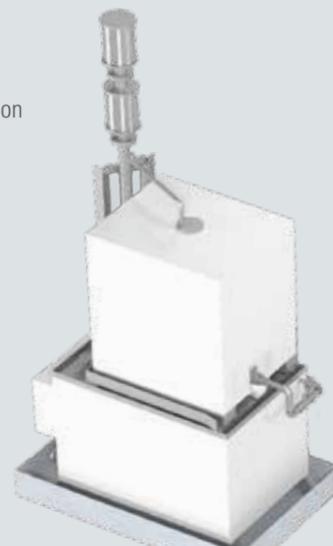
Module 1

PLC control



Module 2

IBC tipping station



Module 3

6-port injection valve

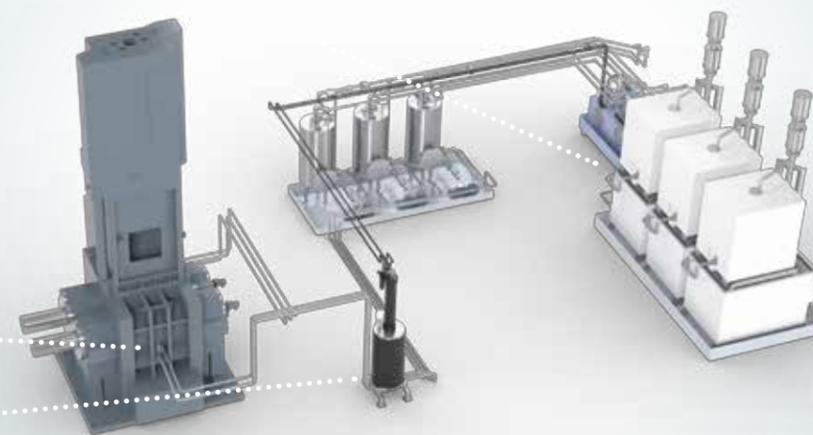


Module 3

LDS dosing cylinder



Liquids Dosing System Videos



The Starter kit: Consisting of four modules, easy to install, quickly ready for use, expandable without limitations



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