

Extendable multi-port valve blocks

Dosing installations for detergent in industrial laundries

The Seitz company from Kriftel, Germany produces both a wide variety of detergents for industrial laundry applications and automated systems for dosing these detergents. Compact multi-port valve blocks from GEMÜ are the key element of these systems as they make the corresponding dosing, distribution and flushing functions possible.



Multi-port valve block made of PVC-U
with GEMÜ 610 pneumatic actuators

Operation of detergent dosing installations

Automated detergent dosing installations provide industrial laundries with flexibility, allowing them to adjust the required detergent composition individually to each specific cleaning program. Depending on the hardness of the water and the type and level of soiling, the cleaning agents, special additives and care products can be dosed to match the type of textile being washed.

In the case of conventional dosing installation designs, a separate dosing pump is required for each washing machine and medium. The resulting large number of pumps, hoses, unions and distribution components makes extensive maintenance and calibration work necessary.

Compact design improves plant reliability

The use of GEMÜ multi-port valve blocks allows the number of pumps, hoses and fittings to be kept to a minimum on modern dosing installations. Here, only one pump is required per medium and multiple washing machines can be supplied with one dosing installation. Fewer welded and solvent cemented joints improve plant reliability because fewer leaks can occur as a result. Quick and easy assembly of the customized units also reduces the assembly time required and saves costs.



Dosing cabinet at Seitz

Multiple functions in one multi-port valve block

In order to achieve a more compact design, all dosing, distribution and flushing functions are combined in one multi-port valve block. The dosing pump for each medium is connected to a variable area flowmeter which are each connected directly to the multi-port valve block. The valve block consists of 3 rows of pneumatically actuated diaphragm valves. Here, the first valve row at the bottom is used to dose the medium. Depending on the requirements, quantities of 10 – 200 ml are metered out. The valves in the second row control which washing machine the medium is sent to and the upper, third row of the valve block is used to flush the unit with water after every dosing process.

Expandability of existing plants

The multi-port valve blocks are also able to be extended. If an industrial laundry adds washing machines to its plant, the existing dosing unit can be extended by the required number of valves with just a few simple modifications without the need for additional piping, solvent cemented joints or welds.



Multi-port valve block with flowmeter for detergent dosing and distribution



Extendable multi-port valve block