

K.H. Schmalz GmbH
The specialist for dosing technology
and accessories

K.H. Schmalz GmbH, with headquarters in Tamm, Germany (near Stuttgart), was founded in 1971 by Karl Heinz Schmalz as sole proprietorship and, through continual innovation and market-oriented concepts, has grown into a world-wide industry-leading company. For over 40 years K.H. Schmalz GmbH has developed and produced successful systems with the main focus in the areas of dosing technology, water treatment, custom system construction and chemical. Included in this, among others:

- Dosing and supply systems for water-miscible mold release agents
- Piston lubricating devices for granulate and liquid lubrication
- Supply and measurement units for minimum volume dosing
- Turbidity measurement devices
- Cooling tanks for cooling castings
- Cooling systems
- Water treatment systems (softening and filtration systems, reverses osmosis)
- Piping and system cleaning
- Sterilization systems

With their experience K.H. Schmalz GmbH supports their customers competently and reliably from consultation and planning, to creation and installation, up to the areas of maintenance and service. Here the goal-oriented and sustainable solution to the demands of the customer stands first and foremost, with a focus on efficiency, process reliability and the environment.



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Chemical dosing device
Central dosing device
Water treatment
Turbidity measurement
Cooling tank
Cooling systems + towers
Piston lubricant
Decalcification pumps
Custom systems

Central dosing device

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Custom systems

Chemicals

Service + maintenance

...on release agent supply systems

...on water supplying systems

Cleaning of humidifiers

Planning

Design

Installation

k.h.schmalz gmbh

anlagenbau und dosiertechnik





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...on release agent
supply systems

...on water supplying systems

Cleaning of humidifiers
acc. to VDI 6022

Planning
Design
Installation

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Service and maintenance on release agent supply systems

We offer you supervision on your release agent dosing systems and the connected systems. Included in this are systems manufactured in-house and also third-party products. Included in the scope of service are the maintenance and repair of the systems and their individual components. This is done both at the customer on-site or also in-house. On request we create system-specific maintenance schedules for you which are adapted to the respective requirements and specifications. Furthermore we offer system cleaning (rinsing) of the connected supply lines (e.g. ring line) incl. the spray systems, to remove the frequently occurring contamination and deposits in the systems and to ensure a problem-free spray and/or casting process. In addition, equipment such as heated rinsing tanks, rinsing pumps and the corresponding chemicals are used. A competent team of qualified service fitters and technicians carry out the service work on their own, fast and reliably, to ensure a high degree of availability of the systems and to reduce costs and possible downtimes to a minimum.

Service and maintenance on water supplying systems

K.H. Schmalz GmbH offers you extensive service in the area of water supplying systems (e.g. for potable water, process water and waste water). For sampling and analyzing the relevant water, supervision of complete systems, cleaning, decalcification and disinfection or the repair of individual components, there is a competent team of qualified service fitters and technicians available for you to carry out the work to be done.

Cleaning of humidifiers acc. to VDI 6022

As a VDI 6022 and WHG certified company we offer supervision and cleaning of humidifiers in RLT systems. From regular sampling and evaluating humidifier water for quality and microbiological growth up to cleaning, decalcification and disinfection of the systems, a competent team of qualified technicians carry out the required work quickly and reliably, to ensure a reliable operation of the system.

Planning – Design – Installation

From planning, to design, up to installation and start-up for a large variety of areas, we support our customers with over 40 years of experience. During this we make calculations, give recommendations and work out complete concept solutions for the realization of your projects. Especially in the area of dosing technology and water treatment we can offer a wide spectrum.

Chemicals

K.H. Schmalz GmbH offers a large selection of chemical products for a wide variety of applications. Individual consultation for the respective purpose of use is here normally essential. Taking into consideration the material resistance, efficiency and environmental aspects, we recommend the most suitable products for our customers.

- Included in the portfolio, among others:
- | | |
|--------------|---------------------------------------------|
| Biocide | Hardness stabilizers |
| Decalcifier | Rust remover |
| Cleaner | Corrosion protection / Corrosion inhibitors |
| Boiler water | Disinfection agent |
| | Defoaming agent |

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Central release agent supply systems

The central release agent dosing system is designed for supply of an entire foundry with release agent mixture. Depending on the specification, the system is equipped with the appropriate components and modules. The dosing station is installed in the supply line to the consumers/sprayers. The incoming water volume is precisely recorded via a volume meter and forwarded to the controls. The dosing pump supplies proportionally and in addition, depending on the setting, the desired volume of concentrate.

Single-feed release agent supply systems

Supply and volume recording for minimum spraying

Release agent dosing systems

Cooling tank

The cooling tank is ideally suited to cool off the casting immediately after the casting process. The metal filter, which can be cleaned as needed without a lot of effort, is operated alternately. The cooling of the tank is done via a plate heat exchanger, which is primarily connected to the cooling system of the foundry and is secondarily fed from the circulating pump. A coarse sieve protects the circulation pump from flashing and casting residues. Application is clean and supports full automation due to the simple design.



The units are used for fully automatic volume- and dosing of a wide variety of chemicals for a wide application spectrum depending on customer specification and can, for example, be integrated into existing system circuits. The infinitely variable setting of the dosing volume enables the very smallest and also very large feed volume. Included in the typical uses are among other things precise dosing. The dosing units are characterized by simple handling, small space requirements and minimum maintenance effort and are delivered preassembled ready for operation. Required catch basins are manufactured according to the Federal Water Act [Wasserhaushaltsgesetz (WHG)].

Chemical dosing units

Cooling systems & towers

The cooling of machines and systems with water is unavoidable in industry. There are a wide variety of processes used for this. The systems are planned according to the customer's specifications and requirements, considering efficiency and the environment, and equipped with the necessary components. The systems and equipment are characterized by individual designs with simple operation, compact size and low maintenance. From planning, to installation and up to service, we offer a broad spectrum of options.



Softening systems

Reverse osmosis

Conductivity test systems

pH value monitoring

Water conditioning

Water treatment

Piston lubricant

The universal dosing unit for powder and granulated piston lubricant. This piston lubricant is used for lubrication of the filling chamber and the press piston on the die cast machines. The significant advantage compared to conventional lubricants for this application area is that the lubricant can be blown directly into the filling chamber where it melts and achieves highly effective lubrication. The large volume storage tank with cover and visual fill level indicator is integrated in the control cabinet and is easily accessible for refilling.



The turbidity measurement is an essential aid in environmental protection and process engineering for automation of industrial operations. The turbidity value of a liquid gives conclusions on substance concentrations, degree of purity and quality. In mixtures the turbidity is an ideal indicator for the determination of mixture ratios. In areas in which weak to strong turbidities with a minimum turbidity of 2000 NTU must be recorded and monitored cyclically or permanently, the turbidity measurement device is used and delivers the necessary process data. Due to the durable design and the well protected electronics, the unit can be integrated with no problem in new and existing systems.

Turbidity measurement

Decalcification pumps

The decalcification pumps of the EKP series have been used for many years for the decalcification and removal of rust in water carrying systems and have proven themselves ideal for this. The integrated multi-directional control valve is used for infinitely variable control of the pressure and the feed volume and enables a change or reverse of the flow direction at any time. All components coming into contact with media are made of acid and lye resistant materials. The decalcification pumps are characterized by simple handling and enables clean and rational work without removing parts of the system.

