

HGV TANK CLEANING



INSPIRED. SOLUTIONS. FOR CUSTOMERS.



ALL-IN-ONE SOLUTION IN CONTINUOUS OPERATION

sera is a globally operating environmental technology company with decades of experience in the field of high-pressure and dosing technology. **sera** can provide an all-in-one solution for every application, individually customised for your requirements.

As a pump manufacturer, we supply all the components needed for professional HGV tank cleaning:

- High-pressure pumps for continuous operation
- Tank cleaning heads
- · Dosing pumps for detergent dosing

- Pumps for transferring the chemicals
- Water treatment / polymer systems from our own production
- Control technology
- Accessories such as hose reels, HP lances, hoses...
- Installation & commissioning by our installers

All industrial systems are matched to each other and are suitable for service water, hot water and 24-hour operation.



- **1** TRANSFERRING THE CHEMICALS AND/OR CLEANING AGENTS
- **2** DOSING THE CHEMICALS AND/OR CLEANING AGENTS
- 3 HIGH-PRESSURE TECHNOLOGY FOR INTERIOR AND EXTERIOR CLEANING
- 4 HIGH-PRESSURE CLEANER FOR EXTERIOR CLEANING
- **5** ACCESSORIES FOR HIGH-PRESSURE CLEANER
- **6** TANK CLEANING HEADS FOR INTERNAL TANK CLEANING
- 7 POLYMER PREPARATION FOR WATER TREATMENT
- 8 EFFICIENT SERVICE



WASTE WATER TREATMENT

sera has been one of the world's leading manufacturers of dosing technology for decades. In addition to dosing pumps, **sera** develops dosing systems as standard and according to customer requirements.

The product range also includes the design and production of all-in-one solutions for complete waste water treatment of the interior cleaning of a lorry tank:

- Preparation and dosing system for polymeric flocculation aids (a)
- Precipitant dosing station (b)
- Neutralisation plants (c)
- Control technology
- All accessories such as suction lances, injection units, drip pans and connection materials



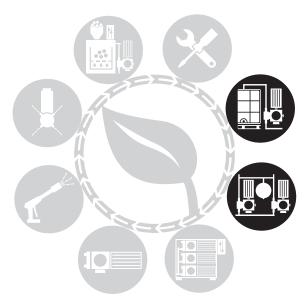
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TRANSFERRING AND DOSING THE **CHEMICALS AND/OR CLEANING AGENTS**

The **sera** dosing technology used is matched to your cleaning process. As one of the leading manufacturers of dosing pumps and systems, sera is your ideal contact here.

All sera systems are suitable for continuous operation and for the use of service water (treated water).

At sera you will find the right dosing system for every application - the configurable modular system makes it possible. The **sera** experts will not only advise you about the many different types of pumps, but of course also about the type of control (manual, conventional such as 4-20 mA or pulse, PROFIBUS or PROFINET).



sero www.sera-web.com

OVERVIEW OF ADVANTAGES

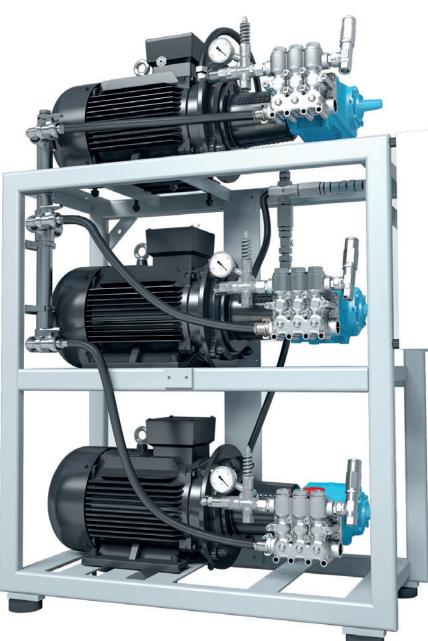
- State-of-the-art pump technology
- Standardised mounting plates
- Space-saving wall mounting
- Wide range of applications
- High safety standard
- Wide power range Simple operation
- Low maintenance
- Complete range of accessories

HIGH-PRESSURE TECHNOLOGY FOR INTERIOR AND EXTERIOR CLEANING

sera supplies high-pressure pumps and high-pressure pump units for a wide range of applications in which liquids have to be pumped at high pressure. Triplex plunger pumps, which are included in the category of positive and oscillating displacement pumps, are mainly used for this purpose. Other specifications and modes of operation of the pumps can of course be selected on customer request.

The high-pressure technology provided by **sera** covers the widest range of applications and is always put together individually according to customer requirements.





OVERVIEW OF ADVANTAGES

- Energy efficient systems with high level of efficiency
- Three plungers made of resilient ceramics
- High quality materials
- Linear control characteristics
- Low maintenance
- Low operating costs
- Simple to use
- Version according to ATEX available
- Seals according to FDA available
- Temperatures -23 °C ... +116 °C

HIGH-PRESSURE CLEANERS FOR EXTERIOR CLEANING

The stationary (HPCcenter) and mobile (HPCmove) high-pressure cleaners are designed for commercial use. The high-pressure cleaners in their compact design are particularly space-saving and completely prepared for connection with the integrated electrical control, a cable (3m) and a standard plug (6 A CEE). They can be operated with fresh or service water.

FUNCTION DESCRIPTION

The high-pressure cleaner switches on automatically when the spray gun is actuated. When the gun is closed, the unit switches to standby mode after an adjustable delay (3 - 30 seconds) and restarts immediately when the gun is actuated again. If the water supply is interrupted, the unit does not switch on, therefore there is a safeguard against dry running (does not apply to operation without upstream pressure).

OVERVIEW OF ADVANTAGES

- Standardised pre-wash equipment
- Compact design
- Integrated controller
- Suitable for fresh and service water

HIGH-PRESSURE PUMP

 Pump head made of corrosion-resistant brass, NiAlBr, stainless steel, duplex stainless steel and other special materials

- Plunger made of hard ceramics (solid)
- Valves, valve seats and springs made of stainless steel
- Seals made of special material
- Integrated leakage return
- Quiet running
- Crankcase made of die-cast aluminium
- · Crankshaft made of forged CrMo steel

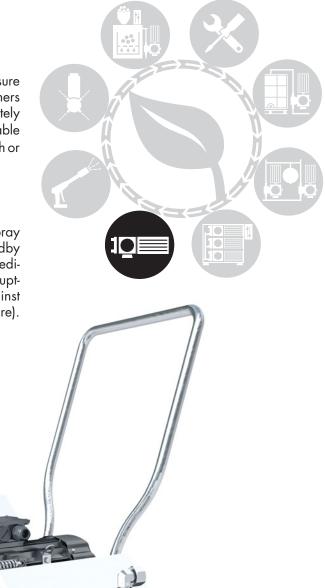
TECHNICAL DATA

Delivery rate*: 15 l/min
Operating pressure*: 200 box

• Operating pressure*: 200 bar

Speed: 1,450 rpmMotor power: 5.5 kW

*Other delivery rates and operating pressures on request.



ACCESSORIES FOR HIGH-PRESSURE CLEANERS

Everything from one source: sera provides a comprehensive range of accessories that leaves no customer wishes unfulfilled.

THE FOLLOWING ARE AVAILABLE

- Nozzles and cleaning accessories
- Spray guns, lances & jet pipes
- High-pressure hoses
- Hose reels
- Valves, fittings & screw connections
- and many more





TANK CLEANING HEADS FOR INTERNAL TANK CLEANING

sera supplies tank cleaning heads specially designed for internal tank cleaning. The tank cleaning heads are ideally matched to the high-pressure pumps used and are driven both with water or with electric motor.

Tank cleaning heads fitted with **sera** nozzles ensure an ideal cleaning

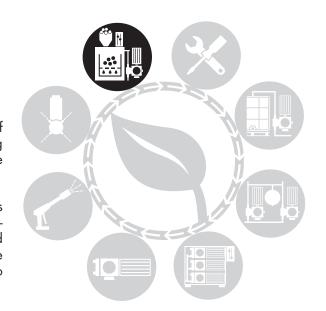
The tank cleaning heads are also approved for potentially explosive atmospheres (according to ATEX).



PREPARATION OF POLYMERS FLOCCULATION AIDS FOR THE WATER TREATMENT

Polymer solutions are used wherever the sedimentation or flotation of suspended solids in water should be accelerated and the dewatering behaviour of thickened sludge should be improved, such as in the treatment of drinking, service, process and waste water.

The PolyLine from sera is a series of simple and flexible as well as economical and high-performance systems for the preparation of polymers. The series covers preparation systems that can be operated with dry or liquid polymers. The systems are equipped with precise flow measurement for solution preparation and level measurement to ensure the efficient and economical operation of the systems.



OVERVIEW OF ADVANTAGES

- Customer and application-specific polymer preparation systems from the modular system
- High quality PP tank
- Can be used in a variety of ways with powder, liquid or powder/liquid combination polymers
- High process efficiency due to almost complete dissolving of the newly prepared polymer
- Exact compliance with the solution concentration due to reproducible calibration of the dry material feeder or liquid concentrate pump
- Low-maintenance level measurement using continuous and non-contact ultrasonic sensor
- High ease of use due to compact PLC with integrated process visualisation and touch screen
- Modular design from the toolbox
- Can be optionally extended according to customer requirements with products from the **sera** product range



EFFICIENT SERVICE

From planning and commissioning of systems to a fast and uncomplicated worldwide equipment replacement service, sera provides support in all project phases. In accordance with the company's guiding principle "We create added value for people and the environment" it is always the objective of the sera Group to create sustainable and reliable solutions for the customer and to achieve optimum production results. This requires a high availability of the system with a minimum of downtimes. For this purpose, sera provides a wide range of services from technical support to spare parts service and repair service.



YOUR CONTACTS



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Fixed, competent **sera** contact persons throughout the entire quotation, order and project realisation process guarantee you optimum customer support and advice. Your contact person reacts flexibly to your needs and is fast and reliable in processing and handling. From Engineering to Production to After Sales Service, sera provides you with high quality products and services.



