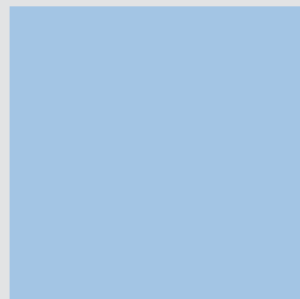
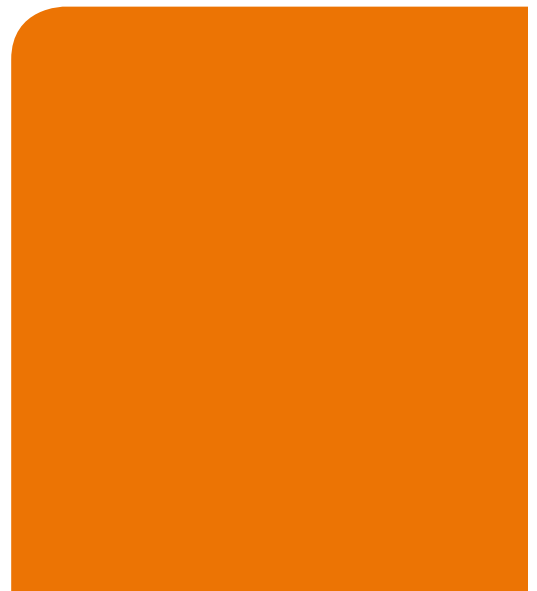


LEWA metering and mixing packages

for process engineering



- **reliable**
- **economical**
- **easy to integrate**

LEWA metering systems and metering packages



All from one source:
all components of the
LEWA metering system



... of the standard metering
packages and of the ...



... individually designed
metering packages are
optimally matched to
each other

Metering and mixing of fluids, in conjunction with other progress steps, plays an important role in many production plants utilising process technology. Increasing automation adds special importance to plant controls with process displays, recording of operating data and interfacing with supervisory process management systems.

LEWA designs and supplies metering systems and metering and mixing packages for the most different applications. The performance range covers basic engineering via process engineering up to commissioning of complete, turn-key installations.

Based on our broad know-how in process engineering we advise our customers during all stages of the project. For this most modern devices, such as a process research laboratory with recording of measured data, CAD-systems, computerised calculation programmes for pipelines and comprehensive data bases for package components, are available. Apart from process engineering technology a fully equipped instrumentation and control department with extensive experience for the concept and optimisation of electric controls is available.

- metering systems
- standard metering packages
- tailor-made metering packages as solution for specific applications

Advantages for the customer are:

- all from one source, only one responsibility for engineering and production
- all systems and components adapted and optimised with each other
- individual solutions from the pump up to turn-key plant installations
- expert selection of hardware
- in-house software development for package control and process visualisation
- control cabinet design and manufacturing
- over 50 years of experience
- state-of-the-art equipment for development and production
- technical leader in liquid metering worldwide
- expert consultancy in process engineering and electronic open and closed loop control technology





High operational safety:
even under aggressive

Repeatable solution concepts: LEWA standard metering packages



Flow proportional:
precisely controlled odourant addition
e. g. in the natural gas supply

LEWA standard metering packages, e. g. for gas odourisation, sulphuric acid dilution or polyethylene cross-linking and metering- and mixing packages for specific applications are supplied from one source. All components are precisely adapted to each other and thus, apart from high availability and operational safety of the packages, assure an excellent cost – benefit ratio also.



Different concentrations:
metering- and mixing packages
e. g. for acid dilution



Precise metering and mixing:
metering of peroxide for
cross-linking of polyethylene





Hygienic and reproducible:
recipe metering in

All from one source: LEWA customised metering- and mixing packages



Precise and continuous:
metering- and mixing packages for
the production of fabric softeners



Precise at high pressure:
LEWA metering pumps and packages
in the chromatography



Precise and reproducible:
fully automatic compact package
for recipe controlled production
of dispersion adhesives

Metering- and mixing packages specially designed for an individual application are also supplied from one source. All components are precisely adapted to each other assures high availability and operational safety of the packages.

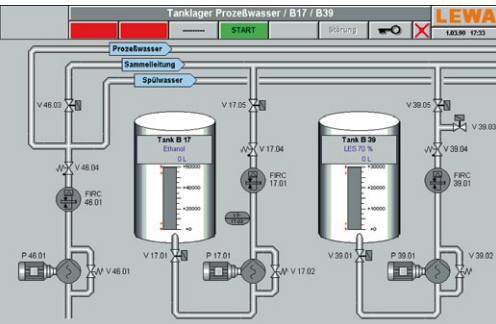
LEWA designs, manufactures and supplies the most different solutions starting from the metering pump with accessories mounted via metering systems up to complete turn-key packages. The advantage for the customer and an optimal, economic design are first priority here.



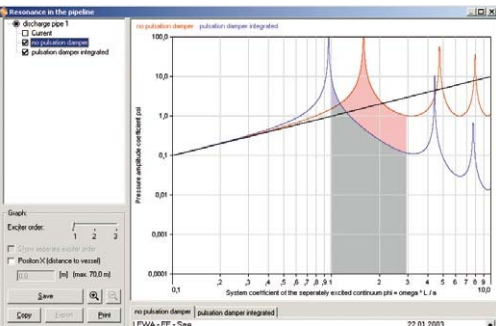


Extremely high availability:
decisive for metering-
and mixing packages for

Partner to the customer: System responsibility from one source



Easy integration:
reliable process monitoring and control



Consultation at an early stage already:
fluid evaluations and sound pipeline
calculations save money even before
the actual investment has started



Utilise competence:
LEWA's know-how and experience includes
the full range of liquid metering technology

LEWA not only is a supplier of metering pumps, metering systems, process diaphragm pumps and control technology, LEWA also is the close partner of the customer for all activities connected to the products.

Our services include consulting before and after placement of an order, engineering of pumps and pump systems including expandable system solutions, complete service including repair, supply of spare parts as well as maintenance and training worldwide. We are always at your service and our 50 years of experience are at your disposal.

Complete service

- vibration analysis and design calculation for pipelines and pulsation dampers
- fluid evaluations
- software development, also for individual controls
- system tests
- commissioning on-site
- service and maintenance contracts
- service worldwide
- consultation for changed operating conditions
- extension and modification of existing pumps and systems



From the pump to the system:
LEWA designs and supplies solutions



For every occasion: The LEWA product range



LEWA micro-flow metering pumps

For laboratories & pilot plants: LEWA micro-flow pumps

These micro-flow metering pumps with hydraulically actuated metal diaphragms are primarily used in laboratories and for test procedures in pilot plants.

Performance range

Flow rate	up to 0.04 m ³ /h
Discharge pressure	up to 560 bar



LEWA ecodos

For low pressures:

LEWA ecodos metering pumps

Diaphragm metering pumps for low pressure duty, using a mechanically actuated PTFE quadruple diaphragm for high security. Can also be combined as a multiple pump.

Performance range

Flow rate	up to 1.5 m ³ /h per pump head
Discharge pressure	up to 20 bar



LEWA ecoflow

For medium to high pressures:

LEWA ecoflow metering pumps

LEWA ecoflow offers the most advanced, safe, leak-free metering pumps for medium and high pressures.

Performance range

Flow rate	up to 10 m ³ /h per pump head
Discharge pressure	up to 1,200 bar

For sterile applications:

LEWA Sanitary & Hygienic

LEWA supplies special sanitary and hygienic diaphragm pumps for metering tasks in hygienic, aseptic or sterile procedures, whether for food and beverages or for pharmaceuticals and personal care.

Performance range

Flow rate	up to 4.5 m ³ /h per pump head
Discharge pressure	up to 350 bar

For high pressures:

LEWA process diaphragm pumps

The leak-free LEWA process diaphragm pumps for high flow rates are the tightness standard in high-pressure process technology. Using LEWA triplex process diaphragm pumps, even critical, toxic or flammable liquids can be conveyed safely. Even extremely low viscous, non-lubricating fluids or abrasive suspensions can be handled successfully.

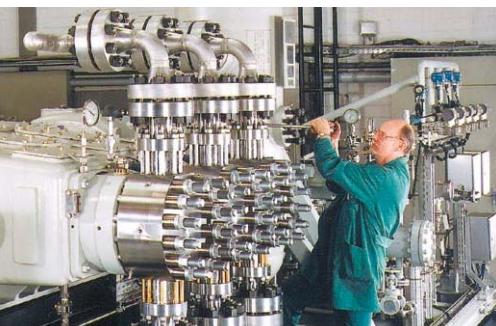
Performance range

Flow rate	up to 180 m ³ /h
Discharge pressure	up to 1,200 bar

For closed control loops:

LEWA metering systems

LEWA is the first point of contact in the market for high-performance yet economically designed metering systems. These are modular combinations of pumps, valves and controls for stroke length and speed, flow meters (volume or mass flow) and controllers. The metered flow is adjusted in a closed control loop.



LEWA triplex process diaphragm pumps

For more information, please request our individual brochures.

Take advantage of our know-how

LEWA is a global supplier of metering pumps, process pumps, and metering systems. We strive for a close partnership with our customers in all activities related to our products. Your complete satisfaction begins with consultation before or after an order is even placed, service and repair, spare parts supply, maintenance and training.

Our services extend from comprehensive documentation for our products through fast spare parts supply, expert repairs and rebuilds, and field service for maintenance and training. This increases the uptime of LEWA pumps and packages and assures troublefree operation.

We would be pleased to present detailed information on our scope of supply, our services and our resources that can be made available to you. Our over 50 years of experience in fluid metering and controlled volume applications is behind the design support we offer.

For this are offer:

- Correct pipe line calculation
- Fluid evaluation from the expert
- Worldwide, competent service
- Maintenance directly from the manufacturer
- Seminars from the specialist
- Spare parts supply with 24/28 hours service
- Installation of diagnosis systems

Motor 1		Motor 2	
VE Wasser		sulfuric acid	
type of drive unit	LDC	type of pumphead	M91.05
position	horizontal	plunger diameter	30
no. of elements	2	heating jacket	0
chosen stroke frequency max.	84 [min ⁻¹]	flushing	SEINE
chosen stroke frequency min.	84 [min ⁻¹]	nominal width valve	10
gear reduction	1:17	volumetric efficiency fluid	93.42
stroke adjustment	98%	flow max (H ₂ O)	100.04
min required suction pressure	0.24 [bar abs.]	flow max (fluid)	100.00

Profit from LEWA's know-how at an early stage, during design or ongoing operation



On-site without delay: Consulting, maintenance or service. Being close to our customers is very important to us

Worldwide:
With numerous subsidiaries and authorized agencies, you will find us in all major countries.



Creating Fluid Solutions

LEWA
pumps + systems

LEWA proven services and technologies



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Contacts of LEWA's numerous affiliated companies and representatives can be found on

www.lewa.com

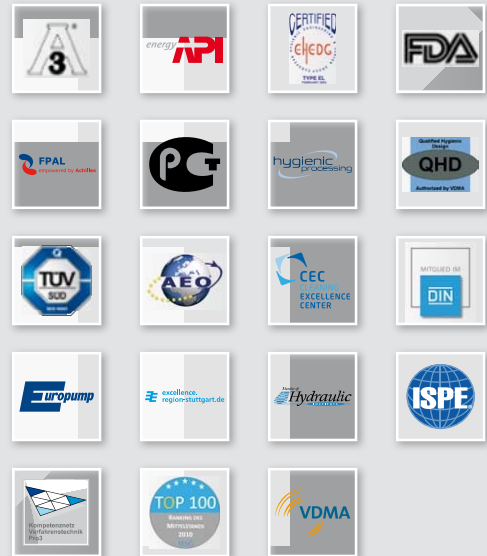


Customized solutions for metering and process technology

For more than 50 years, LEWA has set the technical trends of metering pumps and systems. LEWA offers a single-source solution to handling complex metering and mixing tasks – ranging from individual pump configuration, basic and detailed system engineering and pretesting to onsite commissioning and maintenance services.

Good causes to rely on:

- A solution for your special application: from process analysis to global service
- Highest process safety: individual pump configuration and state-of-the-art design
- International engineering and project competencies
- Highest reliability: developed for continuous operation
- Low lifetime costs: reduced energy consumption and low-wear design
- Compliance with international standards, e.g. API, ASME, GOST-R, FDA, EHEDG, 3A, TÜV
- Comprehensive reference list



Areas of expertise:



Oil & Gas Gas Odorization Refinery Petrochemicals Chemicals Plastics



Cleaning & Detergents Personal Care Pharma & Biotechnology Food & Beverages Energy Utilities

Your local representative:

