

# 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

1 -High operational safety: even under aggressive ambient conditions

### 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 crosslinking 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 the food industry

### 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.

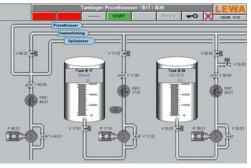
LEWA designs, manufactures and supplies the most different solutions starting from the metering pump with accessories mounted via metering systems up to complete turn-key packages. The advantage for the customer and an optimal, economic design are first priority here.



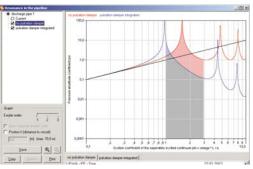


Extremely high availability: decisive for meteringand mixing packages for the 0offshore-technology

### 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

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 the most different tasks



### For every occasion: The LEWA product range



LEWA ecoflow



LEWA micro-metering pumps



LEWA ecodos



LEWA process diaphragm pumps

In addition to metering systems and metering packages LEWA manufactures metering pumps and process diaphragm pumps. If you are interested in our complete scope of supply we would be pleased to send comprehensive information and leaflets to you.

#### **LEWA ecoflow**

The universally applicable metering pump series in modular design is the technically and economically optimal solution for medium and high pressures. Drive units and pump heads can be combined to multiplex pumps even in different frame sizes. A variety of drives and accessories are available for application specific adaptation.

Performance range					
Flow rate	up to 10 m <sup>3</sup> /h				
Discharge pressure	per pump head up to 1200 bar				

#### LEWA ecodos

Standard diaphragm metering pumps for low pressure services using a patented, mechanically actuated fourlayer PTFE sandwich diaphragm for multiple safety. In simplex or multiplex configurations.

Performance range					
Flow rate	up to 1,5 m <sup>3</sup> /h				
	per pump head				
Discharge pressure	up to 20 bar				

#### **LEWA micro-metering pumps**

Micro-metering pumps with hydraulically actuated metal diaphragm, used predominately in the laboratory and process research duties in pilot plants.

#### Performance range

Flow rate	up to 68 l/h
Discharge pressure	up to 560 bar

#### LEWA process diaphragm pumps

Eliminate fugitive emissions with leakfree LEWA process diaphragm pumps for high pressure, high flow services. No process fluid can escape to the atmosphere. LEWA triplex with compact monoblock drive element and LEWA ecoflow in variable multiplex assembly guarantee zero leakage and low maintenance operation.

#### Performance range

Flow rateup to 180 m³/hDischarge pressureup to 1200 bar

### 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

PSBrowser					
LEWA					Herbert Ott group
- And -	configu	ration \	VFD oper	ation	quotation No. (
	iervice fluid	motor	data	default values	
motor	pump structure	speciallie	s/accessories	tests / docume	ntation cotopory
	etriebsdaten 2 iulphuric acid e				
type of drive unit	LDC	1	type of pumpher	ad	M910S
position	horizontal	1	plunger diamete	и	30
no. of elements	2		heating jacket		0
chosen stroke frequency max.	84	Imin <sup>-1</sup>	flushing		KEINE
chosen stroke frequency min.	84	Imin <sup>-1</sup>	nominal width v	alve	10
gear reduction	1:17	1.000	volumetric efficie	encyfluid	93.42
stroke adjustment	He-W		flow max (H <sub>2</sub> O)		100.04
min required suction pressure	0.24	(barabs.)	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 more than 10 LEWA Centers of Competence around the globe, and over 60 experienced representatives, we never are far away

#### **Creating Fluid Solutions**



## For short distances: LEWA at your service worldwide

### Germany / Headquarters LEWA GmbH

Ulmer Str. 10 71229 Leonberg Phone +49 7152 14-0 Fax +49 7152 14-1303 lewa@lewa.de www.lewa.de

#### LEWA HOV GmbH + Co KG

Neue Ramtelstr. 48 71229 Leonberg Phone +49 7152 6091-0 Fax +49 7152 6091-59 hov@hov.de www.hov.de

Austria LEWA Pumpen GmbH 1150 Vienna Phone +43 1 8773040-0 info@lewa.at www.lewa.at

Brazil ■ LEWA Bombas Ltda. 04378-400 São Paulo - SP Phone +55 11 56770466 info@lewa.com.br www.lewa.com.br

Bulgaria LEWA – Technical Office Sofia 1421 Sofia Phone +359 2 8654088 lewa.bg@lewa.at www.lewa.bg

China (P.R.C.)
LEWA Pumps (Dalian) Co., Ltd.
116600 Dalian
Phone +86 411 8758-1477
sales@lewa.cn
www.lewa.cn

Czech Republic LEWA Pumpen spol. s.r.o. 602 00 Brno Phone +420 5 43236052 office@lewa.cz www.lewa.cz

France LEWA S.A.S. 78500 Sartrouville Phone +33 1 308674-80 info@pompes-lewa.fr www.lewa.fr Hungary LEWA Kft. 1012 Budapest Phone +36 1 2240403 info@lewa.hu www.lewa.hu

Italy LEWA S.R.L. 20020 Arese (Mi) Phone +39 02 935826-60 info@lewa.it www.lewa.it

Mexico LEWA México – Technical office 01210 México D.F. Phone +52 55 91 72 92 10 280 info@lewa.es www.lewa.es

Norway LEWA AS 4319 Sandnes Phone +47 52 9091-00 info@lewa.no www.lewa.no

Poland ■ LEWA Sp. z o.o. 00-159 Warsaw Phone +48 22 6358204 info@lewa.pl www.lewa.pl

Romania LEWA Romania s.r.l. 050579 Bucharest Phone +40 21 4107340 info@lewa.ro www.lewa.ro Singapore LEWA PTE LTD Singapore 129808 Phone +65 686 17127 info@lewa.sg www.lewa.sg

Singapore Pump Alliance PTE LTD Singapore 129808 Phone +65 646 86802 pbeddard@cpcasia.com.sg www.pumpalliance.sg

Spain LEWA Hispania, S.L. 08020 Barcelona Phone +34 93 2247740 info@lewa.es www.lewa.es

Switzerland LEWA Pumpen AG 4153 Reinach 1 Phone +41 61 7179400 info@lewa-pumpen.ch www.lewa-pumpen.ch

UAE / Dubai LEWA GmbH (LEWA Branch) Dubai Airport Free Zone, UAE Phone +971 4 2993969 lewa@lewa-dubai.ae www.lewa.ae

Ukraine LEWA Ukraine LC 03039 Kiev Phone +380 44 52796-31 lewa.ua@lewa.at www.lewa.at USA / North- and Middle America LEWA, Inc. Holliston, MA 01746

Phone +1 508 429 - 7403 sales@lewa-inc.com www.lewa-inc.com

USA/Gulf Coast Oil & Gas Production Capital Process Management, Inc. Houston, TX 77086 Phone +1 713 673-5161 rfletcher@capitalprocess.com www.capitalprocess.com

Find more LEWA subsidiaries at www.lewa.com