

# Best partner – for best solutions

reliable – economical – innovative

LEWA NIKKISO Austria GmbH

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#### Unsere Kunden stehen im Mittelpunkt unseres Handelns.

LEWA bietet Ihnen spezifisch zugeschnittene Lösungen, bei denen die umfassende Beratung, das Systemdenken und der Prozess im Mittelpunkt stehen. Zur LEWA Kern-Expertise zählen zudem der erstklassige Service und Ersatzteilvertrieb im After-Sales-Bereich und die langjährige Erfahrung im internationalen Projektmanagement.

## We put our customers at the center of our activities.

LEWA offers customized solutions, with a focus on taking a comprehensive approach to pump and system integration and on the process itself. LEWA's core expertise includes first class service and spare part distribution in aftersales combined with many years of experience in the international project management.

#### First class Produkte für Ihre Anwendung

- Dosier Membranpumpen
- Prozess Membranpumpen
- Dosier- & Odoriersysteme
- Kreiselpumpen
- Hygienepumpen
- Kompressoren
- Kolbenpumpen
- Membranpumpen
- Spaltrohrmotorpumpen

## First class products for your application

- Diaphragm metering pumps
- Process diaphragm pumps
- Metering & Odorizing systems
- Centrifugal pumps
- Hygienic pumps
- Compressors
- Piston pumps
- Diaphragm pumps
- Centrifugal canned motor pumps





























# LEWA: Diaphragm metering pumps

# LEWA ecoflow: for medium to high pressures



#### Performance:

- Flow rate up to 10,000 l/h
- Operating pressure up to 1,200 bar
- Suction pressure down to 0.1 bar abs.
- Temperature
- 20 °C up to +400 °C
- Metering accuracy ± 0.5 %

#### LEWA ecoflow:

The most advanced metering diaphragm pumps with leak-free safety for medium and high pressures – not least because of the unique Diaphragm Protection System (DPS).

The LEWA ecoflow metering pump series is based on a proven modular system. Combined with the newly developed diaphragm pump heads of the M900 series, this range meets the high expectations of our customers.

Benefits offered are: high operating safety, economical modular system, long maintenance intervals, lowest life cycle costs, supplied to meet standard regulations (VDMA 24284, 24286-10, API 675, 3A, FDA).

# LEWA ecodos: for low pressures



#### Performance:

- Flow rate up to1,500 l/h per pump head
- Operating pressure up to 20 bar
- Suction pressure down to 0.1 bar abs.
- Temperature-10°C up to +80°C
- Motor power up to 7.5 kW

#### LEWA ecodos:

Standard diaphragm metering pumps for low pressure use, using a mechanically actuated PTFE quadruple diaphragm for multiple security.

LEWA ecodos series pumps are available in 13 performance ratings and can be combined to form multiplex pumps. The pump heads are constructed of stainless steel, PVC, PVDF or electrically conductive PTFE. With its individual controls and a complete range of accessories, LEWA ecodos can be adapted to any application. They meet all the specific demands of integration in automated installations and are characterised by their high metering accuracy  $\pm$  1%.

# LEWA ecosmart: the smart diaphragm metering pump



#### Performance:

- Flow rate up to 300 l/h
- Operating pressure up to 80 bar
- Suction pressure down to 0.1 bar abs.
- Temperature-20°C up to +120°C
- Motor power up to 0.55 kW

#### LEWA ecosmart:

The safe, economic and hermetically tight diaphragm metering pump in proven quality.

Typical fields of application:

- Water treatment in power plants
- Metering of additives in industrial water processing
- pH adjustment
- Dosing of solvents in the chemical industry
- Feeding of corrosion inhibitors
- Dosing of colorants and flavors in the food industry
- Additive metering in the plastics industry
- Injection of chemicals in the oil & gas industry





# LEWA: Process diaphragm pumps

## LEWA triplex

# LEWA process diaphragm pumps Performance:

- Flow rateup to 200,000 l/h
- Operating pressure up to 1,200 bar
- Suction pressure down to 0.1 bar abs.
- Temperature
- 80 °C up to +200 °C



#### LEWA modular design





## For high pressures:

## LEWA process diaphragm pumps

The leak-free LEWA process diaphragm pumps for high flow rates are the tightness standard in highpressure 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.

# Advantages of LEWA process diaphragm pumps at a glance:

- Hermetically tight, zero leakage
- Metal- or PTFE sandwich diaphragms with diaphragm monitoring system
- Compact monoblock or variable segment design
- Dry run and overload safe
- Rugged and low maintenance requirements
- Precise conveying even at pressure fluctuations due to pressure firm characteristic
- High efficiency
- High availability
- Low maintenance
- Low life cycle costs

LEWA process diaphragm pumps are available in the compact LEWA triplex series and in the segment design LEWA ecoflow.

# LEWA triplex

- Extremely space- and weight saving monoblock design
- Solid, rugged overall design
- Extremely smooth and low vibration operating due to equal eccentric phasing
- Sturdy friction bearings for eccentric shaft and wrist pins
- Integrated worm gear and vertical flange motor up to G3R size
- No base frame necessary up to G3R size
- Low pulsation due to overlapping partial flows
- Precise, reproducible flow setting via speed

# LEWA ecoflow

- Especially for mixture control and strongly varying flows
- Wide control range up to 1:100
- Precise, reproducible flow setting via stroke length and speed
- For conveying processes combined with metering tasks
- Sound overall construction
- Up to six individual elements, even different frame sizes, can be combined
- Economic duplex, triplex, quadruplex or sextuplex pumps in boxer design (LDG and LDHB)





# LEWA: Metering plunger and process plunger pumps

LEWA ecoflow<sup>®</sup> packed plunger metering pump

#### Performance:

- Flow rate up to 9 m<sup>3</sup>/h
- Discharge pressure up to 500 bar
- Suction pressure down to 0.1 bar abs.
- Number of pumpheads 1-6
- Temperature up to 600 °C



#### LEWA ecoflow packed plunger metering pump

The LEWA ecoflow plunger metering pump stands out because of its unique suction capability. Although the system costs are kept at a low level, high quality materials like oxidceramic are used. As a result, a high accuracy for the metering process is achieved for simple proceedings. The LEWA ecoflow plunger pump is executed in many different ways; single or multiple drive elements with the same or even with different performances. The application area extends even more due to the use of special materials for the pump head with diverse characteristics. So even critical fluids like melts can be handled. Since there is the possibility for either analogue or digital signals, an effortless integration into the process system is achieved. The high standard security measures are realised by the use of first class plunger materials and an optimised seal construction.

# LEWA process plunger pump

# Performance:

- Flow rate up to 140 m $^3$ /h
- Discharge pressure up to 3,500 bar
- Number of pumpheads 3-5
- Temperature up to 200°C
- Installed capacity15 kW 600 kW



## LEWA process plunger pump

LEWA process plunger pumps are first class delivery pumps with high volumetric precision. Especially for applications in the oil and gas industry and the offshore area, where huge hydraulic performances are needed, a plunger pump offers an economic and efficient alternative to a diaphragm pump.

Since no system is like another, LEWA pump designs focus on high flexibility and quality. While considering all the possible variations, starting at the different material combinations, the design and additional equipment, a very precise adjustment to given parameters can be achieved. The compact design itself is very space saving and excels with an easy installation and handling. The power unit consists of a double skew gear which stands out because of its low noise level, long life feature and high efficiency in spite of low power consumption.

As an assurance against low oil level and as an overload safety device the gear is equipped with a temperature and pressure switch. This mechanism ensures that the pump shuts off automatically in case of an emergency and a total breakdown caused by a transmission failure is prevented. Another advantage is the good access to the wearing parts and therefore a fast maintenance with only short holding times.



# LEWA: Sanitary/hygienic pumps and systems

# LEWA ecodos<sup>®</sup> sanitary/hygienic



#### Performance:

- Flow rate0.4 1,500 l/h per head
- Discharge pressure up to 20 bar
- Suction pressure down to 0.1 bar abs.
- Number of pumpheads 1-6
- Temperature -10 to 80°C

#### LEWA ecodos sanitary/hygienic

This advanced design of the LEWA ecodos uses the already known features of the diaphragm pump technology to succeed in the demanding field of the food, pharmaceutical and cosmetic industries. Especially concerning the cleaning and sterilising processes (CIP and SIP), dead spaces are minimised and surface treatments are maintained to perfection (316/316L: RA<0,8 $\mu$ m and 1.4435: RA<0,5 $\mu$ m).

Due to the high flexibility in terms of the material selection a high assimilation to specified demands, is achieved. The parts which are in contact with the fluid are FDA conform, free of animal fat and executed according to USP class VI. A certification of the raw materials (EN 10204 3.1b) is feasible if required.

# LEWA ecoflow<sup>®</sup> sanitary/hygienic



- Flow rate 0.04 - 6,000 l/h per head
- Discharge pressure up to 500 bar
- Suction pressure down to 0.1 bar abs.
- Number of pumpheads 1-6
- Temperature -20 to 150°C

#### LEWA ecoflow sanitary/hygienic

As progressive metering diaphragm pump, the LEWA ecoflow in the sanitary / hygienic execution offers optimal solutions for highest requirements in the food, pharmaceutical and cosmetic industry. Simple cleaning and sterilisation processes (CIP and SIP) with a very small effort are feasible due to an optimised construction. The leading status of the LEWA ecoflow is still untouched based on the unique suction capacity (0,1 bar) combined with a high discharge pressure (500 bar).

Similar to the LEWA ecodos, all necessary international and european guidelines concerning the sanitary and hygienic applications are met and can be certified with the according documentation if necessary.



# LEWA EcoPrime®



# LEWA EcoPrime

The LEWA EcoPrime is an up to date chromatography system equipped with a LEWA intellidrive mechanism. To ensure highest efficiency and reproducibility the pulsation of the pumping process is reduced to a minimum. Having combined the already known advantages of a metering diaphragm pump with the optimised regulation system, an unmatched accurateness (margin error of 0,5% at a flow rate of 0,04l/min to 33l/ min) is possible. An implementation in the sanitary and hygienic field is given due to the uncomplicated cleaning and sterilisation process (CIP, SIP) and the ability to completely drain the system of any fluids. Because of the tight regulations in the pharmaceutical industry, the pump heads and the gear are completely separated from each other to prevent any kind of contamination. The LEWA EcoPrime is available in different executions, low pressure and high pressure, which gives us a wide application range.





# LEWA: Metering & Odorizing system

#### **LEWA Metering systems**

### Metering & Odorizing systems Performance:

- Flow rate up to 10,000 l/h
- Operating pressure up to 1,200 bar
- Suction pressure down to 0.1 bar abs.
- Temperature
- 80 °C up to +400 °C



## For process automation: LEWA Metering systems

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, computerized 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 optimization of electric controls is available.

- Metering systems
- Standard metering packages
- Tailor-made metering packages as solution for specific applications

# **LEWA Odorizing systems**



# For economical safety: LEWA Odorizing systems

Standard or tailor-made solutions for odorizing. LEWA offers odorizing systems for natural, liquefied or technical gases as well as all kind of odorants.

LEWA also offers specific solutions tailor-made to customers' applications in addition to its standard products.

In accordance to different national and international laws and regulations, these systems also take into account special operating data and those operating conditions on-site. Using this data as a basis, LEWA builds and delivers systems worldwide which are tailored exactly to customers' requirements. The mechanical and electronic components are custom-made. This is a result of LEWA's extensive experience in the field of metering technology and package building.

## Customized special design, such as:

- ATEX design
- ASME VIII compliant
- Stainless steel pan
- Promass flow meter
- Monitored and controlled via Internet (option: LEWA Netport@l)
- Integration into existing systems possible



# HMD Kontro/ANSIMAG: Sealless Magnet Drive pumps

## **HMD Kontro Sealless Magnet Drive Pumps**

#### Performance:

- Flow rate up to 626 m<sup>3</sup>/h
- Head up to 245 m
- Operating Pressure up to 150 bar
- Temperature
- -100 to +450 °C



HMD/Kontro was first to develop and perfect the magnetic drive for pumping applications over sixty years ago.

HMD-Kontro Sealless pumps are particularly useful in high temperatures, high pressures and volatile substances. Specifically when it comes to applications in the petroleum, chemical, gas production, pharmaceutical and general process industries that involve toxic, fine, corrosive and aggressive liquids that must be handled, our sealless magnetic drive pumps deliver the rock solid performance engineers demand and that industrial regulations require.

**GT** – For general transfer duties. The GT pump series has been specifically designed as a compact, cost-effective and minimum maintenance pump.

**GS** – The general service pump. Available according to ASME/ANSI 73.3 (GSA) & ISO 2858 (GSI). GSA/GSI pumps are for services in the CPI, HPI and specialty processing industries.

**GSP** – The API 685 Sealless pump. The GSP sealless magnetic drive pump meets all of the requirements of API-685, making it ideal for chemical, petrochemical as well as oil and gas installations.

**SPGS** – A range of self priming pumps.

**HPGS** – A sealless magnetic drive pump especially suited for high pressure applications in the chemical industry.

# Sundyne ANSIMAG Sealless Magnet Drive Pumps

## Performance:

- Flow rate up to 260 m<sup>3</sup>/h
- Head up to 104 m
- Operating Pressure up to 24 bar
- Temperature





The Sundyne ANSIMAG sealless magnetic drive nonmetallic product line is simple by design. All wetted parts are molded ETFE components to safely handle a generous range of corrosives and solvents up to 121°C without corrosion.

ANSIMAGs highly reliable sealless magnetic pump line covers a wide range of sizes and includes standard external dimensions so that they can easily replace other sealless and sealed pumps without changing piping or baseplates. They also meet standard design specifications and materials of construction. ANSIMAGs innovative rear casing generates no eddy currents thus eliminating heat generation and reducing energy costs. Our pumps are sealless, so there are no leaks, no emissions, no costly seal maintenance and no problems.

Different designs like chemical standard pumps, vertical inline pumps and selfpriming pumps are available.



# **HOWDEN: Compressors**

#### Diaphragm compressors

#### Performance:

- Inlet volume:
  up to 200 m³/h
- Power: up to 400 kW
- Discharge pressure:
   up to 3,000 barg



Diaphragm Compressors: Howden metal diaphragm compressors provide non-contaminating, leak-tight compression of any gas. This is the ideal compressor for any application that demands high product purity and/ or environmental protection. Howden diaphragm compressors are also the perfect solution for highly reactive and corrosive gases as well as for application which require a reliable solution for oil free compression with a high efficiency and high compression ratio.

**Operational areas:** Chemical and Petrochemical, Energy, Deep sea diving, Industrial, Speciality gases, Metal treating, Defence/Aerospace, Electronics, ...

Applications:  $H_2$  leakage recovery,  $H_2$  storage, Polyethylene and other polymerisation processes (PE, PP, PS...), Chlorinated or fluorinated gases, Chemical and petrochemical processes (TA/PTA – TDI, 2-EH, MMA...), Silane gases handling for Polysilicon manufacturing plants, radioactive gas handling, coal gasification and methane enrichment, oxygen generators, bottle filling for gases with high purity and/or high leak tightness, rare and ultra high purity gases, Ultra-pure gas handling for semiconductors ( $H_2$ ,  $N_2$ ...), Electronics gases (He, Ar, Si $H_4$ ...), any gas handling situation calling for zero-contamination, environmental integrity, high compression and/or high efficiency.

#### Piston compressors

## Performance:

- Inlet volume: up to 22,000 m $^3$ /h
- Power: up to 2.5 MW
- Discharge pressure:up to 350 barg



**Piston Compressors:** Howden process gas piston compressors, oil-free or mini-lubricated API618 designs for process applications. Incorporate buffer-purged packing cases and/or double compartment distance pieces, water-cooled cylinders with removable dry liners, and materials engineered to meet any compression application.

**Operational areas:** Petrochemical and Refinery, Oil and gas, Chemical and agro chemicals, Industrial speciality gases, Energy, Miscellaneous.

Applications: H<sub>2</sub> make-up and recycle for refining applications (HDS, HDT...), Ethylene, EO/EG, Polyethylene (LDPE, LLDPE, HDPE), Polystyrene, Polypropylene, Paraxylene, PTA, MMA, 2-EH, HDS, FCC, RCC, Isomerisation, MTBE, Wax/Parafin, oil well priming, Gas treatment separation, Gas drying, L.P.G., Fertilizers, Ammonia, Polymers, C.F.C./H.F.C., refrigerant gases, detergent, Oleo-chemicals, industrial gases (CO, CO<sub>2</sub>, H<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, Ar,...), Gas production units, Pressure boosting units, Pipeline distribution, Steel and metal processing, Gas engine and turbine feed, Cogeneration, etc.



# POMAC: Lobe-, Centrifugal- & Screw Pumps

#### Pomac PLP



# Rotary lobe pump Performance:

- Capacity up to 100 m<sup>3</sup>/h
- Pressure up to 15 (20) bar
- Viscosity1 − 100,000 mPa·s
- Temperature max. 220°C
- Wetted surfaces 0.8 µm
- Material of wetted parts: 1.4404
- Certificates: EHEDG, FDA, USP Class VI, ATEX, 3.1...

#### Pomac Rotary lobe pumps

For industrial and hygienic process-applications.

Pomac PLP Lobe pumps are designed to achieve maximum pump performance combined with minimal product damage. They are particularly well-suited for viscous and/or shear-sensitive media that are pumped at 10 to 700 rpm. Different rotor designs make the pump suitable for chemical, standard hygienic and highly complex sterile applications. The Lobe pumps are made entirely of stainless steel and meet the strict requirements of EHEDG. The applied "front pull out" principle for the mechanical seal makes maintenance very easy.

## Pomac CP



## Centrifugal pump Performance:

- Capacity up to 300 m<sup>3</sup>/h
- Pressure up to 13 bar
- Viscosity 1 – 500 (1,000) mPa⋅s
- Temperature max. 220°C
- Wetted surfaces 0.8 μm
- Material of wetted parts: 1.4404/316 L
- Certificates: EHEDG, FDA,
   USP Class VI, ATEX, 3.1...

#### Pomac stainless steel centrifugal pumps

For industrial and hygienic process-applications.

Due to different impeller constructions POMAC centrifugal pumps can be used in food and beverage industry, chemical and pharmaceutical industry. The pumps are available in self priming as well as in non-self priming execution and are used for pumping fluids with low or medium viscosity. The modular designed construction allows a various choice of shaft sealing options and so the adaption to different applications. POMAC centrifugal pumps are available in numerous sizes for a capacity up to 300 m³/h and a discharge pressure up to 13 bar. The pumps meet international standards and can be supplied with various certificates like EHEDG (European Hygienic Equipment Design Group), 3A, FDA, USP Class VI, 3.1 and ATEX.

# Pomac PDSP

#### Double screw pump Performance:

- Flow rate
  up to 140 m³/h
- Pressure up to 16 bar
- Temperature up to 140°C
- Viscosity up to 1,000,000 mPa·s



# Pomac PDSP double screw pumps

This hygienic pump type is designed according EHEDG and very suitable for shear-sensitive fluids even with larger pieces up to a diameter of 30 mm – as CIP and process pump.

The same pump can pump very viscous up to very thin products. Due to the front-pull-out-principle the pump can be well maintained within a short time.

The pump is self-priming, has a very high wet suction lift, can run dry for a limited time and can be operated in reversible mode. Other advantages are the non-pulsating and pressure-stabile characteristics.



# SUNDYNE/SUNFLO: Centrifugal Pumps

# Sundyne centrifugal pumps



#### SUNDYNE Performance:

- Flow rate up to 250 m<sup>3</sup>/h
- Operating pressure up to 152 bar
- Suction pressure up to 70 barg
- Temperature from-131 to +340°C
- Drive power up to 300 kW

SUNDYNE manufactures high speed centrifugal process pumps, meeting low-flow and high head process conditions in particular.

The Sundyne-Pumps are offering a high technical standard, an outstanding reliability and efficiency. With their compact design and hydraulic parts manufactured to state of the art technologies these pumps are customized for efficiency and cost effectiveness for a wide range of applications in the process industry.

Single- and two-stage turbocompressors are also built in high speed technology.

# Sundyne Marelli centrifugal pumps



- Flow rate up to 10,000 m $^3$ /h
- Operating Pressure up to 120 barg
- Suction pressure up to 38 barg
- Temperatures from150 to +450 °C
- Drive power up to 2,000 kW



Sundyne-Marelli located in Illescas, Spain, serves the refining, petrochemical, offshore and chemical industry with several heavy-duty horizontal and vertical pump models.

SMK series: Centreline mounted, radially split overhung pumps according to API 610/ ISO 13709 (OH2)

**KSMK** series: Radially split, single or two stage between bearings pumps according to API 610/ ISO 13709 (BB2)

**DVMX** series: Axially split, multistage between bearings pumps according to API 610/ ISO 13709 (BB3)

VSMK series: Submersible vertical single stage pumps according to API 610/ ISO 13709 (VS4)

FG series: Submersible vertical multistage pumps according to API 610/ ISO 13709 (VS1)

FQ series: Submersible vertical double suction pumps according to API 610/ ISO 13709 (VS2)

# Sunflo high pressure centrifugal pumps

#### SUNFLO Performance:

- Flow rate up to 116 m<sup>3</sup>/h
- Pressure up to 160 bar
- Max. power drive 220 kW
- Temperature from -46 to +149 °C
- Suction pressure up to 24 bar



# SUNFLO pumps incorporate state of the art technology for high speed centrifugal pumps.

The resulting circumferencial velocity is converted into performance optimally. With this technology the Sunflo pumps ensure their technical leadership against competitors offering conventional multi-stage centrifugal pumps. These pumps provide unmatched performance in low flow and high head applications.





# **WERNERT: Centrifugal Pumps**

#### NE\_O with slide ring sealing



#### Series NE Performance:

- Flow rate
  up to 1,000 m³/h
- Operating pressure up to 16 bar
- Suction pressure down to 3 barg
- Temperature50 to +160°C
- Power up to 200 kW

The NE pump is designed to convey aggressive, solidladen and toxic liquids. Thick-walled casing parts of plastic material as well as their completely metallic enclosure ensure the pump is safe for pressure rating to PN16

The WERNERT bellow-type axial face seal is of unique simple construction. It can be equipped with quench and/or continuous flushing if required. Various single and double acting axial face seals made by well known manufacturers are also available for special applications.

This constructional conception allows a quick exchange of the hydraulic side of the pump, without detaching the flanges or dismounting of the electric motor.

Available Materials: UHMW-PE, WERNIT®, PVDF, PTFE or PFA.

#### NM\_O with magnetic coupling



#### Series NM Performance:

- Flow rate up to 70 m<sup>3</sup>/h
- Operating pressure up to 16 bar
- Suction pressure down to 5 barg
- Temperature50 to + 160 °C
- Power up to 30 kW

The NM pump is a pump with magnetic coupling to work with toxic and agressive liquids, where leakage to the atmosphere is not allowed.

The drive power is transmitted to the hermetically sealed pump by a permanent magnetic coupling. The fluid-wetted magnetic rotor has an impermeable PFA coating. Couplings with different transmission powers are available depending on the application. The isolationshell is made from carbon fibre compound with PTFE inner shell and, naturally, it is free from eddy current. It is sealed with a round sealing ring with a defined sealing geometry.

## VK\_F vertical pump



## Series VK\_F Performance:

- Flow rate up to 800 m<sup>3</sup>/h
- Operating pressure up to 16 bar
- Temperature up to + 115 °C
- Power up to 200 kW

The type VK\_F is a single-stage submersible pump for open basins and tanks. The thick-walled plastic components and the high quality coatings allow various applications in pumping aggressive, corrosive and solid-laden liquids at temperatures up to 115 °C. The bearings of the shaft are located only above the support flange. There are no bearings in the submerged area. Therefore even liquids that are highly solid-laden can be pumped easily. Tolerant towards dry running Hydrodynamic reduction of the pressure on the rear of the impeller means that a mechanical seal is not required and the pump can run dry for a short time.



# WILDEN/ALMATEC\*: Diaphragm Pumps

#### Wilden Advanced-series

#### WILDEN Performance:

- Capacity up to 72 m<sup>3</sup>/h
- Driving and operating pressure up to 8,6 bar (21 bar)
- Temperature50 to +177 °C
- Particle size of solids up to 76 mm



# Wilden air-operated double diaphragm pumps are easy to use and maintenance friendly.

The pumps are self priming, save against dry running and overloading, submersible and adjustable by regulating the air pressure.

Applications: The main area of operation is pumping of various fluids from aggresive acids to abrasive slurries. Even the pumping of lightweight dry powder is no problem. Special versions for pharmaceutical and food industries as well as high pressure pumps for discharge pressure up to 21 bar are available.

Materials: Aluminium, Cast Iron, Stainless Steel 316, Hastelloy C, PP, PVDF. Diaphragms made of Neoprene, Buna-N, EPDM, Viton, PTFE, Saniflex, Wil-Flex, Polyurethane, Geolast.

# Almatec E-series \*

# ALMATEC Performance:

- Capacity up to 48 m<sup>3</sup>/h
- Driving and operating pressure up to 7 bar (15 bar)
- Temperature-10 to +130 °C
- Particle size of solids up to 14 mm



Not available in Czech Republic, Hungary, Romania and Slovakia

# ALMATEC\* – Air-operated double diaphragm pumps.

The ALMATEC range represents the latest generation of air-operated double diaphragm pumps. It combines relevant advances such as improved efficiency and innovative housing structure with ring-tightening with established ALMATEC traditions such as the robust solid construction.

Applications: Pumping of all liquids, from abrasive to high-purity fluids. Special versions for pharmaceutical and food industry as well as high pressure pumps for discharge pressure up to 15 bar are available.

Materials: PE, PTFE, PE-conductive, PTFE-conductive, Stainless Steel. Diaphragms made of EPDM, PTFE/EPDM-compound, NBR.



# NIKKISO Non-Seal Pump: Centrifugal canned motor pumps

#### Type HT

#### Performance:

- Flow rate up to 780 m<sup>3</sup>/h
- Head up to 210 m(300 m at 60 Hz)
- Motor power up to 132 kW (200 kW without explosion protection)
- Temperature
- -60 to +400 °C
- Viscosity up to 80cP (std.), 200cP (eng.)



Type HX



NIKKISO began with the production of centrifugal canned motor pumps in 1956, making it one of the first companies in the world to produce these pumps commercially, and it continues to do so today. Originally developed for the nuclear industry, the centrifugal canned motor pump has been developed further over the years and adapted to a wide range of industrial applications. NIKKISO has taken a pioneering role in these developments since its founding. For example, the E-Monitor is the most advanced system of its kind for the monitoring of bearing condition.

**Type HN** – Standard version Suitable for a wide variety of clean, non-volatile liquids with moderate temperature.

Type HT – High temperatures with cooling Developed for the production of hot liquids. The process liquid in the rotor compartment is circulated through the use of an auxiliary impeller. An integrated tube bundle heat exchanger as well as a spacer for thermal decoupling serve to keep the medium temperature in the motor constantly cool and thus maintain a suitable winding temperature.

**Type HX** – High temperatures, without requiring cooling Specially developed for heat transfer applications. A special all-ceramic motor insulation is used with the HX pump type.

# Type HM (mechanical seal) and HS (throttling bush) – Slurry handling pump

The supply of a clean irrigation fluid that is compatible with the pumped fluid is required. This is constantly circulated in the motor section for cooling and bearing lubrication as well as for preventing the intrusion of solids or liquids with high vapor pressure into the motor chamber.

# Type HQ – Liquid recirculation

For liquids developed with steep steam pressure curves, which would evaporate after the absorption of engine heat upon recirculation into the eye of the impeller. With the Type HQ, the circulating fluid is channeled through the motor into the vapor zone of the suction tank.

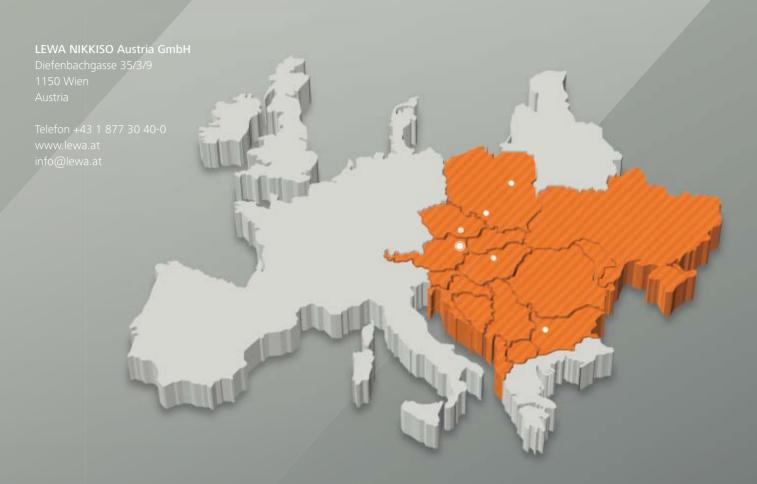
**Type HB** – Jacketed casing for liquids with a high melting point

The HB type pump is equipped with a heating jacket around the pump housing, the motor stator and the rear bearing housing in order to regulate the temperature during the production of liquids with a melting point of up to 140 °C

**Multistage** – Pumps with large head Pumps for high pressure applications through multistage impeller design.

**Type DN** – Self-priming pump Problems due to blockage are reduced through a self-priming diffuser chamber without foot valve.





#### Daten & Fakten:

Die LEWA NIKKISO Austria GmbH, mit Sitz in Wien (Österreich) wurde 1968 gegründet. Aussenstellen in Bulgarien, Polen, in der Tschechischen Republik und in Ungarn sind an die LEWA NIKKISO Austria GmbH

# Facts & Figures:

**LEWA NIKKISO Austria GmbH** based in Vienna (Austria) was founded in 1968. Branch Offices in Bulgaria, Poland, in the Czech Republic and in Hungary are associated to LEWA NIKKISO Austria GmbH.

## LEWA NIKKISO Austria GmbH Websites:

#### Austria

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# LEWA – Creating Fluid Solutions.

Angetrieben von unserer Überzeugung setzen wir seit über 60 Jahren mit zukunftsweisenden Produkten und innovativen Technologien die Maßstäbe bei Membranpumpen und Dosieranlagen. Komplexe Aufgaben lösen wir aus einer Hand. Das reicht von der individuellen Pumpenauslegung, dem Basic- und System-Engineering, dem globalen Projektmanagement über verfahrenstechnische Vorversuche bis hin zur Inbetriebnahme und Wartungsarbeiten vor Ort. Mit unserem konsequenten Willen immer die besten Kundenlösungen zu entwickeln, bieten wir Wettbewerbsvorteile und spürbaren Mehrwert.

Driven by our commitment, our trendsetting products and innovative technologies have set benchmarks for diaphragm pumps and metering systems for over 60 years. We solve complex tasks from a single source. That ranges from custom pump design, basic and system engineering, global project management, and pretesting to commissioning and maintenance on site. With our consistent will always to develop the best solutions for the customer, we offer you a competitive advantage and visible added value.