

HOSE PUMPS



HOSE PUMPS

High-performance peristaltic pumps with large rollers

PERIBEST PUMPS HOSE TECHNOLOGY

Maximum resistance to abrasion

Unparalleled suction ability

Unlimited dry run

No valves or mechanical seals

Gentle pumping

Can pump in both directions

Full dosing control

Industry-, chemical-resistant

and food-grade versions

Dosing accuracy of +-1%





ADVANTAGES OF THE PERIBEST PERISTALTIC **PUMP COMPARED TO:**

Peristaltic pumps with skid technology

Up to 30% more energy efficient, easier to change hoses, wide range of applications, low starting torque

Eccentric screw pumps

Safe to run dry and no mechanical seal, easy to adapt for pumping corrosive media

Air-operated diaphragm pumps

Incomparably higher efficiency, no valves, therefore better performance with media containing solids

NO PROBLEMS WITH DIFFICULT AND CHAL-**LENGING FLUIDS**

Abrasive media

Lime milk, activated carbon, thin and thick slurries

Corrosive media

Sodium hypochlorite, iron(II,III) chloride, hydrochloric acid

Viscous media

Water-based adhesives, lubricants, creams,

Shear-sensitive media Medien

Latex, polymers and flocculation agents, food

HOSE PUMPS





High-quality hose made using a unique manufacturing process. Extruded inner layer, high-density textile reinforcement and precision-engineered outer layer ensure optimal compression and quick installation thanks to controlled tolerances. The available materials allow for use with all available media and under all operating conditions. Excellent performance with abrasive and/or corrosive media, as well as high temperatures.

Low hose wear and easy installation ensure optimised downtime.



EASY INSTALLATION, OPERATION AND MAINTE-**NANCE**

Quick and easy installation, start-up and maintenance. Pump design with innovative assembly makes changing the hose easy. Maintenance-free pump with minimal use of lubricant reduces waste.

Saves maintenance costs through easy assembly and less downtime



EXTREME HIGH-PERFORMANCE DESIGN FOR THE MOST DEMANDING APPLICATIONS UP TO 10 BAR

Integrated oversized bearings to withstand the axial forces, large metal rollers with oversized bearings, safe and reliable connection system and very robust materials. Ideal pumps for continuous operation.

Unrivalled pump service life and excellent performance under all operating conditions.



XXL ROLL TECHNOLOGY

Excellent compression of the hose without friction and thus outstanding efficiency. Low power consumption and long service life due to large rollers. Very user-friendly thanks to low starting torque and large frequency range.

High energy savings, long hose service life and userfriendly operation.

PERIBEST **112**, **117** and **121**

Easy installation for precise dosing

The design of the 112, 117 and 121 models is focused on small, high-performance pumps with XXL rollers that are unique on the market.

The bearings between the rotor and the gearbox absorb all axial forces, reducing material fatigue and improving durability.

Thanks to the precision of all components, the differentiated manufacturing process of the hoses and the high quality of the materials, a durability unmatched on the market is achieved.

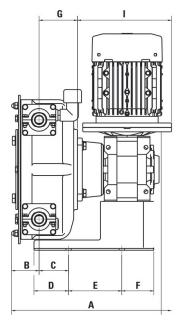


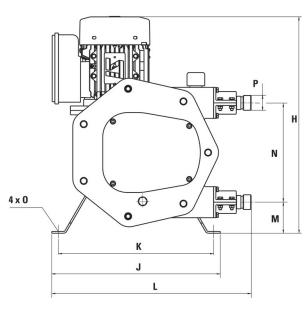
The models 112, 117 and 121 cover a flow rate range of 5-1000L/h.

These robust pumps in a vertical design are ideal for dosing applications for all abrasive, corrosive, viscous or (shear-)sensitive media up to 10bar.

Dosing chemicals, additives, lime milk, activated carbon or polymers are some of the main applications for the small pumps with maximum flow control, efficiency in the process and easy maintenance.



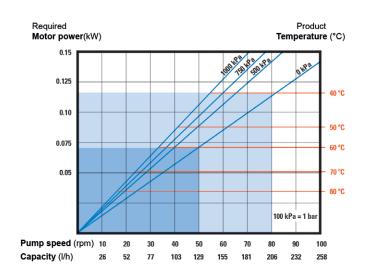




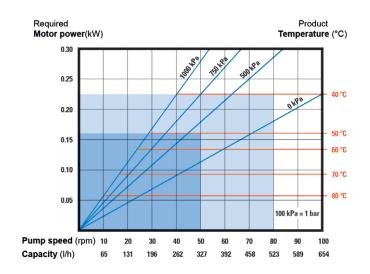
Modell	A*	В	С	D	E	F	G	Н	I *	J	K	L	М	N	0	P
112	240,3	47,5	50	54,3	80	32,8	55,8	367	137	265	235	305	62	116	12	BSP 3/8"
117	292,1	55,6	61	79,5	120	25,5	66,5	436,5	170	320	285	377,6	63	195	12	BSP 3/4"
121	360,6	62,1	66,5	78	120	72	86,5	488	212	380	350	449,5	70	224	12	BSP 1"

PERIBEST **112**, **117** and **121**

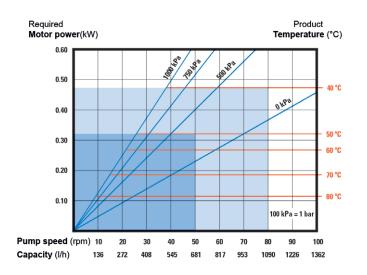
Technical specification	Model I12
Delivery rate (continuous operation)	max. 205 l/h
Capacity	0,043 I/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	13 mm
Hose material	Natural rubber, EPDM, NBR (food-safe), Hypalon®
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)



Technical specification	Model I17
Delivery rate (continuous operation)	max. 500 l/h
Capacity	0,109 I/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	16 mm
Hose material	Natural rubber, EPDM, NBR (food-safe), Hypalon®
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)



Technical specification	Model I21
Delivery rate (continuous operation)	max. 1.100 l/h
Capacity	0,227 l/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	22 mm
Hose material	Natural rubber, EPDM, NBR (food-safe), Hypalon®
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)



PERIBEST 128 and 135

The most compact high-performance pumps for standard flow rates

The 128 and 135 models cover a flow rate range of 250-3500L/h.

The competitiveness of these models, from an economic and technological point of view, is unrivalled on the market.

It is a highly efficient, high-performance pump with a peristaltic compression system for maximum accuracy, effectiveness and durability.

The absence of valves and mechanical seals, the dry-running capability and high suction capacity of these peristaltic pumps make them the best option for dispensing or transferring highly abrasive, shear-sensitive, viscous or corrosive media.





The sturdiness of the 128 and 135 pumps is based on two bearings that absorb the axial forces between the rotor and the gearbox, the rotor assembly and XXL rollers with maximum performance. An innovative design and a compact and simple assembly system complete the series.

Like the smaller pumps, these two models offer the same philosophy in terms of robustness and service life thanks to their very compact, vertical design with XXL rollers. This hose squeezing system, with maximum surface contact, coupled with the differentiated and technically advanced manufacturing process of each individual hose, guarantees maximum service life, reduced and optimised maintenance and operating costs.

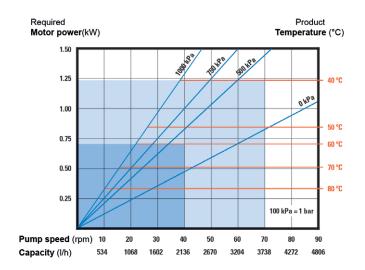


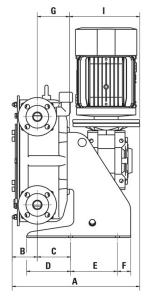
PERIBEST 128 and 135

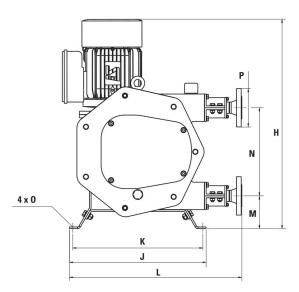
Technical specification	Model I28
Delivery rate (continuous operation)	max. 1.900 l/h
Capacity	0,47 l/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	28 mm
Hose material	Natural rubber, EPDM, NBR (food-safe)
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)

Required Motor power(kW)							Tem	Produ peratu	
1.20				.gº	,/	**			02	
1.00				900		TANTE		500	W.	
0.80										
0.60						\nearrow				- 40 °C - 50 °C
0.60				4,	/					- 60 °C
0.40		A							0 kPa	- 70°C
						_				- 80 °C
0.20			+					100 kPa	= 1 bar	
Pump speed (rpr	m) 10	20	30	40	50	60	70	8	0 9	0
Capacity (I/h)	282	564	846	1128	1410	1692	197	4 22	56 25	38

Technical specification	Model I35
Delivery rate (continuous operation)	max. 3.600 l/h
Capacity	0,89 I/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	35 mm
Hose material	Natural rubber, EPDM, NBR (food-safe)
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)





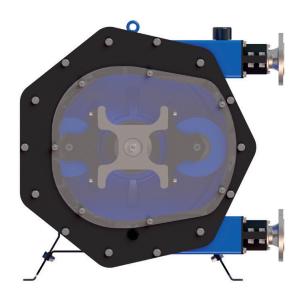


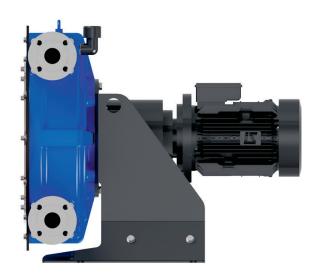
Model	A*	В	С	D	E	F	G	Н	l*	J	K	L	M	N	0	Р
128	382,3	75,6	100	132,3	140	40	96	627	211	410	390	51 <i>7</i>	98	264	12	DN 25
135	408,6	85,1	134,5	161,8	140	40	112,5	677	211	460	440	583	105	330	12	DN 32

^{*}Depending on the drive, these dimensions may change.

PERIBEST **I43** and **I55**

Conveying and dosing with maximum efficiency and service life





Models 143 and 155 complete the pump line with a delivery rate range between 1,000 and 17,000 l/h.

The delivery rate can be increased to a maximum of 34,000 l/h with a two-head version. These two models are perfect for dosing applications of all media.

These pumps are ideal for transfer applications of highly abrasive, viscous media or suspensions with solid content. The lack of valves and mechanical seals, combined with the high-performance design in monobloc construction, makes this pump very robust and suitable for the most demanding industrial applications. Unlimited dry running and a suction capacity of up to 9.5mWS complement the pump portfolio.



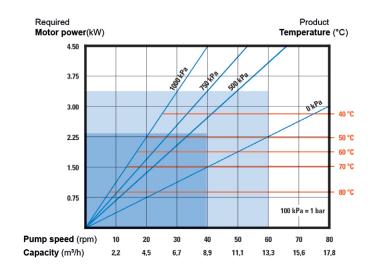
The assembly of the bearing box in the pump casing guarantees perfect alignment, as well as complete absorption of the forces on the shaft. The bearing box supports the reinforced and oversized bearings and the pump shaft, enabling a compact and very robust design. This guarantees unbeatable robustness and power of the pump, even under the most difficult conditions in continuous operation with pressures up to 10 bar. Minimal maintenance costs and downtime.

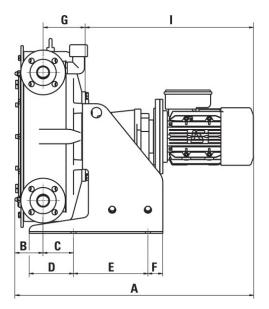
PERIBEST 143 and 155

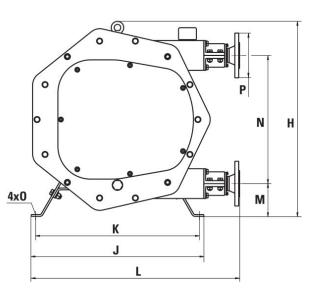
Technical specification	Model I43
Delivery rate (continuous operation)	max. 7.000 l/h
Capacity	1,69 I/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	43 mm
Hose material	Natural rubber, EPDM, NBR (food-safe)
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)

					Te	mperat	ur (°C)
		0			$\overline{}$		ĺ
	, till	*** \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	M2 8	SIM KP 8			– 40°C
						0 KP a	- 50°C
							– 60°C
#							- 70°C - 80°C
					100 kF	Pa = 1 bar	
		10 20	10 20 30	10 20 30 40 5	10 20 30 40 50 6	100 kF	100 kPa = 1 bar 100 a 70 8

Technical specification	Model I55
Delivery rate (continuous operation)	max. 13.000 l/h
Capacity	3,71 I/U
Max. operating pressure	10 bar
Max. operating temperature	80°C
Inner hose diameter	55 mm
Hose material	Natural rubber, EPDM, NBR (food-safe)
Connections	Stainless steel, 1.4401, PP, PVDF (PTFE)







Modell	A*	В	С	D	E	F	G	Н	l*	J	K	L	M	N	0	Р
143	800,6	96,6	102	148,5	250	50	142	655	564	580	550	700	110	430	16	DN 40
155	947,1	107	95	129	380	39,5	156,5	820	684	690	660	820	143	554	16	DN 50

^{*}Depending on the drive, these dimensions may change.

CHEMICAL EXECUTION

The best solution for dosing corrosive media

KEY FEATURES OF THIS VERSION

- The latest generation of peristaltic tubing in NR, EPDM or Hypalon®
- Pump housing and front cover coating in TEFZEL®
- Plastic connectors in polypropylene or PVDF
- Hose leak sensor
- Pump and bearing rib seals in EPDM
- Corrosion-resistant rollers
- Drainage system

The chemical version of the PeriBest pump is optimised to be a fully resistant product with regard to highly corrosive acids and all kinds of difficult chemi-

These specifications enable us to offer a corrosion-resistant pump at a very competitive price.

Without doubt the best option for a corrosion-resistant peristaltic pump on the market.



RECOMMENDED APPLICATIONS

FOR PERISTALTIC PUMPS IN CHEMICAL DESIGN

- Sodium hypochlorite dosing
- Sulfuric acid dosing
- and other acidic liquids in general

FOOD-COMPATIBLE EXECUTION

A new concept for the promotion of food-safe media

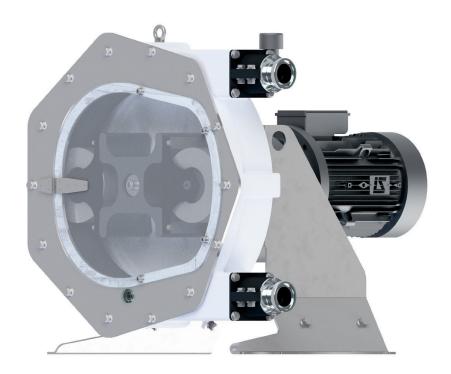
KEY FEATURES OF THIS VERSION

- The latest generation of peristaltic hoses in FDA food-grade nitrile
- DIN 11851 or Tri-Clamp sterile connections
- Easy and quick removal of the front cover to support CIP cleaning processes
- Front removal roller
- Stainless steel base plate and cover
- Pump housing painted in sterile white

The food-grade version of the PeriBest peristaltic pump includes the necessary modifications for a completely sterile pump that is compatible with media used in the food, beverage and cosmetics industries.

Of course, this pump meets the latest standards, regulations and certificates.

Using this version optimises downtime, facilitates cleaning processes and increases efficiency. The innovative peristaltic hose manufacturing process offers additional temperature resistance, extends the service life and reduces maintenance costs of the devices.



RECOMMENDED APPLICATIONS

FOR PERISTALTIC PUMPS IN FOOD QUALITY

- Transfer of juices and sauces
- Conveying foods such as drinks, dairy products and confectionery
- Yeast pumps
- Oil pumps
- Wine transfer

WATER SUPPLY

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- High abrasion resistance when transporting sludge and when dosing highly abrasive media such as lime milk and activated carbon
- Suction capacity of up to 9.5m WS and optimal control of the flow rate for sampling applications
- Maintenance and operation friendliness for continuous operation (24h/7 days) due to the design and robustness of the equipment
- Gentle pumping for dosing polymers and flocculation agents
- Chemical design with resistant materials
- Pumping of gaseous media for an indefinite period of time without any problems

SUCCESSFUL APPLICATIONS IN WATER TREATMENT

- Conveying of sludges
- Dosing of activated carbon and lime milk
- Dosing of polymers and flocculation agents
- Sample collection

PeriBest peristaltic pumps have an optimised design for maximum durability. This advantage is very important in the continuous operation applications that are common in this sector.

Slurries, slags and media with high solids content or very abrasive media, such as lime milk, do not present a problem for the PeriBest pump.

The robustness is achieved by the use of very strong materials. Integrated, large bearings and a system of reliable and very secure connections can prevent the occurrence of leaks during operation.

CHEMICAL INDUSTRY



The chemical industry requires equipment with high technical performance and materials with maximum durability.

High downtime for maintenance is always a problem in the production of high-quality and resource-intensive products, and this is exactly what the PeriBest peristaltic pump solves in comparison to traditional competitors.

A special assembly design with high-quality NR or EPDM hoses, as well as a pump housing coating in TEFZEL®, ensure robustness in the chemical version.

Plastic connections and a hose leakage sensor form a heavy-duty and durable unit. Corrosion or operating conditions at the limit (high suction heights, dry running, high viscosity, inclusion of gases, etc.) are not a problem.

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- Corrosion resistance through the use of hoses and connections that are compatible with the vast majority of media.
- No mechanical seals or valves for pumping difficult, viscous, sticky or solid-laden media.
- Maintenance- and user-friendly for continuous operation (24/7) due to the design and robustness of the equipment.
- Chemical design with resistant materials especially for highly concentrated acids.
- Problem-free pumping of outgassing media for an indefinite period of time.

SUCCESSFUL APPLICATIONS IN THE CHEMICAL INDUSTRY

- Dosing of water-based pigments and paints
- Conveying highly abrasive media such as titanium dioxide
- Dosing of resins
- Dosing of water-based cleaning agents, creams and glues
- Dosing of all types of chemicals containing acids or bases

MINING INDUSTRY



During metal extraction, the mining sector is always concerned with saving ressources and reducing water consumption.

PeriBest peristaltic pumps optimise these processes by pumping liquids with a high solids content. Thanks to their robustness and high resistance to abrasive substances, the necessary water consumption during separation and circulation is drastically reduced.

Gentle conveying and precise control of the dosage ensure maximum efficiency in polymer dosing. This reduces the raw material costs of the sensitive medium.

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- Excellent resistance to abrasive fluids with high solids content
- Maintenance-friendly and easy to operate for continuous (24/7) duty due to the design and robustness of the equipment
- Gentle pumping of polymers and flocculants with maximum efficiency
- Pump without diaphragm, valves or seals
- Unlimited dry running
- Invertible pump

SUCCESSFUL APPLICATIONS IN THE MINING INDUSTRY

- Transfer of mineral pulp, slurries and suspensions
- Dosing of cyanides and xanthates
- Conveying and dosing of polymers
- Dosing of reagents

FOOD AND COSMETICS INDUSTRY

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- Easy maintenance and operation
- Food-grade version of the pump with tubing in FDA certificate, easy and quick removal of front cover
- Internal lubricant in food grade
- Gentle liquid pumping
- Maximum process efficiency
- Self-priming pump
- Accurate dosing. ± 1% accuracy

SUCCESSFUL APPLICATIONS IN THE FOOD AND COSMETICS INDUSTRY

- Conveying of kieselguhr
- Transfer of viscous juices and sauces or media with solids
- Various additives, colourings and flavourings for food
- Supply to filling machines

The food and cosmetics industries each require a sterile and completely cleanable product with certified components that come into contact with the medium.

PeriBest developed a pump with food-grade components to dispense food products. In these pumps, peristaltic tubes are made of food-grade nitrile according to FDA, DIN11851 or three-clamp connections. The sophisticated design of this special pump makes CIP cleaning much easier.

The hose's inner extruded layer increases durability, reducing spare part wear and maintenance. At the same time, it improves the performance of the cleaning process with temperatures of up to 80°C.



CERAMIC AND CONSTRUCTION INDUSTRY

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- Maximum service life with highly abrasive media
- Low wear and thus an increase in service life
- Suction heights up to 9.5mWS
- Due to the well-thought-out design and the high-quality individual parts used, easy maintenance and operation even in continuous use (24/7) is guaranteed.

SUCCESSFUL APPLICATIONS IN THE CERAMIC AND CONSTRUCTION INDUSTRY

- Dosing of highly abrasive media such as barium carbonate and potassium permanganate
- Transferring ceramic slag
- Dosing of additives and colouring agents in cement production
- Conveying cement with a low density

In the ceramics and construction industries, the continuous pumping of many highly abrasive media is essential

High pump wear and thus exorbitant spare part costs are the order of the day. When using PeriBest peristaltic pumps, you acquire the added value of high abrasion resistance and maximum robustness of the materials used.

Due to the required abrasion resistance of the contacting components, the components in contact with the liquid are designed to the highest quality standards.

Hoses and stainless steel connections are designed and manufactured for the individual application.

By minimising the use of spare parts and drastically reducing downtime and maintenance times, plant efficiency increases, leading to lower production costs and product waste.





In the paper industry, it is common to have to pump large volumes of waste water containing fibre residues and chemicals used in processing.

In these cases, PeriBest peristaltic pumps are an excellent solution, due to the high abrasion resistance of the latest generation tubing, the robustness of the built, and the straightforward control.

Media such as calcium hydroxide are frequently used for water treatment.

Dry run and high solids handling capacity are two notable advantages of PeriBest pumps, compared to traditional pump systems such as peristaltic pumps, which tend to clog easily when pumping solids.

Therefore, the peristaltic pump is the right system for pumping high-density media.

Easy installation, low downtime and easy assembly of the components to be maintained are further outstanding advantages of the PeriBest peristaltic pumps.

ADVANTAGES OF PERISTALTIC PERIBEST PUMPS

- Precise and controlled dosing of chemical products
- High abrasion resistance with highly abrasive media
- No problematic components such as mechanical seals and valves
- Low wear and minimisation of downtime
- Can run dry
- Suction lift up to 9.5m

SUCCESSFUL APPLICATIONS IN THE PAPER INDUSTRY

- Dosing chemicals and colours
- Dosing lime milk
- Dosing additives and colouring agents
- Dosing and transferring adhesives

THE PERIBEST QR-CODE

For maximum information - can be found on every peristaltic pump



POWERFUL SERVICE DIRECT FROM THE FACTOR

Our customers' satisfaction is our top priority.

In addition to our range of innovative product and system solutions, we also see it as our responsibility to offer our customers a high-quality, high-performance service. Our aim is to ensure that our customers can always achieve the desired production results with our systems, dosing systems and pumps, both now and in the future. To ensure this, a high level of system availability with a minimum of system downtime is necessary. For this purpose, sera offers a wide range of services, from technical support to the spare parts service and the repair service.

INSPECTION AND MAINTENANCE SERVICE

In order to prevent failures, installed sera systems are serviced and maintained by experienced service technicians, because products and service from one source, directly from the manufacturer, offers additional security. Unexpected system downtimes can be significantly reduced by detecting possible sources of error at an early stage.

TECHNICAL SUPPORT

Whether you have questions about **sera** products, need help with system design or a solution for an individual requirement, our experienced and highly qualified **sera** service team will be happy to help.

CUSTOMER TRAINING

sera training courses are held at our premises and, on request, at our customers' sites and can be both customer- and application-oriented. The following training courses are offered in the field of dosing technology:

- Basic seminar on dosing technology
- Maintenance and servicing of sera dosing pumps
- User training for controllable **sera** dosing pumps

You can find detailed information on current training dates in the service area of our website.

ASSEMBLY AND COMMISSIONING

Our trained sera service technicians are available for installation and commissioning. If desired, the installation can also be carried out by the customer's specialist personnel under the supervision of a sera service technician. This ensures that commissioning goes smoothly and that the customer's specialist personnel quickly become very familiar with how to use the new system.

SPARE PARTS SERVICE

We pay very close attention to the quality, ease of maintenance and durability of all our products. However, should a replacement or spare part be needed, our spare parts service can deliver the required part as quickly as possible, as we keep a large proportion of our spare parts in stock.

REPAIR SERVICE

Whether you have questions about **sera** products, need help with a system or a solution for an individual requirement, our experienced and highly qualified **sera** service team will be happy to help.

MAINTENANCE OF NETZSCH PUMPS

We also service eccentric screw pumps from our partner. Our experienced and highly qualified sera service team is happy to help.

era Technology MENA

sera Technology SA (PTY) Ltd. Gauteng, South Africa

Dubai, UAE

era Technology Italia Milan, Italy

ra Technology UK Ltd. Burton upon Trent, Staffordshire, UK

> **era** Technology Swiss GmbH Arlesheim (Basel), Switzerland

> > sera Tecnología Iberia S.L.

Castalla (Alicante), Spain

WORKING FOR YOU ALL OVER THE WORLD

HEADQUARTER

sera GmbH

sera-Straße 1 34376 Immenhausen Germany

Tel.: +49 5673 999-00

info@sera-web.com

sera Technology Austria GmbH

Gewerbestraße 5 4774 St. Marienkirchen bei Schärding

Tel.: +43 771 131 7770 sales.at@sera-web.com

sera Technology UK Ltd.

Unit 5, Granary Wharf Business Park Wetmore Road, Burton upon Trent Staffordshire DE14 1DU United Kingdom

Tel.: +44 1283 753 400 sales.uk@sera-web.com

sera Technology MENA

Dubai UAE

Tel.: +971 589 287 559 sales.mena@sera-web.com sera AQUA GmbH

sera-Straße 1 34376 Immenhausen Germany

Tel.: +49 5673 999-02 sales.aqua@sera-web.com

sera Technology Swiss GmbH

Altenmatteweg 5 4144 Arlesheim Switzerland

Tel.: +41 615 114 260 sales.ch@sera-web.com

sera Technology SA (PTY) Ltd.

Unit 3-4, Airborne Park Cnr Empire & Taljaard Str Bartletts Boksburg, 1459 Gautena South Africa

Tel.: +27 113 975 120 sales.za@sera-web.com

sera HYDROGEN GmbH

sera-Straße 1 34376 Immenhausen Germany

Tel.: +49 5673 999-04 sales.hydrogen@sera-web.com

sera Tecnología Iberia S.L.

Calle Cocentaina n°8, 03420 Castalla (Alicante)

Tel: +34 666 024 388 sales.es@sera-web.com

sera Technology Italia

Milan Italy

Tel.: +39 340 81 92 744 sales.it@sera-web.com

sera

