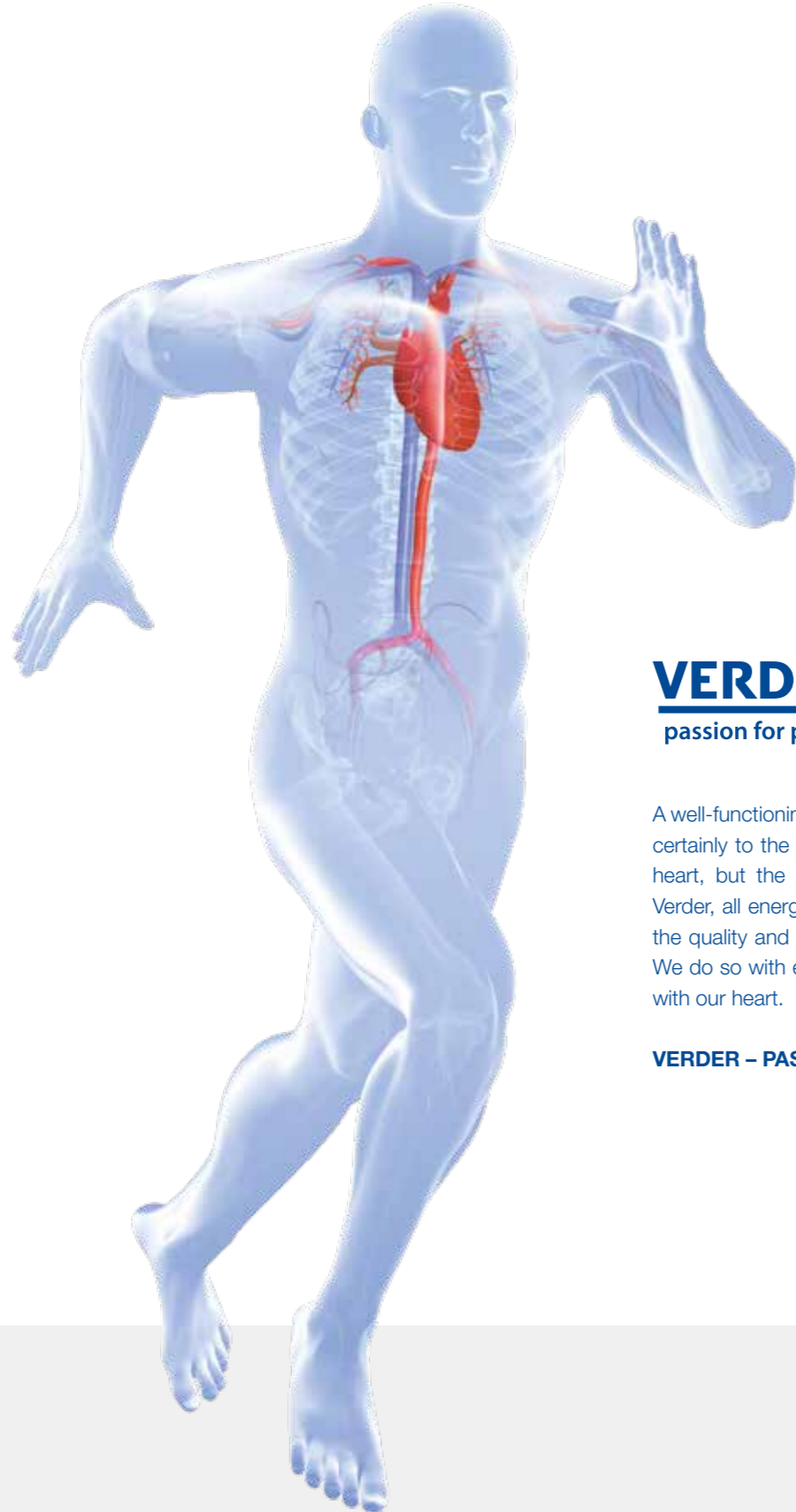


VERDER INDUSTRIAL PUMPS

Peristaltic pumps | Double diaphragm pumps | Centrifugal pumps | Gear pumps
OEM pumps | Mag-drive centrifugal pumps | Screw centrifugal pumps
Static mixers | Dosing pumps

Your benefits

- *Manufacturer with extensive knowledge about your process*
- *Certified quality*
- *Always the most suitable pump solution*



VERDER passion for pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pumps and service. We do so with energy, dedication and most importantly, with our heart.

VERDER – PASSION FOR PUMPS

THE VERDER GROUP

Enabling progress



The Verder group is a family owned business formed over 60 years ago in the Netherlands; the group consists of a worldwide network of production and distribution companies. Group companies are involved in the development and distribution of industrial pumps, pumping systems, high-tech equipment for quality control, research and development into solid material (solids sample preparation and analytical technologies).

The Verder Group employs over 2000 people and has an annual turnover in excess of 450 million Euros.

Enabling progress

Throughout the decades, our value-adding innovations have been fueling our success and the success of our customers. We operate a network of more than 70 sales and manufacturing organizations worldwide, providing sales support and technical service, and ensuring customer proximity, which is vital for offering spot-on as well as establishing and maintaining long-term trustful partnerships.

With our pumping equipment we help enabling progress by for example,

- Ensuring safe food for everyone
- Keeping healthcare agile and responsive
- Making airports and travel safe

Our DNA

Our DNA is the foundation upon which our business principles are built. It forms the basis for our approach to our clients and all actions that result from this. It is as vital for us as the passionate search for technological and organizational improvements. With these core principles in mind, we help enabling progress. With continuous improvement techniques, in production processes and in the quality of life in the world.

We act as one family and know our responsibility for the society as a whole. With passion, responsibility, always aiming to improve, and an open eye for details.

- 1 Company
- 27 Countries
- > 60 Years of expertise
- > 20 Manufacturing companies
- Global network
- Local distributors
- In-house service & maintenance
- A solution for every application
- In-depth knowledge of processes and applications

INDUSTRIAL APPLICATIONS

Chemical industry

- Reception
- Storage
- Raw material preparation
- Dosing
- Transfer
- Filtration
- Spin
- Blending
- Filling
- CIP / SIP
- Wastewater (treatment)



(Waste) water treatment

- Reception
- Quality control
- Measurement & control
- Dosing
- Disinfection
- Sludge transfer
- Filtration
- Dirt remove
- Clean and dirty water transfer
- Odor reduction



Oil & Gas

- Reception
- Storage
- Raw material preparation
- Dosing
- Transfer
- Filtration
- Centrifuge
- Blending
- Filling
- CIP/SIP
- Wastewater (treatment)



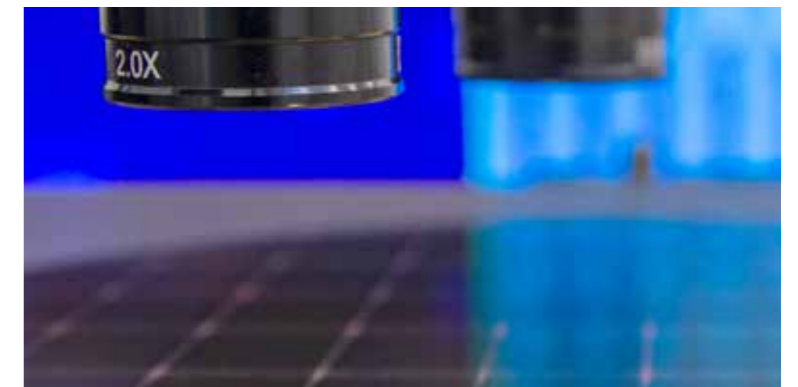
Paint & Lacquer

- Reception
- Storage
- Raw material preparation
- Dosing
- Transfer
- Filtration
- Disperging
- Blending
- Filling
- CIP/SIP
- Wastewater (treatment)



Manufacturing

- Dosing
- Measurement & control
- Mixing
- Filling



OEM

- Dosing
- Measurement & control
- Mixing
- Filling



Storage and transshipment

- Storage and transshipment
- Reception
- Storage
- Dosing
- Measurement and control
- Transfer
- Filling



THE INDUSTRIAL PROGRAM

Offering a large gamme of industrial pump solutions

Our highlighted program



Verderflex peristaltic pumps



Verderair double diaphragm pumps



Packo industrial centrifugal pumps



Verderflex OEM pumps

Other industrial pumps and products



Verdergear gear pumps



Verdermag mag drive pumps



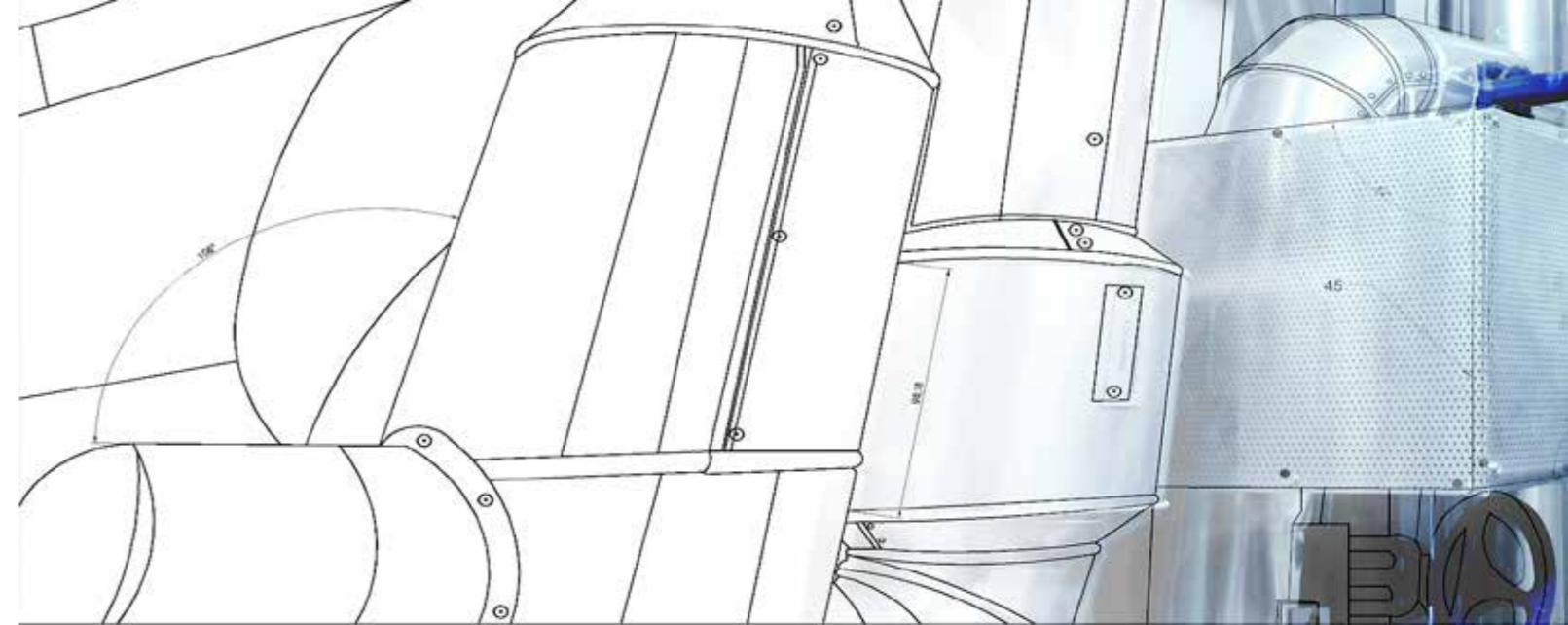
Verderhus screw centrifugal pumps



Verderdos solenoid dosing pumps



Verdermix static mixers



CERTIFICATIONS & BENEFITS

- ✓ Own design
- ✓ Highest material quality
- ✓ Excellent durability
- ✓ Optimal safety
- ✓ Continuous development
- ✓ Optimal productivity
- ✓ Continuously improving technologies
- ✓ Lowest Total Cost of Ownership
- ✓ Multiple pump working principles
for the best possible process solution
- ✓ Electropolishing or other surface treatment
- ✓ Extended process knowledge
- ✓ ATEX options



ATEX is a European Directive (2014/34/EC) for explosion-proof electrical and mechanical equipment, components and protective systems. It concerns the manufacture of products which are used in potentially explosive atmospheres.



Minimum Efficiency Index, guideline for efficiency of pumps. This index gives a percentage from the sold pumps in the market on a certain moment with a low hydraulic efficiency on BEP. From 01/2015 MEI \geq 0.4. 95% of our centrifugal pumps complies to MEI.

VERDER also has FDA approved pumps available.

OUR PRODUCTION COMPANIES

We are rightly proud of our production companies, with Verder brands being produced in 6 locations in Germany, United Kingdom, Belgium, Poland, South Korea and Italy. In-house pump production allows us to be more responsive to customer demands, assures the shortest lead times and maintains greater control over quality and costs.

Our industrial pumps are manufactured at:

Verderflex – Verdermag – Verderhus – United Kingdom

Verder's British manufacturing facility comprises the development and production of the Verder house brand Verderflex (peristaltic pumps), Verdermag (mag drive centrifugal pumps) and Verderhus (screw centrifugal pumps). These pump series seek excellence from every aspect of the product and its journey to the customer. Continuously improvements provide the best possible product. After four decades of development and production, it is still the goal to further improve the performance and build of every pump we make.



Packo – Belgium / South Korea

Our manufacturing company Packo specializes in industrial stainless steel centrifugal pumps and hygienic rotary lobe pumps and twin-screw pumps. Packo is creating the highest quality centrifugal pumps for industrial, food and pharmaceutical applications. The centrifugal pumps are manufactured in Belgium. All centrifugal pumps are electropolished according to an in-house developed process method for surface treatment of stainless steel. The method is finished with hand polishing techniques to achieve the highest quality pump specification for applications where compromise is not an option. The rotary lobe pumps and twin-screw pumps are manufactured in South Korea. The Diksmuide plant produces not only pumps but also static and dynamic mixers.



Metplast – Poland

Our Verderair Pure machined double diaphragm pump is manufactured at the Metplast production location, according to the very highest production standards. In this modern production location everything is focused towards maintaining the highest standard of quality with a stringent protocol of testing.



Microdos – Italy

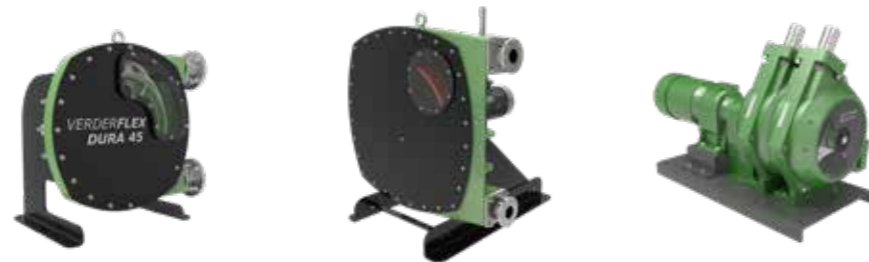
Microdos is a manufacturer of small dosing pumps and systems. They produce Verderflex VP peristaltic pumps and Verderdos solenoid dosing pumps including related professional control instruments and complete dosing systems. Microdos has developed a strong position in southern European countries for applications in swimming pools, detergent dosing and water treatment applications. Microdos also provides private labelling pumps for third party companies.



VERDERFLEX INDUSTRIAL TUBE & HOSE PUMPS

Verderflex industrial tube and hose pumps are the ideal solution for pumping and dosing liquids that are difficult to pump such as highly viscous and/or abrasive liquids. The series ranges from smaller OEM pumps for vending machines, pumps for precision metering, to the largest high-pressure hose pumps in the world for pumping concentrated thickened slurries containing many solids.

Applications can be found in water treatment, mineral processing, biotechnology, food, beverage, chemical, paper, ink, pharmaceutical and shipping industry.



	Verderflex DURA	Verderflex VF	Verderflex Rollit
Concept	Compact	High flow range	Lubrication free
Max. flow	33 m ³ /h	90 m ³ /h	24.5 m ³ /h
Max. operating pressure [bar]	16	16	4



- ✓ Very long service life due to reinforced hoses
- ✓ Easy to maintain: no valves, only one consumable part
- ✓ No damage: smooth transfer of almost all liquids with little shear
- ✓ Various accessories available



Verderflex Vantage 3000/5000	Verderflex Rapide	Verderflex Rapide 5000	Verderflex OEM
Precise and programmable	Low pressure dosing	Robust low dosing (also 380V and dual pump head options)	OEM applications
6,6 l/min	17 l/min	8.8 l/min	17 l/min
7	2	2	3

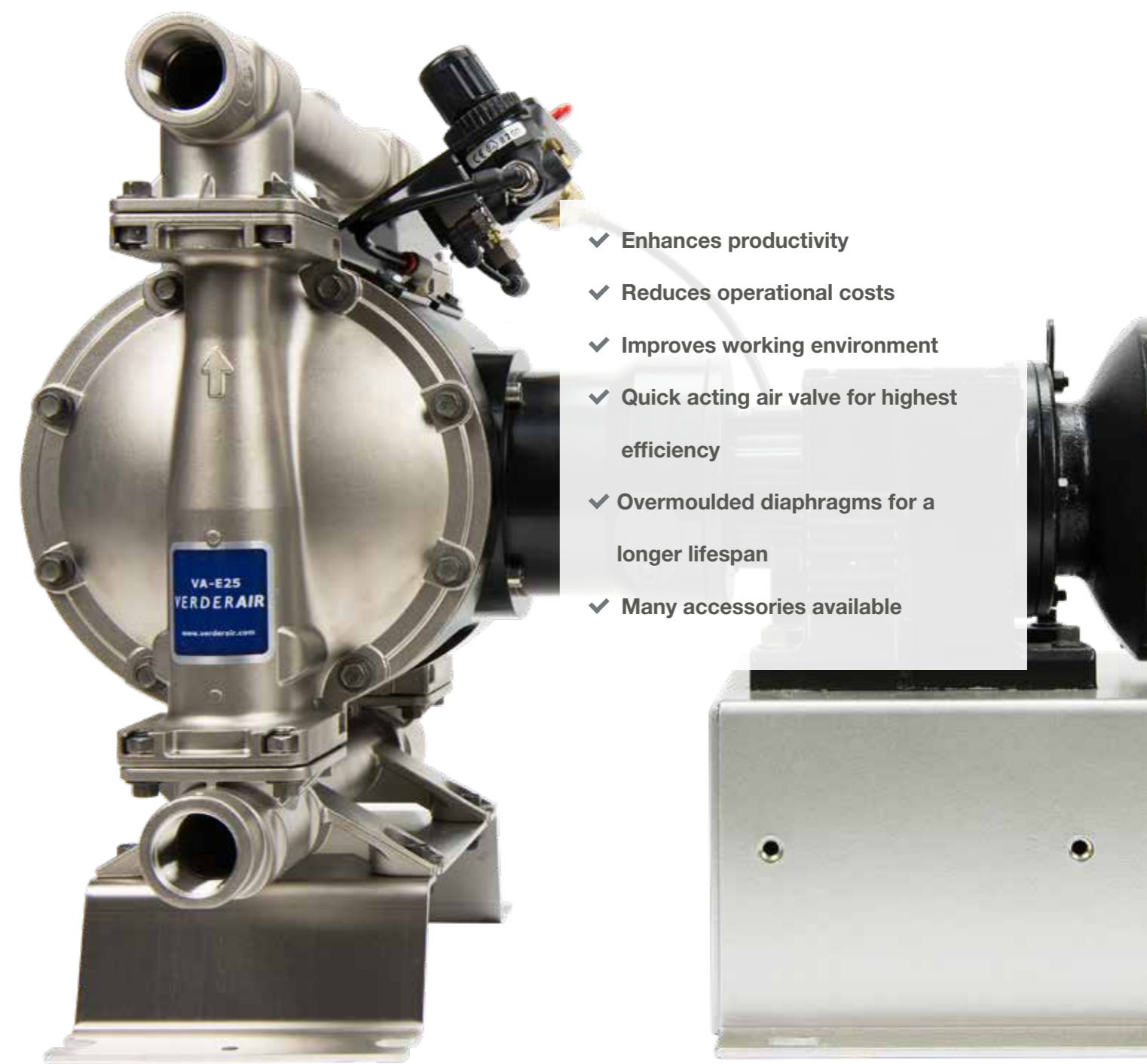
VERDERAIR INDUSTRIAL DIAPHRAGM PUMPS

Verderair double diaphragm pumps are used for a wide variety of applications. These pumps are the best solution for abrasive or corrosive liquids. These pumps are especially suitable for pumping very sticky and viscous liquids and liquids with solid particles. Verderair diaphragm pumps are the most efficient diaphragm pumps on the market due to the quick acting air valve.

The Verderair series offers various diaphragm pumps, varying in material (metallic, non-metallic, conductive), drive principle (electric, air driven). Applications can be found in the chemical, paint, paper, pharmaceutical, ceramic, solar energy industry and wastewater treatment. All models are available for ATEX applications. Special models are available for ultra-pure applications.



	Verderair Standard	Verderair Pure	Verderair EODD	Verderair CONT-EX
Concept	The allrounder	High purity AODD	Electrical driven	OEM and demanding applications
Max. flow [l/min]	1,200	600	530	130
Max. pressure [bar]	8.6	7	6.5	7



- ✓ Enhances productivity
- ✓ Reduces operational costs
- ✓ Improves working environment
- ✓ Quick acting air valve for highest efficiency
- ✓ Overmoulded diaphragms for a longer lifespan
- ✓ Many accessories available

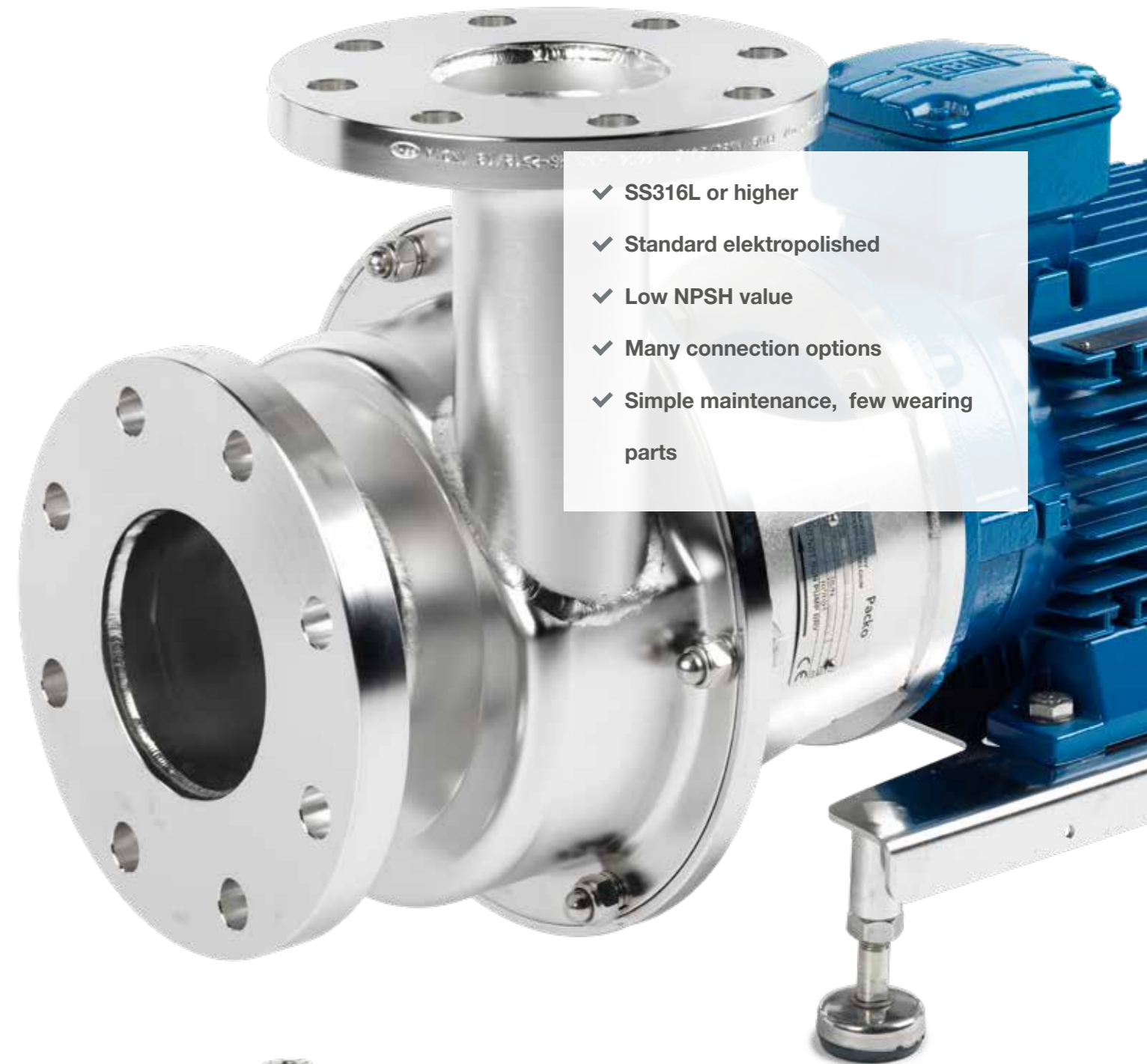


Verderair e-PURE	Verderair VA flapper	Verderair barrel pumps	Verderair HP	Verderair Split Manifold
		Emptying barrels, vessels & containers	High pressure	Double pumping action
		61	565	2 x 30
		7	17.2	7

PACKO INDUSTRIAL CENTRIFUGAL PUMPS

Packo stainless steel centrifugal pumps have a unique and solid design with the highest possible surface finish. All pumps are electropolished and therefore have a perfectly cleanable and smooth surface with increased resistance to corrosion. They are characterized by their modular design with interchangeable standard components. Also available as cantilever pumps, vortex pumps and special pumps for water/air mixtures.

Packo pumps make the difference in surface finish, food safety, energy costs, easy maintenance and optimization of production processes. They are suitable for the most demanding industrial applications. A range of pumps for the food and pharmaceutical industries is also available.



- ✓ SS316L or higher
- ✓ Standard electropolished
- ✓ Low NPSH value
- ✓ Many connection options
- ✓ Simple maintenance, few wearing parts



	NP60	ICP1	MCP2/MCP3	ICP2/3 *)
Concept	Cost saving	Best 'value for money'	High flow	• Robust design
Max. flow [m³/h]	40	55	1.800	320
Max. pressure [bar]	2,5	3,5	7	123

*) equipped with hygienic connections



NMS	IRP2/3 *)	IML, IMXL, IMO	VPCP
High pressure	• Air handling pump for CIP return	Cantilever	Product pumping
50	120	1.000	1000
16	7	6	2

MORE PUMPS TO COMPLETE YOUR INDUSTRIAL PROCESS

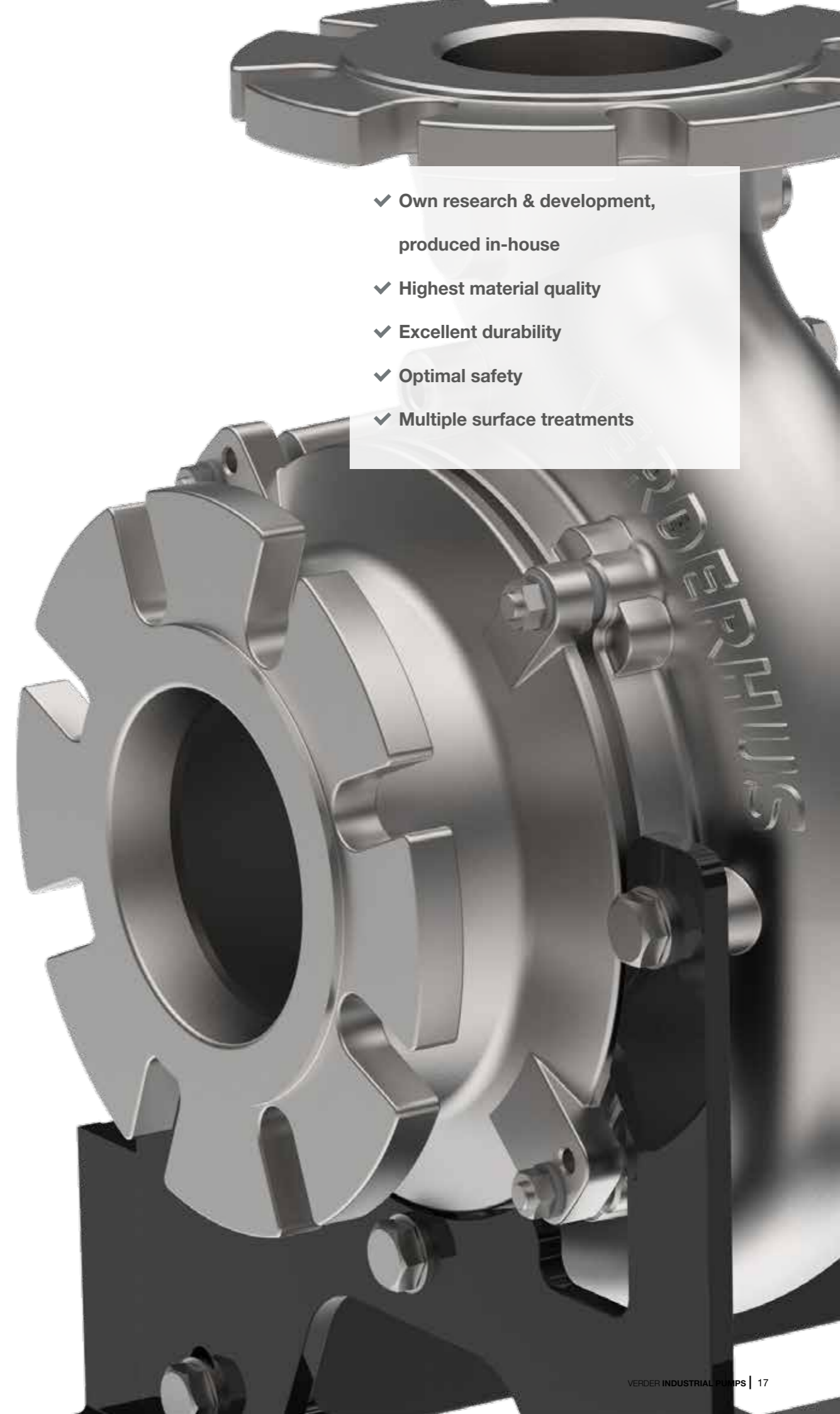
Verder, being a full service pumping manufacturer and supplier, is focussing on peristaltic, double diaphragm and rotary lobe pumps but to complete your process line there is an extended additional program of pumps and accessories, produced almost entirely in house, to offer a complete range for all your pumping applications.



- ✓ Own research & development, produced in-house
- ✓ Highest material quality
- ✓ Excellent durability
- ✓ Optimal safety
- ✓ Multiple surface treatments



	Verdermag VM	Verderhus HSB	Verdergear (Mag-drive) gear	Verderdos Solenoid dosing	Verdermix Static mixers
Concept	Mag-drive centrifugal	Screw centrifugal	(Mag-drive) gear	Solenoid dosing	Static mixers
Max. flow	360 m ³ /h	360 m ³ /h	22 l/min	22 l/min	
Head	153 mwc	24 mwc	18 bar	18 bar	



ACCESSORIES & CONSUMABLES

To optimize the operation of your pump or to protect your product line even better, we have various accessories in the program, all specially developed for the Verder pump brands and tailored to demands we received from the market. In addition to accessories, pumps also have consumable parts. We are also happy to assist you with this. These accessories are an excellent fit in third brands.



Accessories

As optionals and accessories we have adjustable base plates, mobile systems and “drop-in” skid systems, pH and Redox probes, cells to measure the concentration of chlorine, pulsation dampers, quick connect hoses and connections, rotation counters and frequency converters for our peristaltic pumps.

For our double diaphragm pumps there is an extended program of accessories such as pulsation dampeners, air control equipment consisting of a filter – regulator with semi-automatic drain, several control valves (speed control, soft-start, on-off, flow-stop) and accessories such as stroke sensors, remote control, manual drains, pneumatic drains, barrier systems and leakage detections.

Consumables

Hoses

Hoses are required for both industrial hose pumps, OEM tube pumps and peristaltic dosing pumps. The Verderflex hose can achieve up to 15 million compressions. The maximum fatigue strength ensures that the hose lasts a long time. Verderflex hoses are available in NR, NBR, NBRF, EPDM, CSM-Hypalon, Verderprene, Neroprene and Platinum-cured silicone.

Lubrication

Peristaltic pumps use a lubricating bath to ensure that the hose absorbs the energy stored in the reinforced layers. Good lubrication is therefore required for optimal operation of the pump. Verderlube (glycerine based) is the standard lubricant for Verderflex pumps. For pumping strong oxidants or nitrogen-containing chemicals, Verder also offers Verdersil, a silicone-based lubricant that is also suitable for higher temperatures.

Both lubricants have been specially developed for use with Verderflex hose pumps and also act as a coolant for efficient pumping function and longer hose life.

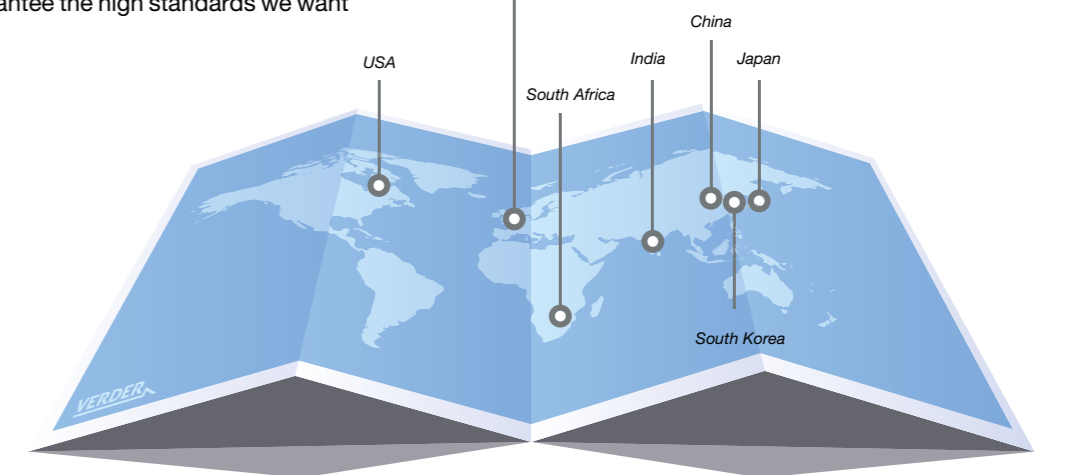
LOCAL PRESENCE - WORLDWIDE AVAILABILITY

Verder has 27 own sales offices worldwide. There is also an extensive network of local distributors who are skilled and well-trained by Verder. As a result, Verder offers a worldwide coverage but is also locally on site. Logistics are centralized to ensure that many pumps and spares are availability and ready to be sent.

With 27 sales offices worldwide, 5 manufacturing plants and a very extensive centralized logistics center, Verder strives to have a worldwide presence to be able to serve the customer base quickly, reliably and efficiently.

Verder realized a huge logistics center in Groningen, the Netherlands. In this way the distribution of Verder pumps in Europe is completely centralized. This ensures a fast distribution of your pump; In Europe even with “next day delivery”. The other branches and the distributors are supplied with two more centralized warehouses. In this way also worldwide customers benefit of the centralization of the logistics.

At logistics there are two key values: “in time” and “in perfect condition”. We strive to continuously improve production and distribution to be able to guarantee the high standards we want for our customers.





Questions? Visit our website
www.verderliquids.com



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