AGGRESSIVE FLUIDS

... PUMP THEM RELIABLY WITH US.
WE
... are a family business.

At our location in Mülheim an der Ruhr, we develop and produce high-quality centrifugal and axial pumps made from plastic. Our business is an owner-managed SME, run independently and to the benefit of our long-standing customers and employees. Welcome to WERNERT!

PUMPS
– the heart of the plant.

Whether horizontal, vertical or in a pipe bend, chemically resistant or wear-resistant, conventional or hermetically sealed, our plastic pumps form the ever-reliable heart of many process engineering plants around the world.

INDUSTRIES
... facing big challenges.

WERNERT pumps are at home in a wide range of sectors, such as:
- the chemical industry
- the steel industry
- flue gas cleaning and desulphurisation
- electrolytic processes
- seawater desalination
- wastewater treatment

FLUIDS
... require extensive experience.

Highly, moderately or lightly concentrated acids or alkaline solutions, chemically contaminated wastewater, suspensions and salt solutions: We know them all. So you can trust us to select the right materials and sealing systems.

SHAFT SEALS
... without any small parts for once.

Tried and tested for decades, and still unbeatably simple in structure: the WERNERT bellows seal. The bellows are made from elastomer materials, and act as a spring and seal in one. Leak-proof, even when pumping extremely high solids contents. Robust. Simple. Ingenious.

QUALITY
... is our tradition.

Since 1920, the name WERNERT has stood for brave innovations, first-class technology and the best workmanship. High-quality materials, production on modern CNC machinery, final inspections on the IT-controlled test stand, and certification of our company under EN ISO 9001 guarantee that our products comply with the highest standards.
STANDARDISED CHEMICAL PUMP WITH MECHANICAL SEAL

TYPE SERIES NE | EN ISO 2858 / ATEX T3 OR T4

The all-purpose pump – reliable and robust.
For pumping aggressive, corrosive, or toxic fluids, or fluids containing solids. Smaller sizes also available in close-coupled design (type series FK and FE).

Technical characteristics:
- Single-stage radial centrifugal pump in process design
- Various impeller geometries, optionally also in non-clog design
- Thick-walled, replaceable plastic components, optionally also conductive
- Complete metallic enclosure
- Single-acting WERNERT bellows seal
- Optional double-acting mechanical seal HRZ 13
- Metallic absorption of all pipe forces
- Grease or oil lubrication

Flow rate: 0.5 to 1000 m³/h
Total head: up to 110 m

Main materials and application limits:
- UHMW-PE up to 90 °C
- PVDF up to 115 °C
- Mineral casting WERNIT® up to 125 °C
- PTFE/PFA up to 160 °C
PROCESS PUMP WITH MECHANICAL SEAL

TYPE SERIES SP | ATEX T3

The power pump – for high flow rates.
For pumping aggressive or corrosive fluids, or fluids containing solids, e.g. in the flue gas cleaning systems of power plants and waste incineration plants.

Technical characteristics:
- Single-stage radial centrifugal pump in process design
- Closed impeller specially for abrasion loading
- Thick-walled, replaceable plastic components
- Metallic enclosure
- Single-acting WERNERT bellows seal
- Optional double-acting mechanical seal HRZ 13
- Metallic absorption of all pipe forces
- Grease or oil lubrication

Flow rate: 500 to 2500 m³/h
Total head: up to 60 m
Main materials and application limits: UHMW-PE up to 90 °C
STANDARDISED CHEMICAL PUMP WITH MAGNETIC COUPLING

TYPE SERIES NM | EN ISO 2858 / ATEX T3 OR T4

The safety pump – completely leak-free.
For pumping aggressive, corrosive, or toxic fluids. All sizes also available in close-coupled design (type series FM).

Technical characteristics:
- Single-stage radial centrifugal pump in process design
- Semi-open impeller
- Hermetically sealed with eddy current-free CFRP / PTFE isolation shell
- Magnetic couplings between 25 and 100 Nm
- Optionally with external flushing system
- Thick-walled, replaceable plastic components
- Complete metallic enclosure
- Metallic absorption of all pipe forces
- Grease lubrication

Flow rate: 0.5 to 80 m³/h
Total head: up to 65 m

Main materials and application limits:

<table>
<thead>
<tr>
<th>Material</th>
<th>Temperature limits</th>
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</thead>
<tbody>
<tr>
<td>UHMW-PE</td>
<td>up to 90 °C</td>
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<tr>
<td>PVDF</td>
<td>up to 115 °C</td>
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<tr>
<td>PTFE/PFA</td>
<td>up to 160 °C</td>
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STANDARDISED CHEMICAL PUMP WITH CANNED MOTOR

TYPE SERIES TAIFUN | EN ISO 2858 / ATEX T3 OR T4

The pump from the future – a technical miracle in a tiny space.
For pumping aggressive, corrosive, or toxic fluids. After emptying a container or tank, problem-free transition to slurp mode.

Technical characteristics:
- Single-stage radial centrifugal pump in process design
- Maximum safety through dual shell
- Integrated synchronous motor with eddy current-free containment can for operation at frequency inverter
- Ultra-compact design
- Slurping, high gas contents and operation with severe cavitation possible
- Complete metallic enclosure
- Metallic absorption of all pipe forces

Flow rate: 0.5 to 35 m³/h
Total head: up to 75 m

Main materials and application limits: PTFE/PFA up to 160 °C
VERTICAL CHEMICAL TANK PUMP

TYPE SERIES NKPF

The tank pump – space-saving and accessible.
For pumping aggressive, corrosive, or fluids containing fibres, directly out of tanks and containers.

Technical characteristics:
- Single-stage radial centrifugal pump in vertical design for dry installation
- Space-saving external installation directly on tanks or containers
- Internal suspension pipe rubberised or Halar®-coated
- Thick-walled, replaceable plastic components
- Brief dry-running possible, because no mechanical seal required
- Shaft bearing in protected, dry location

Flow rate: 0.5 to 450 m³/h
Total head: up to 90 m
Installation depth:
- short: approx. 915 mm
- long: approx. 1515 mm

Main materials and application limits:
- UHMW-PE up to 90 °C
- PVDF up to 115 °C
The submersible pumps – inconspicuous and reliable.
For pumping aggressive, corrosive, or fluids containing solids, directly out of pits, tanks and building sumps.

Technical characteristics:
- Single-stage radial centrifugal pump in vertical design for wet installation
- Pump casing with impeller submerges in the fluid
- Suspension pipe rubberised or Halar®-coated
- Thick-walled, replaceable plastic components, optionally also conductive
- Brief dry-running possible, because no mechanical seal required
- Type VKPF: Shaft bearing in protected, non-submerged location
- Type VKP: Intermediate bearing in submerged range with internal or external flushing

Flow rate: 0.5 to 800 m³/h
Total head: up to 90 m

<table>
<thead>
<tr>
<th>Installation depth:</th>
<th>Flow rate:</th>
<th>Main materials and application limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type VKPF:</td>
<td>up to 1.5 m</td>
<td>UHMW-PE up to 90 °C</td>
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<td></td>
<td>(without intermediate bearing)</td>
<td>PP up to 95 °C</td>
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<tr>
<td>Type VKP:</td>
<td>up to 8.5 m</td>
<td>PVDF up to 115 °C</td>
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<td>(with intermediate bearing)</td>
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ELBOW PUMP MADE FROM PLASTIC

TYPE SERIES ROPP | ATEX T3 OR T4

ROPP, the tiny giant – compact, flexible, convincing.
 Pumping high flow rates of aggressive or corrosive fluids, or fluids containing solids cost-effectively to variable total heads.

Technical characteristics:
- Single-stage, axially fed pipe bend pump
- Cost-effective thanks to the use of proven plastic materials
- Compact all-in-one assembly with integrated V-belt drive system
- Internal pipe bend rubberised or Halar®-coated
- Thick-walled, replaceable plastic components
- Single-acting WERNERT bellows seal
- Optional double-acting mechanical seal HRZ 13
- Metallic absorption of all pipe forces

Flow rate: 750 to 3500 m³/h
Total head: up to 9 m

Main materials and application limits:
- UHMW-PE up to 90 °C
- PTFE/PFA up to 160 °C
YOUR PARTNER WORLDWIDE

SALES AND AFTER-SALES IN GOOD HANDS.

LOCATIONS
From Mülheim an der Ruhr, in the heart of the western German heavy industry landscape, we can supply you with pumps, pump aggregates and spare parts, either directly or via our global distribution partners. Trained and certified premium sales partners keep stocks of important spare parts locally, and can independently perform maintenance and repairs on WERNERT pumps. Our sales partners are located in all important industrial and raw materials regions around the world. In Germany, you are supported by a highly qualified network of local sales engineers working exclusively for WERNERT-PUMPEN GMBH. You can find your contact to us under www.wernert.de.

CONSULTATION
We support our customers upon request in every aspect of planning and designing pump systems. When calculating the characteristic curve for the plant, the subsequent hydraulic design, and finally selection of materials – in the end you have a WERNERT unit that will perform its duties for decades.

CERTIFICATES
Our machines are generally supplied and certified in accordance with EC Directive 2006/42/EC (Machinery Directive). Before the delivery of a WERNERT unit, upon request it can be subjected to extensive factory testing. The most important test is the hydraulic acceptance test under DIN EN ISO 9906, together with the NPSH measurement and pressure test.

AFTER-SALES
Whether for spare parts deliveries, repairs at our facility, or onsite assembly work, we endeavour to help our customers quickly and efficiently at all times. Highly qualified technicians and engineers are available to analyse any damage or pumping problems, and provide specific recommendations for avoiding damage, preventive maintenance, and strategic spare part stockpiling. Put us to the test!