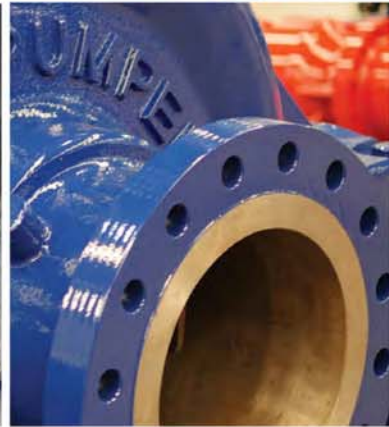


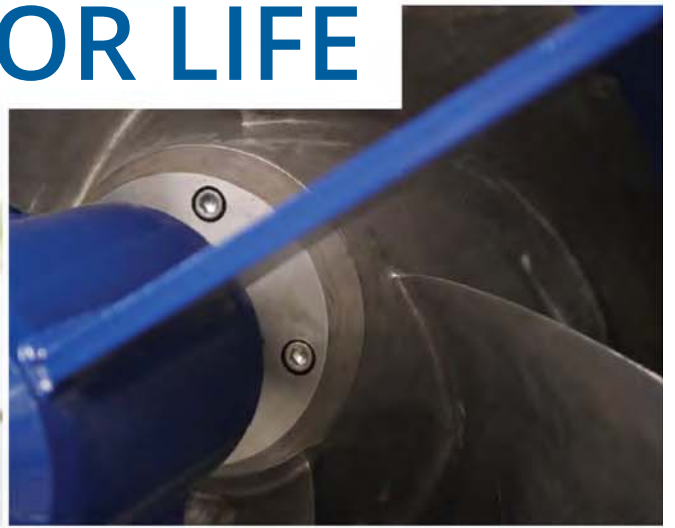


INDUSTRIAL PUMPS

CATALOGUE



PUMPING TECHNOLOGY FOR LIFE



CREATING YOUR **SOLUTION**

Aiming to provide **the best available technology** through centuries of industrial application experience, **not impacting our planet..**

Efficiency	Low carbon footprint
Reliability	Reduced waste & resources
Ecological materials	Sustainable with VOC caution
Modularity	Consumable recycled and investment cast
Manufacture	Optimized space
People	Health, safety and ecological culture
Waste	Sustainable within our strategy



70 YEARS CREATING PUMPING TECHNOLOGY FOR LIFE

We deliver industrial fluid-handling solutions ranging from off-the-shelf pumps, through to pre-configured process packages, and engineered-to-order systems.

The Ruhrpumpen brand means "Solution". Our experienced fluid handling team assist with commercially-centric application challenges across all areas of the world.

Safeguarding families with fire protection packages, facilitating health within pharmaceutical production, and providing clean drinking water, are just a few reasons which make Ruhrpumpen the ideal life-choice for industrial pumping equipment.

We aim to reduce our planet's carbon footprint and waste plastic. Ecologically-biased engineers use lean and clean processes to manufacture solutions by employing parts that have a long lifetime and can eventually be recycled.

Ruhrpumpen at a Glance



Vertical
Integration



70 years of
experience



Sales offices
in more than
35 countries



+2,000
employees



Manufacturing
facilities in 10
countries



Global Service
Centres



*Sustainable pumping solutions
installed globally*

PUMPING TECHNOLOGY FOR LIFE...

OUR SERVICES

Your aftermarket supplier of choice for spare parts, mechanical seals, repairs, upgrades, field service, and total-pump-management.

The dedication of Ruhrpumpen to our customers goes beyond simply supplying world class products. Our dedicated Aftermarket Staff is ready and waiting to assist you in solving all your pumping needs. From on-site service to standard overhauls, in Ruhrpumpen we are ready to supply parts, service and training for your complete pump line.

Field Service

- Available for worldwide assignments
- Our Specialists can be dispatched within 24 hrs
- Reliability Engineering
- Field Technicians
- Application Engineering

OEM & Spare Parts

- OEM Spare parts
- Reverse Engineering
- Mechanical Seals

Upgrades & Retrofits

- Retro-fits & Upgrades

Repairs










- Workshop repairs
- Performance Testing
- Reverse Engineering

Approvals Maintenance

- Fire-Pump service
- ATEX assesment



MEET OUR PUMPS

RP MODEL	DESCRIPTION	DESIGN STANDARDS	OPERATING LIMITS	
	CRP	Single stage, end suction ISO process pump	DIN EN ISO 2858, ISO 5199 HI design (OH1)	Q = up to 500 m³/h H = up to 215 m P = up to 25 bar T = up to 300 °C
	CRP-M	Sealless process pump with magnetic drive	DIN EN ISO 2858 & ISO 15783 (OH1)	Q = up to 500 m³/h H = up to 215 m P = up to 16 bar T = -120 to 450 °C
	CPP / CPP-L	Single stage, end suction ANSI process pump (enclosed impeller)	ANSI B73.1 HI design (OH1)	Q = up to 1,150 m³/h H = up to 235 m P = up to 26 bar T = -45 to 315 °C
	CPO / CPO-L	Single stage, end suction ANSI process pump (open impeller)	ANSI B73.1 H1 design (OH1)	Q = up to 1,590 m³/h H = up to 198 m P = up to 26 bar T = up to 371 °C
	CPA-M	Sealless process pump with magnetic drive	ANSI B73.3 H1 design (OH1)	Q = up to 500 m³/h H = up to 215 m P = 16 bar T = -120 to 450 °C
	CLP	Sealless Fluoropolymer lined up pump with magnetic drive	DIN EN ISO 2858 & DIN 24256 (OH1)	Q = up to 300 m³/h H = up to 90 m P = 16 bar T = -60 to 180 °C
	IVP / IVP-CC	Vertical in-line pump in extended and close coupled configurations	HI design (OH4 / OH5)	Q = up to 2,271 m³/h H = up to 122 m P = up to 19 bar T = -45 to 150 °C
	IRP	Single stage, end suction industrial water-type pump	DIN EN ISO 2858 & DIN 24255 (OH1 & Close coupled)	Q = up to 681 m³/h H = up to 130 m P = up to 10 bar T = up to 140 °C
	Combitude	Single stage, pitot tube pump for low flow, high head applications	Industrial & API norms	Q = up to 80 m³/h H = up to 1,480 m P = up to 160 bar T = up to 200 °C
	SWP	Self-priming pump for solids handling applications	HI design (OH1)	Q = up to 1,476 m³/h H = up to 42 m T = up to 70 °C
	PS	Single stage, end suction, centrifugal solids handling stock pump	HI design (OH1)	Q = up to 1,817 m³/h H = up to 91 m P = up to 10 bar T = up to 144 °C
	ZW	Horizontal & Vertical double suction, single stage, split case pumps	HI design (BB1)	Q = up to 9,000 m³/h H = up to 340 m P = up to 98 bar T = up to 120 °C
	SO	Single stage, end suction ISO Process pump	DIN EN ISO 2858, Transnorm, DIN 24256 (OH1)	Q = up to 2,800 m³/h H = up to 160 m P = up to 25 bar T = -10 °C to 240 °C
	SHD / ESK SKO / SK / SKV / ST / STV	Single stage, end suction pumps (solids handling)	HI design (OH1)	Q = up to 8,000 m³/h H = up to 116 m P = up to 10 bar T = up to 80 °C
	SD / SDV	Single stage, end suction pumps (solids handling) for vertical and horizontal installations	HI design (OH3)	Q = up to 14,000 m³/h H = up to 45 m P = up to 4.4 bar T = up to 40 °C
	NE	Submersible Non-clog centrifugal wastewater pump with oil-filled motor	HI design Industrial norms	C = up to 522 m³/h H = up to 53 m P = up to 4.8 bar T = up to 70 °C
	SHS	Submersible Non-clog centrifugal wastewater pump with dry-running motor	HI design Industrial norms	C = up to 1,600 m³/h H = up to 73 m P = up to 10.3 bar T = up to 120 °C
	VTP	Multi-stage, vertical turbine pumps with diffuser type bowl	HI design Industrial & API 610 (VS1) norms	Q = up to 13,636 m³/h H = up to 762 P = 74 bar T = 0 to 121 °C
	VSP / VSP CHEM	Single stage vertical sump pump design for wet pit applications	ANSI B73.1, ISO 5199 EN ISO 2858 and API 610 (VS4) norms	Q = up to 1,200 m³/h H = up to 130 m P = up to 40 bar T = up to 200 °C

RUHR^{CHEM} - CHEMICALS









RUHR^{PRO} - INDUSTRIAL

RUHR^{H2O} - WATER & WASTE

RUHR^{VERT}
VERTICAL

PUMPING TECHNOLOGY FOR LIFE...

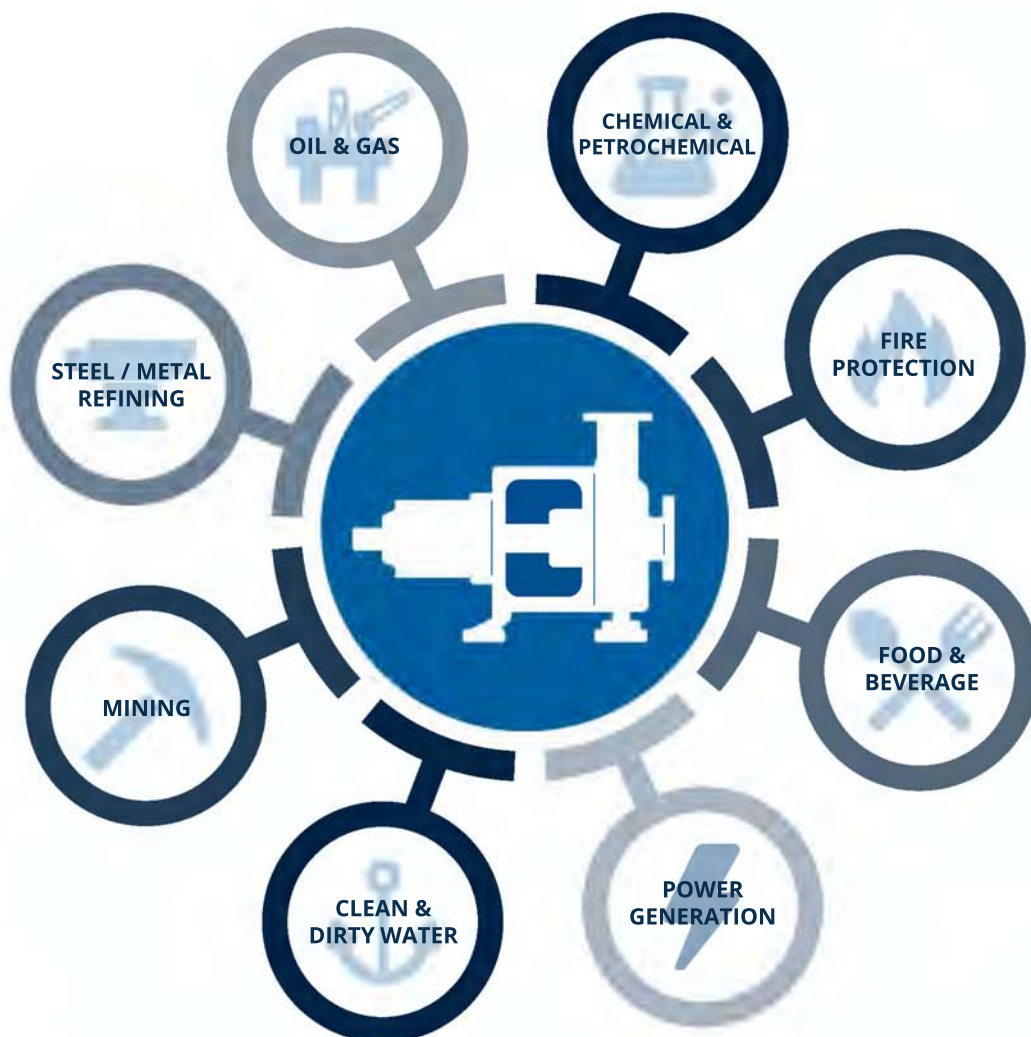
MEET OUR PUMPS

RP MODEL	DESCRIPTION	DESIGN STANDARDS	OPERATING LIMITS	
	VSS Vertical multi-stage centrifugal in-line pump with balanced mechanical seal	Industrial norms	Q = 1,120 m³/h H = 300 m P = up to 30 bar T = up to 120°C	RUHRPUMP HIGH PRESSURE
	GP GPA Horizontal, multi-stage, ring-section type process and boiler feed water pump	ISO 5199, Industrial norms and API 610 (BB4)	Q = up to 900 m³/h H = up to 4,000 m P = up to 416 bar T = up to 205 °C	
	MPP Single stage, end suction, Hard-metal mining & slurry pump	Heavy duty design norms (OH1)	Q = up to 4,500 m³/h H = up to 70 m P = up to 20 bar T = up to 120 °C	RUHRQUARTZ MINING
	ZW - F Horizontal, single stage, split case fire pumps	NFPA 20 FM / UL approvals	Q = 150 to 5,000 US gpm (1,135 m³/h) P = up to 355 psi (25 bar)	RUHRFIRE FIRE PROTECTION
	IRP - F Horizontal, single stage, end suction fire pumps	NFPA 20 FM / UL approvals	Q = up to 1,500 US gpm (340 m³/h) P = up to 185 psi (13 bar)	
	Pre-Packaged Fire Pump Systems Fire systems incorporate pumps, drivers, control systems and pipework in a single container. They can be skid mounted, with or without enclosure and supplied with electric motor or diesel engine.	NFPA 20-850 FM / UL approvals	Q = up to 5,000 US gpm (1,135 m³/h) P = up to 355 psi (25 bar)	
	PSKI & PDKI Component Single & Dual mechanical seals	DIN 24960, EN 12756, ATEX II2G & II3G	T min = - 50 °C T max = 400 °C P = up to 80 bar	RUHR ^{PH} - MECHANICAL SEALS
	CSCI & CDCI Cartridge Single & Dual mechanical seals	EN 12756, ATEX II2G & II3G	T min = -40 °C T max = -220 °C P = up to 25 bar	
	CSCI & CDCI Cartridge Single & Dual mechanical converter seals	EN12756, DIN24960, ISO 3069, ATEX II2G & II3G	T min = -40 °C T max = -220 °C P = up to 20 bar	
	CSCA & CDCA Cartridge Single & Dual Mechanical seals	API 682, ISO 21049, EN 12756, ATEX II2G & II3G	T min = -40 °C T max = -220 °C P = up to 25 bar	
	SSCM, SSCL & SSCU Split semi-cartridge mechanical seals	FDA, DIN28136 T2 & T3, DIN 28137 T2, DIN28141/ U154, DIN 28154, DIN 28159, ATEX II2G & II3G	T min = -20 °C T max = 500 °C P= FV P = up to 25 bar	
	PSGI, PDGI, CSGI, CDGI, CSGI, CDGL, CSGU, CDGU, CSGM & CDGM Dry Gas cartridge single & dual mechanical seals	FDA DIN28136 T2 & T3, DIN 28137 T2, DIN28141/ U154, DIN 28154, DIN 28159, ATEX II2G & II3G	T min = -20 °C T max = 170 °C P= FV P = up to 25 bar	
	Support Systems Thermosyphon circulation and cooling systems	API 682 / ISO 21049: PLAN 52 & PLAN 53A, PED 2014/68/EU, ASME VIII, Div. 1	T min = - 60 °C T max = 200 °C P = 40 bar	
	Engineered Seals Cartridge & component Single & Dual API & Chemical mechanical seals	API 682, FDA, DIN	T min = - 50 °C T max = 500 °C P= FV P = up to 150 bar	RUHR ^{PH} OIL & GAS
	SCE Horizontal, centerline mounted, single stage API process pump	API 610 (OH2)	Q = up to 3,200 m³/h H = up to 480 m P = up to 90 bar T = -80 to 450 °C	
	SCE-M Horizontal, centerline mounted, single stage API process pump with magnetic drive	API 685 (OH2)	Q = up to 2,200 m³/h H = up to 330 m P = up to 40 bar T = -120 to 450 °C	

A WIDE RANGE OF APPLICATIONS

We offer 70 years of experience solving thousands of specific industrial needs in fluid transfer technology.

Our customers can be sure that we are constantly developing more efficient pumps for new and existing industrial processes. Our products are used in a wide variety of industrial applications, including but not limited to:



The background of the entire page is a photograph of a large industrial chemical plant at night. The facility is illuminated by numerous lights, with several tall distillation columns and complex piping visible against a dark sky. In the foreground, there is a body of water reflecting the lights from the plant. Overlaid on the lower half of the image are several large, circular, metallic pump components, likely centrifugal pump casings, arranged in a grid-like pattern. These components are made of a light-colored metal, possibly stainless steel, and have multiple bolt holes around their perimeters.

CHEMICAL PUMPS

RUHRCHEM

CRP

ISO 2858 / 5199 End Suction Chemical Process Centrifugal Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- High-end shaft rigidity and seal face deflection
- Single & Dual component & cartridge seals & system options
- Enclosed impeller
- Corrosion resistant material options
- 17.500, 25.000 and 40,000 Bearing life options

OPERATING LIMITS

Capacity	up to 500 m³/h	Pressure	up to 25 bar
Head	up to 215 m	Temperature	-60 to 300 °C

CRP-M

Permanent Magnetic Drive Centrifugal Pump acc. ISO 2858 /15873 (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung sealless centrifugal pump
- Patented spherical journal bearing design
- 100% leakage free containment shell
- Secondary containment & control options
- Highly efficient magnetic drive, fully drainable
- Corrosion resistant material & ceramic containment shell options

OPERATING LIMITS

Capacity	up to 500 m³/h	Pressure	up to 16 bar
Head	up to 215 m	Temperature	-120 to 450 °C

CPP / CPP-L

ANSI B73.1 End Suction Process Pump (OH1: Closed Impeller)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- High-end shaft rigidity and seal face deflection
- Single & dual component & cartridge seals & systems options
- Enclosed impeller
- Corrosion resistant material options
- Air-fin & liquid cooled bearing bracket options
- Low flow / High head standard models available

OPERATING LIMITS

Capacity	up to 1,150 m³/h	Pressure	up to 26 bar
Head	up to 235 m	Temperature	-60 to 315 °C

CPO / CPO-L

ANSI B73.1 End Suction Process Pump (OH1: Open Impeller)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- High-end shaft rigidity and seal face deflection
- Single & Dual component & cartridge seals & systems options
- Open impeller
- Corrosion resistant material options
- Air-fin & liquid cooled bearing bracket options
- Low Flow / High Head standard models available

OPERATING LIMITS

Capacity	up to 1,590 m³/h	Pressure	up to 26 bar
Head	up to 198 m	Temperature	-60 to 370 °C

CPA-M

Permanent Magnetic Drive Pump acc. ANSI B73.3 (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung sealless centrifugal pump
- Patented spherical journal bearing design
- 100% leakage free containment shell
- Secondary containment & control options
- Highly efficient magnetiv drive, fully drainable
- Corrosion resistant material & ceramic containment shell options

OPERATING LIMITS

Capacity	up to 500 m³/h	Pressure	16 bar
Head	up to 215 m	Temperature	-120 to 450 °C

CLP

Permanent Magnetic Drive Pump acc. ISO 2858/ DIN 24256 (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung sealless centrifugal pump
- PTFE/PFA/Polypropylene, polyethylene, lined ductile cast iron casing
- 100% leakage free containment shell
- Positively keyed isostatically pressed lining
- Metal core rigid impeller
- Drain options

OPERATING LIMITS

Capacity	up to 300 m³/h	Pressure	16 bar
Head	up to 90 m	Temperature	-60 to 180 °C

RUHR^{PRO}

RUHR^{PRO}

INDUSTRIAL PUMPS

PUMPING TECHNOLOGY FOR LIFE...

IVP / IVP-CC

ISO 2858 / DIN 25256 Vertical In-line Centrifugal Pump (OH4 / OH5)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, vertical close-coupled centrifugal pump
- Single & Dual component & cartridge seals & system options
- Enclosed single piece impeller design
- Distanced Muff/split coupling with standard IEC & NEMA motors
- Top pull-out dismantling
- DIN & ANSI flange drilling options

OPERATING LIMITS

Capacity	up to 2,271 m³/h	Pressure	up to 19 bar
Head	up to 122 m	Temperature	- 45 °C to 150 °C

IRP

ISO 2858 / EN 733 / DN 25255 End Suction Industrial Centrifugal Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- Enclosed impeller
- Long & Close-coupled options
- DIN & ANSI flange drilling options
- High efficiency to "Eco-design 2009/125/EC no 547/2012(MEI)

OPERATING LIMITS

Capacity	up to 681 m³/h	Pressure	up to 10 bar
Head	up to 130 m	Temperature	-20 to 140 °C

COMBITUBE

Single stage, pitot tube pump for low flow, high head applications



CHARACTERISTICS AND DESIGN FEATURES

- Single stage horizontal in-line
- Designed for low flow vs high pressure performance
- Liquid cooling bearing bracket options
- Pulsation free flow
- Closed valve stability
- Low NPSH (r)

OPERATING LIMITS

Capacity	up to 80 m³/h	Pressure	up to 160 bar
Head	up to 1,480 m	Temperature	-60 to 200 °C

SWP

End Suction industrial Self-Priming Centrifugal Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Self-priming from 8.2 m
- 80 mm solids handling
- Heavy Duty 2-vane non-clog open impeller
- Diesel & Electric motor drive options
- Easy cleaning and access to the impeller chamber
- Simple maintenance

OPERATING LIMITS

Capacity	up to 1,476 m³/h	Solids Diameter	up to 7.62 cm
Head	up to 42 m	Temperature	-20 to 70°C

PS

End Suction Industrial Centrifugal Stock Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- 6% (paper) stock solids content handling
- Semi-open impeller
- Adjustable front wear-plate
- DIN & ANSI flange drilling options
- Various materials for pumping erosive & corrosive media

OPERATING LIMITS

Capacity	up to 1,817 m³/h	Pressure	up to bar
Head	up to 91 m	Temperature	-20 to 144 °C



WATER & WASTE PUMPS

RUHR^{H2O}

RUHR^{H2O}

HSC / HSD / HSL / HSR / ZW

Horizontal Split Casing Double Suction Pump (BB1)



CHARACTERISTICS AND DESIGN FEATURES

- High efficiency and double suction impeller
- Component or Cartridge, Mechanical seals or packed gland sealing
- Simple rotor removal for seal & bearing access
- Vertical mounting options
- Corrosion resistant material options (Ductile cast iron with Stainless steel impeller as standard)
- DIN & ANSI flange drilling options

OPERATING LIMITS

Capacity	up to 31,800 m³/h	Pressure	up to 20 bar
Head	up to 673 m	Temperature	-60 to 150 °C

SO

ISO 2858 DIN 25255 Transnorm High Flow End Suction Centrifugal Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Radially split, horizontal, centrifugal pump
- SO foot mounted, SO-M centerline mounted
- ANSI and DIN flanges available
- Single suction, radial, enclosed impeller
- End-top nozzle arrangement

OPERATING LIMITS

Capacity	up to 2,800 m³/h	Pressure	up to 25 bar
Head	up to 160 m	Temperature	-60 to 240 °C

SHD / ESK / SK / SKO / SKV / ST / STV

End Suction Industrial Centrifugal Solids Handling Non-clog Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung centrifugal pump
- From 38 mm to 152 mm solids content handling
- Free-flow non-clog impeller
- Adjustable front wear-plate options
- Vertical mounting options
- Various materials for pumping erosive & corrosive media

OPERATING LIMITS

Capacity	up to 8,000 m³/h	Pressure	up to 10 bar
Head	up to 116 m	Temperature	-60 to 80 °C

SD / SDV

End Suction Industrial Centrifugal Mixed-Flow Pump (OH3)



CHARACTERISTICS AND DESIGN FEATURES

- High flowrate single stage, radially split centrifugal pump
- Mixed flow design for high flow vs low head characteristics
- Semi-axial enclosed impeller
- Vertical & horizontal mounting options
- Small solids handling capabilities
- Robust bearing design

OPERATING LIMITS

Capacity	up to 14,000 m³/h	Pressure	up to 4.4 bar
Head	up to 45 m	Temperature	-20 to 80°C

RUHRH2O

NE

Submersible Non-clog Centrifugal Grey & Wastewater Pump with oil-filled motor



CHARACTERISTICS AND DESIGN FEATURES

- Up to 80 mm solids handling, free-flow, non-clog impeller
- Water collection chambers with humidity sensors
- Highly efficient hydraulic design
- Oil-filled cast iron motor for integrated lubrication & cooling
- Dual mechanical seal options
- Robust water tight design

OPERATING LIMITS

Capacity	up to 522 m³/h	Pressure	up to 4.8 bar
Head	up to 53 m	Temperature	up to 70°C

SHS

Submersible Non-Clog Centrifugal Grey & Wastewater Pump with dry-running motor



CHARACTERISTICS AND DESIGN FEATURES

- Up to 80 mm Solids handling, free-flow, non-clog impeller
- Water collection chambers with humidity sensors
- Highly efficient hydraulic design
- Dry-running motor
- Grease lubricated bearings
- Adaptable & modular discharge elbows
- Robust water tight design

OPERATING LIMITS

Capacity	up to 1,600 m³/h	Pressure	up to 10.3 bar
Head	up to 73 m	Temperature	up to 120 °C



VERTICAL PUMPS

PUMPING TECHNOLOGY FOR LIFE...



VTP

Multistage Vertical Turbine suspended bowl Pump (VS1)



CHARACTERISTICS AND DESIGN FEATURES

- Multi-stage vertical turbine centrifugal pumps with diffuser type bowl
- Rigid shaft design with low deflection
- Cartridge mechanical seal options
- Collet mounted, or keyed, impeller mounting options
- Highly efficient hydraulic design
- Up to 30 stages to efficiently match application requirement
- Modular design with Canned (VS6) options
- Various materials for pumping erosive & corrosive media
- API 610 options

OPERATING LIMITS

Capacity	up to 13,636 m³/h	Pressure	up to 74 bar
Head	up to 762 m	Temperature	up to 121°C

VSP / VSP-CHEM

Single stage Vertical Sump Pump (VS4)



CHARACTERISTICS AND DESIGN FEATURES

- Up to 6m length and 100 mm dia. solids handling
- ISO or ANSI volute & impeller hydraulic options
- Semi-open & closed non-clog impeller options
- Modular with the CPO & CRP chemical pump range
- Open shaft, packed gland, dry-running singe, or dual mechanical sealing
- Ground pump-shaft quality
- Free-flow filtered lubrication options
- Highly efficient hydraulic design
- Various materials for pumping erosive & corrosive media
- API 610 options

OPERATING LIMITS

Capacity	up to 1,200 m³/h	Pressure	up to 40 bar
Head	up to 130 m	Temperature	up to 200°C

RUHR^{SEAL}
PRIMING

RUHR^{DRUCK}



HIGH PRESSURE PUMPS

PUMPING TECHNOLOGY FOR LIFE...

VSS

Vertical Multi-stage Industrial Centrifugal In-Line Pump



CHARACTERISTICS AND DESIGN FEATURES

- Close-coupled pump with up to 36 stages
- Balanced cartridge mechanical seal
- Closed impeller
- Cast iron and stainless steel wetted options
- Up to DN 100 suction & discharge sizes
- Highly efficiency hydraulic design
- Single phase 240v options
- ATEX options

OPERATING LIMITS

Capacity	up to 120 m³/h	Pressure	up to 30 bar
Head	up to 300 m	Temperature	up to 120°C

GP

Horizontal, Multi-stage, Ring-Section Type, Centrifugal Pump (BB4)



CHARACTERISTICS AND DESIGN FEATURES

- Balanced drum or disk options
- Enclosed impeller
- A&B series of impeller for optimized application fit
- High efficiency design
- Low NPSH (type IS) first stage impeller
- Interstage take-off options
- Cold start possibilities-multiple bearing configuration options
- Heavy duty construction

OPERATING LIMITS

Capacity	up to 900 m³/h	Pressure	up to 416 bar
Head	up to 4,000 m	Temperature	up to 205°C

RUHRQUARTZ

RUHRQUARTZ

QUARRYING PUMPS

PUMPING TECHNOLOGY FOR LIFE...

MPP

End Suction Industrial Mining Centrifugal Pump (OH1)



CHARACTERISTICS AND DESIGN FEATURES

- Single stage, radially split, overhung, heavy duty slurry pump
- Solids handling
- Hard metal & treated internal casing liner
- Adjustable wear plate
- Oversized shaft & bearings
- Free-flow closed impeller
- Flushed, grease-packed, or mechanical sealing options
- Dry running capability options with expeller
- Vertical mounting options
- Various materials for pumping erosive & corrosive media
- Highly modular design

OPERATING LIMITS

Capacity	up to 4,500 m³/h	Pressure	up to 20 bar
Head	up to 70 m	Discharge size	25 to 450 mm

RUHRSAFE

RUHRSAFE



FIRE PUMPS AND SYSTEMS



PUMPING TECHNOLOGY FOR LIFE...

FIRE PUMPS AND SYSTEMS

Our fire protection pumping solutions can be found all around the world in a variety of industrial, commercial and residential applications. We are able to supply single pumping units or complete pre-packaged fire systems (with or without enclosure), always tailored and built to the requirements of the customer, ensuring that they meet international and local safety regulations.



CHARACTERISTICS

All pre-packaged systems accommodate any of the RP fire pump models with drivers, control systems and pipework on a common base for a plug-and-play installation.

- Available with electric motor or diesel engine
- ETL/C-ETL third party listing components
- UL listed and FM approved components
- NFPA 20 full compliance
- NFPA 850 compliant
- Wide range of construction materials available. Metallurgies available for sea/brackish water application and harsh environments.

BENEFITS

- Single source responsibility for complete system
- System is completely wired and factory tested
- Delivered on site in a single shipment, ready for installation
- Engineered to customer requirements
- International distribution and start-up capabilities
- ABS certification for offshore platform fire pump packages and fire skid units



APPLICATIONS

- Commercial, municipal and residential high-rise buildings
- Large industrial premises and storage warehouses
- Offshore and remote facilities
- Airports
- Commercial centers
- Power stations
- Marine

Ruhrpumpen fire pumps: the heart of your fire protection system



Split case fire pumps

Horizontal, single and two stage, split case centrifugal pumps

Characteristics

- Flows from 150 to 5000 GPM
- Pressures from 40 to 355 + PSI
- Electric or Diesel driven
- UL-448 listed
- FM-1311 approved
- NFPA-20 design
- Factory tested

Benefits

- Ease of installation and maintenance
- Wide range of applications
- Construction materials for seawater service are available



End suction fire pumps

Horizontal, single stage, end suction centrifugal pumps

Characteristics

- Flows from 150 to 1,500 GPM
- Pressures from 40 to 250 + PSI
- Electric or Diesel driven
- UL-448 listed
- FM-1319 approved
- NFPA-20 design
- Factory tested
- EN12845 options

Benefits

- Space-saving and simplified maintenance with back pull-out design without disturbing pipe work



Vertical turbine fire pump

Vertical, single and multi-stage, turbine pumps

Characteristics

- Flows from 250 to 5000 GPM
- Pressures from 40 to 519 + PSI
- No priming
- Adaptability to water level
- Electric or Diesel driven
- UL-448 listed
- FM-1312 approved
- NFPA-20 design
- Factory tested

Benefits

- UL listed and FM approved pump for suction lift conditions
- Minimal maintenance
- Can be used where city water is not available and ponds or lakes are the only water supply
- Construction materials for seawater service are available



In-line fire pump

Vertical in-line centrifugal pumps

Characteristics

- Flows from 150 to 1000 GPM
- Only available with electric drive
- Pending UL Listing and FM Approval
- NFPA-20 design
- Factory tested

Benefits

- Top pull-out design simplifies maintenance
- Compact, space-saving design



MECHANICAL SEALS

RUHR^{PI}

RUHR^{SAFE}

PSKI & PDKI

Component Single & Dual Chemical & Industrial Seals acc. DIN 24960



CHARACTERISTICS AND DESIGN FEATURES

- Rubber Bellows Seals: Balanced: P= 16 bar / T= -40 to 180 °C
- Encapsulated Multiple Spring Pusher Seals: Balanced: P= 25 Bar
T= - 50 to 220 °C
- Encapsulated Wavy Spring Pusher Seals: Balanced: P= 80 bar
T= -50 to 220 °C
- Metal Bellows Pusher seals: Balanced: P= 25 bar / T= -40 to 400 °C
- Pinned and Unpinned static seal faces
- EN12756 Materials of Construction
- Parallel & Stepped shaft options
- Solids handling & Extreme Temperature Options
- ATEX Categories II2G and II3G

CSCI & CDCI

Cartridge Single & Dual Chemical & Industrial Seals



CHARACTERISTICS AND DESIGN FEATURES

- Cartridge construction for simplicity: P= 25 bar / T= -40 to 220 °C
- Encapsulated Multiple springs: Balanced
- Single & Dual Seal options: Back-to-Back, Face-to-Face, and Tandem
- Quench, Vent, Flush and Throttle-Bush Options
- Pumping Ring Options for enhanced flow through seal system
- EN12756 Materials of Construction & 3.1 Certification options according EN10204
- Solids handling, Material, and Extreme Temperature Options
- Replacement OEM Pump seals & Upgrades
- ATEX Categories II2G and II3G

CSCI & CDCI

Cartridge Single & Dual Converter Chemical & Industrial Seals



CHARACTERISTICS AND DESIGN FEATURES

- Simple conversion of Gland Packing to an environmentally balanced Cartridge mechanical sealed.
- Encapsulated Multiple springs: Balanced: P= 20 bar / T= -40 °C to 220 °C
- Designed to be fitted to DIN24960/ISO3069 standard Stuffing Box.
- Quench and Flush Options
- EN12756 Materials of Construction & 3.1 Certification options according EN10204
- Solids handling and Material Options
- Narrow Bore for Gland Packing chambers
- ATEX Categories II2G and II3G

CSCA & CDCA

Cartridge Single & Dual Seal acc. API 682 / ISO 21049



CHARACTERISTICS AND DESIGN FEATURES

- Cartridge construction for simplicity: P= 25 bar. T= -40 to 260 °C
- API 682 Categories available: 1, 2, or 3
- API 682 Type: A, B, or C
- API 682 Arrangements: 1, 2 or 3.
- Single & Dual Seal options: Back-to-Back, Face-to-Face, and Tandem
- Quench, Vent, Flush and Throttle-Bush Options
- Pumping Ring Options for enhanced flow through seal system
- EN12756 Materials of Construction & 3.1 Certification options according EN10204
- Solids handling, Material, and Extreme Temperature Options
- ATEX Categories II2G and II3G

SSCM, SSCL, & SSCU

Split Single Chemical, Pharmaceutical & Industrial Seals for Pumps



CHARACTERISTICS AND DESIGN FEATURES

- Semi-Cartridge & Component constructions for ease of maintenance: FV<P = 25 bar / T= -120 to 500 °C
- Pumps, Compressors, Fans and Gearboxes...
- Mixer seals for Glass Lined Vessels to FDA | DIN28136 T3, DIN 28137 T2 (Flanged), & DIN 28159
- Mixer seals for Steel Vessels to FDA | DIN28141/U154
- Mixer seals for Steel Vessels to FDA | DIN28136 T2 (with STEPPED shaft), DIN28141 (Flanged), and DIN 28154
- 3.1 Material Certification options according EN10204
- Shaft Diameters up to 300mm
- Vent & Flush Options
- Dry running & Shut-down options
- ATEX Categories II2G and II3G

ENGINEERED SEALS

Cartridge Single & Dual API & Chemical Seals



CHARACTERISTICS AND DESIGN FEATURES

- For Demanding Applications: FV: P = 150 bar / - 50 °C to 500 °C
- Cartridge, Component, Split, Dry-Gas, options to Industrial, API, and Glass-Lined Mixer applications.
- Extreme temperature, Solids Handling, and shaft deflection possibilities
- Bespoke spring options for rotating and static faces
- Single & Dual Seal face configurations and bonding: Back-to-Back, Face-to-Face, Tandem....
- Dry Running, Quench, Vent, Flush, Throttle-Bush, and Pumping Ring Options
- Specific Engineering Design Standards, Sanitary Norms, Directives, and ATEX
- Endless Materials of Construction possibilities with 3.1 Certification options according EN10204
- Specific dimensions to suit New, OEM Replacement, and Upgrades
- Solids handling & Extreme Temperature Options

THERMOSYPHON SYSTEMS

Stainless Steel support for Industrial, Chemical, and API applications



CHARACTERISTICS AND DESIGN FEATURES

- Circulation in accordance with API 682 / ISO 21049: Plan 52 & Plan 53A
- 9 litre Stainless Steel standard Modular construction with ancillaries. $P < 40 \text{ bar}$. $-60^\circ\text{C} < T < +200^\circ\text{C}$
- Thermosyphon effect with stand and Sight Level Glass
- Pressurised or Atmospheric for Barrier fluid lubrication, cooling, Dry-Running, and leakage compensation
- PED 2014/68/EU, ASME VIII, Div. 1,
- Integrated cooling coil and Plan 53B standard options
- Modular Ancillaries: Flow, Level, & Temperature monitoring. Pressure control valve (PCV), Hand Refill Pump, Circulating Pump...
- 3.1 Material Certification options according EN10204

DRY GAS SEALS

PSGI, PDGI, CSGI, CDGI, CSGL, CDGL, CSGU, CDGU, CSGM, & CDGM



CHARACTERISTICS AND DESIGN FEATURES

- Non-Contaminating Component & Cartridge Gas Lubricated: $P = 25 \text{ bar}$ / $T = -20^\circ\text{C}$ to 170°C
- Simple low-friction operation that do not need complex components for heat dissipation
- Encapsulated Multiple springs
- Balanced for use with Stepped or parallel shafts
- V or U Face Grooves that contact only during slow/no rotation
- API682 Containment
- Dual Seals & Support systems for liquids containing solids
- Carbon and SiC Seal Face Options. Various EN12756 Materials of Construction.
- Mixer seals for Glass Lined Vessels to FDA | DIN28136 T3, DIN 28137 T2 (Flanged), & DIN 28159
- Mixer seals for Steel Vessels to FDA | DIN28141/U154 (with PARALLEL shaft)
- Mixer seals for Steel Vessels to FDA | DIN28136 T2 (with STEPPED shaft), DIN28141 (Flanged), and DIN 28154
- Compressor, Mixer, Pump, Fan, Blower, and Turbine Upgrades
- ATEX Categories II2G and II3G

YOUR PROCESS PARTNER

We understand your application

- 70 years of pump processing experience
- Application specialists available for support

Ecological Foot-printing is important to us

- Investment being made to reduce waste
- CO₂ Impact aligned to offers

Operational Excellence

- Continual process improvements
- Best in class products

Continued Product Development & R&D

- In-house R&D efforts for your Industry
- Vertically integrated skills and competence

Training

- Our tailored courses can be matched to the experience levels and needs of our customers in their specialized fields



70 years creating the pumping technology that moves our world

Ruhrpumpen is an innovative and efficient pump technology company that offers highly-engineered and standard pumping solutions for the oil & gas, power generation, industrial, water and chemical markets. We offer a broad range of centrifugal and reciprocating pumps that meet and exceed the requirements of the most demanding quality specifications and industry standards such as API, ANSI, UL, FM, ISO and Hydraulic Institute.

