RUHRPUMPEN

Specialist for Pumping Technology

INDUSTRIAL PUMPS

CATALOG

Advanced pumping technology for industrial processes

Ruhrpumpen is your single source supplier

- Original Equipment (OEM)
- Spare parts
- Installation and startup support
- Repair and maintenance
- Engineering, training and consulting
- Reverse engineering

Benefits of our pumps:

- Proven reliability
- High efficiency designs ensure lowest operating cost
- Robust design allows for long system life with minimal maintenance
- Optimized total cost of ownership

Ruhrpumpen Industrial Pumps

Pumps find application in thousands of manufacturing processes around the world. They lie deep in the heart of hundreds of industries playing an essential role in the production and development of materials that support and improve modern life.

Regardless of their industry, manufacturers face many of the same challenges: from shorter product life-cycles to increasingly sophisticated customer demands.

As a highly-engineered pump manufacturer, Ruhrpumpen delivers cost-effective, custom made solutions for a wide range of industrial applications. RP Industrial pumps are engineered to perform in the most harsh and corrosive environments, while achieving the highest levels of safety and reliability.

From the chemical and petrochemical industries to pharmaceutical and food processing units, Ruhrpumpen's pumping solutions ensure an efficient and reliable operation throughout the entire operating cycle of your plant.

Despite the application, Ruhrpumpen has the solution to handle the demands of your industry.

Our centrifugal and reciprocating pumps have proven their performance in a wide range of industrial applications such as:

- Process water
- Flood control
- Condensation control
- Dewatering service
- Agricultural irrigation
- Water treatment
- Water distribution and supply
- Seawater recirculation
- Washing and cleaning
- Wastewater handling
- Industrial refrigeration
- Pressure boosting
- Fire protection

RP offers more than 65 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 pumps are used in a wide variety of industries, including but not limited to:

APPLICATIONS & INDUSTRIES

- Cooling & Thermal
- Chemical
- Power Generation
- Marine
- Food Processing
- Oil & Gas
- Water & wastewater
- Pharmaceutical
- Steel / Metal Refining
- Automotive
- Mining
- Fire protection

IPP

End suction pump, dimensionally compliant with the ANSI B73.1 standard

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH1), dimensionally compliant with the ANSI / ASME B73.1 standard
- Horizontal, overhung, single stage, end suction centrifugal pump
- Open impeller, provides hydraulic balance reducing axial thrust
- Back pull-out design for ease of maintenance
- Modular design concept
- Available in a wide range of metallurgies to allow operation with a broad variety of liquids

OPERATING LIMITS

Capacity	up to 1,000 gpm up to 227 m³/h
Head	up to 420 ft up to 128 m
Pressure	up to 375 psi up to 26 bar
Temperature	up to 500 °F up to 260 °C

APPLICATIONS

- Chemical
- Pharmaceutical
- Auxiliary services in power plants
- General industry
- Food processing
- Water and wastewater treatment
- Industrial refrigeration

CPP / CPP-L

Single stage, end suction ANSI process pumps (enclosed impeller)

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH1), compliant with the ANSI / ASME B73.1 specification
- Enhanced hydraulic design for low NPSH requirements
- Back pull-out design for ease of maintenance
- C-Frame option is available
- Optional cooling jacket and cooling coil for high temperature applications
- Available in ductile iron, stainless steel, duplex and alloy 20 (other materials on request)
- Available in 35 sizes to operate within a wide range of hydraulic parameters, including the CPP-L for low-flow, high-head applications

OPERATING LIMITS

Capacity	up to 12,340 gpm up to 2,800 m³/h
Head	up to 770 ft up to 235 m
Pressure	up to 375 psi up to 26 bar
Temperature	up to 700 °F up to 371 °C

APPLICATIONS

- Chemical and petrochemical
- Auxiliary services in power plants
- Agricultural irrigation
- Water treatment
- Food processing
- Pulp and paper
- Textile industry
- Pharmaceutical
- Tank farms

CPO / CPO-L

Single stage, end suction ANSI process pumps (open impeller)

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH1), compliant with the ANSI / ASME B73.1 specification
- Back pull-out design for ease of maintenance
- Open impeller design allows handling of solids in suspension
- Industry leading low NPSHR performance and high efficiencies
- C-Frame option is available
- Optional cooling jacket and cooling coil for high temperature applications
- Available in ductile iron, stainless steel, duplex and alloy 20 (other materials on request)
- CPO-L model for low-flow, high-head applications

OPERATING LIMITS

Capacity	up to 7,000 gpm up to 1,590 m³/h
Head	up to 920 ft up to 281 m
Pressure	up to 400 psi up to 27.5 bar
Temperature	up to 700 °F up to 371 °C

APPLICATIONS

- Chemical and petrochemical
- Auxiliary services in power plants
- Agricultural irrigation
- Water treatment
- Food processing
- Pulp and paper
- Textile industry
- Pharmaceutical
- Tank farms

GSD / GSD-C

Single stage, end suction general service centrifugal pump

CHARACTERISTICS AND DESIGN FEATURES

- HI design (GSD – OH0 / GSD-C – OH7)
- Maximum parts interchangeability to reduce costs
- Available in 28 sizes
- Semi-open, adjustable impeller
- Frame mounted as standard
- Back pull-out construction is available
- Packing or mechanical seal
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 4,000 gpm up to 908 m³/h
Head	up to 400 ft up to 122 m
Pressure	up to 175 psi up to 12 bar
Temperature	up to 250 °F up to 121 °C

APPLICATIONS

Clear liquids or fluids with small solids in suspension:

- Water supply systems
- Agricultural irrigation
- Construction dewatering
- Recirculation
- HVAC
- Booster service

For operation outside operating limits, please contact a Ruhrpumpen representative.

SHD

Solids handling pump, one stage

CHARACTERISTICS AND DESIGN FEATURES

- End suction, single stage
- Vertical and horizontal mountings available
- Designed to handle solids from 1 1/2" (38 mm) up to 6" (152 mm) in diameter
- Solids handling, non-clog design, hydraulically balanced impeller
- Sump pump configuration available
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 10,000 gpm up to 2,271 m³/h
Head	up to 380 ft up to 116 m
Pressure	up to 150 psi up to 10 bar
Temperature	up to 122 °F up to 50 °C

APPLICATIONS

- Sewage
- Sanitary and industrial wastes
- Treatment and process wastes
- Storm and rain water
- Pollution control
- Wastewater treatment and management

SWP

Self-priming pump for solids handling applications

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH1A)
- Self-priming process pump
- Handles solids up to 3" (76 mm) in diameter
- Removable cover plate allows for easy access to impeller and seal to facilitate maintenance
- Availability of mounting above the liquid being pumped, maximum lift up to 25 ft. (7.6m)
- Available with or without trailer
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 6,500 gpm up to 1,476 m³/h
Head	up to 140 ft up to 42 m
Pressure	up to 83 psi up to 5.6 bar
Temperature	up to 158 °F up to 70 °C

APPLICATIONS

Waste handling and sewage applications, it can handle clear liquids or with solids:

- Paper mills
- Food processing
- Wineries
- Steel industry
- Wastewater treatment
- Mine dewatering and groundwater control

IIL

Vertical in-line process pump (close coupled)

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH5), dimensionally compliant with the ANSI / ASME B73.2 standard
- Space saving design allows for use in thight installations or modular packages
- Top pull-out design to simplify maintenance
- Protected one-piece shaft
- Flanged suction and discharge on common centerline
- Fully enclosed balanced impeller
- Stainless steel as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 1,300 gpm up to 295 m³/h
Head	up to 340 ft up to 119 m
Pressure	up to 350 psi up to 24 bar
Temperature	up to 350 °F up to 177 °C

APPLICATIONS

- HVAC
- Chemical and petrochemical
- Pharmaceutical
- Water treatment
- Beverage industry
- General process
- Fire protection

IVP / IVP-CC

Vertical in-line pump in split and close coupled configurations

CHARACTERISTICS AND DESIGN FEATURES

- HI design (OH4 / OH5)
- Fully enclosed, balanced, one-piece impeller design
- Split coupling simplifies maintenance (IVP-CC close coupled available)
- Top pull-out design for ease of maintenance
- Flanged suction and discharge on common centerline
- Coupling guard for protection during operation
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 10,000 gpm up to 2,271 m³/h
Head	up to 400 ft up to 122 m
Pressure	up to 275 psi up to 19 bar
Temperature	-50 °F to 300 °F -45 °C to 150 °C

APPLICATIONS

- HVAC
- Chemical and petrochemical
- Pharmaceutical
- Beverage industry
- Utility services
- Water supply systems
- Industrial refrigeration
- Fire protection

**For operation outside operating limits, please contact a Ruhrpumpen representative.*

HSC / HSD / HSL / HSR / ZW

*See ZM line for API build

Horizontal, single stage, axially split case pumps

CHARACTERISTICS AND DESIGN FEATURES

- HI design (BB1)
- High efficiency, foot mounted design
- Double suction, dynamically balanced enclosed impeller
- Mechanical or packing seal
- All HS/ZW pumps can be mounted vertically or horizontally
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

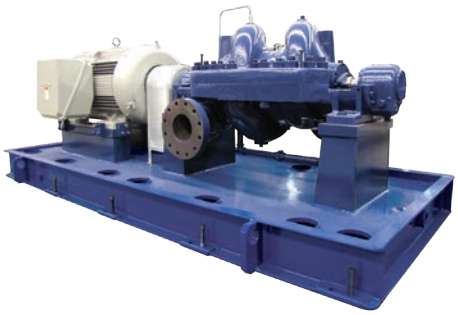
Capacity	up to 140,000 gpm up to 31,800 m³/h
Head	up to 2,210 ft up to 673 m
Pressure	up to 298 psi up to 20 bar
Temperature	50 °F to 300 °F 10 °C to 150 °C

APPLICATIONS

- Cooling towers
- Water distribution and supply
- Water treatment
- Pulp and paper
- HVAC
- Dewatering
- Municipal water systems
- Fire protection

HSM

Horizontal, multi-stage, split case pump for high pressure applications



CHARACTERISTICS AND DESIGN FEATURES

- HI design (BB3)
- Two or four stage pump with double volute casing and side-side nozzle arrangement
- Double suction, dynamically balanced enclosed impeller
- Mechanical or packing seal
- Cast iron as standard material (other materials on request)

OPERATING LIMITS

Capacity	up to 2,000 gpm up to 454 m³/h
Head	up to 2,200 ft up to 670 m
Pressure	up to 740 psi up to 51 bar
Temperature	up to 250 °F up to 121 °C

APPLICATIONS

- Chemical and petrochemical
- Cooling towers
- Municipal water systems
- Water pipelines
- Mining
- Fire protection

VTP / HQ

Multi-stage, vertical turbine pump with diffuser type bowl

CHARACTERISTICS AND DESIGN FEATURES

- HI design and API 610 latest edition (VS1) constructions available
- Collet mounted or ring and key, semi-open and enclosed impellers
- Threaded or flanged bowls are provided depending on pump size
- Up to 30 stages, number of stages according to requirement
- Basket or conical strainer available according to service conditions
- Can be built as a vertical canned pump (VS6)
- Standard materials include cast iron bowls, bronze impellers and 416 SS shafting (other materials on request)

OPERATING LIMITS

Capacity	up to 60,000 gpm up to 13,630 m³/h
Head	up to 2,500 ft up to 762 m
Pressure	up to 1,080 psi up to 74 bar
Temperature	up to 250 °F up to 121 °C

APPLICATIONS

- Deep well
- Sump drain
- Hydrocarbon service
- Offshore facilities
- Water intake
- Condensate extraction
- Municipal water systems
- Fire protection

VSP / VSP-CHEM

Single casing, vertical sump pumps

CHARACTERISTICS AND DESIGN FEATURES

- HI design and API 610 latest edition (VS4) constructions available
- Semi-open impeller for clean water applications and enclosed impeller for solids handling (non-clog model)
- Can handle water with solids up to 4" (102 mm) in diameter (non-clog)
- Sump mount or tank mount available
- Sump depth up to 20 ft (6 m)
- Cast iron as standard material for the VSP model (other materials on request) for the VSP-Chem materials are according to API 610

OPERATING LIMITS

Capacity	up to 8,500 gpm up to 1,931 m³/h
Head	up to 425 ft up to 130 m
Pressure	up to 580 psi up to 40 bar
Temperature	up to 400 °F up to 200 °C

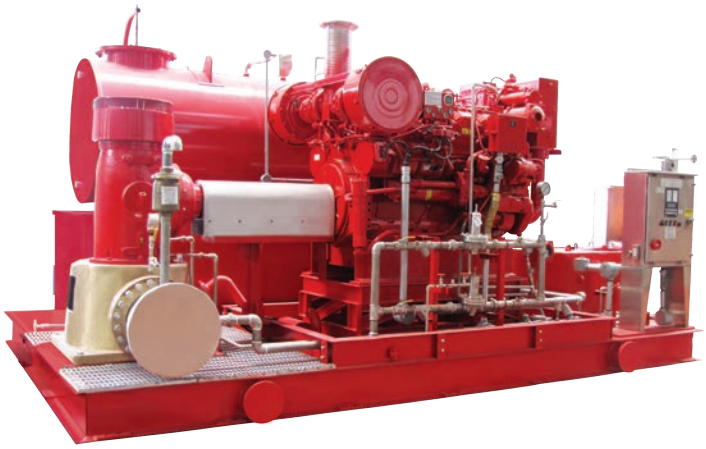
APPLICATIONS

- Water treatment
- Hydrocarbon processing
- Condensation control
- Automotive solvents
- Sump drainage
- Flood control
- Dewatering service
- Utility service
- Open or closed drain service

**For operation outside operating limits, please contact a Ruhrpumpen representative.*

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.



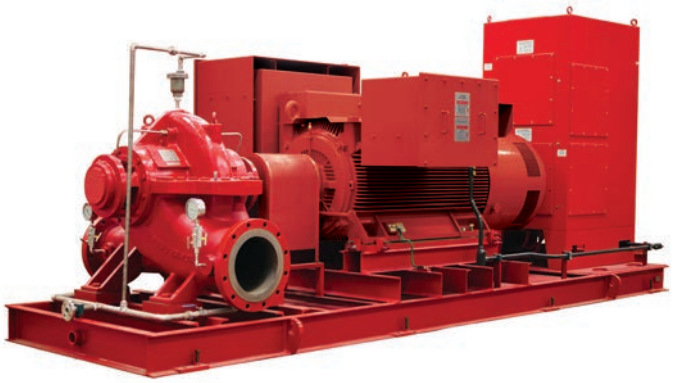
CHARACTERISTICS

All pre-packaged systems accomodate 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

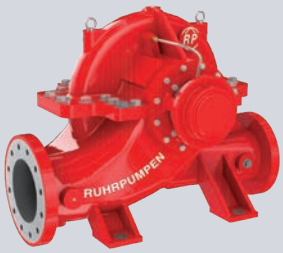
- Single source responsibility for complete system
- System is completely wired and factory tested
- Delivered on site in a single shipment, ready for installation
- Engineered to customer requirements
- International distribution and start-up capabilities
- ABS certification for offshore platform fire 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 400 GPM
- Pressures from 40 to 250 + PSI
- Electric or Diesel driven
- UL-448 listed
- FM-1319 approved
- NFPA-20 design
- Factory tested

Benefits

- Back pull-out design simplifies maintenance and reduces problems associated with pipe strain

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

+65 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.

Ruhrpumpen Plants

- ARGENTINA, Buenos Aires
- BRAZIL, Rio de Janeiro
- CHINA, Changzhou
- EGYPT, Suez
- GERMANY, Witten
- INDIA, Chennai
- MEXICO, Monterrey
- RUSSIA, Moscow
- UK, Lancing
- USA, Tulsa

Manufacturing plant & service center

Service center