



*Specialist for Pumping Technology*

INNOVATION  
EFFICIENCY  
QUALITY



**CRP**

Chemical Centrifugal Pump  
Acc. to DIN EN ISO 2858 & DIN EN ISO 5199



## For more than 60 years the name Ruhrpumpen has been synonymous worldwide with innovation and reliability for pumping technology

Ruhrpumpen is an innovative and efficient centrifugal pump technology company that offers a wide range of quality products to our clients. Ruhrpumpen is committed to global excellence with a complete range of Pumps, Fire Pump Packages and related products, such as Decoking Systems and Tools to support the core markets, namely Oil & Gas, Petrochemical, Power, Heavy Industry Applications, Mining and Water Services.

The broad product line complies with the most demanding quality specifications and goes beyond stringent industry standards such as API, ANSI, Hydraulic Institute, Underwriter's Laboratories, Factory Mutual and ISO 9001.

Ruhrpumpen is a vertically integrated company with its own foundry, machine shop, pump manufacturing plants and service centers. With strategically located Manufacturing Plants, Operating Offices and Service Centers in many parts of the world, Ruhrpumpen is truly a global pump company which also has the strength to focus on the local necessities of each client.

## CRP Process Pump

The CRP pump is designed to meet DIN EN ISO 2858 / 5199 specifications and directive 94/9/EG (ATEX 100). This pump is intended for our European customers.

All CRP pumps are designed around a single, basic hydraulic and mechanical design concept. This ensures efficiencies across a wide spectrum of operating conditions, unmatched application flexibility and superior interchangeability. This rugged centrifugal pump is designed to operate dependably for long periods of time, even in the toughest industrial applications.

The CRP line features 33 sizes to precisely meet service conditions within a wide range of hydraulic parameters. The line was also designed to accommodate many different optional features such as wear rings on the pressure casing and cooling coils for bearing housings.

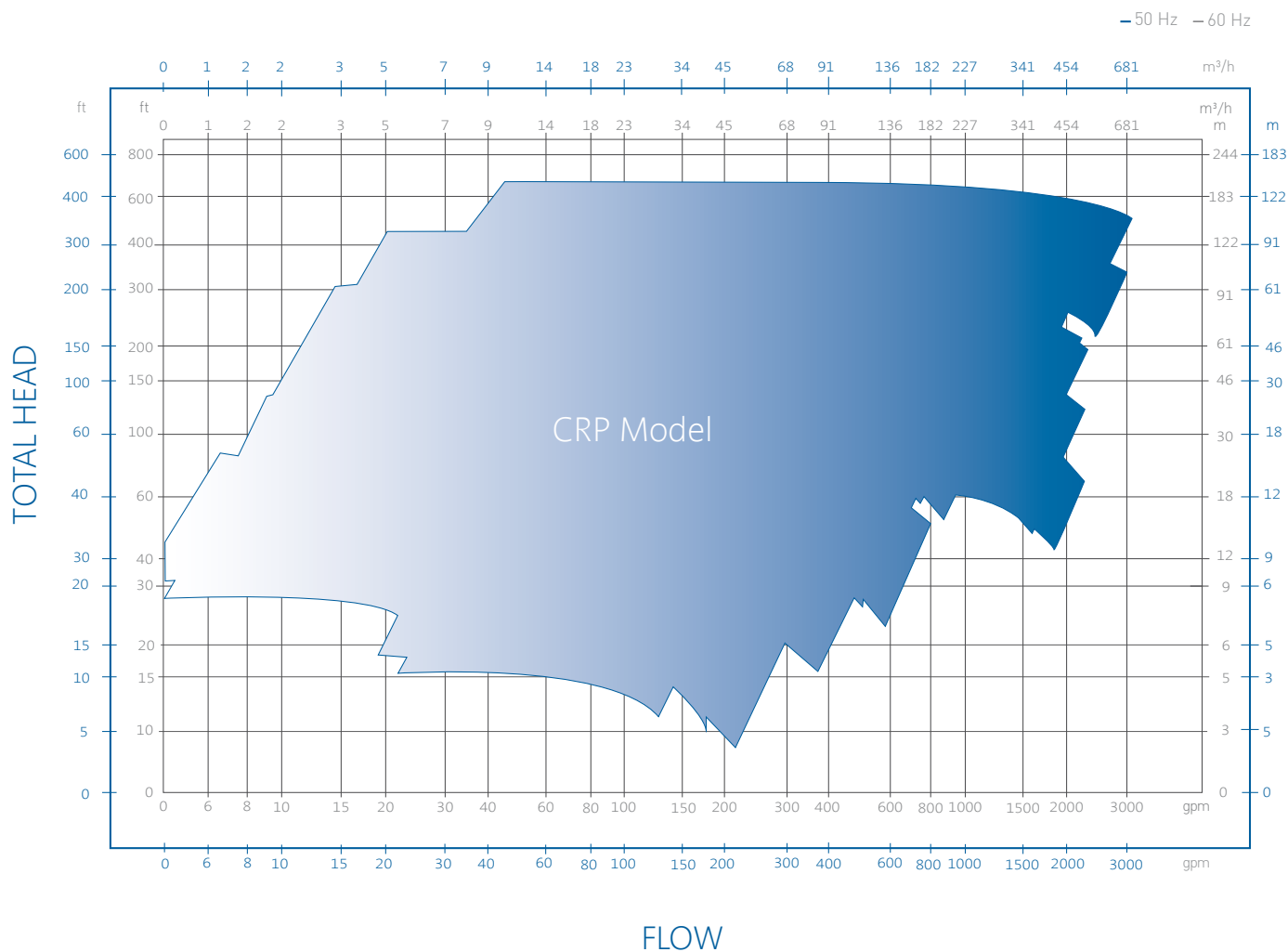
Ruhrpumpen's quality program and in-house Foundry, along with the latest testing equipment, ensures that our pumps will provide a long operating life, even under the most severe conditions.



## Selection Chart

CRP Various Poles

### SELECTION CHART CRP



**Back Pull-Out  
Configuration Design**



# Characteristics

## 5 IMPELLER

Enclosed impeller design ensures maximum efficiency. The impeller itself is keyed and is positively locked onto shaft and sealed.

## 4 CASING

Integrally cast support feet minimize alignment problems caused by the case movement due to temperature differences between operating and ambient conditions.

## 3 MECHANICAL SEAL

Standard mechanical seal Type 2100, includes a circlip. Dual or Cartridge Seals available as an Option.

## 2 SHAFT

316SS solid shaft as standard for extended seal life. Large diameter and short length design to reduce shaft deflection.

## 6 FLANGES

ISO PN16 and PN25 flange drilling as well as ASME 150RF are available.

## 7 CASING COVER

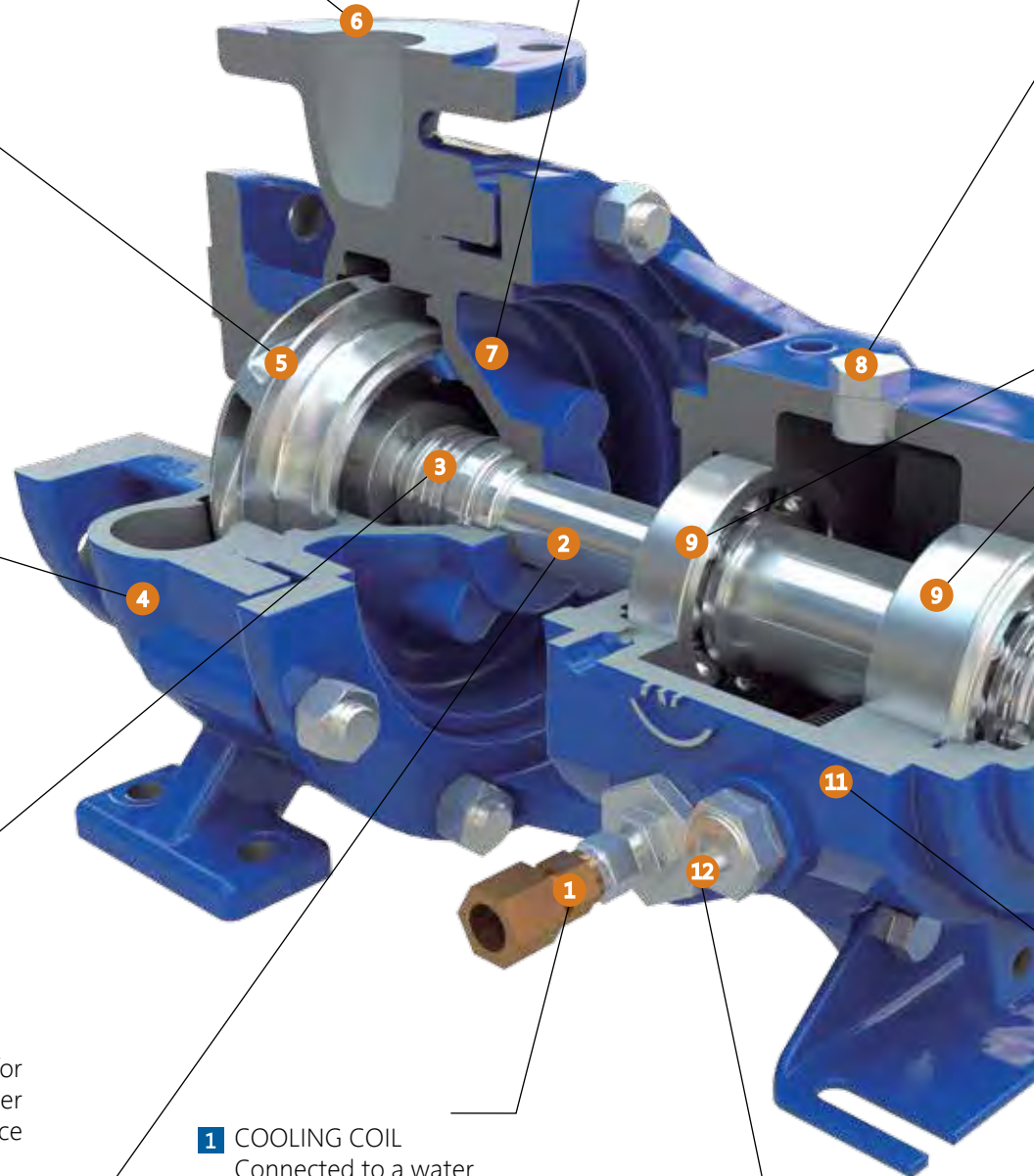
Stuffing box covers many kinds of mechanical seal applications. Internal or external, double or single, balanced or unbalanced seals, with any required gland connections.

## 1 COOLING COIL

Connected to a water source, the optional coil cools the lube oil for optimal performance.

## 12 OIL SIGHT

Oversized oil sight glass mounted on one side of the bearing unit. Constant Level Oilers available as an option.



-Images for general arrangement use only, not certified for construction.

### Description

Horizontal Process Pump

- Fully in compliance with DIN EN 22858/ISO 2858
- Single stage horizontal centrifugal pump
- Radially split casing with flanged connections
- Horizontal end suction and vertical discharge on the center line
- Foot mounted
- Enclosed impeller
- Clockwise rotation (viewed from coupling end)
- Oil lubricated
- Casing and casing cover wear ring replaceable

### BENEFITS

- Back Pull-Out design for ease of maintenance, allows removal of pump assembly without disturbing casing flange connections.
- Optimum Efficiency
- Various materials of construction available
- Durable Mechanical seal
- Compact design

### MATERIALS OF CONSTRUCTION

- Carbon Steel
- Duplex
- Stainless Steel

#### 8 VENT PLUG

Vent Plug as standard. Vent filter with oil mist lubrication available as option.

#### 9 BEARINGS

The double row thrust bearing provides minimal shaft end play for extended mechanical seal life.

#### 10 SEAL

Standard Lip/Seal bearing Isolators.

10

#### 11 BEARING BRACKET

The bearings are oil-lubricated as standard. Grease and oil mist lubrications are optional.

### CRP Performance Data

Capacity	up to 500 m <sup>3</sup> /h	up to 2,200 gpm
Head	up to 215 m	up to 705 ft
Pressure	up to 25 bar	up to 360 psi
Temperature	up to 300 °C	up to 572°F

For Pump operation outside this range, please contact a Ruhrpumpen representative.



## Optional Features

- Double mechanical seals can be furnished
- Constant Level Oiler
- Cooling Coil available
- Grease and oil mist lubricated bearings



**CONSTANT  
LEVEL OILER**

## Applications

- Petrochemical
- Oil & Gas
- Steel Industry
- Automotive
- Agriculture
- Tank Farm
- Pulp and Paper
- Chemical
- Semiconductor
- Food Processing
- Power Generation
- Pharmaceuticals
- Water Treatment
- Paper Stock
- Pipeline
- General Industries
- Textile
- Mining







## Other Ruhrpumpen Products

### ANSI Horizontal Process Pump



CPP - ANSI Single Stage end suction horizontal centrifugal pump, enclosed impeller, radially split casing with flanged connections.  
 Petrochemical, Oil & Gas, Steel Industry, Automotive, Food Processing, Power Generation, Pharmaceuticals, Water Treatment, General Process.

### CRP-M centrifugal pump with permanent magnetic drive



The CRP-M pump range is equipped with a permanent magnetic drive in accordance with DIN EN ISO 2858 and strikes new paths especially for the design of the Journal Bearings, Internal Flows and Pressures, Magnetic Drive System and Axial Thrust Balancing.  
 Chemical and Petrochemical Industry, Tank Farms, Liquid gas industry, Refrigeration- and heat technology, Power plant technology, Galvano technique

### Vertical In-Line Flexible Coupled Pump



IVP - Split-coupling, flanged suction and discharge on common centerline, up to 350 psi, fully enclosed, impeller with hydraulic balance, which prevents vibration, radially splitcase.  
 Fire Service, Air Conditioning Systems, Condensed Water, Ice Water, Service Water, Ocean Water, Building Water Supply Systems.

### ANSI Vertical In-Line Close Coupled Pump



ILL - Top pull-out design, CI/SS impeller, packing box cover, casing-flanged suction, front wear rings, manual vent plug.  
 Chemical, Petrochemical, Petroleum, Coal, Fiber, Pulp and Paper, Food and Beverage, Pharmaceutical Fats and Oils, Soap, Paint, Automotive.

### Vertical Turbine Pump



VTP - Multistage vertical centrifugal pump with diffuser type bowl, semi-open / enclosed impellers, cast iron bowls, counterclockwise rotation viewed from coupling end.  
 Deep Well and Irrigation, Cooling Tower, Sump, Condensate, can Pump Requirements.

### Horizontal Split Case Pump Single Stage



HSD - Single stage double suction horizontal centrifugal pump, foot mounted, oil or grease lubricated bearings.  
 Dewatering, Mining, Water, Fire service, Cooling Towers, Municipal, Oil Process, Petrochemical, Sugar Industry, Paper Industry, Pipeline, Power Generation.



## RUHRPUMPEN PLANTS

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

More Information:

