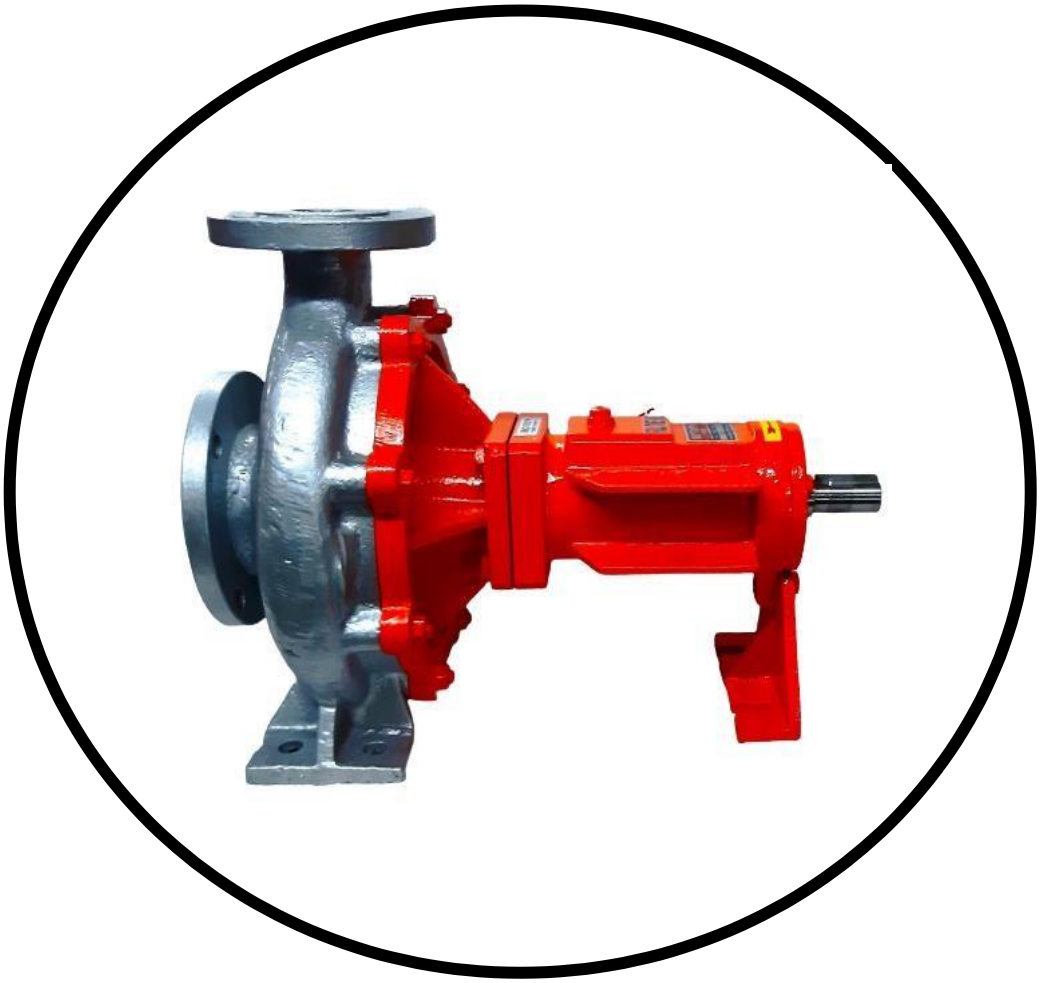
ROTON PUMPS
Continuous Flow Solutions.



Heavy - duty & most efficient

AIR - COOLED PUMPS

The most reliable and efficient pump with cutting edge technology for complex Industry application

General Specifications

Fields of Application.

- Chemical and petrochemical processing industries
- Paper /Sugar mills.
- Food and pharmaceutical industries.
- Leather industries.
- For heating of baking ovens.
- Manufacturing of plastic and synthetic fiber material
- Rubber industries.
- Laundries.
- Textile plants.
- All heat transfer applications over 100 ° C

Pumped Liquids.

All kinds of heat transfer liquids.

General Information.

The RPCPK series comprises horizontal single stage centrifugal Pumps, Specially designed for the pumping of thermal fluids at a High temperature, in industrial installation, without needing any Type of external refrigeration. The Hydraulic characteristics of Pumps are in accordance with the standard DIN 24 256 (ISO 2858) for chemical pumps. Which means that for each installation The most suitable pump can be used to give optimum performance.

Design.

From the hydraulic point of view, the RPCPK pump are centrifugal single stage, horizontal, volute type pumps. with regard to the mechanical design, the main concept of the RPCPKseries is to a maximum, the mechanical seal and ball bearing fromthe source of heat that constitutes the pump casing, placing between both a thermal barrier and cooling the mechanical seal housing and bearing support by natural convection.

Pump Casing.

Single spiral volute type, radially split with integrated suct`son and discharge ports and also integrally cast feet for baseplate attachment. thanks to back pullout design, maintenance is mucheasier as the inside of the pump can be dismounted without needing to disconnect the casing from the pipe connections. suction port is axial and discharge is vertical.

Impeller.

The impellers of the RPCPK pump are single entry, closed type and dynamically balanced. the impeller has back wings for the axial balancing of pressures.

Shaft and support.

The impeller is overhung mounted on the end of the shaft. the shaft isdesigned to be able to withstand all mechanical and thermal efforts generated during operation of the pump with minimum deflection.

The bearing housing is made of cast iron and apart from serving as the shaft support, it also houses the mechanical seal .it equipped withexternal cooling wings .

Shaft Seal & Bearings.

Shaft sealing is optained by means of a high security mechanical seal placed in the bearing housing, close to the second ball bearing near tothe shaft end. this mens that the sealis housed in a low temperature zone , given the distance from the pump casing , thus optaining a longlife for the seal.

the first ball bearing near to the casing is lubricated by pumped liquid.a safety stuffing box with a following throttling area is arranged in front of the of the first ball bearing and mechanical seal .Even in case of failure of the the mechanical seal ,these additional safety element prevent seepage from emerging in a hazardous quantity and manner.

The second ball bearing is located near the end of the shaft andlubricated by oil.

Technical Data.

- **Suction and Discharge Nozzles :.DN 32 …DN 100**
- **Operating Pressure ..... 16 Bar**
- **Speed : …….: 1450 -1750 - 2900 - 3600 RPM**
- **Capacity Range : ……..: 10 - 300 m3 l h**
- **Head Range : ……..: 5 - 90 m.**
- **Temp Range:……..: 350 °c**

Pump Flanges.

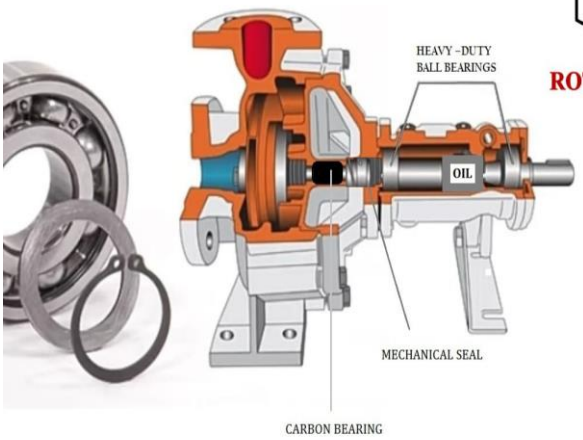
- **According to DIN 2533 - PN 16**
- **Identication Code RPCPK 80 - 250**

Pump Type

- **Discharge Nozzle DN (mm)**
- **RatedImpeller Diam. (mm)**

Materials.

For stand construction the RPCPK pump casing and casing cover are Made with nodular WCB (UNS J03002) which is very resistant tohigh Temperatures. Impeller and bearing housing are made with WCB (UNS J03002) shaftIs made with % 13 Chromium Stainless steel.



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