

# **RPG VS1 series**

## (API 610 11TH ED. VS1)

The RPG VS1 pumps are wet pit single and multi-stage pumps with single casing.

Fully compliant with API 610  $11^{TH}$  ed / 682  $4^{TH}$  ed and with different features ranging from standard design to special engineered solutions.

With different design according required capacities and heads. Single or double suction and with open or closed impeller depending the application. Including heavy duty bowl construction, product or oil lubricated. The bearings and bearing brackets are designed for extended life and seal chamber designed to accommodate cartridge seals according API 610 11<sup>TH</sup> ed / 682 4<sup>TH</sup> ed, meeting all dimensional and design requirements.







Up to 700 m



Up to 300 °C

## **Options**

- · DIN Standard option
- Soft packing (Non-API)
- Gearboxes as per API 677 or API 613
- VFD driven
- Steam turbine driven (API 611 or API 612)
- Vibration probes and RTDs
- · Monitoring systems as per API 670
- API 671 couplings



#### **Product features**

- Full compliance with API 610  $11^{TH}$  ed. (ISO 13079) VS1
- Seal chamber design fully compliant with API 610 11<sup>™</sup> ed / API 682 4<sup>™</sup> ed.
- Variety of hydraulic designs for each pump size allows optimal selection of the pump
- Radial diffuser casing minimizing radial forces
- Rigid shaft with critical speed above operating speed. Pump rotor fully dynamically balanced
- Several mechanical seal options: single, double, tandem seals. Seal chamber designed to fit API 682 mechanical seals
- Several bearing design options depends of duty, temperatures and custom requirements
- Diffuser (VS1) and volute (VS2) as per process and design requirements
- ISO/ANSI B16.5/16.57 flanges as standard (others upon request)
- Heavy duty discharge heads able to stand vibration and piping loads for long life trouble free operation
- Removable casing/impeller wear-rings
- Custom hydraulic design , optimized by CFD analysis



## **Aplications**

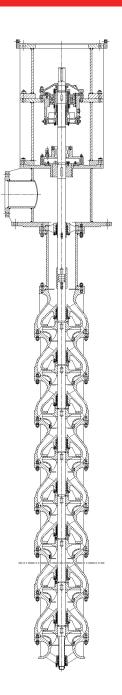
- Petrochemical process
- · Chemical processing
- · Refinery off-sites
- Drainage
- Gas and coal processing
- Liquid Sulphur
- · Molten salts
- Cooling Water

#### Materials

- All materials of construction in accordance with the latest API 610 Annex H Table H.1 available plus bronze
- Special materials and coatings available upon request

### Technical data

- capacity up to 4.000 m<sup>3</sup>/h
- Head up to 700 m
- Maximum temperature up to 300°C



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