

CV 11 PUMP

Centrifugal vertical pump
Single | Multi stage

CZ

EN

RU



KEY FEATURES

CV 11 pumps are mainly used for **cooling water systems**, **condensate tank services** and others in power plants, oil & gas, petrochemical and chemical industries.

HEAVY DUTY SHAFT

- designed for long lifetime of the pump
- robust design and smaller deflection to avoid excessive stress of mechanical seals, wear rings and bearings
- the shaft is fully sealed to avoid leakage of oil, dust, humidity etc.

IMPELLER

- dynamically balanced
- designed for the best possible efficiency
- first stage is designed for the best possible NPSH3 value

MECHANICAL SEALS OR GLAND PACKING

- gland packing
- single or double mechanical seal arrangement
- cartridge or non-cartridge design
- split seal design available

OUTLET FLANGE

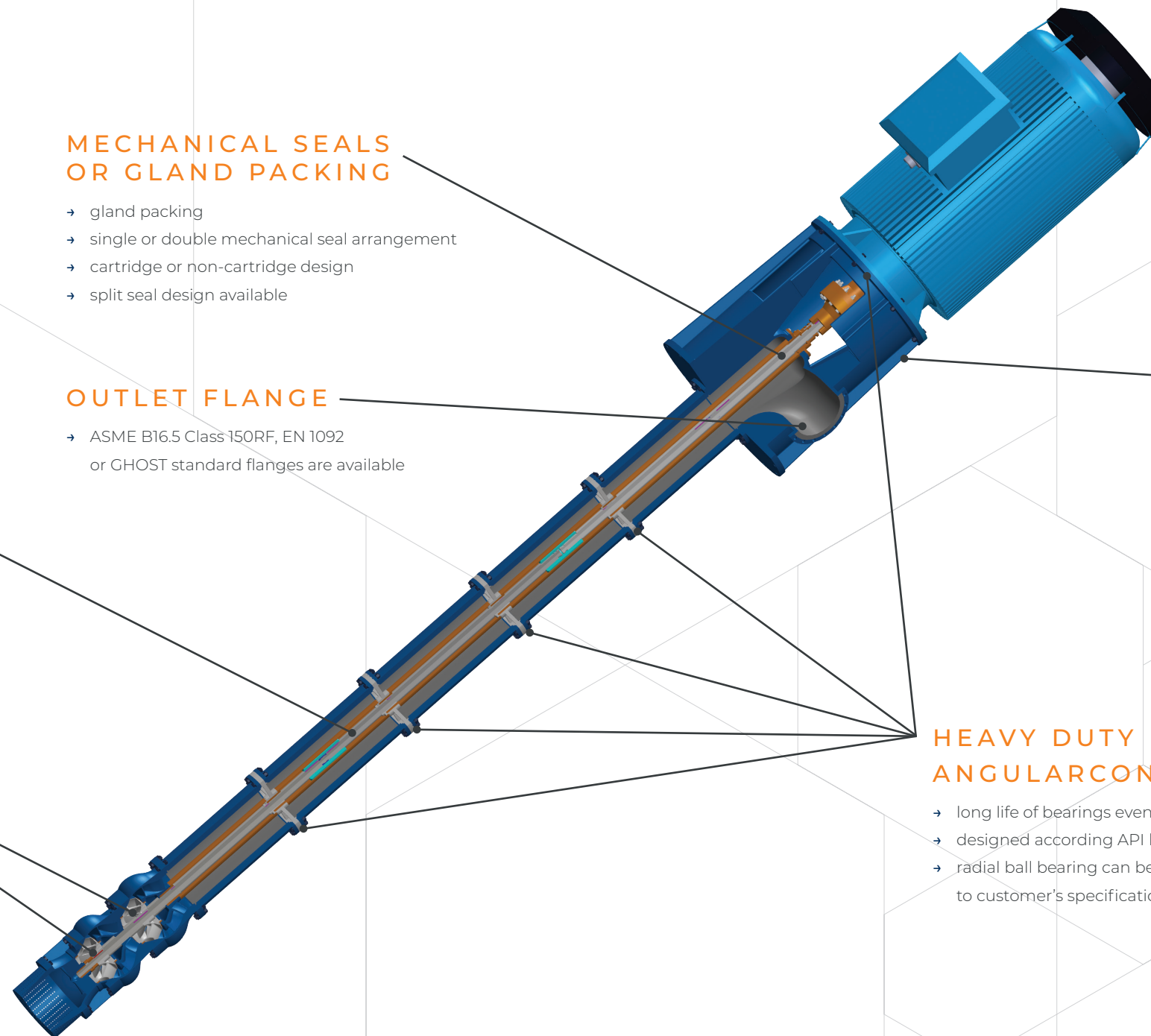
- ASME B16.5 Class 150RF, EN 1092 or GHOST standard flanges are available

RIGID DISCHARGE BODY OF PUMP

- is designed for all sizes of flanges and various sizes of bearings
- simple maintenance of mechanical seal and adjustment of rotor

HEAVY DUTY RADIAL AND ANGULAR CONTACT BEARINGS

- long life of bearings even under the most critical operations
- designed according API long-life specifications
- radial ball bearing can be supplied according to customer's specifications



ADVANCED OPTIONS AND APPLICATIONS

For application with low NPSHr value, a **barrel design** of pump is available. An inducer is basically an axial impeller with high specific speed and is designed specifically for requested flow.

1 SUCTION BODIES

- Possibility of using can or suction cone depending on customers' specifications. Cones are usually designed to prevent vortices for pumps which are located in open tanks. Can be designed with semi spherical bottom, with internal or with external drains.

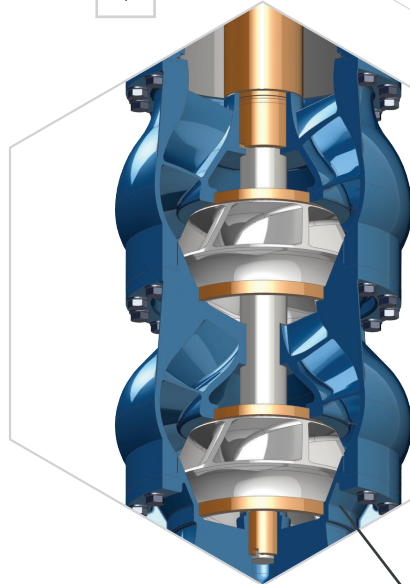
Materials

CAST IRON
CARBON STEEL
12% CR STAINLESS STEEL
AUSTENITIC STAINLESS STEEL

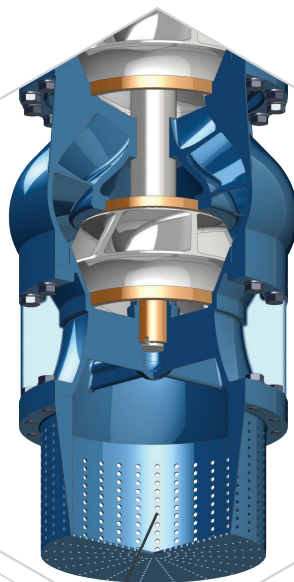
Other materials available on request

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2 IMPELLERS

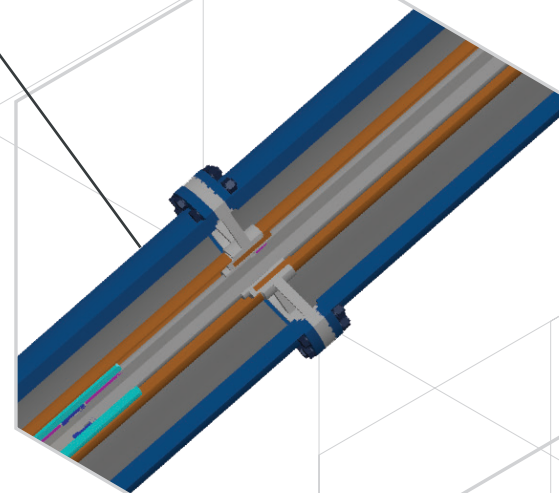
CV I1 pumps are available with 2 types of impellers:

- **radial flow type** for lower level of flow and higher level of pump head
- **mixed flow type** for higher level of flow and lower level of pump head

3 BEARING SYSTEM OF LUBRICATION

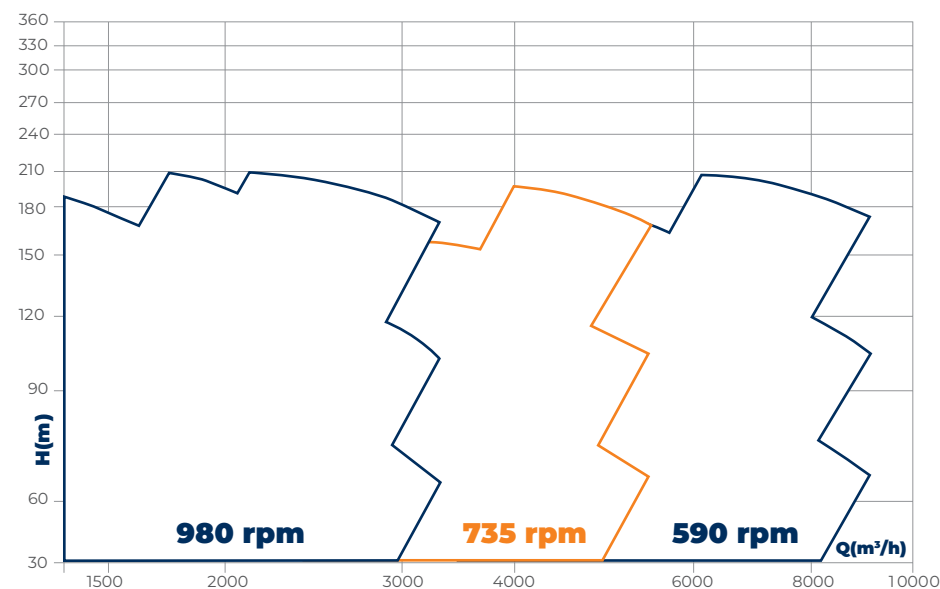
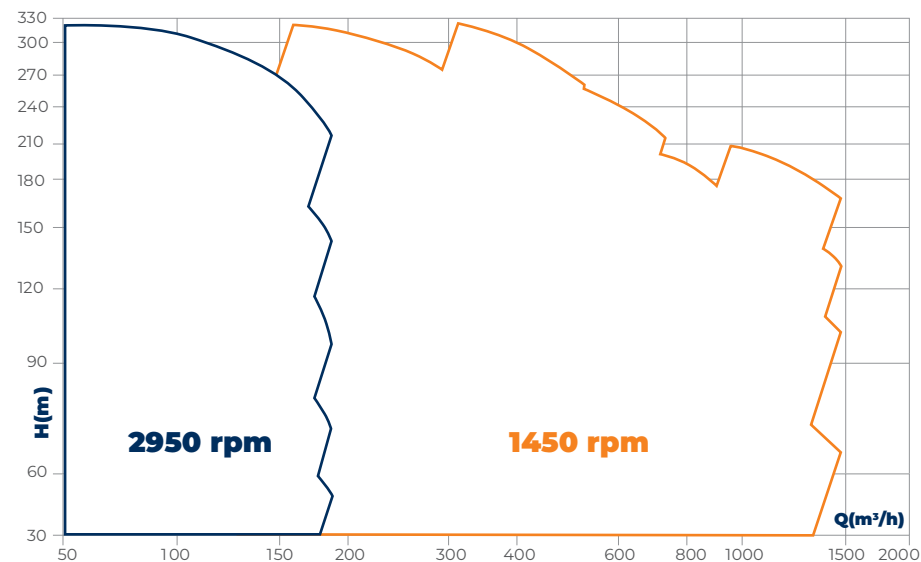
- Designed for operating parameters fully in accordance with API 610 with robust angular contact ball bearing. Sliding bearings are located directly in correct places for good dynamic behaviour of the pump. Oil bath, mist and purge for continuous bearing lubrication.
- An air fan for cooling of bearing housing is part of standard features. Water pipe cooling of oil filling for extreme ambient condition is optional.

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PERFORMANCE RANGE CHARTS



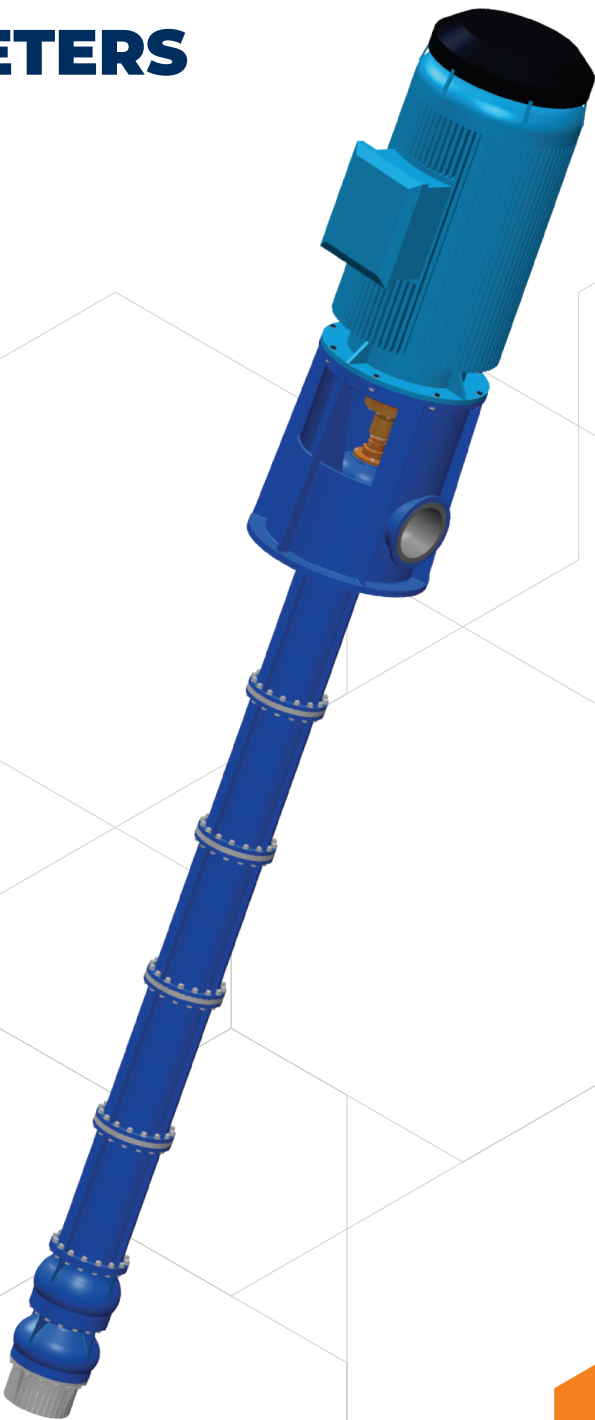
OPERATING PARAMETERS AND DIMENSIONS

- OPERATING FREQUENCY → 50 HZ
- OPERATING FLOW → up to 10.000 m^3/h *
- OPERATING HEAD → up to 320 m*
- OPERATING PRESSURES → up to 25 bar (at 20° C)*
- INLET AND OUTLET FLANGES → up to 800 mm*
- OPERATING TEMPERATURES → up to 210° C*

*Special designs upon request.

3D Model

EXAMPLE OF USE
OF OUR CV 400-400 II PUMPS



We manufacture industrial pump units that we sell to customers worldwide and we also have our own team of research and development experts who use modern technologies, diagnostics and software (3D Solidworks, Solidworks Flow Simulation, FEAT software Solidworks Simulation, OpenFoam, Adash Vibration Analyzer).



We offer a broad portfolio of pumps even for the most demanding applications and most extreme use. We aim to be a reliable and professional partner in constructions of new investment units and refurbishments of already existing plants.

RENETRA s. r. o. is a holder of the quality certificates ISO 9001:2016, ISO 14001:2016, ISO 18001:2008, TP TC 004/2011, TP TC 010/2011, TP TC 012/2011, ATEX 94/9/EC and the CE mark



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