

CD 11 PUMP

Centrifugal | Single stage
Double suction pump

CZ

EN

RU



RENETRA®
PUMP UNIT MANUFACTURER



KEY FEATURES

CD 11 pumps are mainly used for **water treatment industry** and for **water cooling systems** in power plants, chemical and petrochemical industry. CD 11 pumps are widely used for desalination of sea water.

- heavy duty design fully in accordance with ISO 9905/API 610
- pressure casing is designed for good efficiency and low NPSHr
- lifetime of bearings more than 20.000 hours

INLET AND OUTLET FLANGES

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

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.

BEARINGS

- long life of bearings even under the most critical operations
- grease bearing lubrication as standard, oil lubrication available on customer's request

IMPELLER

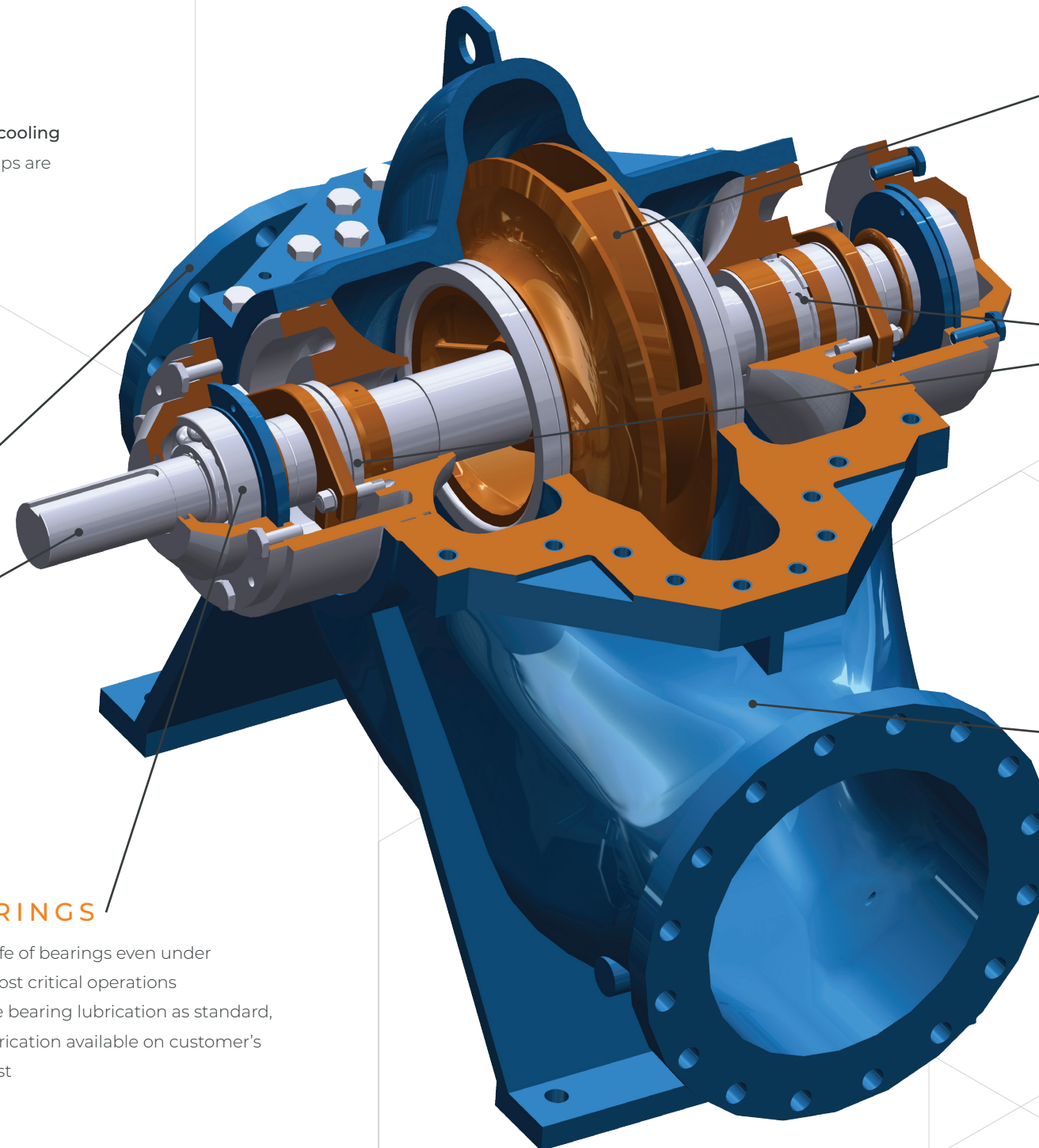
- dynamically balanced
- designed according to the best possible efficiency and NPSH3 value

MECHANICAL SEALS OR GLAND PACKING

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

PUMP CASING

- casing is designed using ANSYS software for optimizing stress and strain agility of the pump and to improve stiffness of the body



ADVANCED OPTIONS AND APPLICATIONS

1 DOUBLE VOLUTE IMPELLER

- The impeller is designed with two inlets and it's designed according to the best possible NPSH3 value and efficiency. Because of the back to back arrangement of impeller axial force which acts from pumping, liquid is almost zero. This has a huge influence on lifetime of bearings.

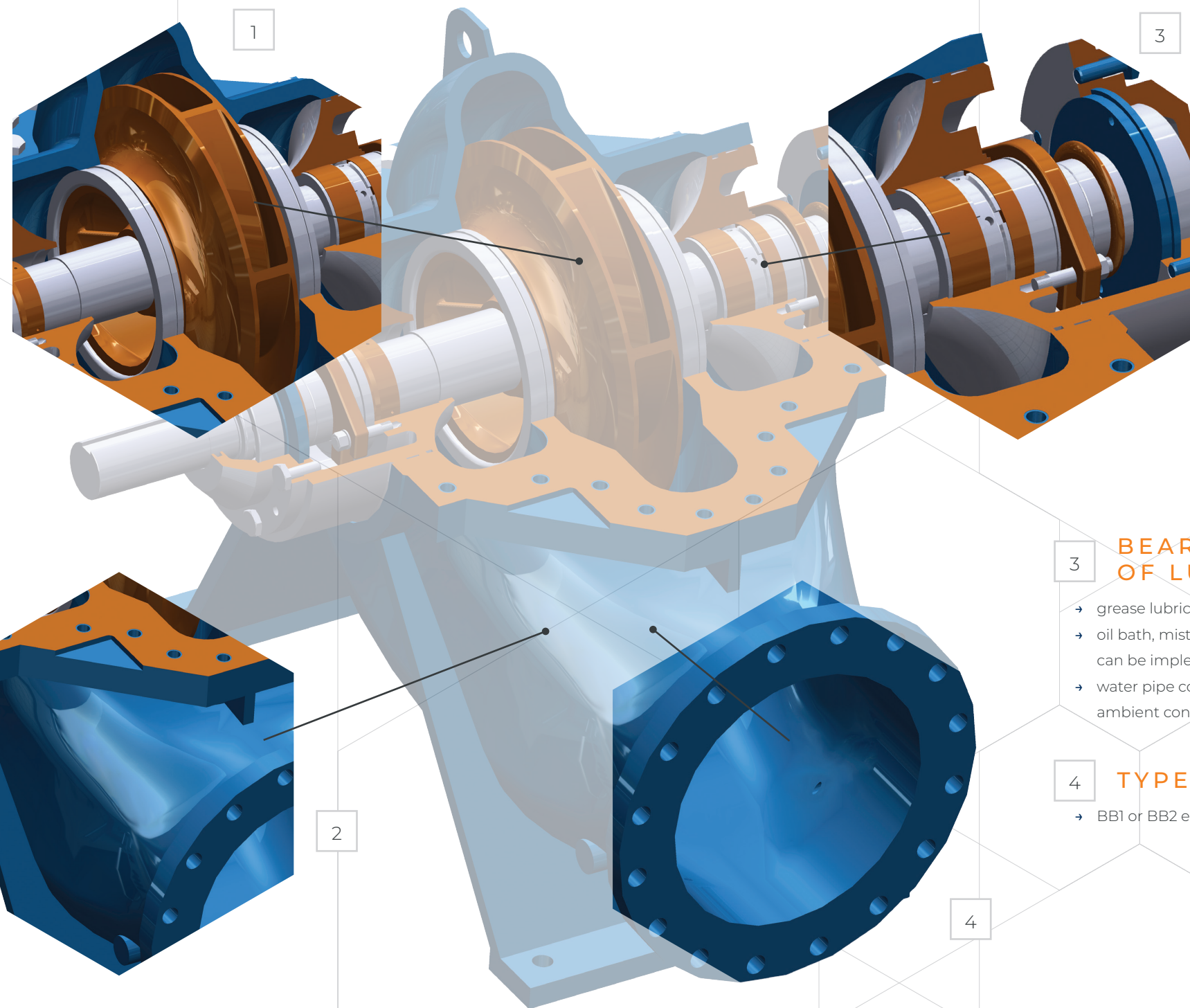
2 PUMP CASING

- Pressure casing is fully designed in 3D design software. CFD and FEA analysis are used for optimizing hydraulic shapes, structure and stiffness.

Materials

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

Other materials available on request



Execution

HORIZONTAL
OR
VERTICAL

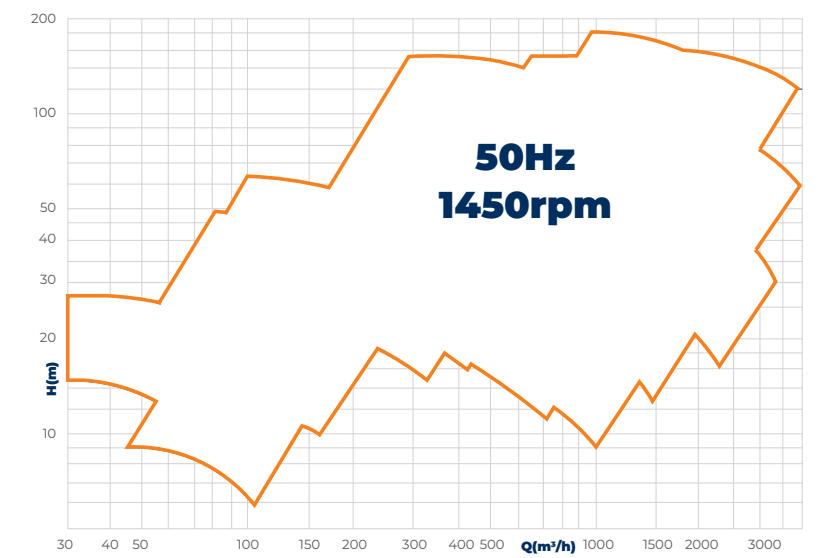
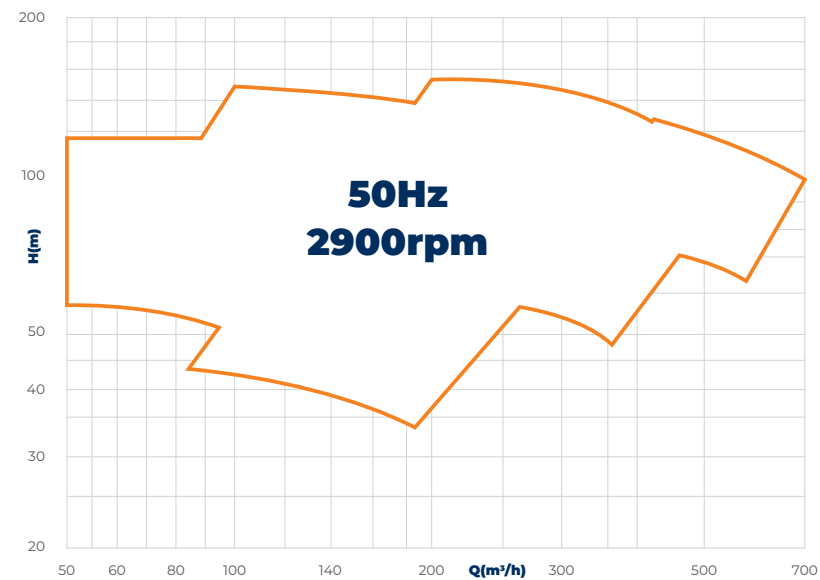
3 BEARING SYSTEM OF LUBRICATION

- grease lubrication of bearings as standard
- oil bath, mist and purge for continuous bearing lubrication can be implemented on the customer's request
- water pipe cooling of oil filling for extreme ambient condition is optional

4 TYPE OF PUMP EXECUTION

- BB1 or BB2 execution according to API 610 available.

PERFORMANCE RANGE CHARTS



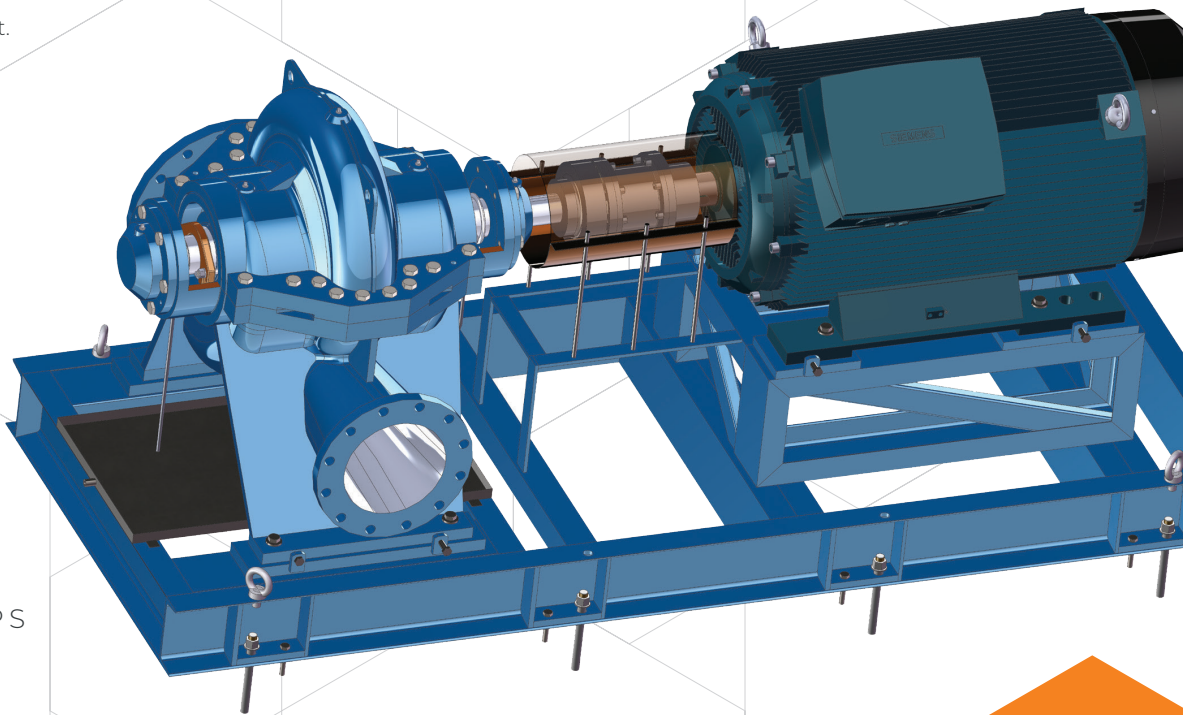
OPERATING PARAMETERS AND DIMENSIONS

- OPERATING FREQUENCY → 50 HZ
- OPERATING FLOW → up to 7.500 m^3/h^*
- OPERATING HEAD → up to 190 m *
- OPERATING PRESSURES → up to 16 (25) bar (at 20° C) *
- INLET AND OUTLET FLANGES → up to DN400 *
- OPERATING TEMPERATURES → up to 80° C *

* Special designs upon request.

3D Model

EXAMPLE OF USE
OF OUR CD 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



RENETRA S. R. O.

 753 53 Všechnovice 294, Czech Republic

 +420 581 655 111

 renetra@renetra.cz

WWW.RENETRA.CZ