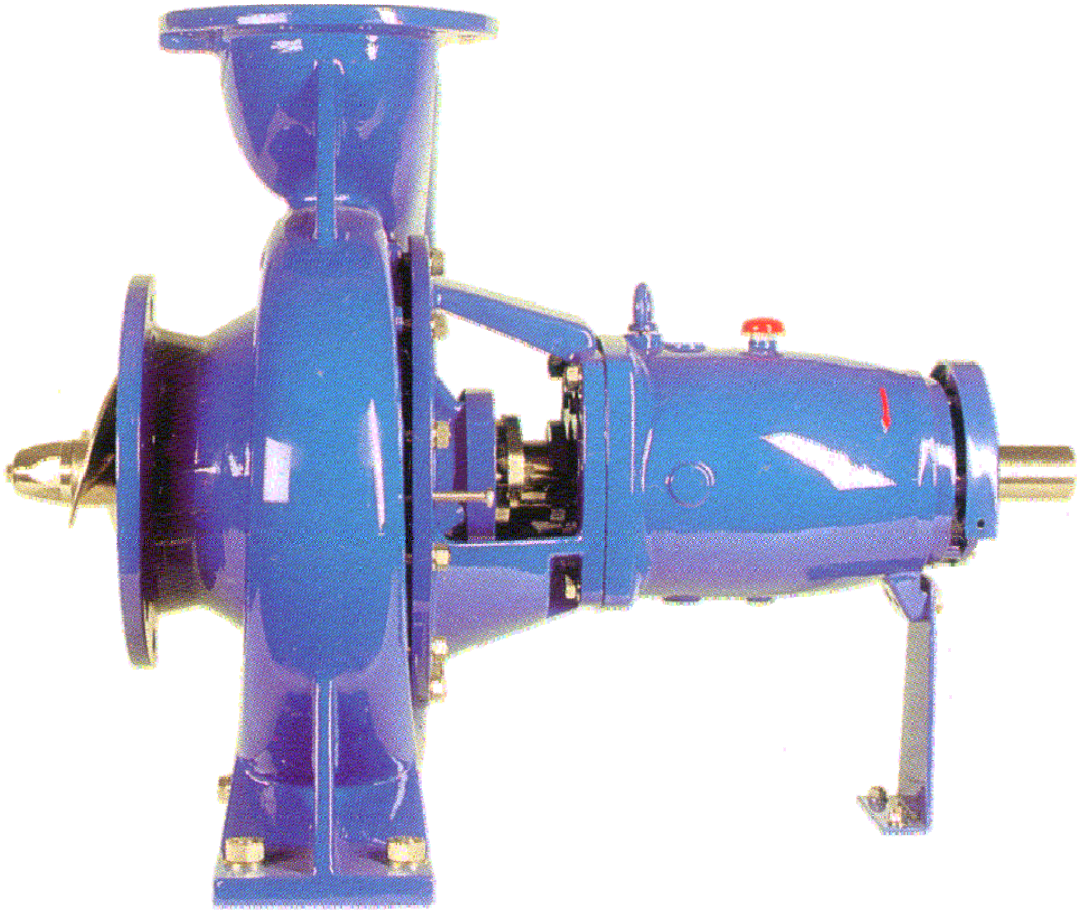
ENDSUCTION PUMPS - Model CNX, CAX

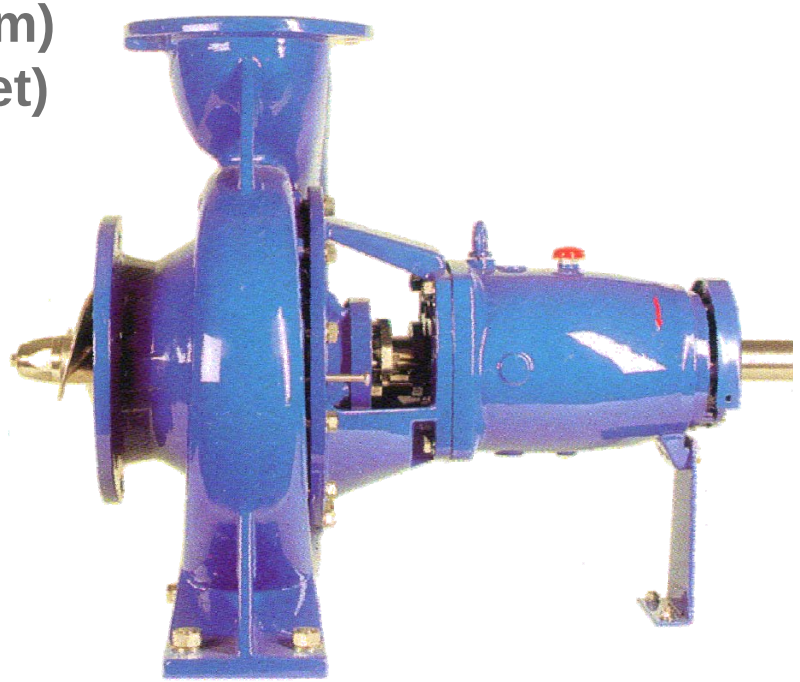


ENDSUCTION Pumps , Design CNX

Performance Range:

Capacity up to **2.200 m3/h** (9.680 USgpm)
Head up to **150 / 240 m** (520 / 780 feet)
Speed up to **1450 / 2950 min-1**
(1750 / 3500 rpm)

Sizes: **DN 125 up to DN 400**
(4“ up to 16“) **discharge**



Smaller sizes DN 25 up to DN 150
(1“ up to 6“) **refer to design IC**

Temperature max.180 °C (350 °F)

Casing pressure max. 16 / 25 bar (230 / 360 psig)

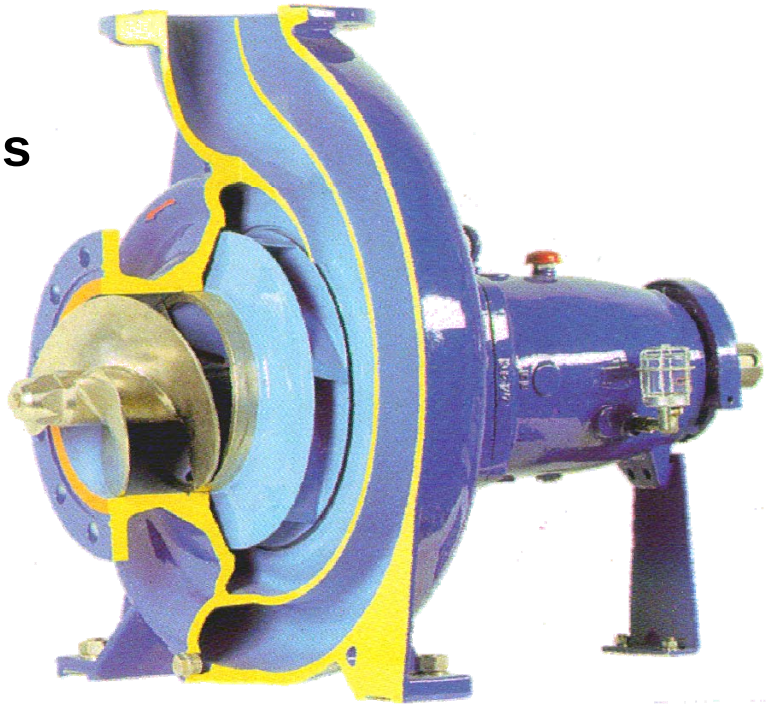
VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsution Pumps, Design CNX

Handled liquids:

Clean and slightly contaminated liquids (without bigger solids)
Cold and hot water
Condensate and Deionate
Oils, Brines, Caustic solutions and Acids
Pulpsuspensions up to 1,2%

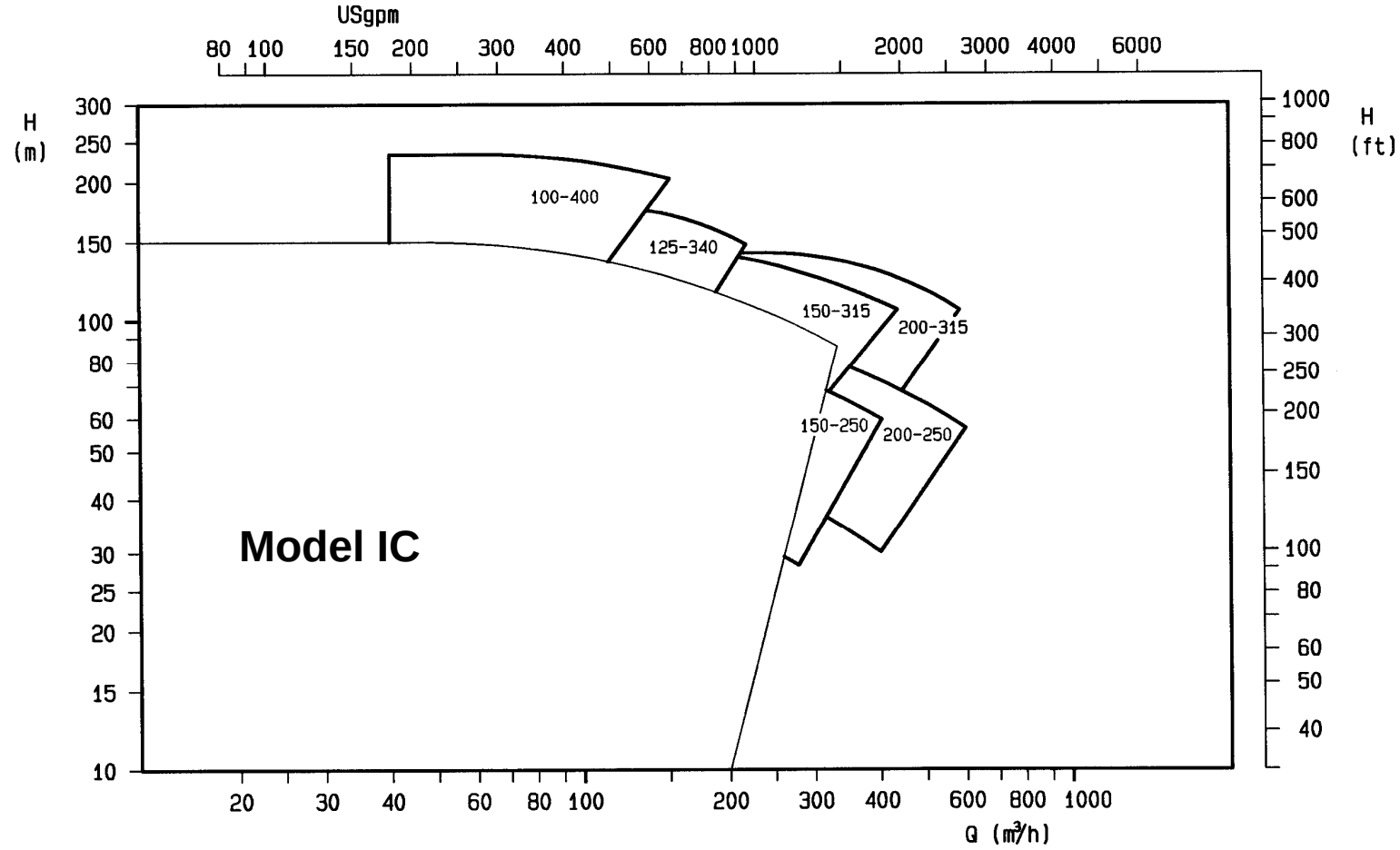


Applications:

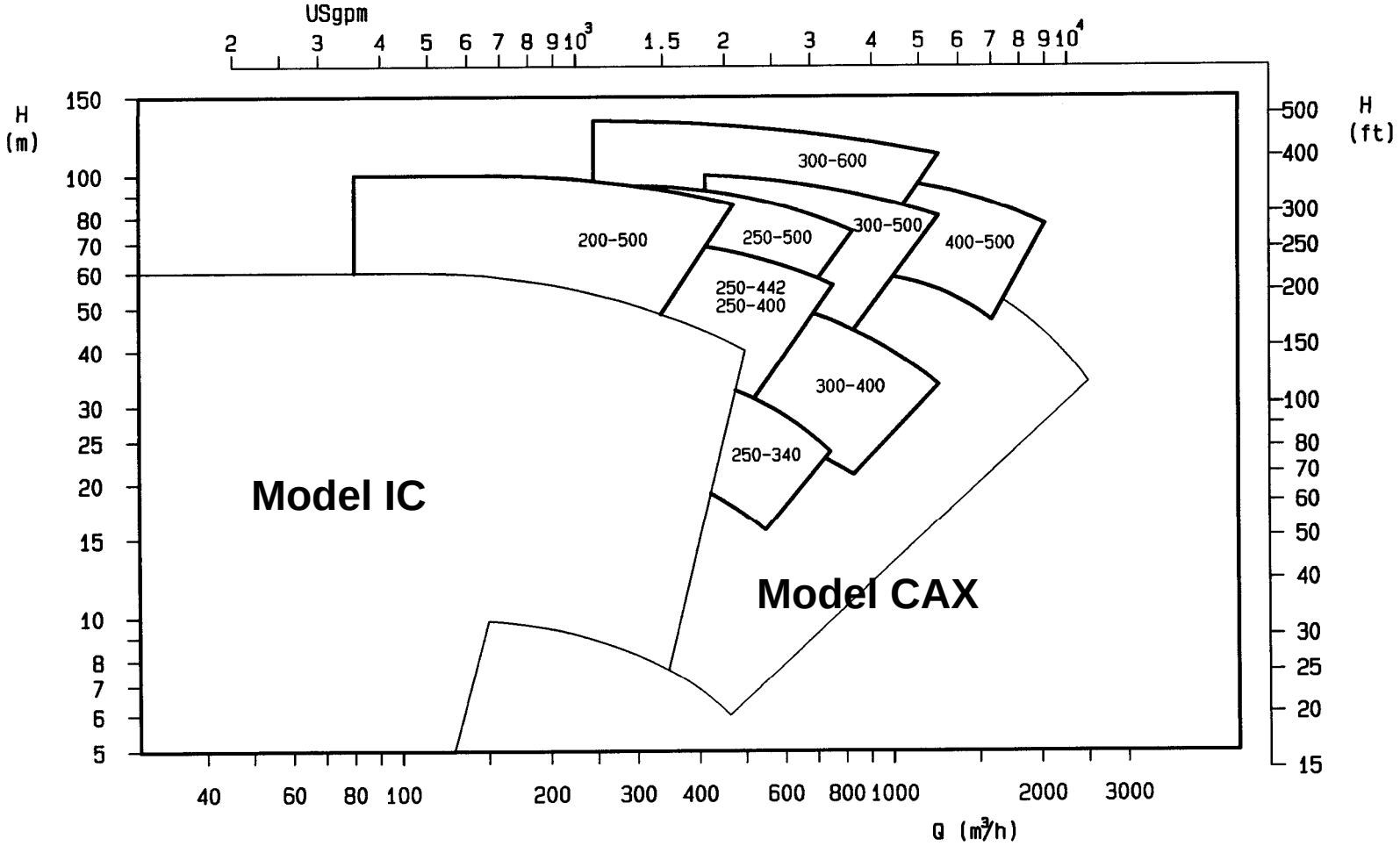
General Industry
Chemical Industry
Steel Mills
Sugar Industry
Paper and Pulp Mills
Power plants , District heating

ITT Industries
Engineered for life

Endsution Pumps, Design CNX - 2950 rpm

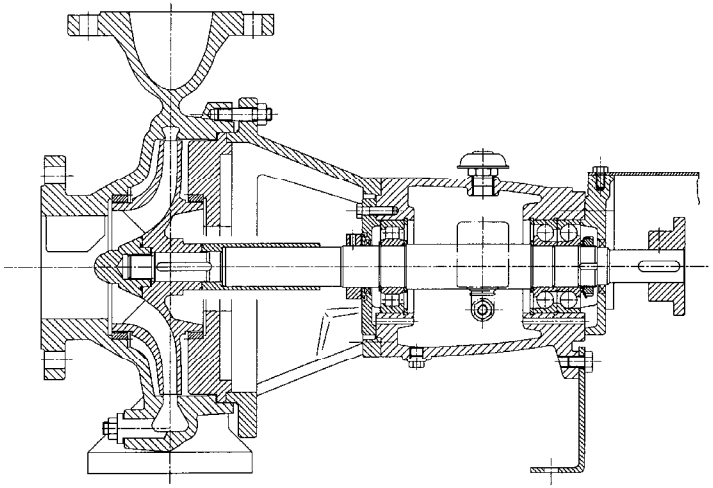


Endsuction Pumps, Design CNX - 1450 rpm



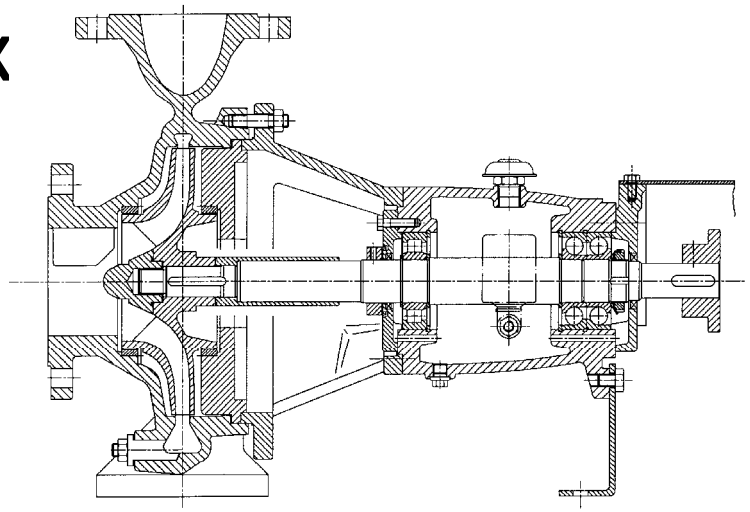
Endsuction Pumps, Design CNX

Horizontal single stage volute casing pump with closed impeller and oil lubricated bearing frame.
Optional grease lubrication is possible.
Process design for easy dismantling of impeller and bearing frame without disassembly of pump casing and motor (spacer coupling required).
Suction branch axially, discharge branch radially upwards. Drive by electric motor and elastic coupling mounted on a common base frame.



Endsuction Pumps, Design CNX

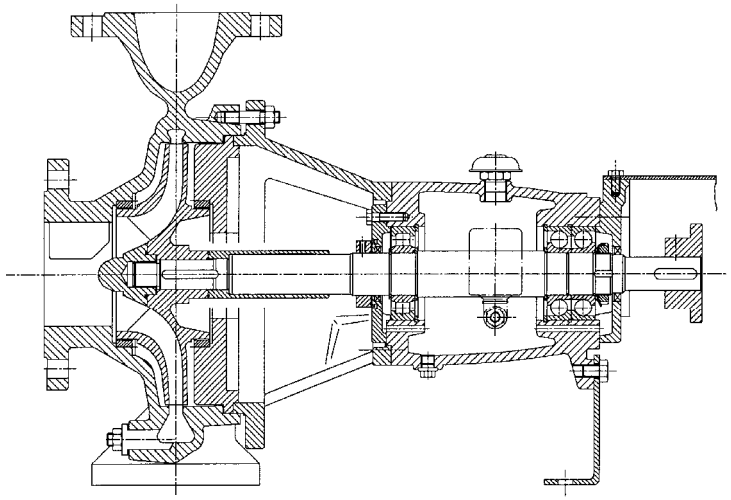
Design features:



- Horizontal single stage volute casing pump with closed radial impellers
- Thrust balancing through balance holes resp. back vanes
- Double volute casing for reducing the hydraulic radial forces, enables a wide operating range by reduced bearing load and shaft deflection
- Casing wear ring standardwise
- All pump sizes can otionally be supplied with INDUCER
- Process design for easy dismantling of impeller and bearing frame without disassembly of pump casing and motor (spacer coupling required)

Endsuction Pumps, Design CNX

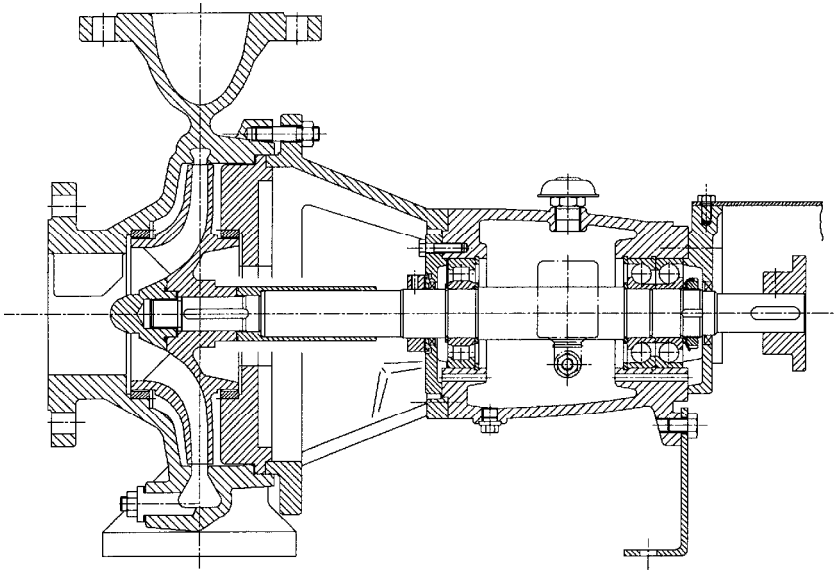
Design features:



- Fixed axial bearing at drive side (pair of angular contact bearings) for handling high axial forces in both directions, roller bearing at pump side designed as floating bearing
- Big shaft diameter, reduced shaft deflection and heavy duty oil lubricated bearings, designed for continuous operation
- Dry shaft design, closed impeller nut and shaft sleeve (o-ring sealing fully consigned)
- Big distance between bearings, bigger than impeller overhung

Endsuction Pumps, Design CNX

Design features:



Shaft sealing: Stuffing box with internal or external sealing, flushing or cooling, hydrodynamic shaft sealing, mechanical seal acc. to EN 12756 (DIN 24960), inner single mechanical seal, double mechanical seal or Cartridge mechanical seal

Endsuction Pumps, Design CAX
with semi axial impeller

Performance range:

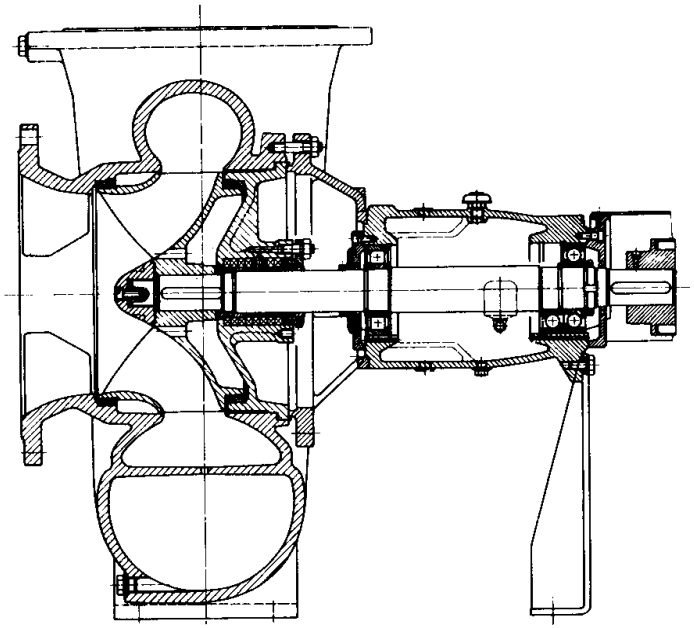
Capacity up to 4.000 m3/h (17.600 USgpm)
Head up to 50 m (164 feet)
Speed up to 1450 min-1 (1750 rpm)

Sizes: DN 250 up to DN 500
(10“ up to 20“) discharge

Sizes DN 25 up to DN 150 (1“ up to 6“)
refer to design IC

Temperature max.180 °C (350 °F)

Casing pressure max. 10 / 16 bar (145 / 230 psig)



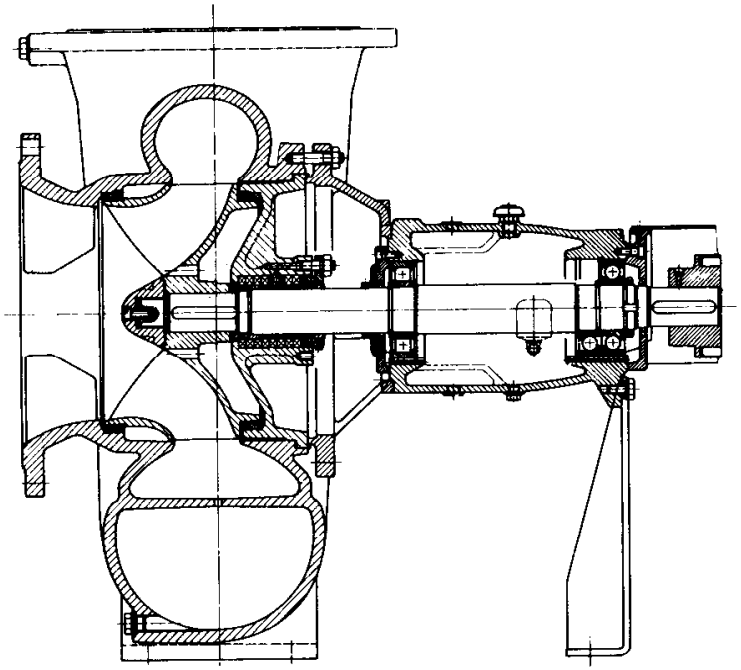
VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsuction Pumps, Design CAX

Handled liquids:

Clean and slightly contaminated liquids (without bigger solids)
Cold and hot water
Condensate and Deionate
Oils, Brines, Caustic solutions and acids
Pulp suspensions up to 1,2%

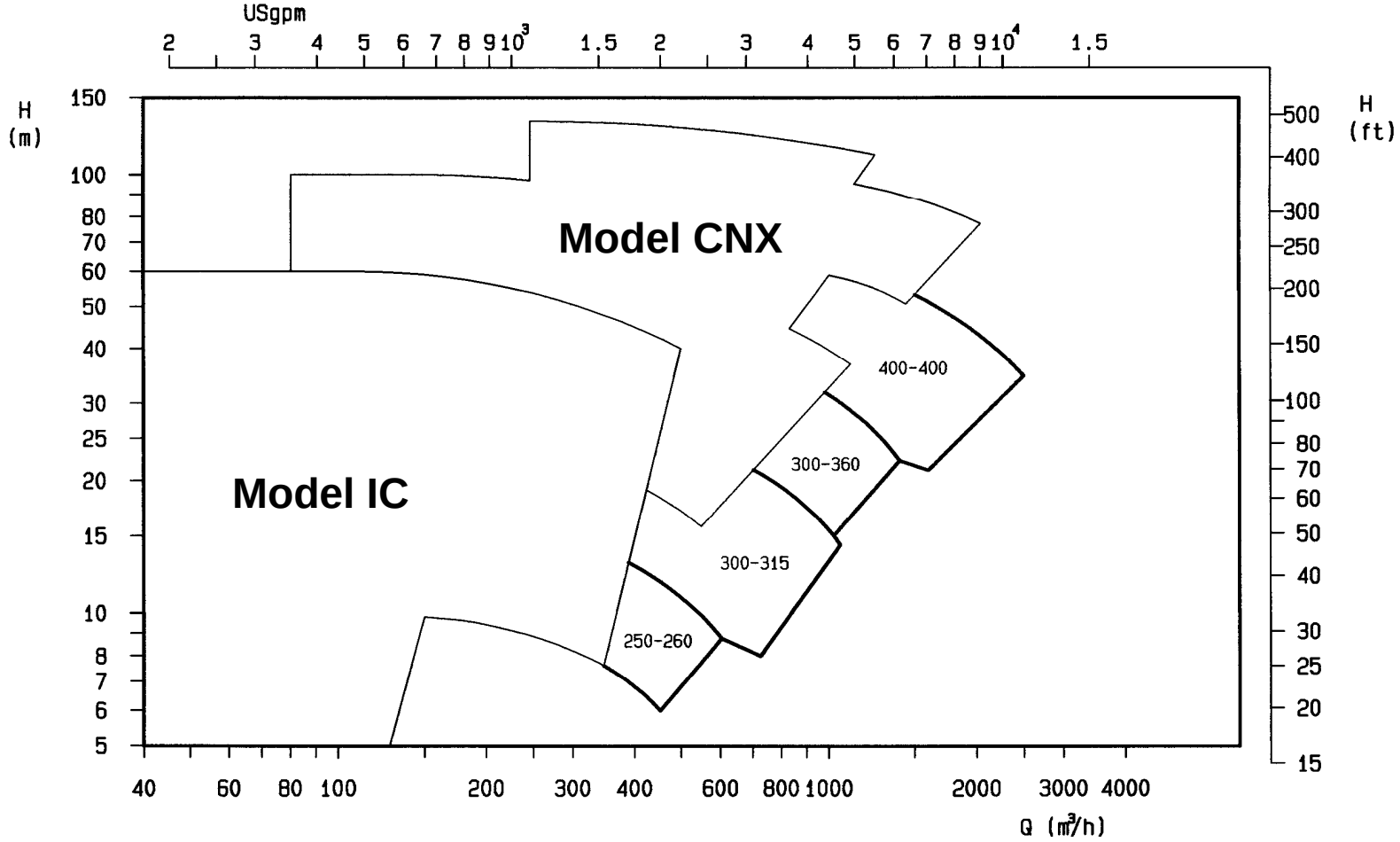


Applications:

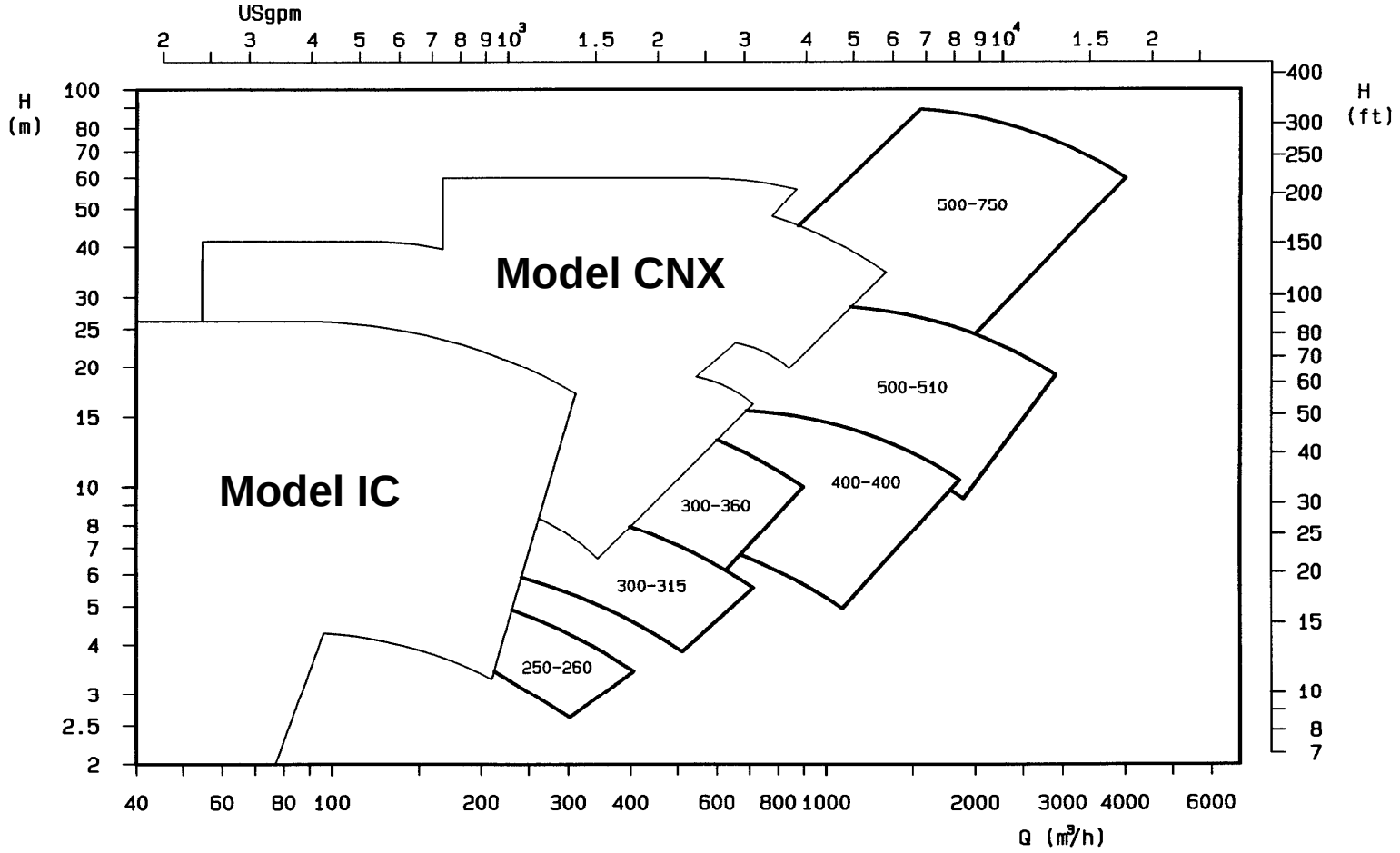
General Industry
Chemical Industry
Steel Mills
Sugar Industry
Paper and Pulp Mills
Power plants, District heating

ITT Industries
Engineered for life

Endsuction Pumps, Design CAX - 1450 rpm

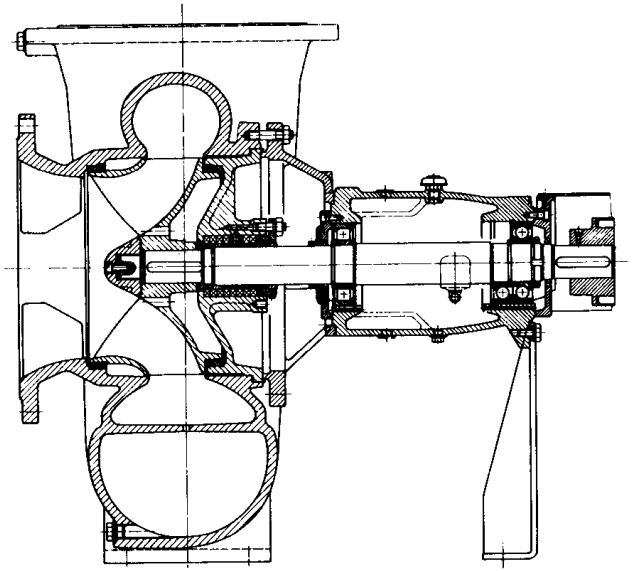


Endsuction Pumps, Design CAX - 950 rpm



Endsuction Pumps, Design CAX

Horizontal single stage volute casing pump with closed semi axial impeller and oil lubricated bearing frame. Optional grease lubrication possible. Process design for easy dismantling of impeller and bearing frame without disassembly of pump casing and motor (spacer coupling required).
Axial suction branch, discharge branch tangentially upwards.
Drive by electric motor and elastic coupling mounted onto a common base frame.

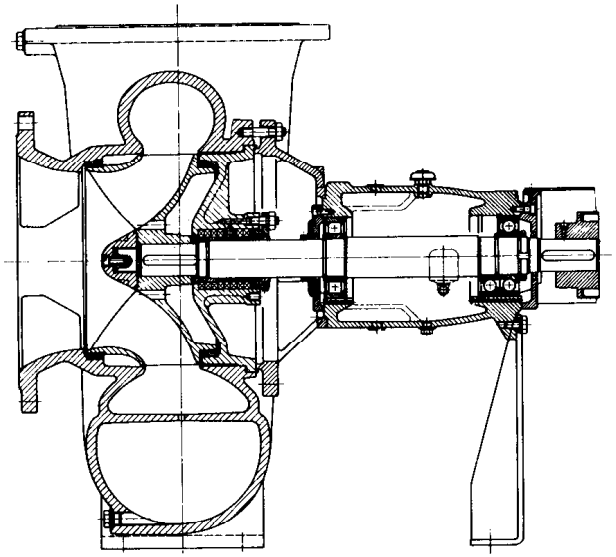


VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsution Pumps, Design CAX

Design features:

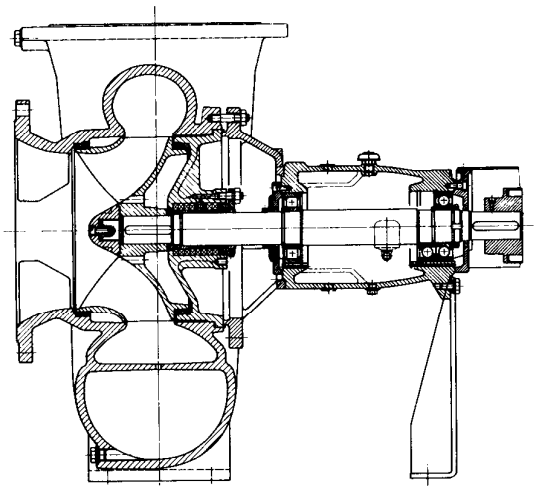


Horizontal single stage volute casing pumps with closed semi axial impellers

- **Thrust balancing through balancing holes**
- **Double volute casing for reduction of the hydraulic forces, enables a wide operating range by reduced bearing load and shaft deflection**
- **Casing wear rings standardwise**
- **All pump sizes can optionally be supplied with INDUCER**

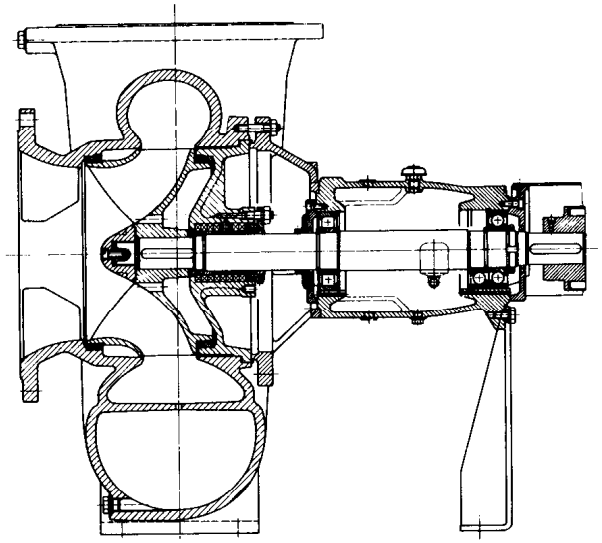
Endsuction Pumps, Design CAX

Design features:



- Process design for simple dismantling of impeller and bearing frame without disassembly of pump casing and motor (spacer coupling required)
- Fixed axial thrust bearing at drive side (pair of angular contact bearings) for handling high axial forces in both directions, roller bearing at pump side designed as floating bearing
- Big shaft diameter for reduced shaft deflection and heavy duty oil lubricated bearings, designed for continuous operation

Endsuction Pumps, Design CAX
Design features:



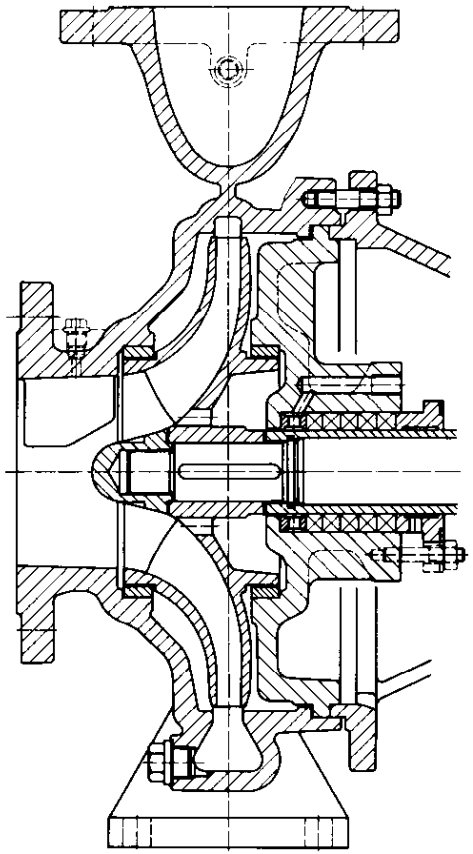
- Dry shaft design by closed impeller nut and shaft sleeve (o-ring sealing fully confined)
- Big distance between bearings, bigger than impeller overhung
- Shaft sealing: Stuffing box with internal or external sealing, flushing or cooling, hydrodynamic shaft sealing, mechanical seal acc. to EN 12756 (DIN 24960), inner single mechanical seal, double mechanical seal or Cartridge mechanical seal

VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsuction Pumps
Design CNX, CAX

Shaft sealing:



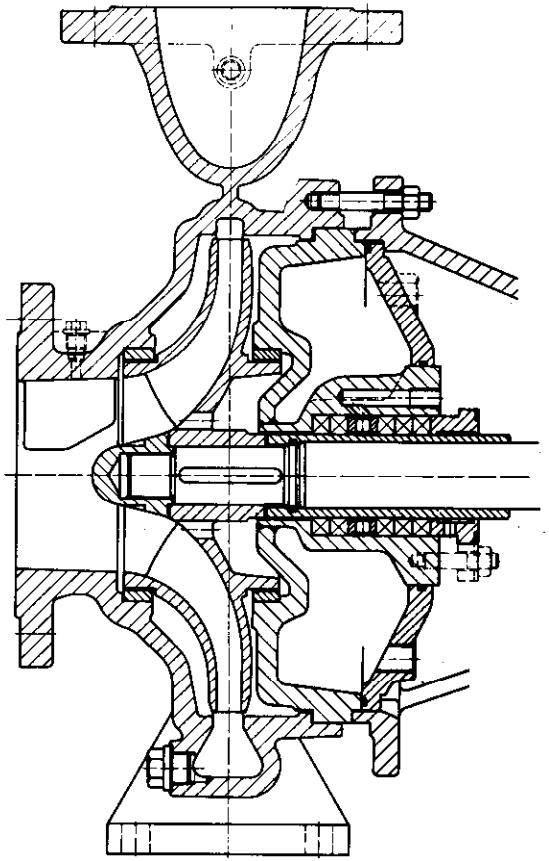
Stuffing box optional with internal or external sealing or flushing temperature up to 140 °C (280 °F)

VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsuction Pumps
Design CNX, CAX

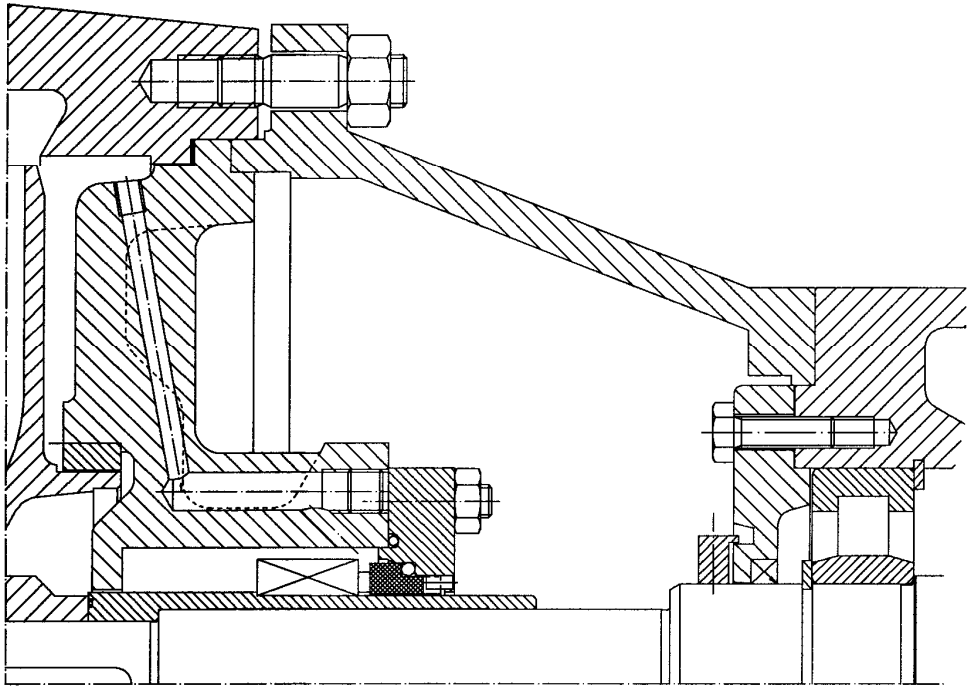
Shaft sealing:



Stuffing box optional with cooling for temperatures up to 180 °C (350 °F)

Endsuction Pumps, Design CNX, CAX

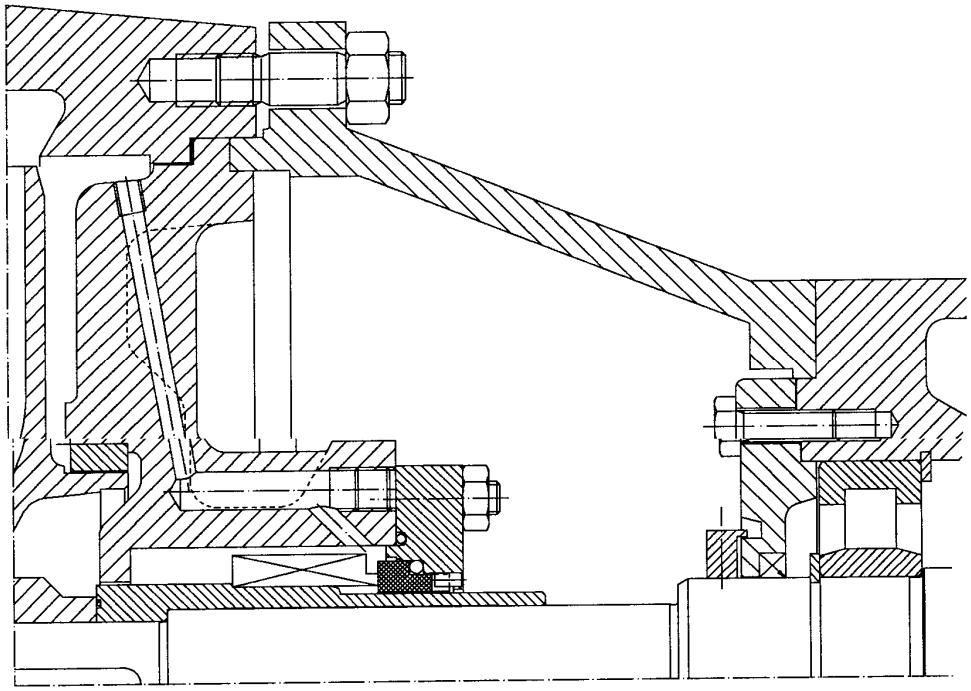
Shaft sealing:



Inner single mech. seal acc. to EN 12756 (DIN 24960) with shaft sleeve unbalanced

Endsuction Pumps, Design CNX, CAX

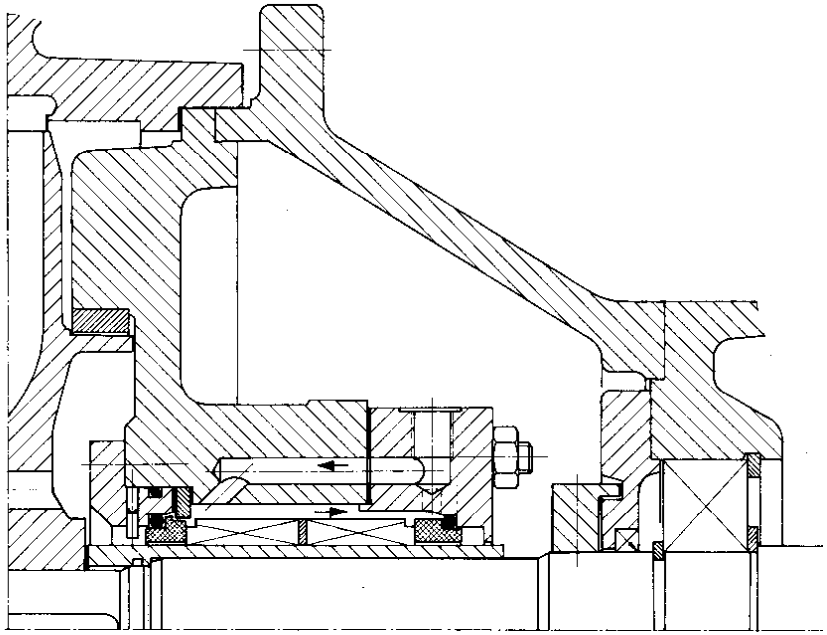
Shaft sealing:



Inner single mech. seal acc. to EN 12756 (DIN 24960) with shaft sleeve, balanced design

Endsuction Pumps, Design CNX, CAX

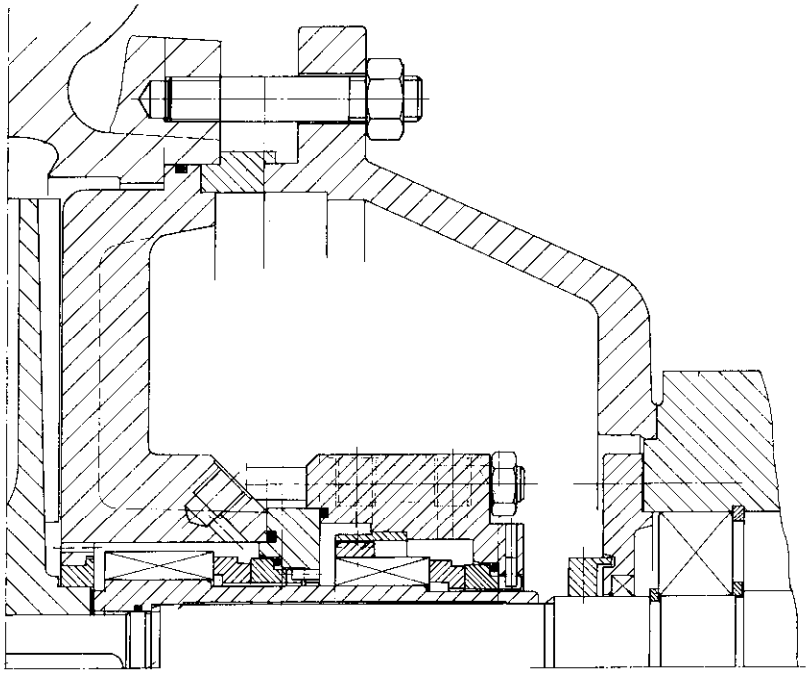
Shaft sealing:



Double mech. seal in „back to back“ arrangement acc. to EN 12756 (DIN 24960) with shaft sleeve, unbalanced

Endsuction Pumps, Design CNX, CAX

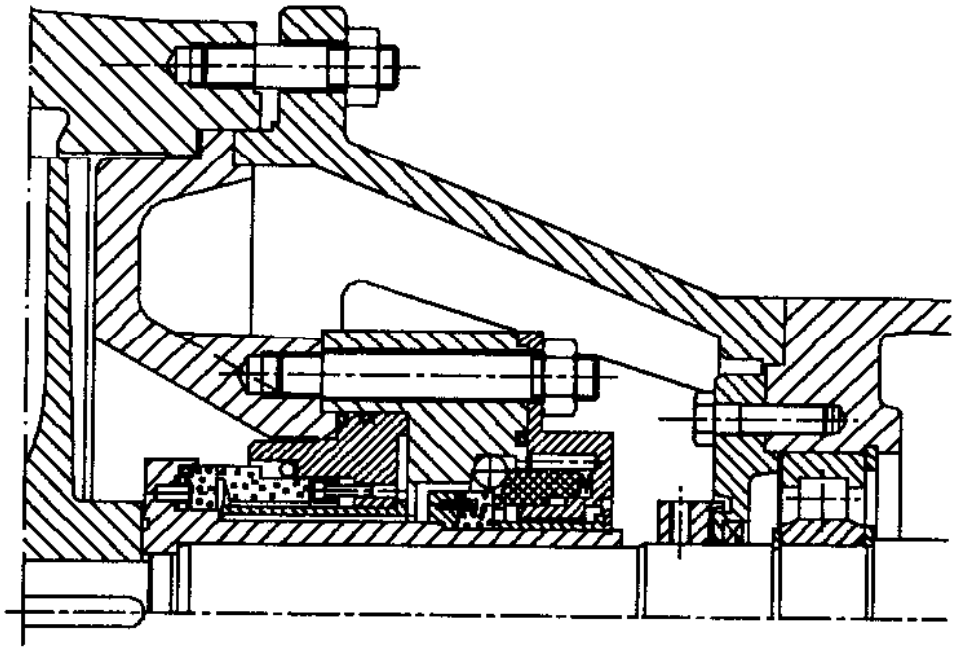
Shaft sealing:



Double mech. seal in „tandem“ arrangement acc. to EN 12756 (DIN 24960) with shaft sleeve, unbalanced optional balanced.

Endsuction Pumps, Design CNX, CAX

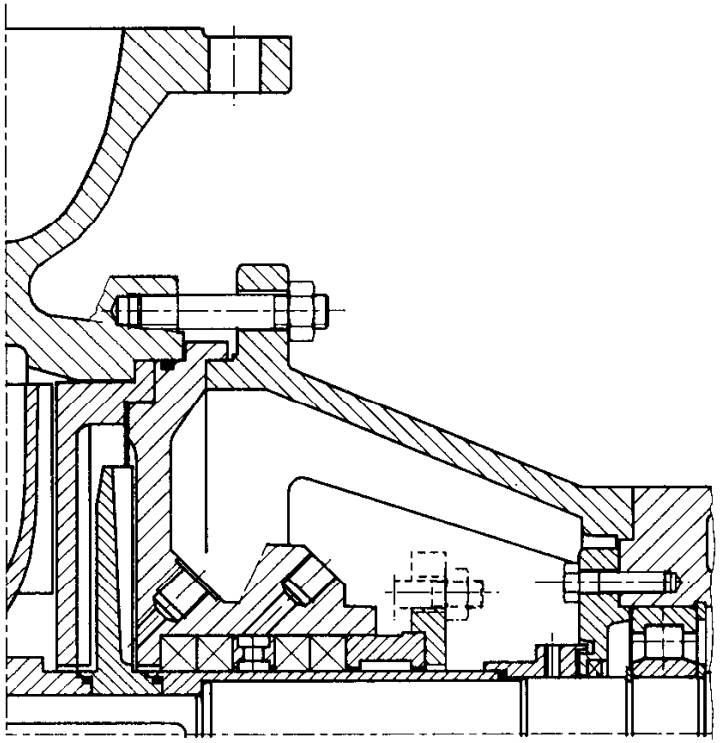
Shaft sealing:



Cartridge mech. seal in single seal design. Optional in single seal design with quench. Optional as double mech. seal .

Endsution Pumps, Design CNX, CAX

Shaft sealing:



Hydrodynamic shaft sealing with expeller and stuffing box with clean water flush as stand by seal.

VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Endsution Pumps, Design CNX, CAX

For applications in explosive atmospheres pumps model CNX & CAX are optional avialable in compliance with ATEX 95 (EC Directive 94/9/EC).

ITT Industries
Engineered for life

Endsuction Pumps - CNX, CAX

ITT Industries
Engineered for life

VOGEL PUMPEN

Endsuction Pumps - CNX, CAX

Liability Information:

The mentioned limits of operation and / or applications are only a general information and may not be applied for every case. The permitted range of operation and / or application for the specific case is to be obtained from our acknoledgment of order and / or the instruction for installation, operation and maintenace.

Pumpenfabrik Ernst Vogel GmbH

A 2000 Stockerau, Austria