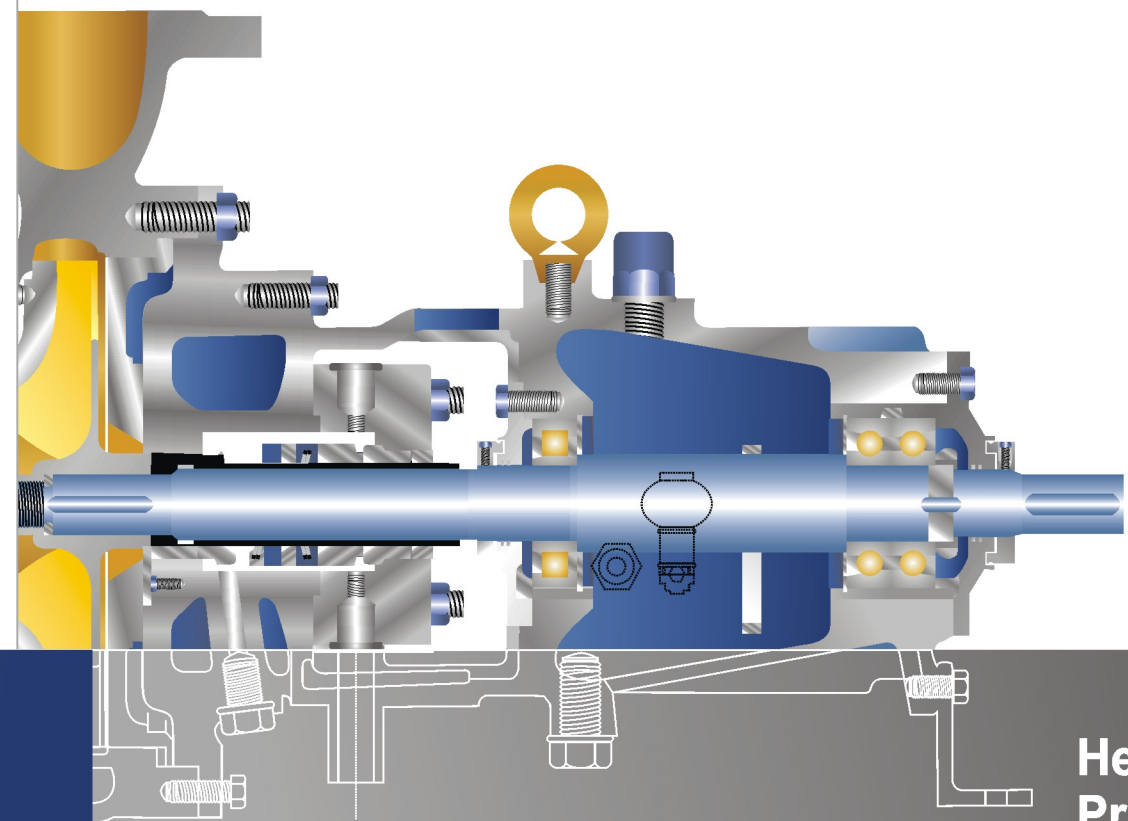
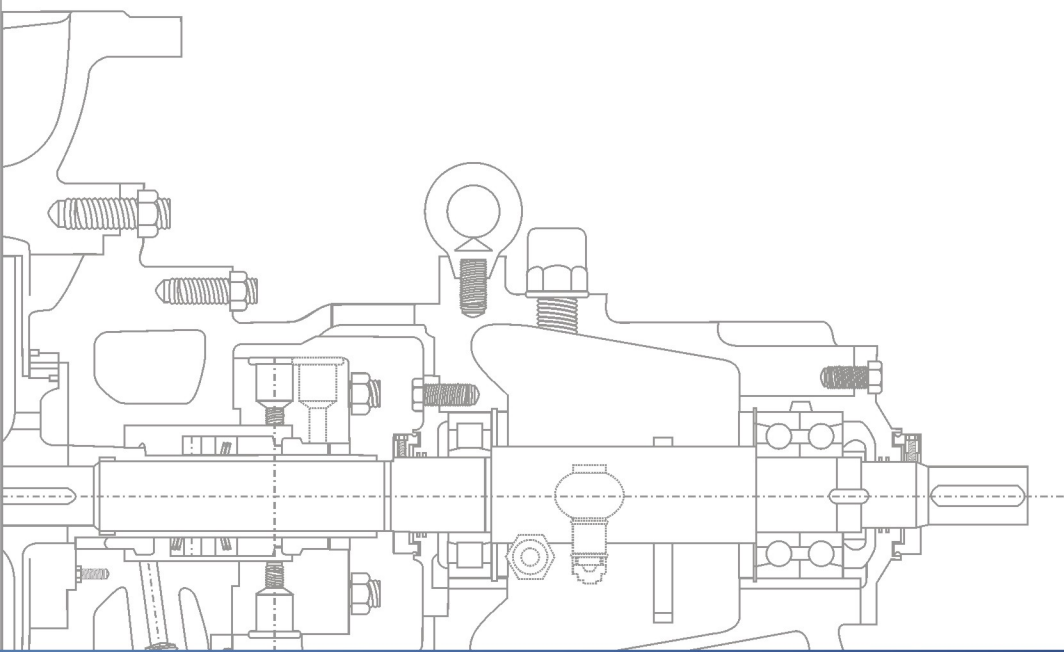


TG CPR



PT TORISHIMA GUNA ENGINEERING

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Jakarta 13930 - Indonesia. Phone: +62 21 460 3963, Fax: +62 21 460 3937
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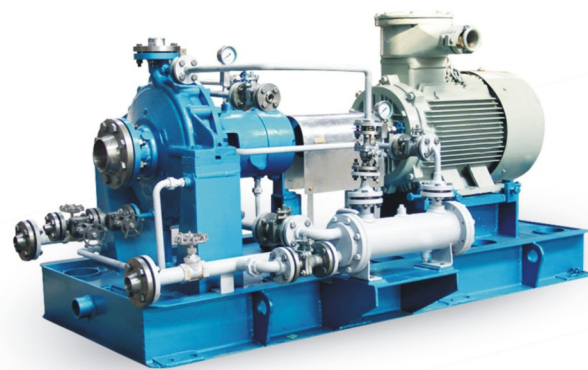
TURBOMACHINERY WORKSHOP : Jl. Selayar II Blok H-12, Kawasan Industri MM2100
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Heavy Duty
Process Pump
API 610 10th Ed
OH1 / OH2 Type



INTRODUCING



GENERAL

TG CPR series are single suction, overhung, foot and centerline mounted, horizontal pump; designed in accordance with API 610 11th Edition.

Main application fields of this pump series are oil refineries, chemical and petrochemical plants. TG CPR series pumps use back pull - out design, which means the rotating assembly can be dismantled without removing the pump casing from the piping.

If a spacer type flexible coupling is fitted, the driver can also remain attached to the common baseplate when the pump being dismantled.

CASING

One piece volute casing; from DN 80 upward is designed double volute, which can balance the radial thrust. The pump can be equipped with heat protection sleeve. There is cooling water chamber on the casing cover to reserve the heat of pump chamber.

NOMENCLATURE

- O type : Open Impeller
- S design : Foot Mounting
- D design : Centerline Mounting

IMPELLER

Both closed and open impeller types are available. Wear ring clearance conform to API 610 specification.

A version equipped with an inducer can be supplied where the available NPSH is very low.

BEARINGS

The bearings are oil-lubricated. The constant level oiler at bearing housing control the oil level automatically.

For hot liquids, the bearing housing must be cooled. There are three types of cooling ; air cooling, water cooling, and fan cooling.

SEAL CHAMBER

Seal Chamber is designed according to API 682 to accomodate ripple seal, single-end and double-end mechanical seal which can be equipped with various flushing plans.

DIRECTION OF ROTATION

Clock-wise / CW viewed from the drive end.

OPERATING RANGE

| | | |
|--------------------|----|--|
| Capacity | Q | up to 2,000 m ³ /hr (8,800 usgpm) |
| Total head | H | up to 300 m (1000 feet) |
| Temperature | T | -80 to + 450 °C (-110 to 840 °F) |
| Discharge pressure | Pd | up to 5.0 MPa (725 psi) |
| Nozzle size | DN | 25 to 400 mm (1 to 16 inch) |



Oil Refinery

APPLICATION



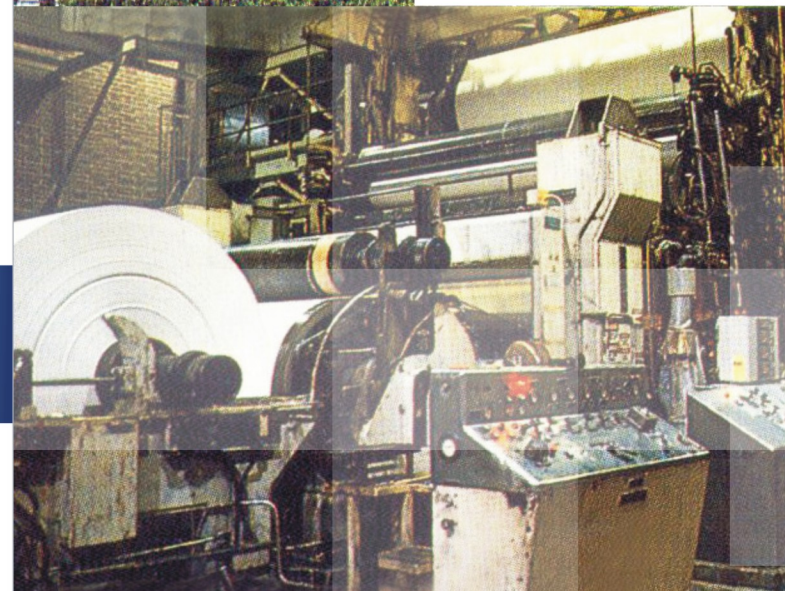
Oil Refinery



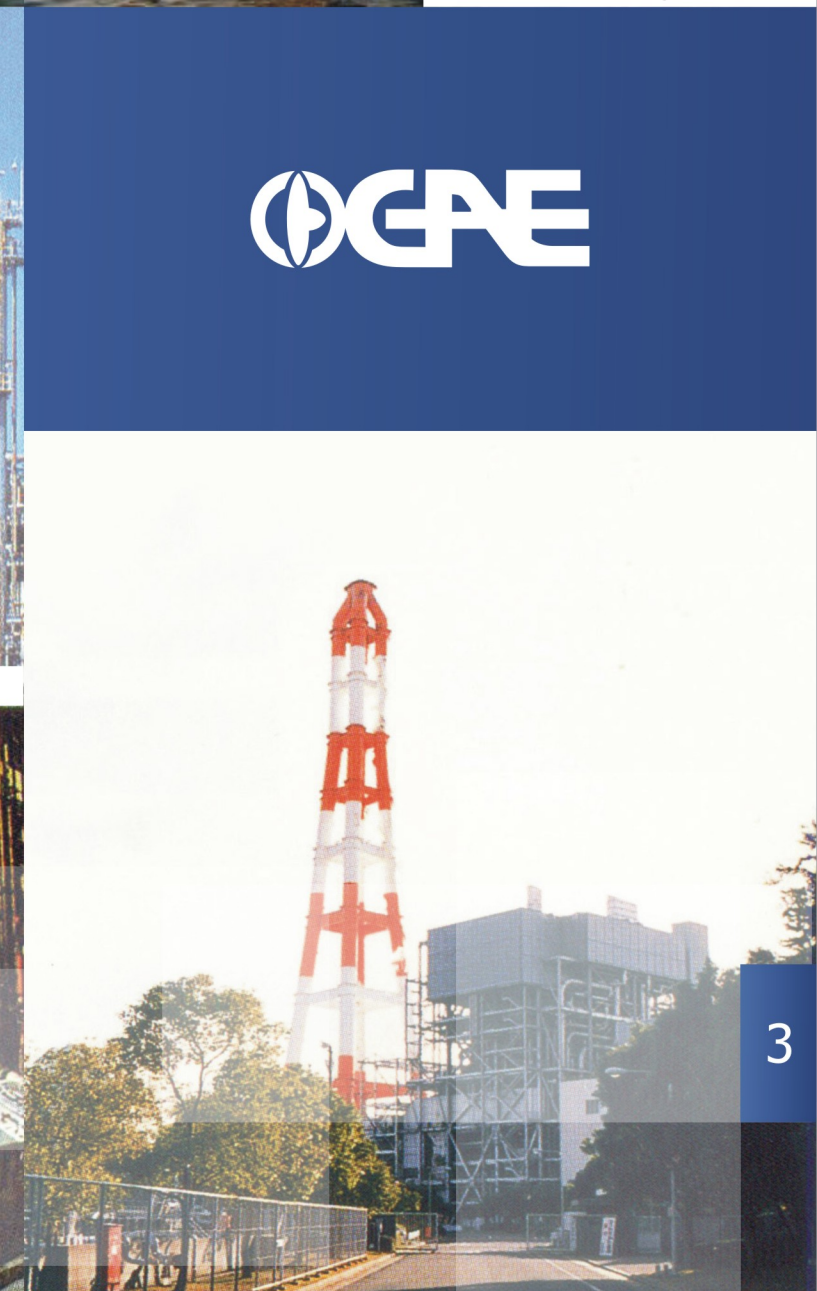
Offshore Oil Exploration



Petrochemical Industry



Pulp & Paper Industry



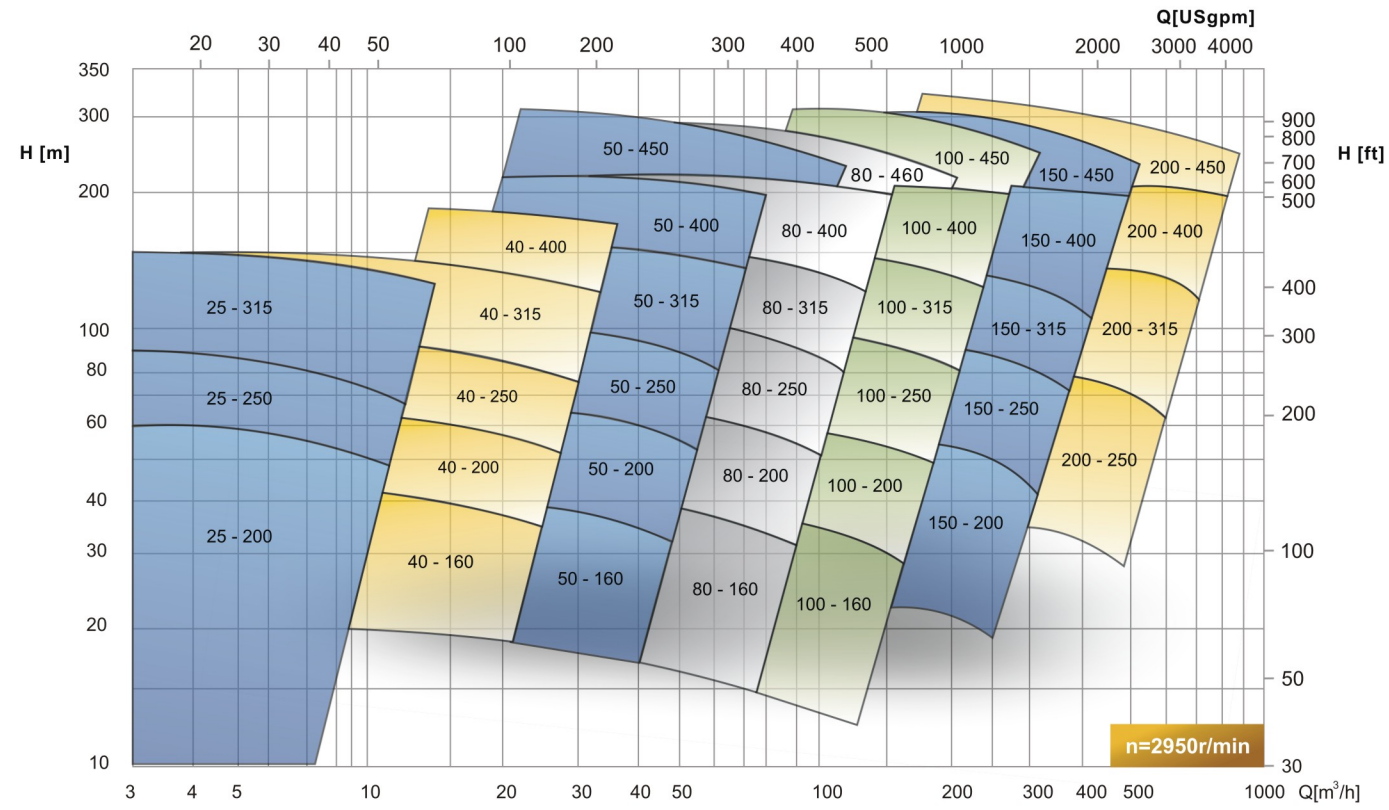
Power Generation



SELECTION CHARTS

CLOSED TYPE IMPELLER

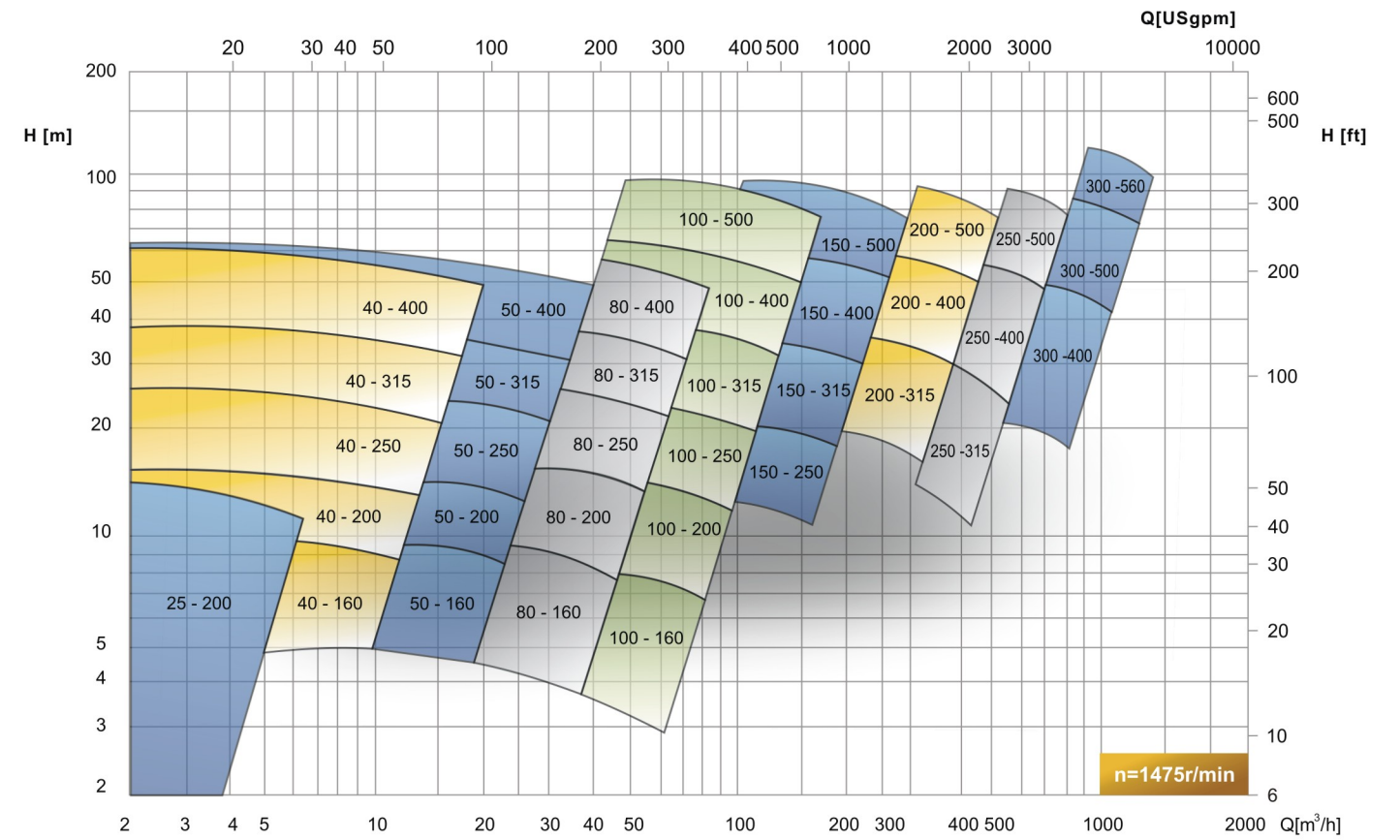
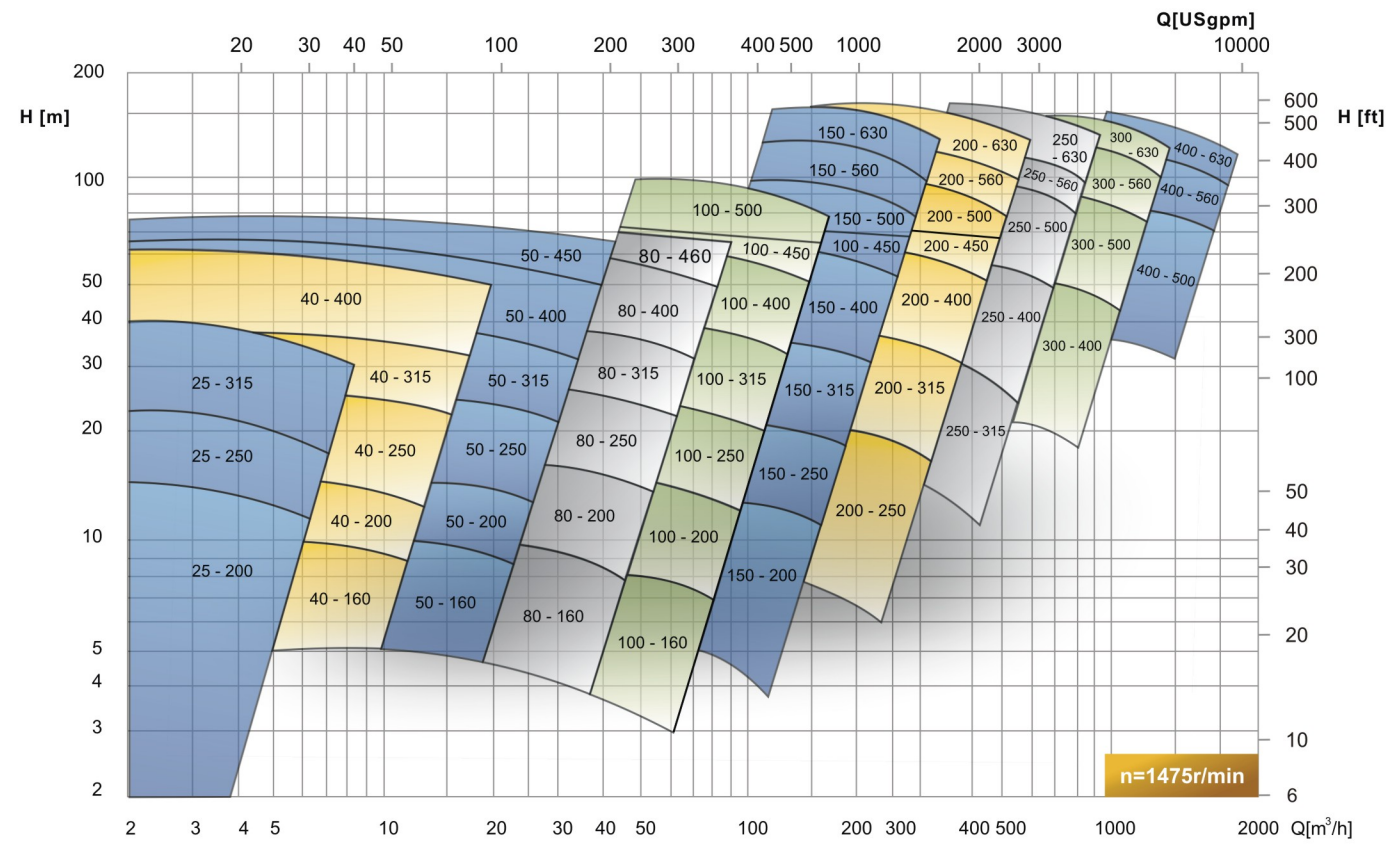
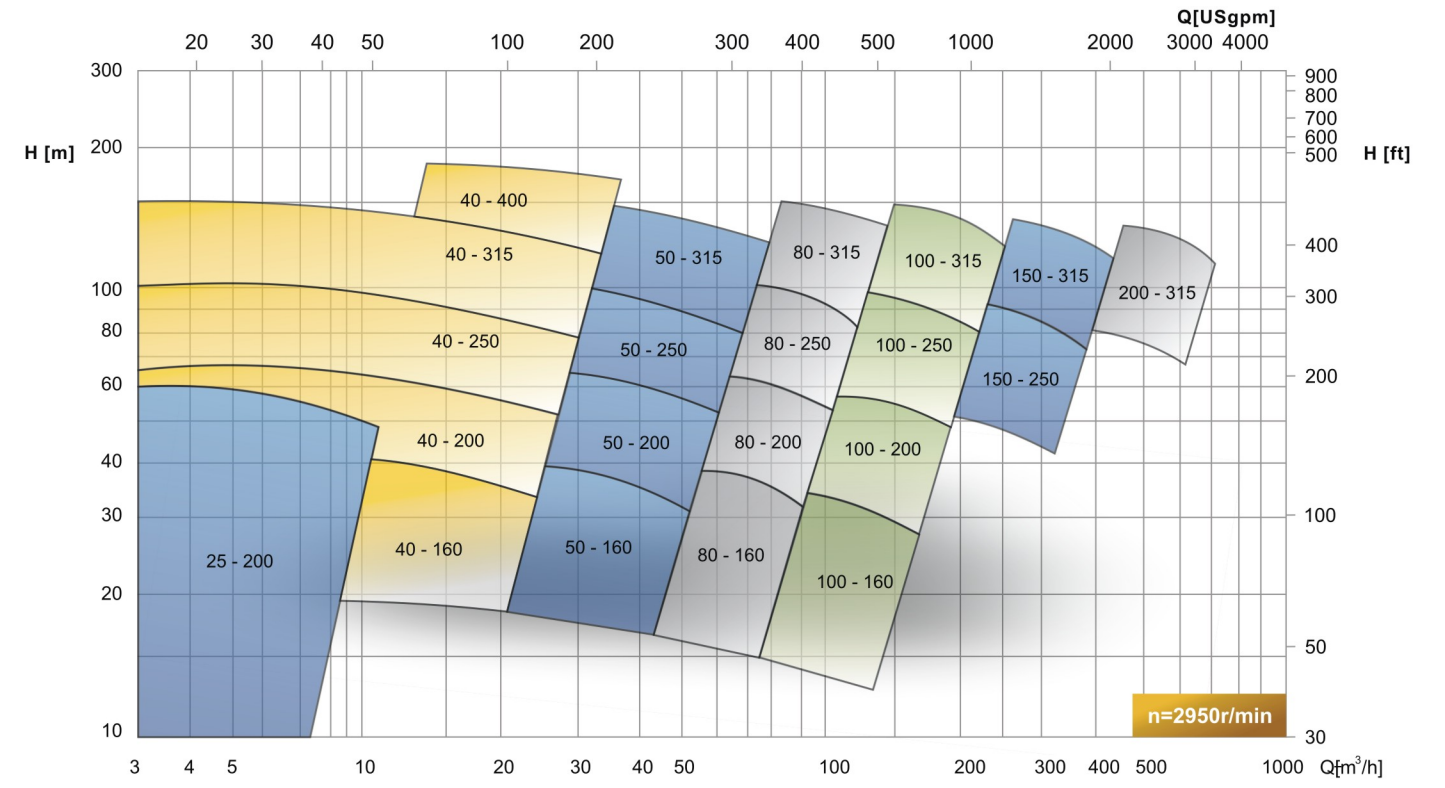
50 Hz



SELECTION CHARTS

OPEN TYPE IMPELLER

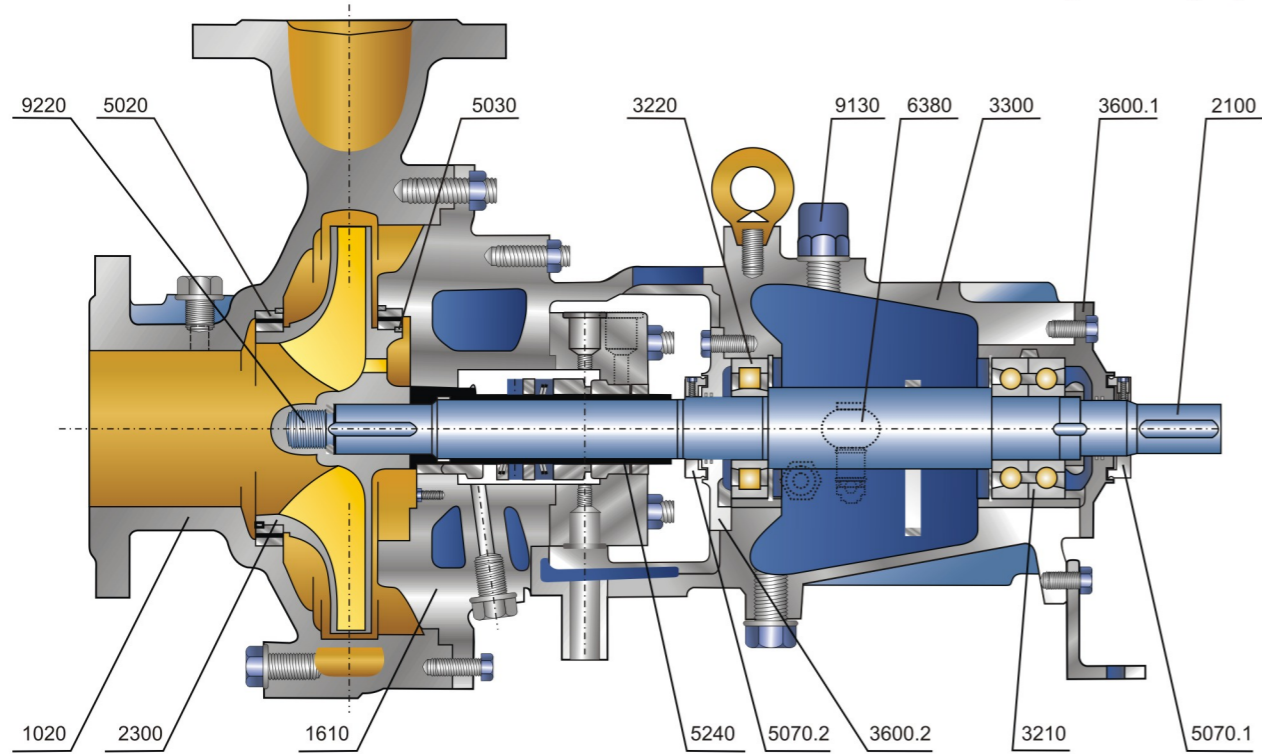
50 Hz



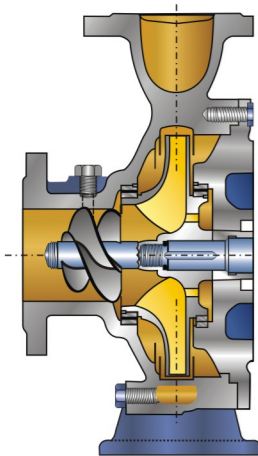
SECTIONAL DRAWING & LIST OF COMPONENT

CLOSED TYPE IMPELLER

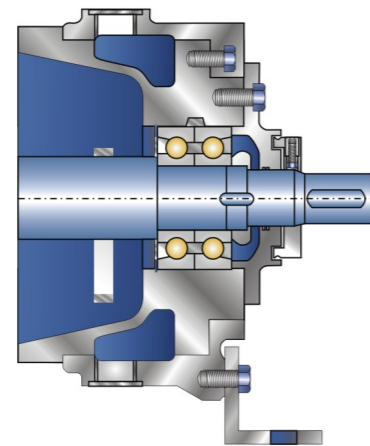
* Typical drawing only



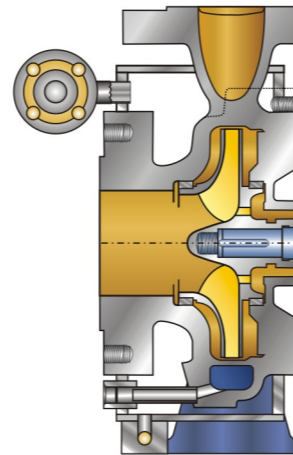
| | | |
|-----------------------|---------------------------|-----------------------------|
| 1020 : Volute Casing | 3300 : Bearing Housing | 5070.2 : Deflector |
| 1610 : Casing Cover | 3600.1 : Bearing Cover | 5240 : Shaft Sleeve |
| 2100 : Shaft | 3600.2 : Bearing Cover | 6380 : Constant Level Oiler |
| 2300 : Impeller | 5020 : Casing Wear Ring | 9130 : Plug |
| 3210 : Ball Bearing | 5030 : Impeller Wear Ring | 9220 : Impeller nut |
| 3220 : Roller Bearing | 5070.1 : Deflector | |



With Inducer



Water Cooled Bearing Bracket



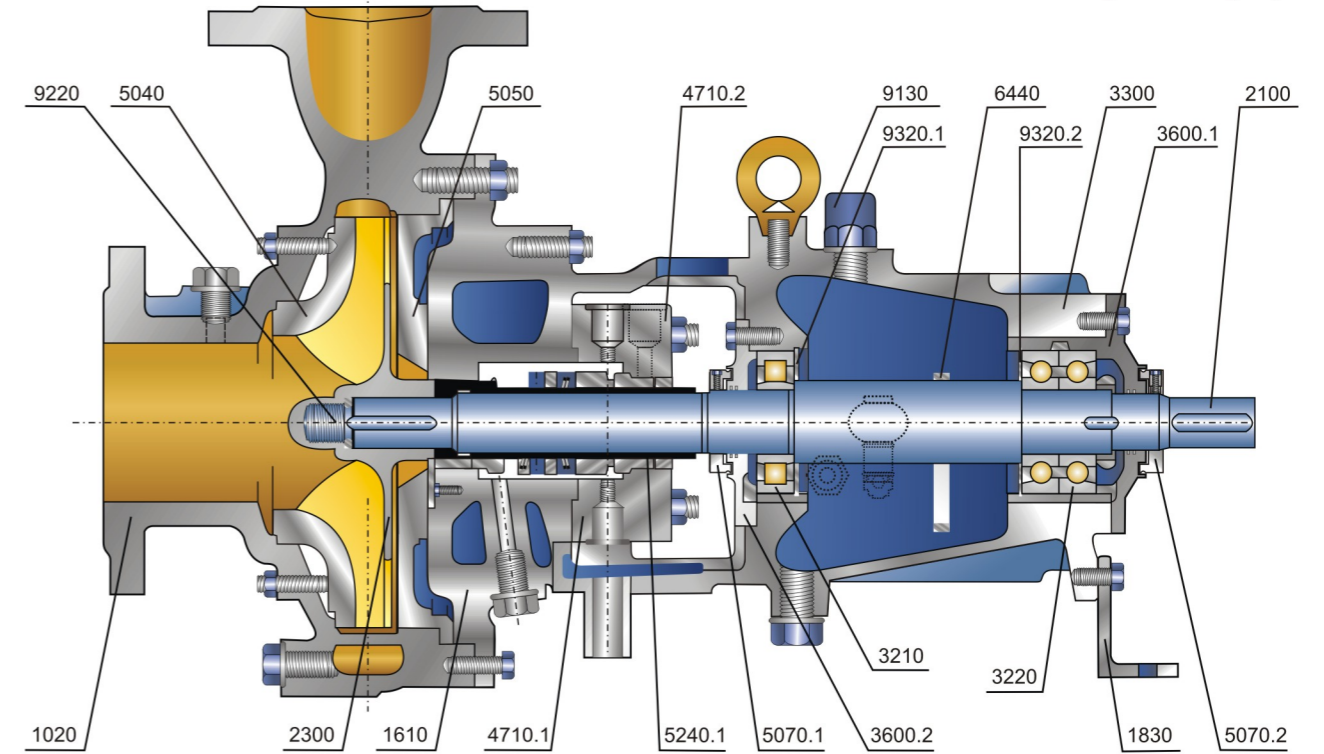
Casing With Heat Keeping Sleeve

6

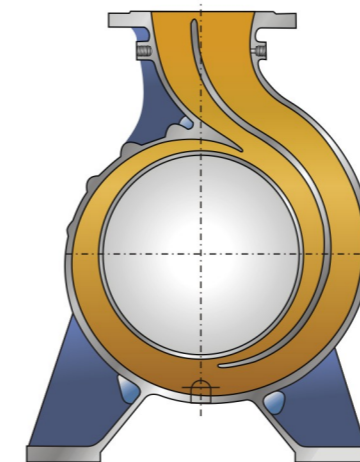
SECTIONAL DRAWING & LIST OF COMPONENT

OPEN TYPE IMPELLER

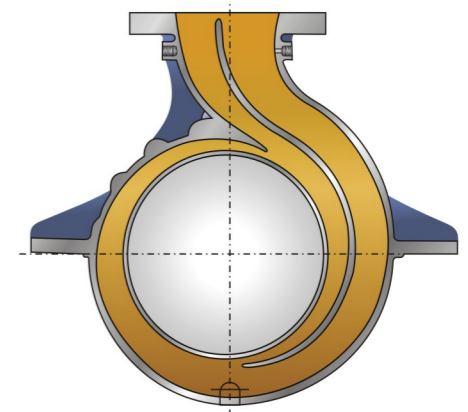
* Typical drawing only



| | | | |
|-----------------------|------------------------|-------------------------|---------------------|
| 1020 : Volute Casing | 3220 : Ball Bearing | 5040 : Wear Plate | 9130 : Plug |
| 1610 : Casing Cover | 3300 : Bearing Housing | 5050 : Wear Plate | 9220 : Impeller Nut |
| 1830 : Support Foot | 3600.1 : Bearing Cover | 5070.1 : Deflector | 9320.1 : Retainer |
| 2100 : Shaft | 3600.2 : Bearing Cover | 5070.2 : Deflector | 9320.2 : Retainer |
| 2300 : Impeller | 4710.1 : Seal Cover | 5240.1 : Shaft Sleeve | |
| 3210 : Roller Bearing | 4710.2 : Seal Cover | 6440 : Lubricating Ring | |



Foot Mounting



Centerline Mounting

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