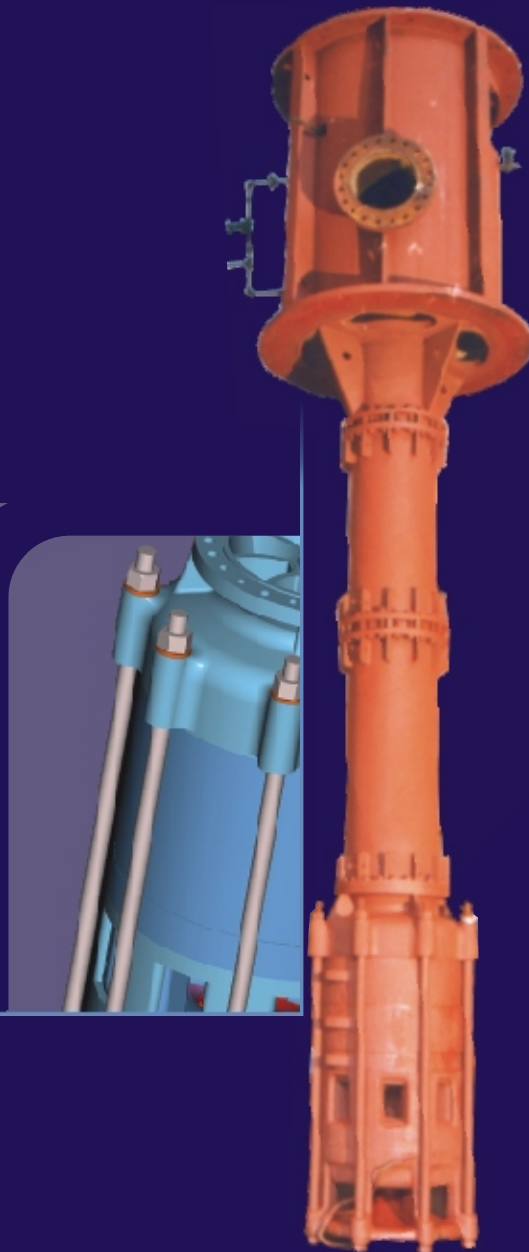


*Kirloskar*

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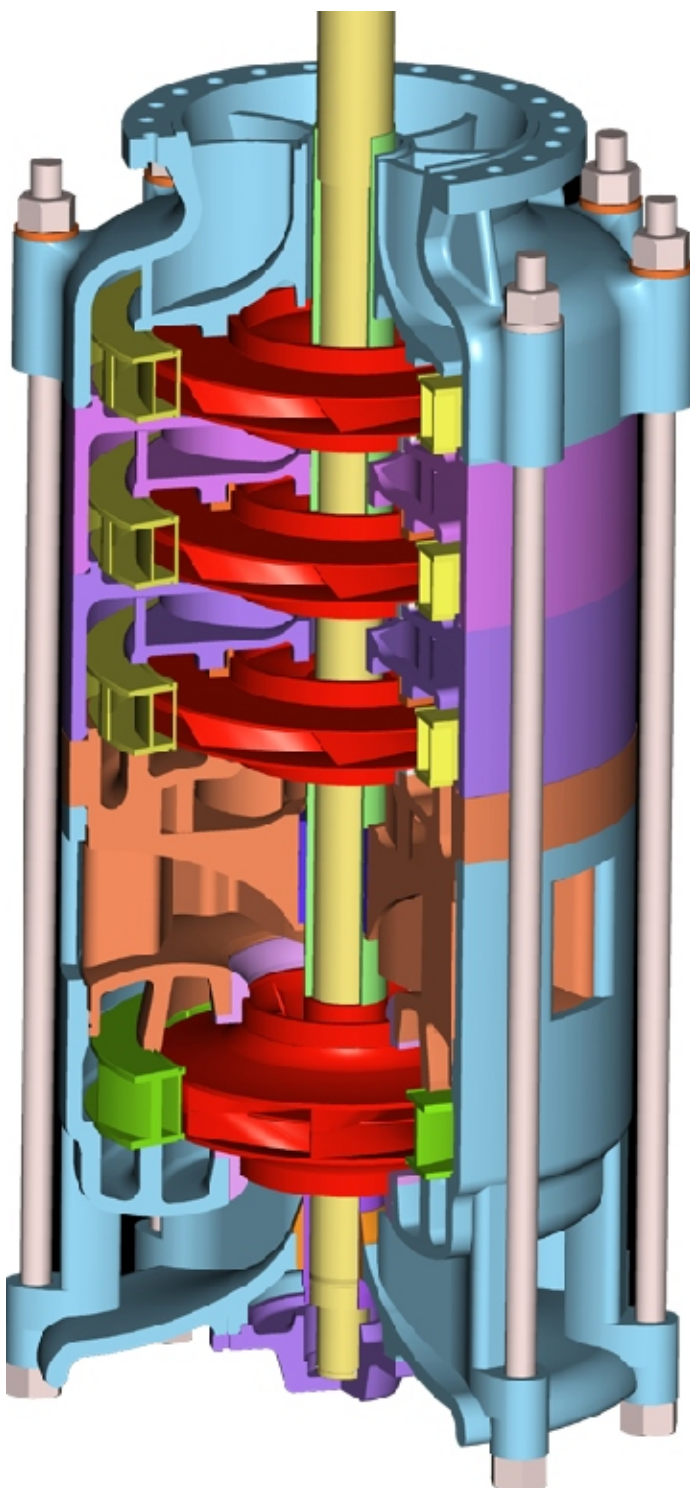
**KIRLOSKAR** CONDENSATE EXTRACTION PUMPS TYPE - BHRC / MNCV

**KIRLOSKAR BROTHERS LIMITED**

# KIRLOSKAR CONDENSATE EXTRACTION PUMPS

TYPE - BHRC / MNCV

## Pump Unit



TYPE - BHRC / MNCV

### Range

- Delivery size  $\varnothing$  - up to 500 mm
- Suction size  $\varnothing$  - up to 800 mm
- Head - up to 350 meters
- Capacity - up to 2000 m<sup>3</sup>/hr

### Impeller

- Francis type impeller with bowl.
- Radial type impeller with diffuser.

### Applications

For condensate extraction in thermal and nuclear power plants of 500 MW and above

## Description and Design Features

Pumps are of single stage or multi stage consisting of bowl assembly , column assembly and driving unit assembly. Various models are available to operate at 50 Hz and 60 Hz.

### ▶ Bowl

A diffuser with integral cast vanes

### ▶ Suction Bell / Bell Mouth

Designed for smooth inflow of water with minimum losses

### ▶ Shaft

Made of high tensile strength steel

### ▶ Column Pipe

Fabricated column pipes to house the line shaft bearings and direct the water from pump unit to the discharge head

### ▶ Transmission Bearings

Cutless bearings are of natural rubber / synthetic rubber / elastomeric with outer shell of brass or suitable material

### ▶ Thrust Bearings

Mitchell tilting pad type or anti-friction type for taking hydraulic axial thrust and weight of rotor assembly

Bearing lubrication with either oil or grease

Thrust bearing arrangement available either independently in pump and drive or combined in drive

### ▶ Discharge Head / Suction and Delivery Casing

Discharge head connects flow from suction pipe to CAN (outer shell) and directs the flow from pump unit through column pipe in to discharge line

### ▶ CAN (Outer Shell)

Fabricated CAN made out of steel is connected to the discharge head. Length of the CAN depends upon the NPSHA at site

### ▶ Non-Reverse Ratchet

Non reverse ratchet (optional) to prevent the reverse rotation

### ▶ Motor Stool

Rigid construction to endure vibration-free operation

### ▶ Coupling

For pump and prime mover flexible or rigid type as per requirement

For line shaft threaded or muff type as per requirement

### ▶ Drive

Electric motor with vertical solid shaft as standard arrangement

Alternative thrust bearing housed in the motor

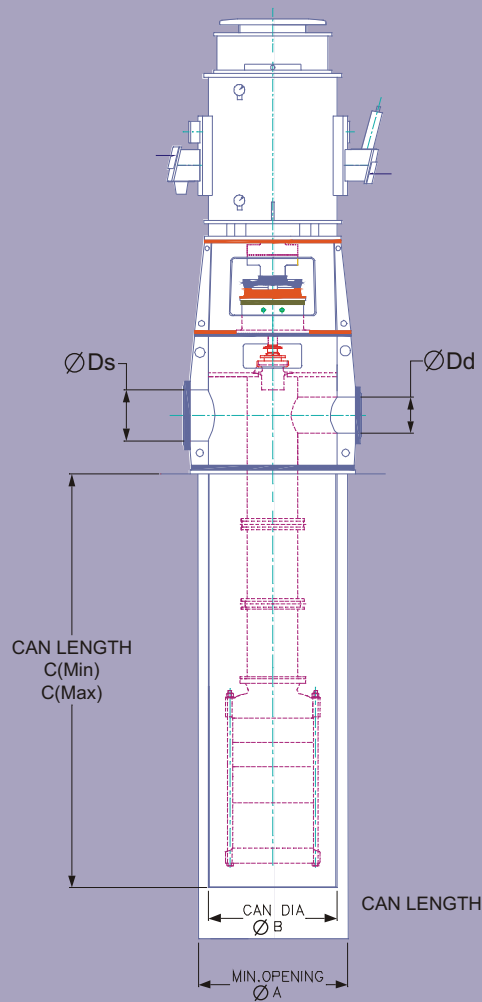
### ▶ High Efficiency and Low NPSHR

Hydraulic design constantly being updated through our research and development work meeting high efficiency and low NPSHR requirements

# KIRLOSKAR CONDENSATE EXTRACTION PUMPS

TYPE - BHRC / MNCV

## General Layout Dimensions



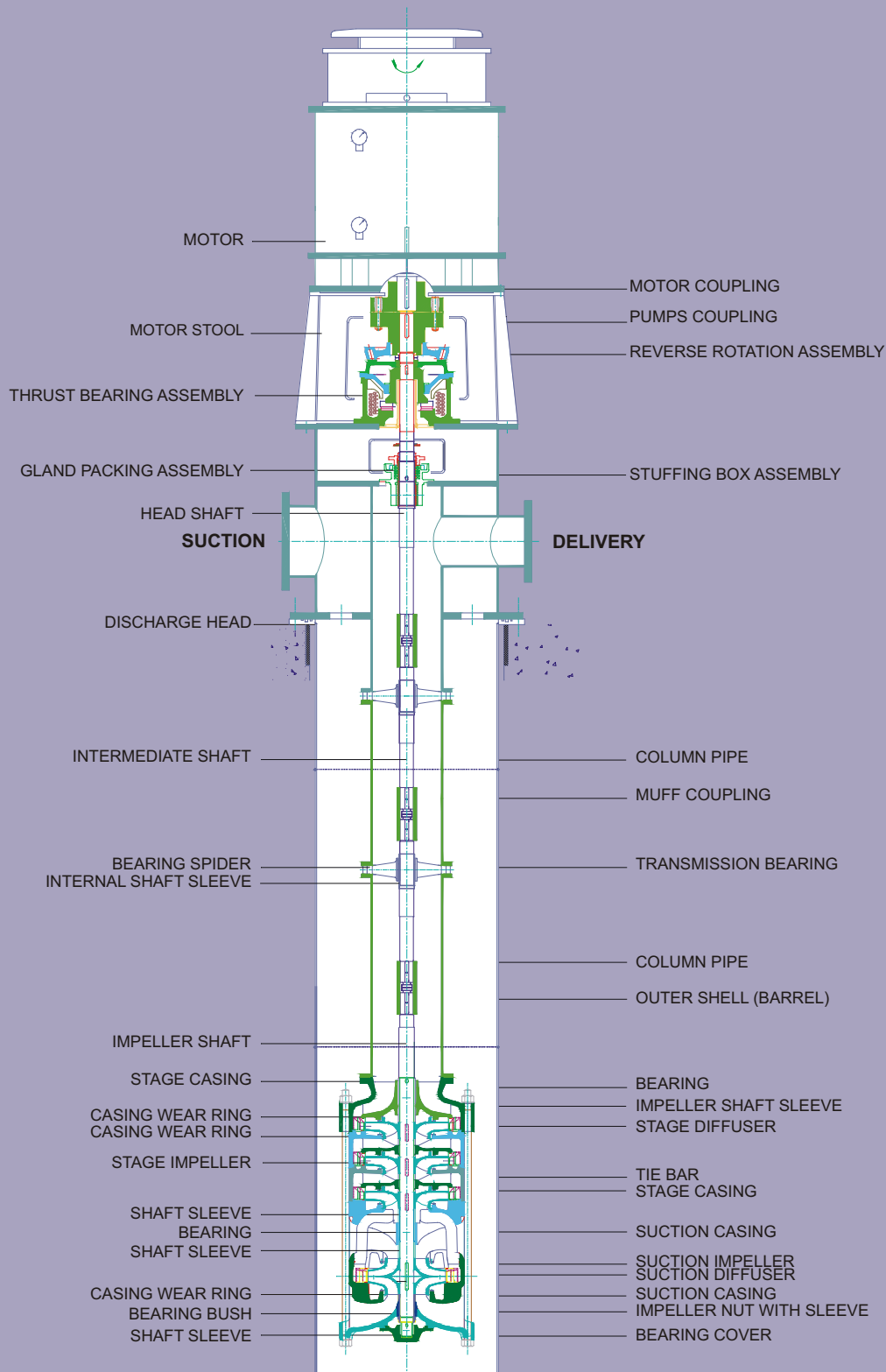
Dimensions in mm

Pump Type	Min Opening	CAN Diameter	CAN Length		Suction Size Ds Ø	Delivery Size Dd Ø
	A	B	C-Max	C-Min		
BHRC-28	1000	800	*6000	3000	250/300	200
BHRC-28M	750	650	*5000	2000	200/250	150/200
BHRC - 35	1000	800	*6000	3200	300/350	200/250
BHRC-42	1200	1000	*6000	3000	400/500	350/300
BHRC - 7	1400	1400	*6000	3000	500/600	350/400
MNCV 37-20	1000	850	*6000	1000	300	200

\* Longer CAN available optionally

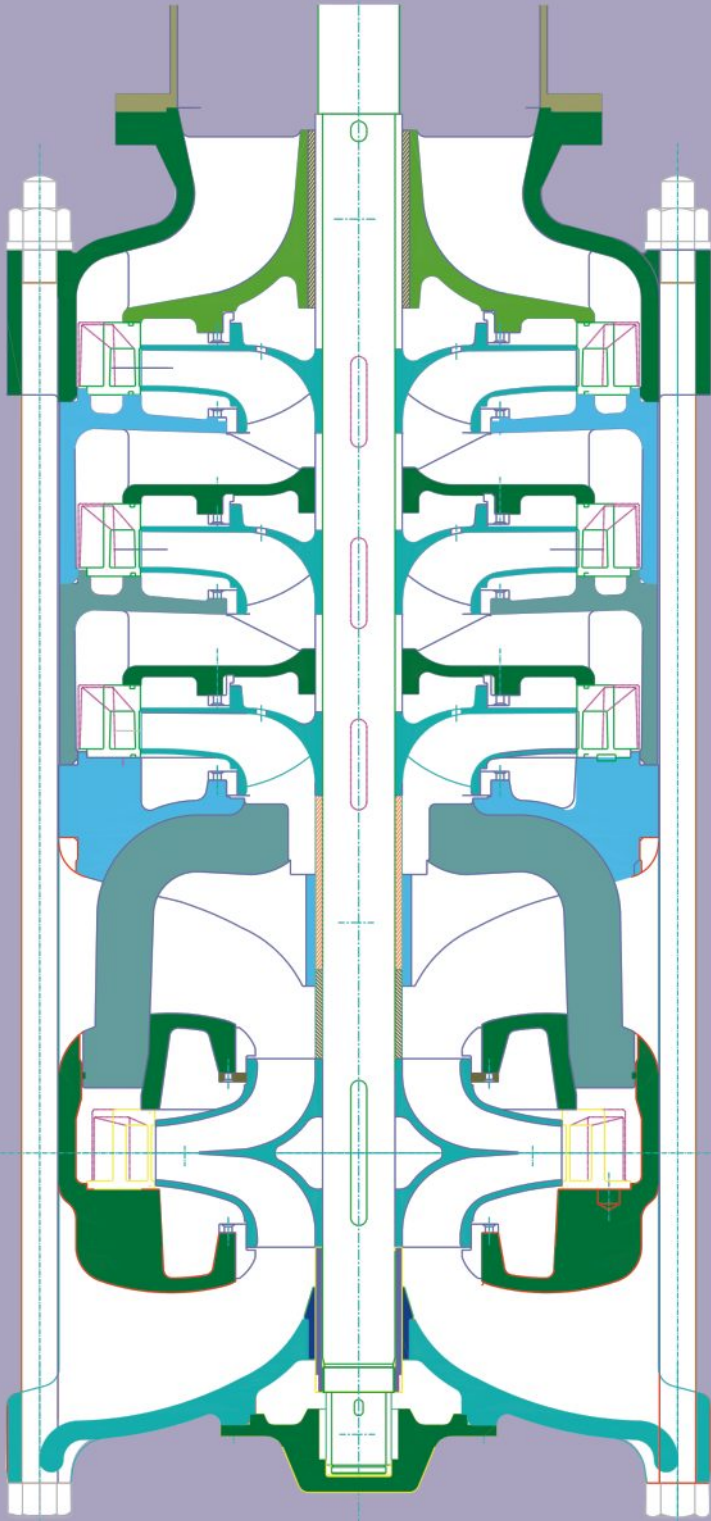
**Cross Sectional View**

**BHRC7 PUMP**

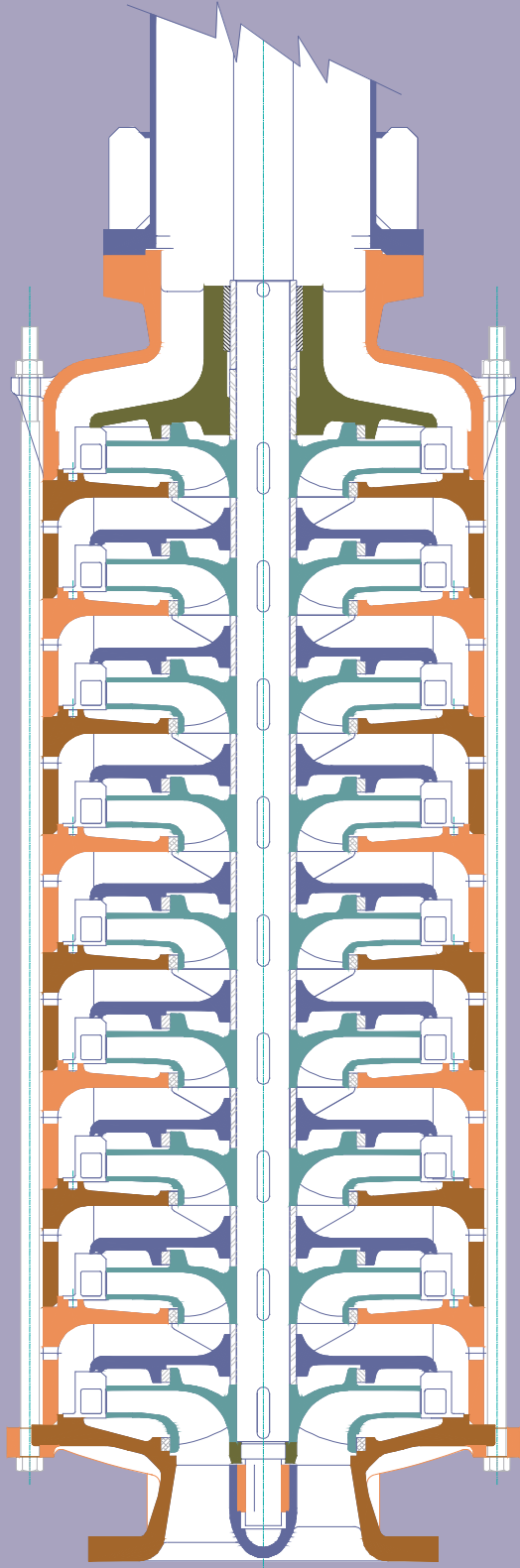


**Pump Unit Assembly**

**BHRC7 PUMP**



**BHRC28M PUMP**

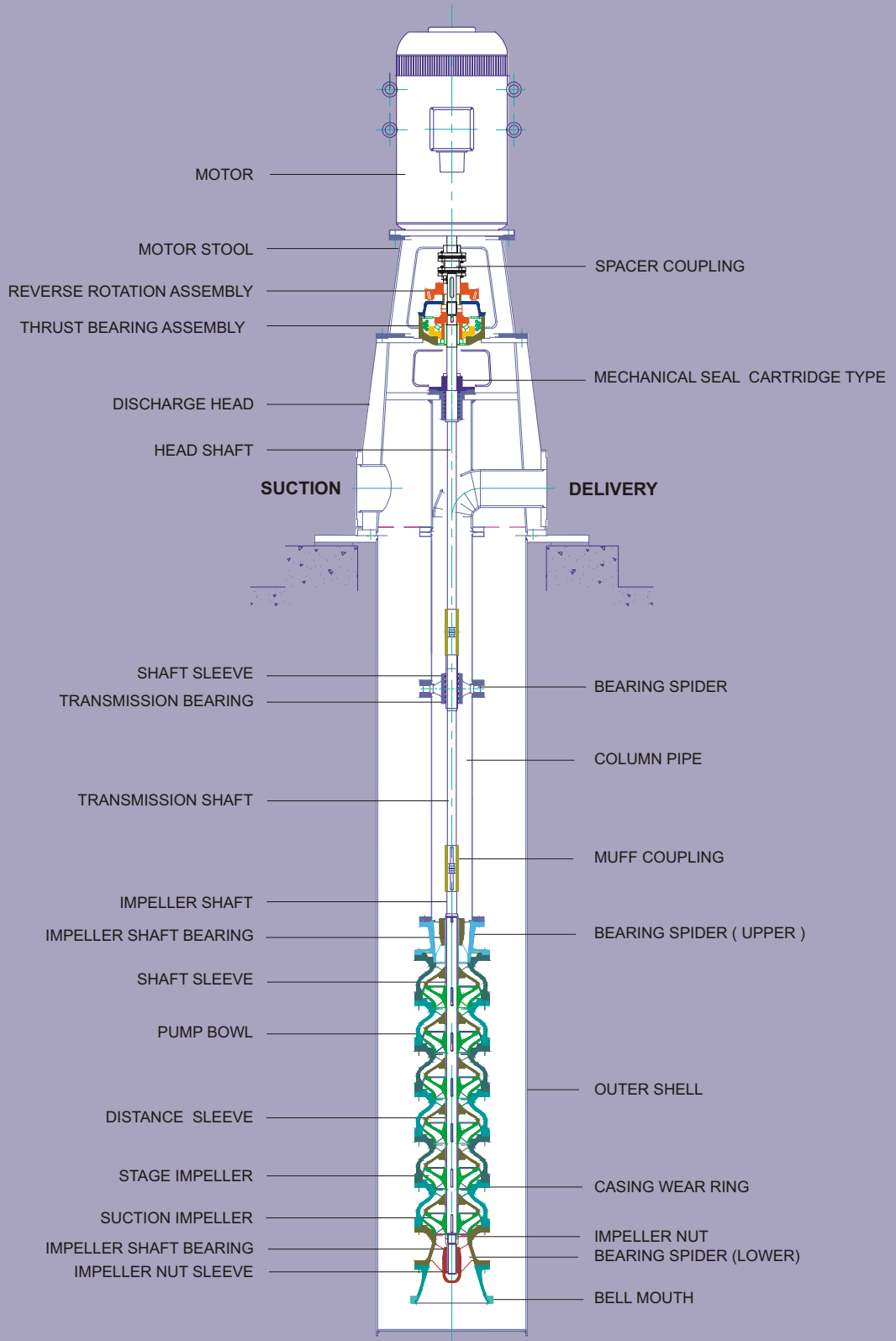


# KIRLOSKAR CONDENSATE EXTRACTION PUMPS

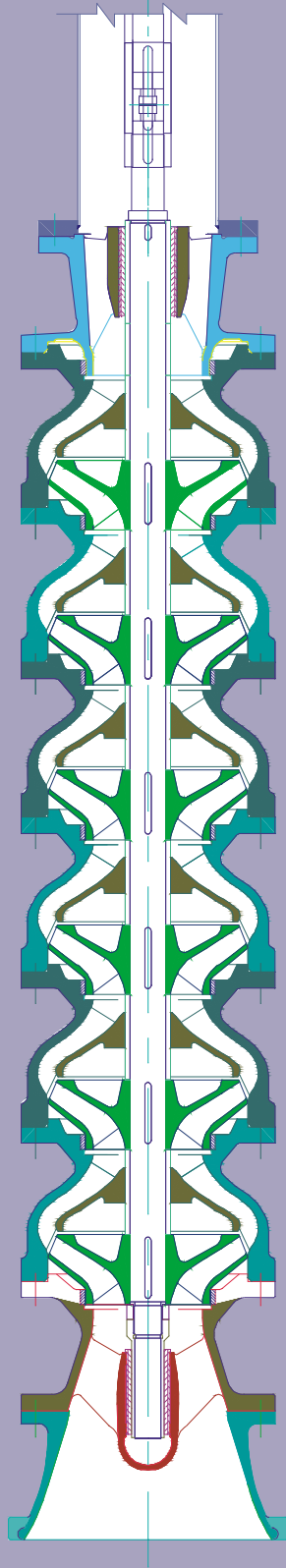
TYPE - BHRC / MNCV

## Pump Unit Assembly

### BHRC28 / 35 / 42 PUMP

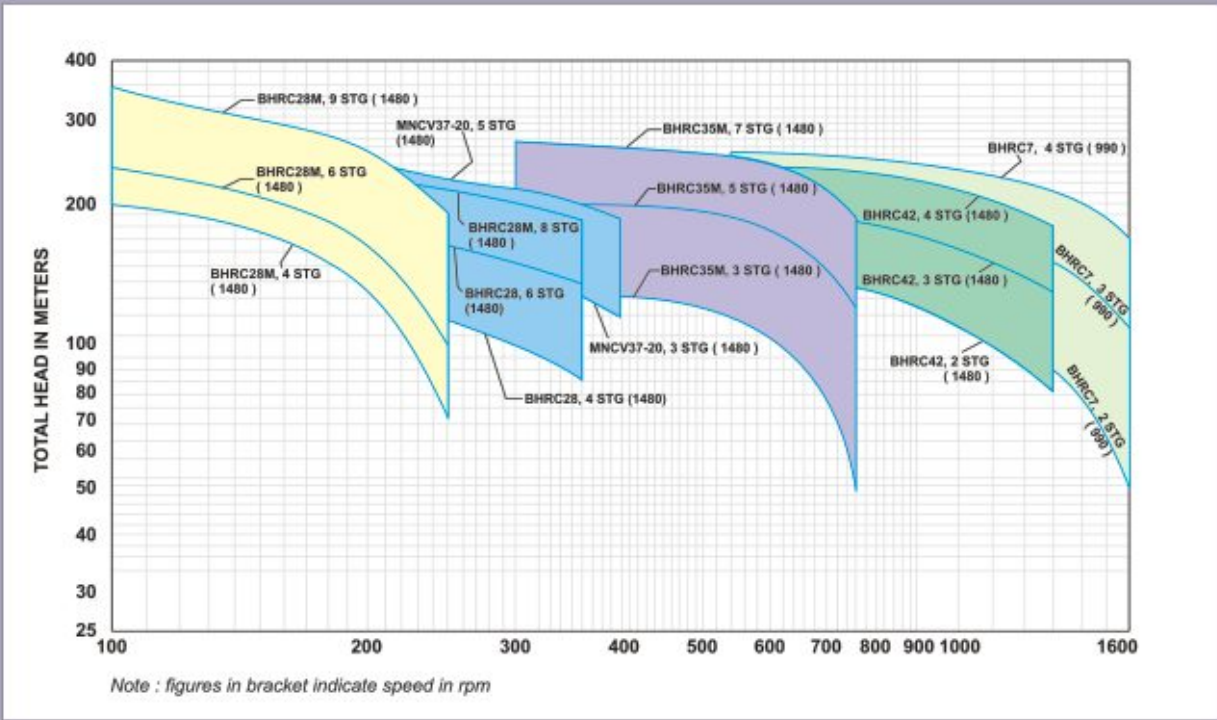


**BHRC28 PUMP**

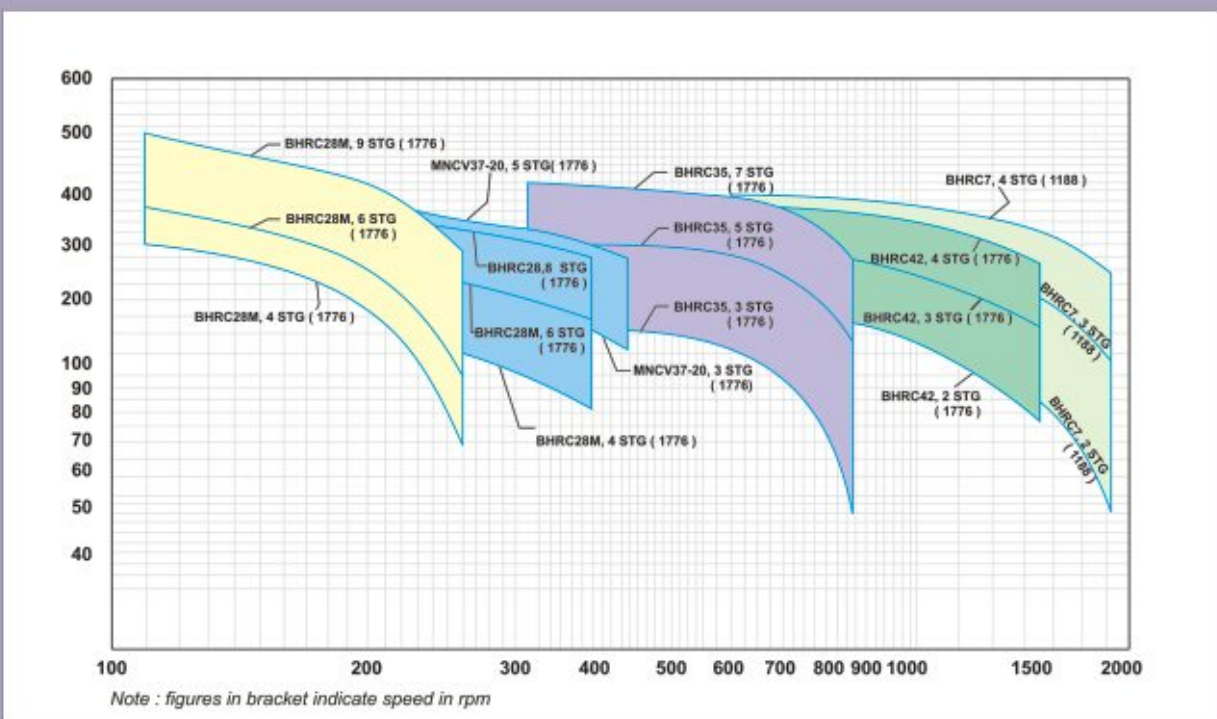


Family Curves

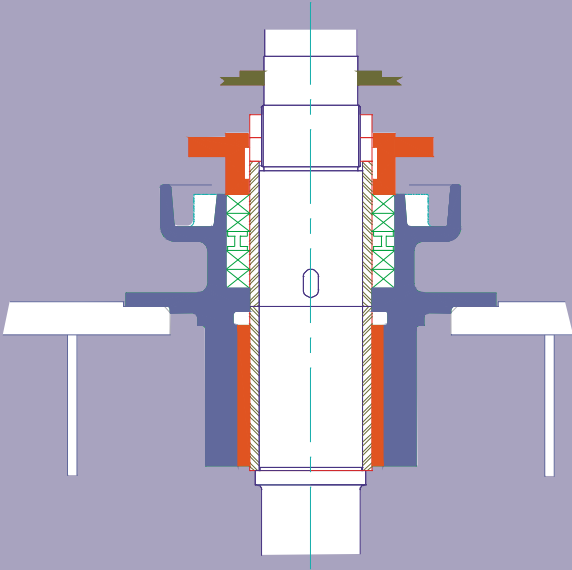
**BHRC and MNCV Pumps (50Hz)**



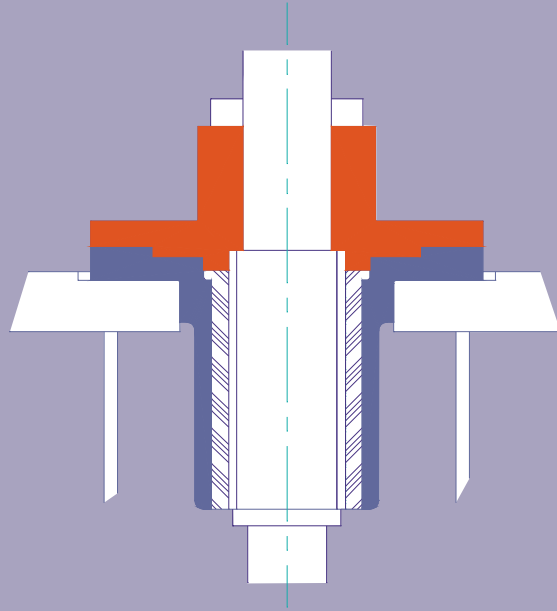
**BHRC and MNCV Pumps (60Hz)**



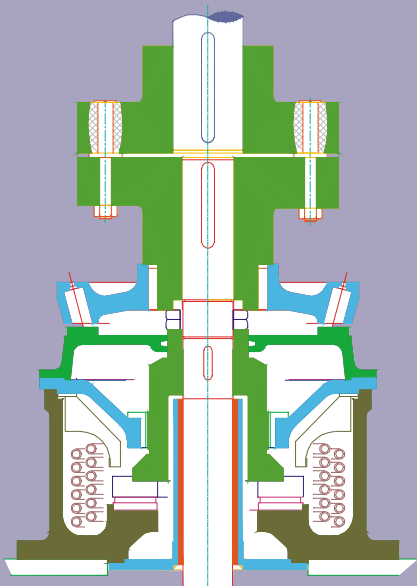
**Alternative Arrangement**



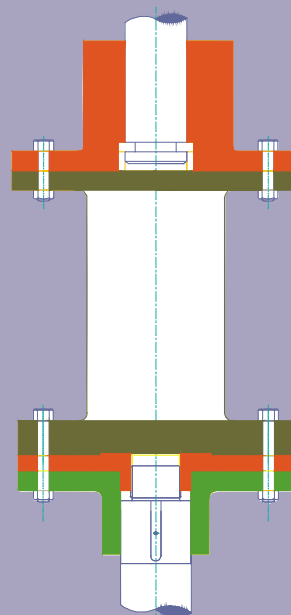
**Stuffing Box Arrangement**



**Mechanical Seal Arrangement**



**Thrust Bearing With Flexible Coupling**



**Rigid Coupling With Spacer Thrust Bearing In Motor**

As we are constantly endeavouring to improve the performance of our products/equipment, we reserve the right to make alterations from time to time, and as such our products/equipment may differ from that detailed in this publication. For latest information you may get in touch with our Regional Sales Offices.



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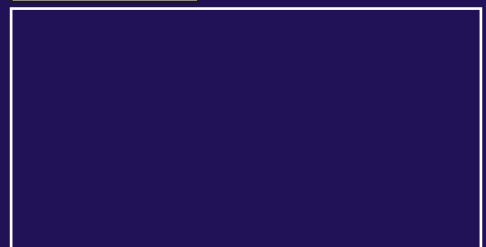


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