

# HORIZONTAL PUMPS







### Introduction

WPIL Limited, formerly known as Worthington Pump India Ltd., was established about 60 years back and has dedicated itself to the development of complete range of pumps and water handling systems.

Leveraging the hydraulic heritage of the world famous Worthington and Johnston brand and enhancing it with a sophisticated Research and Development Centre, the Company now possesses an envious product range of Pumps and capability. Its Horizontal Pump range covers the large engineered Horizontal Split Case and Volute Pumps to the smaller End Suction Pumps.

The Pumps find applications in all spheres of Industry, Power, Irrigation and Municipal Sectors from Raw Water applications, Booster Pump Applications, Cooling Water Applications, Municipal Distribution Applications to Lift Irrigation Applications. These products are the market leaders in performance.

Based on WPIL's huge manufacturing capability including 4 foundries handling various metallurgies, these pumps can be supplied in all metallurgies from simple cast iron construction to exotic super duplex stainless steels and nickel alloys.

WPIL products are backed by a world class after sales team with trained personnel who can be deputed a short notice.

Today WPIL is truely an International Company with operations accross the Globe.

### The company had following Historical Benchmarks during these long years:

- 1952 Johnston Pumps India A JV of Johnston, US
- 1983 Worthington Pump India Ltd JV of Worthington
- 1991 India's largest Cooling Water Pump
- 2003 Start of Turnkey Project Division
- 2010 Manufacture of Concrete and Metallic Volute Pumps
- 2011 Large Turnkey Projects for Water System of Power Plant
- 2011 WPIL International Formed
- 2013 Large order for 30000 KW Volute Pumps

Split Case Range - Between Bearings:



L R type - Axially Split Double Suction - Standard



U type - Axially Split Single Suction - 2 Stage



L N type - Axially Split Double Suction - Heavy Duty



WXH type - Radial Split Multistage

## HORIZONTAL PUMP RANGE

A broad line of field proven centrifugal pumps for a wide variety of applications is given. However designs as per requirements can also be provided in various materials of construction & performance ranges.



### End Suction Range:



WPE type - End Suction Back Pullout



DS type - End Suction Heavy Duty



MN type - End Suction Solid Handling - Heavy Duty

Note : 1. Designs subject to change. 2. Other sizes and options available as per requirement

## SPLIT CASE - BETWEEN BEARING LR-Axial Split Case



#### Features:

- Axially Split Case Design
- Single Stage Pump
- Range from IOM<sup>3</sup>/HR to 2200M<sup>3</sup>/HR
- Head upto 150 Mtr
- Double Suction design Closed type Impeller
- Both Horizontal & Vertical execution available

#### Advantages:

- Balanced Axial Loading
- High Efficiency
- Ease of maintenance



### Horizontal Split Case Pump "LR" Series Coverage Chart



## SPLIT CASE - BETWEEN BEARING

LN - Axial Split Case - Heavy Duty





#### Features:

- Axially Split Case Design
- Single Stage Pump
- Range from 400M<sup>3</sup>/HR to 15000M<sup>3</sup>/HR
- Head upto 200 Mtr
- Double Suction Closed type Impeller -Volute Casting design
- Suction / Discharge branches integrally cast with Casting
- Both Horizontal & Vertical execution available

#### Advantages

- Balanced Axial Loading
- Can Operate almost at shut-off capacity without excessive deflection
- High Efficiency
- Ease of maintenance
- Low noise & vibration
- Low NPSHR





Horizontal Split Case Pump ''LN'' Series Coverage Chart 6, 8 & 10 Pole 50Hz



#### Horizontal Split Case Pump "LN" Series Coverage Chart 4 Pole 50Hz

### SPLIT CASE - BETWEEN BEARING U - Axial Split Case - 2 Stage



#### Features:

- Axially Split Case Design
- 2 Stage Pump
- Range from IOM<sup>3</sup>/HR to 2200M<sup>3</sup>/HR
- Head upto 200 Mtr
- Single Suction Closed type Impeller

#### Advantages:

- Balanced Axial Loading
- High Efficiency
- Ease of maintenance
- Low NPSHR

### WXH - Radial Split Case Multi Stage



#### Features:

- Radially Split Case Suction Design
- Multi Stage Pump
- Range from 6M<sup>3</sup>/HR to 450M<sup>3</sup>/HR
- Head upto 650 Mtr

#### Advantages:

- Suitable for water supply and drainage
- Axial thrust balancing by balancing disc
- High Efficiency
- Extra Sliding bearing for longer life
- Various options available

## **END SUCTION** WPE - End Suction Pump - ISO 2858





#### Features:

- Radial Split Case Design
- Range upto 900M<sup>3</sup>/HR
- Head upto 140 Mtr
- Closed or open type Impeller
- DN 32 mm to DN 200 mm
- Casting pressure upto 16 bar

#### Advantages:

- Exceeds ANCI B 73.1 Standards
- High Efficiency
- Low noise & vibration
- Low NPSHR

### Chart of WPE - End Suction Pump - ISO 2858







## **END SUCTION** DS Industrial type - Heavy Duty





#### Features:

- Radial Split Case Design
- Range from 420M<sup>3</sup>/HR to 5000M<sup>3</sup>/HR
- Head upto 100 Mtr
- End Suction Back Pull-Outdesign
- Single Stage, Single Suction, Double Volute Casting

#### Advantages

- Low NPSH requirement
- High Efficiency
- Low noise & vibration
- Conservative loading of components
- Low wear & tear

### Chart of DS Industrial type - Heavy Duty



## **END SUCTION**

MN - Solid Handling Pumps



#### Features:

- Radial Split End Suction Design
- Range from 250M<sup>3</sup>/HR to 9400M<sup>3</sup>/HR
- Head upto 200 Mtr
- Mixed Flow Type
- Enclosed non-clog Impeller design
- Large solid & Stringy Material handling capability
- Both Horizontal & Vertical execution available, with various nozzle position

#### Advantages:

- Consistent performance over long years
- High Efficiency
- Low noise & vibration

### Chart of MN - Solid Handling Pump





# REFERENCES

Over the years WPIL has created huge references not only India but also accross the Globe some selected major ones are listed below.

#### POWER

Aravali STPP thru BHEL, India

#### **DRAINAGE & IRRIGATION**

- APSIOC, India
- UP irrigation, India
- IFC, Srinagar, India

#### MUNICIPAL

- River raw water intake in West Bengal, India
- Water Supply Project Malaysia
- KWA, India
- Delhi Jal Board, India
- Sokoto State Water Supply in Nigeria
- Osaka Steel in Nigeria
- Hidromac in Colombia



#### INDUSTRY

- Tata Steel, India
- Hindalco, Hirakund, India
- Ispat Alloys Ltd. India
- Beijing Sino Steel, China
- GHCL Ltd. India
- ITC Ltd. India
- CPCL, India
- TCI Sanmar Egypt
- Chemanol Jubali, Saudi Arabia

# FACILITY

- One dedicated factory at Ghaziabad (near Delhi) having 54,000 Sq.Mtr.Area
- In-house grey iron and non-ferrous foundry with induction furnace. Foundries in other 2 locations in India also cater in this product group.
- Test facilities to test pumps upto 10,000 M<sup>3</sup>/Hr capacity & I.5 MW, LT and HT. Test facility to test pumps upto 40,000 M<sup>3</sup>/Hr capacity & 4 MW power at Kolkata plants.
- Fully automatic machining centres for large casings/impellers & dynamic balancing setups for rotating assemblies.
- Research & Development wing recognised by Govt. of India, Ministry of Science.



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