# **Chemical Process Pumps**

### **Seal less Magnetic Drive pumps**

These pumps are 100% Leak Proof Magnetic Drive pumps. There is no shaft seal used and the impeller is provided the rotation with the help of Magnetic drive. High Power permanent rare earth Magnets are used in magnetic drive arrangement which gives high mechanical efficiency with zero slippage. These pumps are 100% Leak Proof and ideally suitable for handling corrosive chemicals, toxic and fuming liquids, acids, electroplating chemicals, dyes, solvents, petrol, kerosene, pharmaceutical and food syrups etc.

#### **Features**

- 100% Leak Proof Pumps
- No Shaft Seal to maintain, replace
- High Efficiency due to permanent magnet power coupling
- Simple design, easy to operate & maintain
- Very useful for handling highly corrosive chemicals, plating chemicals, toxic & fuming liquids

### Pump Material & Temperature Resistance

• Polypropylene Glass Field: 80 deg C

• PVDF (Polyvinylidene Fluoride): 120 deg C

## Pump Range & Capacity

• Capacity upto: 10 LPM To 750 LPM.

• Head upto: 40 Mtrs.

• Power upto: 0.12 H.P. To 5 H.P.

• Speed (RPM): 2900 RPM

• Phase : Single Phase / Three Phase

All Pumps are Available in Three Phase Power.

#### Horizontal Centrifugal Pumps

Horizontal Centrifugal Pumps are Horizontal Centrifugal Volute Casing type Process pumps with Mechanical Seal. Highly reliable and sturdy design pumps for handling corrosive liquids. Better efficiency due to computer aided design of Volute casing, Impeller etc resulting in lower power consumption and smoother operation. Heavy duty bearing box and heavy duty shaft ensures longer life of the pump.

Pumps are available with Teflon Bellow type Mechanical Seal with GFT v/s Ceramic face combination OR with pure Teflon gland packing with High Alumina Ceramic or SS 316 shaft sleeve.

These pumps are ideally suitable for handling corrosive chemicals, acidic water with mild impurities, pickling plant chemicals, effluents and boiler descaling chemicals.

Pumps are available in bare shaft pump only. Base Frame & Coupling can be provided for mounting motor directly

#### **Features**

- Made from 100% virgin PP for best resistance against corrosion and long lastings.
- Computer aided casting & impeller design for smooth hydraulic passage that gives best efficiency & performance.
- Useful for handling corrosive chemicals in various industries and different application.
- Standard design ensures interchangebility of spares

### **Pump Material & Temperature Resistance**

• Polypropylene: 80 deg C

PPH: 100 deg CPVDF: 120 deg CPFA: 180 deg C

All Pumps are Available in Three Phase Power.

# Pump Range & Capacity

• Capacity up to: 75 m3/hr.

• Head up to : 60Mtrs.

• Power up to : 1 H.P. To 15 H.P.

• Speed (RPM): 1440 RPM, 2900 RPM

#### VERTICAL GLANDLESS PUMP

Vertical Glandless Pumps are specially design to remove the problems arising from the use of Mechanical Seals, Stuffing Box Gland, Internal Bearings and Dry running in all types Centrifugal Process Pumps. The pumps are similar design to any conventional centrifugal pump. It differs in so far as, it is always mounted in the vertical position. A restriction is provided above the impeller and the need for any form of liquid seal is obviated by allowing a small leakage to escape by way of an overflow connection in the upper pump body and return to the suction vessel. The Volute Casing & Impeller are made from UHMWPE and also the over flow Casing Cover is made from UHMWPE materials to give max. high strength to pump. The Pump is supported by CI mounted bracket with SS Bolts & Nuts. Vertical Glandless Pumps are specially design to remove the problems arising from the use of Mechanical Seals, Stuffing Box Gland, Internal Bearings and Dry running in all types Centrifugal Process Pumps. The pumps are similar design to any conventional centrifugal pump. It differs in so far as, it is always mounted in the vertical position. A restriction is provided above the impeller and the need for any form of liquid seal is obviated by allowing a small leakage to escape by way of an overflow connection in the upper pump body and return to the suction vessel. The Volute Casing & Impeller are made from UHMWPE and also the over flow Casing Cover is made from UHMWPE materials to give max. high strength to pump. The Pump is supported by CI mounted bracket with SS Bolts & Nuts. Polypropylene Vertical Gland Less Pump uses for handling highly corrosive & abrasive acids, alkalis like H3PO4, H2SO4, HF, ZnSO4, Na2SO4, HCL, NaoH, etc. in Phosphoric Acid Plants, Gas Washing Plants, Rayon Plants, Caustic Soda Plants, Water Treatment Plants, Filter press for Dyes, Effluent Treatment Plants, Electro plating, Pickling in Steel Rolling Mills, Paper & Fertilizer Plants etc.

#### Features of Vertical Glandless Pump

• No mechanical seal, stuffing box and internal bearings provided.

- No maintenance since the pump can even run dry indefinitely as there is no packing, bushes or internal Bearings.
- Reduction of downtime production losses in view of above features.
- All the wet-end parts are in solid moulded construction to with stand corrosion and erosion.
- The impeller is semi-open type used in our all-vertical pumps to suit both clear and polluted fluids.
- Pump mounted outside the suction tank and is not submerged type.

# Pump Material & Temperature Resistance

• Polypropylene: 80 deg C

PPH: 100 deg CPVDF: 120 deg CPFA: 180 deg C

## Pump Range & Capacity

Capacity upto : 60m3/hr.Head up to : 50 Metres.

• Power up to : 1 H.P. To 10 H.P.

• Speed (RPM): 1440 RPM, 2900 RPM

# **Mono Block Pumps**

Mono block type PP – PVDF pumps which are small, economical and easy to use and maintain. Ideal to for transfer of corrosive liquids, pharmaceutical products, food and dairy products, chemical transfer and filtration etc. These pumps are specially designed for economic application with high capacity and discharge. Standard pumps are available with GFT Mechanical Seal.

#### Pump Material & Temperature Resistance

Polypropylene: 80 deg CPVDF: 120 deg C

# Pump Range & Capacity

• Capacity up to: 32 m3/hr.

• Head up to : 20 Metres.

• Power up to : 1 H.P. To 3 H.P.

• Speed (RPM): 2900 RPM

All Pumps are Available in Three Phase Power.

# **Application in Industries**

- Chemical Process Plants
- Fertilizers
- Textile processing Industries
- Drugs & Intermediate
- Petrochemicals

- Pulp & Paper Industries
- Pharmaceuticals
- Salt, Sugar & Marine Industries
- Food & Beverages
- Steel Industries
- Power Plants
- Oil Treatment Plant
- Water Treatment Plants
- Oil &Refinery Industries