



## VERTICAL MULTISTAGE PUMPS MCPS, MCSS, MCSSN, MCDU

### PUMP DESIGN ZERO AXIAL THRUST

The Pumps are non-self priming Vertical Multistage In-Line Centrifugal Pumps designed to occupy minimum floor Space. Un-like other Pumps with sheet metal and plastic fabricated components, our Pumps have components all cast in various metals like Cast Iron, Bronze, Stainless Steel 304 & 316 Excessive Axial thrust is balanced by assembling the Pump stages with equal number of opposed Impellers. Balancing of axial thrust allows the use of standard Flange Mounted Motor without special bearings. Pressure on Mechanical Seal reduces to half the working pressure due to opposed Impellers. The Shaft is well supported in bush Bearings making operation noise less. The Maintenance is easy & in expensive.



### HIGHLY RELIABLE CAST COMPONENTS

The Pumps have components like Base, Impellers & Diffusers are cast in various metals like Bronze, Gunmetal, SS 304(CF8e), SS 316(CF8M) & Duplex.

### STANDARD PUMPS IN EXOTIC METALS

Standard Pumps have a proven record of exceptional reliability. All parts in contact with corrosive media are made from exotic metals such as SS 304(CF8e), SS 316(CF8M), Gunmetal, Duplex etc.

This ensures that the Pumps are impervious to liquids & resistant to highly corrosive & Thermal stresses, depending on the process conditions & fluids involved.

Capacities range from 1 to 90 m<sup>3</sup> / hr & discharge head from 1 bar to 60 bar.

Besides these standard types, we cater for special requirements & develop Pumps which can also be used safely & reliably for more demanding duties. In such cases we work closely with our customers. Our team of experts analyse the required liquid transfer & on this basis develop solutions which optimally meet their requirements in terms of performance, design & economy.

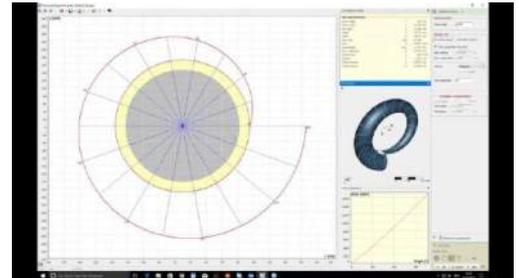




## QUALITY AT EVERY STEP PUMP DESIGN, PRODUCTION & TESTING

### DESIGN & DEVELOPMENT STEP

Pumps design department is equipped with various 3D Softwares for designing new Pumps, checking performances & the mechanical stresses.



### MACHINING

Our state-of-the-art Production facility is equipped with CNC's, VMC's & other automatic machines to machine all cast components very precisely.



### PRODUCTION

Our Pumps production line is State-of-the-art production line fitted with pneumatic tools. All the parts are fully interchangeable to get similar, effective & fast production of the Pumps.

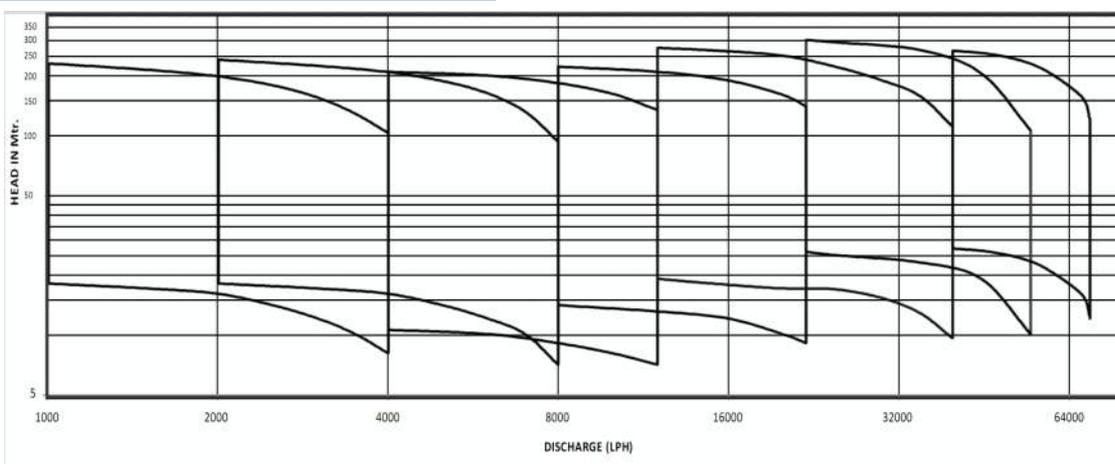


### TESTING FACILITY

Our Pump Production Center is equipped with a Test Bench for testing every Pump of any design. This enables us to meet the customers's specific requirements & ensures excellent quality & reliability in operation.



### GROUP PERFORMANCE





## QUALITY AT EVERY STEP PUMPDESIGN, PRODUCTION & TESTING

### APPLICATIONS

Pressure Boosting  
Cooling Systems  
Air-Conditioning Systems  
Horticultural Irrigation  
Water Treatment Systems

Boiler Feeding Systems  
Fire Fighting Systems  
Industrial Plants  
Reverse Osmosis Systems  
Ultra filtration Systems



High Pressure Pumps.(Combo)  
Pressure: 60 Bar. Flow: 90 M<sup>3</sup>/Hr



Jockey Pump fitted in Fire Fighting System.



Hydropneumatic Pressure Booster Pumps



Boiler Feed Pumps



**QUALITY AT EVERY STEP PUMPDESIGN, PRODUCTION & TESTING**

**Water Evaporation Systems for the Mining Industry**



**Space saving vertical Pumps for Shipping Industry**





PUMP COMPONENTS

**PUMP WITH BOTTOM BUSH**

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	LOCK WASHER
10	RUBBER GASKET
11	MECHANICAL SEAL
12	TOP DIFFUSER
13	LOCK RING
14	KEY
15	SHAFT
16	LOCK NUT
17	BASE PLATE
18	MOTOR
19	BOTTOM CASING(BASE)
20	BUSH HOUSING
21	BOTTOM BUSH
22	HOUSING BOLTS
23	MECH. SEAL JACKET
24	BOTTOM DIFFUSER
25	T C BUSH

**PUMP WITH REVERSE FLOW STAGE**

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	BUSH SPACER
10	LOCK WASHER
11	RUBBER GASKET
12	MECHANICAL SEAL
13	TOP DIFFUSER
14	LOCK RING
15	KEY
16	SHAFT
17	LOCK NUT
18	BASE PLATE
19	MOTOR
20	BOTTOM CASING
21	BUSH HOUSING
22	BOTTOM BUSH
23	HOUSING BOLTS
24	MECH. SEAL JACKET
25	BOTTOM DIFFUSER
26	T C BUSH
27	REVERSE FLOW STAGE