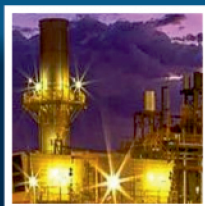


# IPD - PROFILE



# END SUCTION CHEMICAL PROCESS PUMP

## ECC Series



### ■ OPERATING DUTY

HEAD	:	198m
CAPACITY	:	1000 m <sup>3</sup> /hr
SPEED	:	2/4/ 6 POLES (50 HZ)
WORKING PRESSURE	:	20 bar
TEMPERATURE	:	(-30 to 180 )deg C
SOLID SIZE	:	50 MM (MAX)

### ■ MOC OFFERED

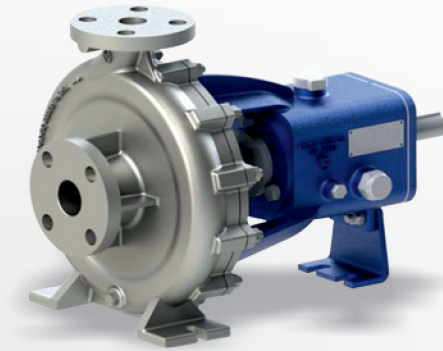
CS|CF8|CF8M|CF3M and Other HIGH ALLOY materials  
CI / SS Fitted ( Made to Order)

### ■ SALIENT FEATURES

ANSI B 73.1 pump with Flange to ANSI B 16.5 Class 150  
Semi open impeller ( Expeller type Optional)  
Back pull out design with Splash Oil Lubrication  
Casing-stuffing box jackets | vertical spindle - optional  
Sealing : M. Seal ( Single & Double ) & Gland packing

# END SUCTION LOW FLOW CHEMICAL PROCESS PUMP

## ECC Series



### ■ OPERATING DUTY

HEAD	:	Up to 60m
CAPACITY	:	Up to 15 m <sup>3</sup> /hr
SPEED	:	2 / 4 POLES
WORKING PRESSURE	:	10 bar
TEMPERATURE	:	(-30 to 180) deg C
SOLID SIZE	:	3 TO 6 MM (MAX)
FREQUENCY	:	Both 50 & 60Hz

### ■ MOC OFFERED

ALL SS Fitted  
Other Material on Request

### ■ SALIENT FEATURES

Especially for low flow applications  
Semi Open Impeller locking options threaded type  
Shaft Sealing options (Gland packing, Single Mech. seal) (Common seal housing)  
Flange conforms to ANSI B 16.5 Class 150  
Back Pull Out Design  
oil lubrication- Oil Bath Method  
Integrated bearing frame

# END SUCTION PAPER / PULP & PROCESS PUMP ECP Series



## ■ OPERATING DUTY

HEAD	:	up to 95 M
CAPACITY	:	up to 3600 m <sup>3</sup> /hr
SPEED	:	4 6 8 pole
CONSISTENCY	:	up to 8% & to 10% with Inducer
WORKING PRESSURE	:	10 bar
TEMPERATURE	:	180 deg C (max)
FREQUENCY	:	Both 50 & 60Hz
MAX SOLID SIZE	:	95 mm

## ■ MOC OFFERED

ALL SS Standard.  
CI with SS Fitted (Made to order)

## ■ SALIENT FEATURES

Semi open impeller with Replaceable Suction Wear Plate  
Splash Oil Lubrication  
Shaft sealing both M. Seal & Gland packing ( Common Seal Housing)  
Flange Drilling to ANSI B 16.5 & Class 150.  
Back Pull Out Design

# END SUCTION PUMP - ECW Series



## ■ OPERATING DUTY

HEAD	:	Up to 160m
CAPACITY	:	up to 600 m <sup>3</sup> /hr
SPEED	:	2 / 4 / 6 POLES
WORKING PRESSURE	:	16 bar ( Maximum)
DESIGN PRESSURE	:	1.5 X W.P ( Minimum)
TEMPERATURE	:	-30 to 140 Deg C.
FREQUENCY	:	Both 50 & 60Hz

## ■ MOC OFFERED

ALL CI , CI With Bronze & CI With SS Impeller  
ALL CF8, CF8M and STEEL ALLOYS.

## ■ SALIENT FEATURES

Design conforms to EN 733 and Flange drilling to ISO 7005 / DIN 2533 as per rating PN 16

High Efficiency with Closed Impeller and Casing + Stuffing Box Wear ring

Shielded Grease bearing

Shaft sealing M. Seal (Single component & Cartridge seal option) & Gland packing (Same Housing & Shaft. Only Sleeve change).

No gasket @ impeller & Sleeve. Replaced by O ring design and Serrated impeller nut

Stuffing box designed with internal cooling ( Plan 01) of shaft sealing. External cooling ( Plan 11 ) is optional.

# CLOSE COUPLED PUMP - CCW Series



## ■ OPERATING DUTY

HEAD	:	Up to 90m
CAPACITY	:	up to 115 m3/hr
SPEED	:	2 / 4 POLES
WORKING PRESSURE	:	16 bar
TEMPERATURE	:	-30 to 140 deg C
FREQUENCY	:	Only 50 HZ
IMPELLER SIZE	:	125 TO 250 MM
POWER	:	Up to 45 KW

## ■ MOC OFFERED

All CI, CI/Bronze fitted and CI/SS fitted- All Models 43 Models  
Stuffed Shaft in SS 410 Material Std.

## ■ SALIENT FEATURES

Flanges rating conforms to PN 16 and drilling as per DIN  
Closed Impeller design with stub shaft.  
Impeller Keyed & nut to Shaft.  
Shaft sealing only Mechanical Option ( Bellow Seal Single option)  
Totally 215 Motor frame variations developed.

## ■ APPLICATIONS

Industrial pressure boosting, HVAC, Firefighting predominantly

# VERTICAL INLINE SINGLE STAGE PUMP

## VIL SERIES



### ■ OPERATING DUTY

HEAD	:	Up to 96m
CAPACITY	:	up to 503 (VC)/ 421 (VS) m <sup>3</sup> /hr
SPEED	:	2 / 4 POLES ( VS 2 pole under Develop)
WORKING PRESSURE	:	16 bar
TEMPERATURE	:	130 deg C
FREQUENCY	:	50 HZ
INLET & OUTLET	:	40 to 200 MM
Power Range	:	90 KW (VC) and 75 (VS)
Motor	:	IP55, Class F

### ■ MOC OFFERED

ALL CI, CI With Bronze  
Shaft & Sleeve in SS 410 Material. Bracket in CI.

### ■ SALIENT FEATURES

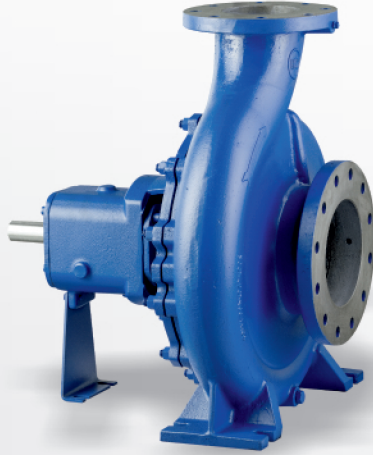
Easy mounting with Same suction & delivery size  
Closed impeller & Occupies very less Space  
Self Lubrication by Internal Circulation & Provision for External Lubrication  
Inside mounted Mechanical seal / Dry Seal  
Flange rating confirms to DIN 2533 & PN 16

### ■ CONFIGURATIONS

VC- Closed coupled pump, VS- Split Coupled pump

# END SUCTION MIXED FLOW PUMPS

## ECM SERIES



### ■ OPERATING DATA

Flow	:	Max. 3600 m <sup>3</sup> /h
Head	:	Max. 45 m
Outlet size Range	:	DN 200mm to DN 450mm
Working Temperatures	:	Up to 60°C
Operating Pressures	:	Max. 16 bar
Speed	:	4/6/ Poles & both 50/60 HZ.

### ■ MOC OFFERED

All CI, CI With Bronze Impeller, All SS (Optional)  
Other materials also Available on Request.

### ■ SALIENT FEATURES

Shaft sealing both M. Seal & Gland packing  
Dimensions confirms to ISO 2858 Standard  
Heavy duty bearings ensures longer life.  
Back Pullout Design

# Horizontal split case Pump - SCW SERIES



## ■ OPERATING DATA

Flow	:	Max. 30000 m <sup>3</sup> /h
Head	:	Max. 200 m
Working Temperatures	:	Up to 200°C
Operating Pressures	:	Max. 16 / 20bar
Maximum Power	:	3150 KW
Speed	:	2 /4/6/ Poles & both 50/60 HZ.

## ■ MOC OFFERED

DCI, CI With CI/Bronze Impeller, SS Fitted (Made to order)  
Other materials also Available on Request.

## ■ SALIENT FEATURES

Robust double volute casing for High flow & head.  
High Efficiency with double suction Closed Impeller  
Shaft sealing both M. Seal ( Cartridge) & Gland packing ( Common Seal Housing)  
Designed with replaceable casing wear rings, and optional impeller wear rings.  
Deep groove ball bearing at both the sides results in low shaft deflection  
Flange drilling standards to DIN/ISO & ANSI.  
Direction of rotation is clockwise/Anticlockwise viewed from driver.  
Grease lubrication as standard.  
Seal Housing common for drive & non drive end

# Vertical Turbine Pump - VT Series



## ■ Operating Parameters

Capacity : 12000 m<sup>3</sup>/hr  
Head : Upto 200 Mtrs

## ■ Material of Construction

All CI, NICI and Steel Alloys

## ■ Applications

Primarily used in places where it is impossible to use submersible pump.  
Used in bore wells to provide agricultural or irrigation.  
Ground water supplies for municipalities that don't rely on surface water  
Fire water for industrial plants  
Open body of water such as a reservoir, river or pump intake structure.

## ■ Few advantages

Space savings – a vertical pump uses 75% less floor space than a horizontal pump with electric motor drive.

Driver is up off the floor, therefore there is less danger of damage due to flooding.

Adaptable to wide range of water supplies and different water levels. Column length can be varied to fit application and tailored to fit any water level situation (floods, tides), off shore platforms, rivers, wells, reservoirs, ponds.

# VERTICAL MULTISTAGE INLINE PUMP MV SERIES



## ■ Performance Range / Operation Limits

Flow	:	Max. 30000 m <sup>3</sup> /h
Head	:	Max. 200 m
Working Temperatures	:	Up to 200°C
Operating Pressures	:	Max. 16 / 20bar
Maximum Power	:	3150 KW
Speed	:	2 / 4/6/ Poles & both 50/60 HZ.

## ■ Applications

- Pressure Boosting.
- Pumping Clean Liquid in Industries.
- Reverse Osmosis & DM Plant.
- Boiler Feed.
- Fire Fighting
- Hot & Cold Water Circulation.
- Industrial Washing.

# VERTICAL SUMP PUMPS



## ■ Advantages

- No Priming Requirements
- Occupies less Space
- Reduced foundation costs
- Increased System Reliability
- Promotes a safer work environment
- Eliminates pressurized seal area & Seal wear.

## ■ Salient features

- Maximum standard sump depth up to 7m. Higher depth can be offered on case to case basis.
- External shaft adjustment allows for simplified (top side) impeller clearance adjustment
- Direct Motor driven with fixed Rpm and Variable RPM with belt and pulley driven.
- Circular / Rectangular Top mounting plate
- With / Without Gland Packing , Mechanical Seals
- With / Without external cooling
- Setting heights from 0.5m to 7 meter with 0.5m increment

## ■ Material of Construction

- The Vertical Cantilever pumps can be offered in:  
ECC, ECW, & ECP Series.

# BOOSTING SYSTEM



## ■ BOOSTING- System Salient Features

Variable Frequency Drive (VFD) and Programmable logic controller (PLC) to regulate the speed of the duty pump as deliver required flow rate and maintain constant pressure.

The complete system mounted on a single rigid base and factory tested, ensures the reliability of the system functions.

High operating efficiency of the system.

# Dust Suppression Pump



Model IW 36

SIZE : 100x80x250

Duty parameters

Flow & Head:  $180 \text{ m}^3/\text{h}$  @ 80 m