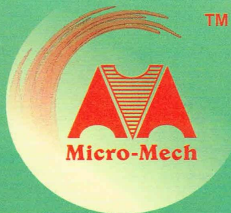
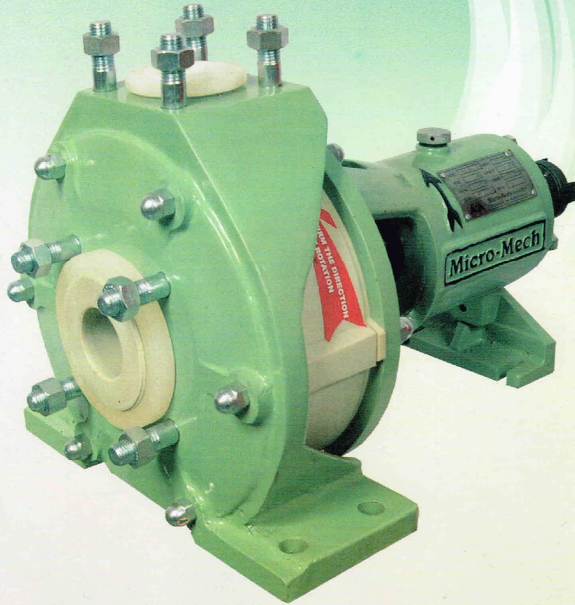


# Micro-Mech

## POLYPROPYLENE CENTRIFUGAL BACK-PULL OUT PUMPS



TM

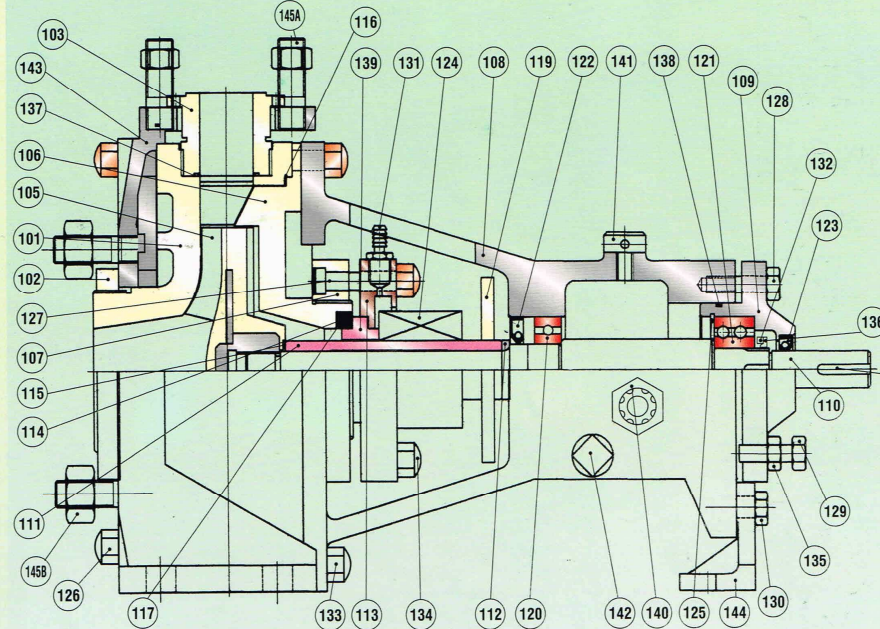
**CORROSIVE**

**TOTAL PUMPING SOLUTIONS...**

## SERIES MBD

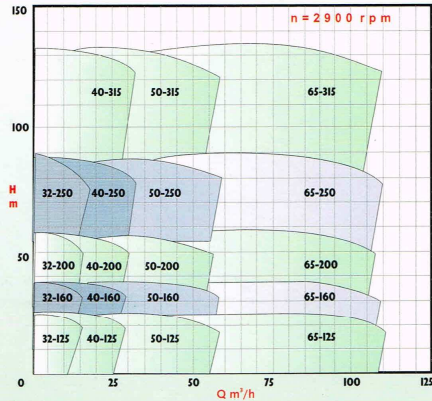
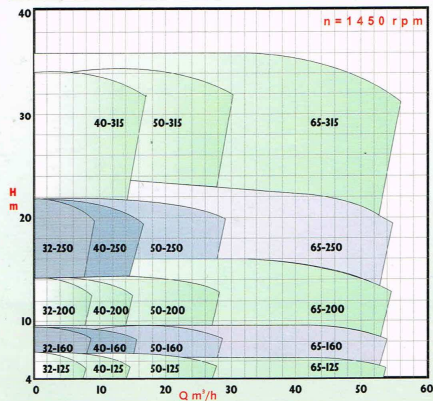
### SERIES "MBD" PUMPS

Series "MBD" industrial centrifugal Plastic pumps are designed and manufactured to meet the stringent requirement for handling corrosive liquids including moderate slurries. The pump design conforms to IS-5120 standard, which gives higher efficiency. All wetted parts coming in contact with media are injection molded, which can withstand in higher pressures. These pumps have a Back Pull-out construction for easy maintenance without armour provides maximum protection against suction and the discharge nozzles of the pump. There fore can handle maximum misalignment, distortion and piping lods. The pump shaft is protected from corrosive media with reliable sealing arrangement. Our pump manufacturing program ensures quality, reliability and trouble free operation for long duration.



No.	qty	Part Name	Material	No.	qty	Part Name	Material	No.	qty	Part Name	Material
101	1	CASING	PP/GRP	117	1	GASKET MATING RING	PTFE	133	6	NUT WITH GRP	STEEL WITH GRP
102	1	SUCTION FLANGE	PP/GRP	118	1	KEY	STEEL	134	4	NUT WITH GRP	STEEL WITH GRP
103	1	DISCHARGE BRANCH	PP/GRP	119	1	DEFLECTOR	PP	135	3	LOCK NUT	STEEL
				120	1	INBOARD BEARING	STEEL	136	1	BEARING LOCK NUT	STEEL
105	1	IMPELLER	PP/GRP	121	1	OUTBOARD BEARING	STEEL	137	1	O' RING DISCHARGE	VITON
106	1	STUFFING BOX	PP/GRP	122	1	INBOARD OIL SEAL	NEOPRENE	138	1	O' RING	NEOPRENE
107	1	STUFFING BOX FLANGE	PP	123	1	OUTBOARD OIL SEAL	NEOPRENE	139	1	MATING RING	CERAMIC
108	1	BEARING FRAME	CI	124	1	ROTARY	GFT	140	1	OIL VIEWER	ALLUMINIUM
109	1	BEARING CUP	CI	125	1	CIRCLIP (INTERNAL)	STEEL	141	1	BREATHER	STEEL
110	1	SHAFT	EN8	126	6	HEX. BOLT	STEEL WITH GRP	142	1	DRINE PLUGE	STEEL
111	1	SLEEVE	HB/CERAMIC/A-20	127	4	HEX. BOLT	STEEL	143	1	ARMOUR	C.I.
112	1	SLEEVE SUPPORTER	SS316	128	3	HEX. BOLT	STEEL	144	1	SUPOKT PLATE	C.I.
113	1	GLAND	BAKELITE	129	3	HEX. BOLT	STEEL	145A	4	STUD WITH NUT	STEEL
114	1	CFT BUSH	CFT	130	1	HEX. BOLT	STEEL	145B	4	STUD WITH NUT	STEEL
115	1	IMPELLER GASKET	PTFE	131	2	NIPPLE	PP				
116	1	GASKET CASING	PTFE	132	1	LOCKING WASHER	STEEL				

## FAMILY CURVES



### DESIGN CONSTRUCTION DETAILS :-

Casing, stuffing box and impeller are offered in Various Material

- polypropylene\*
- UHMW
- HDPE
- Glass-fibre Reinforced polypropylene
- PTFE

\* Offered as standard

### IMPELLER :-

Solidly moulded, semi-open impeller with metal insert ensures high strength and durability. The impeller is dynamically balanced as per ISO 1940 to achieve minimum vibration and extended bearing life.

### SHAFT :-

As a standard shaft is offered EN-8 Material. Different materials can be offered on request.

### SHAFT SLEEVE :-

Sleeve is protecting the shaft from the attack of corrosive media and can be offered in various materials after confirming chemical compatibility.

- Ceramic (99.5% Alumina Oxide)\*
- Silicon Carbide
- Monel
- Alloy-20 (CN 7M)
- Hastelloy-B
- Hastelloy-C
- Titanium

\* offered as a standard.

### MECHANICAL SEAL:-

As single externally mounted PTFE bellows Mechanical Seal with various face combination is offered after confirming chemical compatibility.

- GFT v/s CERAMIC\*
- GFT v/s SILICON
- CARBON v/s CERAMIC
- CARBON v/s SILICON
- SILICON v/s SILICON

\* offered as a standard.

### SEALING :-

'O' Ring and Gaskets Sealing are provided in the joints to ensure better sealing even at high pressure.

## ACCESSORIES

### PRIMING CHAMBER :-

This is specially used for negative suction. It is effective in handling liquids with slurry or particles, as it does not get clogged as easily as the foot valve.

### TROLLEY :-

A specially designed, vibration free trolley keeps the pump mobile, whenever required. Further, the trolley can also be provided with FRV coating on the parts exposed to chemical drip.

Liquid	Formula	Liquid	Formula
Acetic Acid	CH <sub>3</sub> COOH	Lactic Acid	CH <sub>3</sub> CHOHCOOH
Aluminium Chloride	Al Cl <sub>3</sub>	Magnesium Sulphate	Mg SO <sub>4</sub>
Aluminium Hydroxide	Al (OH) <sub>3</sub>	Nickel Chloride	Ni Cl <sub>2</sub>
Aluminium Sulfate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	Nickel Sulphate	Ni SO <sub>4</sub>
Alums Conc.	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> K <sub>2</sub> SO <sub>4</sub> etc	Oxalic Acid	CO <sub>2</sub> HCO <sub>2</sub> H
Alums Dilute	-	Phosphoric Acid (100%)	H <sub>3</sub> PO <sub>4</sub>
Ammonia Gas Moist	NH <sub>3</sub>	Phosphoric Acid (15% cold)	-
Ammonia Carbonate	(NH <sub>3</sub> ) <sub>2</sub> CO <sub>3</sub>	Phosphoric Acid (45% cold)	-
Ammonium Nitrate	NH <sub>4</sub> NO <sub>3</sub>	Phosphoric Anhydride	Dry or Moist
Ammonium Chloride	NH <sub>4</sub> Cl	Potassium carbonate	K <sub>2</sub> CO <sub>3</sub>
Ammonium Phosphate	(NH <sub>4</sub> ) <sub>2</sub> PO <sub>4</sub>	Potassium Chloride	KCl
Arsenic Acid	As O <sub>5</sub>	Potassium Dichromate	K <sub>2</sub> CR <sub>2</sub> O <sub>7</sub>
Barium Sulphide	BAS	Potassium Hydroxide	KOH
Calcium Chloride	CaCl <sub>2</sub>	Potassium Nitrate	KNO <sub>3</sub>
Calcium Hypochlorite	Ca(OCl) <sub>2</sub>	Potassium Permanganate	KMnO <sub>4</sub>
Carbon dioxide (Wet)	H <sub>2</sub> CO <sub>3</sub>	Silver Nitrate	Ag NO <sub>3</sub>
Chlorine (Dry)	Cl <sub>2</sub>	Sodium Bisulphate	NaHSO <sub>4</sub>
Chlorine (Wet)	Cl <sub>2</sub>	Sodium Carbonate	Na <sub>2</sub> CO <sub>3</sub>
Chromic Acid	CrO <sub>3</sub>	Sodium Chlorate	NaClO <sub>3</sub>
Copper chloride	Cu Cl <sub>2</sub>	Sodium Chloride	NaCl
Copper Nitrate	Cu(NO <sub>3</sub> ) <sub>2</sub>	Sodium Hydroxide (Conc.)	NaOH
Copper Sulphate	CuSO <sub>4</sub>	Sodium Hydroxide (Dilute)	-
Ferric Chloride	FeCl <sub>3</sub>	Sodium Sulphate	Na <sub>2</sub> SO <sub>4</sub>
Ferrous Sulphate	FeSO <sub>4</sub>	Sodium Sulphide	Na <sub>2</sub> S
Formaldehyde	CH <sub>2</sub> O	Stannous Chloride	Sn Cl <sub>2</sub>
Formic Acid	HCOOH	Stearic Acid	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>16</sub> COOH
Glycerol	CH <sub>2</sub> OH CHOH CH <sub>2</sub> OH	Sulphuric Acid (75%, 95%)	-
Hydrobromic Acid	HBr	Sulfuric Acid 10%, 75%	-
Hydrochloric Acid Conc.	HCL	Tannic Acid	-
Hydrochloric Acid Dilute	-	Zinc Chloride	ZnCl <sub>2</sub>
Hydrochloric Acid Conc.	HF	Zinc Sulphate	Zn SO <sub>4</sub>
Hydrochloric Acid Dilute	-	Barium Sulphide	BAS
Hydrochloric Peroxide (Dilute)	-		

We reserve the right to change specification without notice.

## Technical Specification of Pumps

Capacity..... 200 m<sup>3</sup>/hr  
 Head ..... 150 meters  
 Viscosity..... 100 cp  
 Temperature..... 180° C  
 RPM..... 1450/2900



# Micro-Mech Industries