

Pumps and Pumping Systems

Overview Brochure

Water Management, Building Services and Industry segments

Bangalore
Mather and Platt Pumps Ltd.
S & S Elite Building, 2nd Floor, No. 197,
10th Cross, CBI Road, Ganganagar,
R. T. Nagar Post, Bangalore-560 032
Ph: +91 80 23541887
Email: mnpblr@matherplatt.com

Bhubaneswar
Mather and Platt Pumps Ltd.
B-15, 2nd Floor, Arihant Plaza,
Shahid Nagar, Bhubaneswar-751 007
Ph: +91 674 2541738
Email: mnpbhu@matherplatt.com

Chandigarh
Mather and Platt Pumps Ltd.
SCO 18, FF, Cabin No. 4, Sector 26,
Madhya Marg, Chandigarh-160 026
Ph: +91 172 3913891
Email: mnpchd@matherplatt.com

Chennai
Mather and Platt Pumps Ltd.
2nd Floor Mootha Centre 23, Kodambakam
High Road, Nungambakkam, Chennai-600 031
Ph: +91 44 28251171
Email: mnpchn@matherplatt.com

Delhi
Mather and Platt Pumps Ltd.
602, 604, 606, 608, Ansal Chambers-II,
Bhikaji Cama Place, New Delhi-110 066
Ph: +91 11 40811111
Email: mnpdel@matherplatt.com

Dhanbad
Mather and Platt Pumps Ltd.
Vishwa Mitra Kutty, Jai Prakash Marg,
Lane No. 3, Denobli Road, Dhanbad-825 001
Ph: +91 326 2203673
Email: mnpdhn@matherplatt.com

Hubli
Mather and Platt Pumps Ltd.
H No. 132, Sali Layout, Opp. Gangubhai Hangal
Gurukul, Sainagar Railway Gate,
Unkal, Hubli-580 032
Ph: +91 9741125941
Email: mnpHub@matherplatt.com

Indore
Mather and Platt Pumps Ltd.
112, Royal Gold, 4 Y N Rd,
Near High Court, Indore-452 001
Ph: +91 731 4003570
Email: mnpind@matherplatt.com

* Technical matter subject to change

Jaipur
Mather and Platt Pumps Ltd.
317, 2nd Floor Apex Mall,
Tonk Road, Jaipur - 302 015
Ph: +91 141 4038844
Email: mnpjai@matherplatt.com

Kolkata
Mather and Platt Pumps Ltd
"Shaila Towers", 3rd Floor,
J1 /16, EP Block, Sector V,
Salt Lake City, Kolkata-700 091
Ph: +91 8100218116
Email: mnpkol@matherplatt.com

Lucknow
Mather and Platt Pumps Ltd.
F-2(D), 2nd Floor, A. F. Tower,
Park Road, Hazaratganj,
Lucknow-226 001
Ph: +91 522 2239556
Email: mnpiko@matherplatt.com

Nagpur
Mather and Platt Pumps Ltd.
A-1, Ground Floor, Avanti Appt.,
Plot No 300, Lakshmi Nagar,
Nagpur - 440 022
Ph: +91 712 2245519
Email: mnpngp@matherplatt.com

Pune
Mather and Platt Pumps Ltd.
Sales and Marketing Office
Office No. 201-206, 2nd Floor, CB-2,
Empire Estate, Mumbai-Pune Road,
Pune-411 019
Ph: +91 20 67347100
Email: sales@matherplatt.com

Raipur
Mather and Platt Pumps Ltd.
Maruti Heights, Office No. 2,
3rd Floor, Mahoba Bazar, G.E. Road,
Raipur-492 001
Ph: +91 771 4055911
Email: mnprrp@matherplatt.com

Secunderabad
Mather and Platt Pumps Ltd.
506, Amsri Classic Building, S.D. Road,
Secunderabad - 500 003
Ph: +91 40 27700971
Email: mnpHyd@matherplatt.com

Thane
Mather and Platt Pumps Ltd.
601, Dev Corpora, 6th Floor,
Opp. Cadbury Company,
Eastern Express Highway, Khopat,
Thane (W)-400 602
Ph: +91 20 41222411
Email: mnpmm@matherplatt.com

Vadodara
Mather and Platt Pumps Ltd.
316, Race Course Tower, Race Course Circle,
Gotri Road, Vadodara-390 007
Ph: +91 265 2334289
Email: mnpbrd@matherplatt.com

Pune Works
Mumbai Pune Road,
Chinchwad, Pune-411 019,
Maharashtra, INDIA.
Ph: +91 20 27442100

Kolhapur Works
Gokul Shirgaon, MIDC,
Kolhapur-416 234,
Maharashtra, INDIA.
Ph: +91 231 2672904

Sales and Marketing Office
Office No. 201-206, 2nd Floor,
CB-2, Empire Estate,
Mumbai-Pune Road,
Pune-411 019
T +91 20 67347100
F +91 20 67347112
sales@matherplatt.com
www.matherplatt.com

Toll free: 1800 266 8866
http://www.matherplatt.com

marketing@zestcreative.in September 2013 / 1



The company at a glance

WILO SE, based in Dortmund, Germany is one of the world's leading manufacturers of pumps and pumping systems for heating, cooling and air conditioning, water supply, sewage disposal and industrial applications. With more than 15 production sites over 60 subsidiaries, and more than 7,000 employees around the world, Wilo is a true global player. Founded in 1872 as the Louis Opländer Copper and Brass Goods Factory, the company has developed to become the leading innovator in the high-tech pump sector.



WILO worldwide



Wilo Branches/Production Sites

- WILO SE, Dortmund plant/Germany
- WILO SE, Oschersleben plant/Germany
- WILO SE, Holf plant/Germany
- WILO EMU Anlagenbau GmbH, Roth/Germany*
- Pompes Salmson S. A. A., Laval plant/France
- TEK S. r. l., Bari/Italy*
- WILO Pumps Ltd., Limerick/Ireland

- Circulating Pumps Ltd., Kings Lynn/Great Britain
- WILO USA LLC, Thomasville plant, Georgia/USA
- WILO China Ltd., Beijing plant/China
- WILO ELEC China Ltd., Qinhuangdao/China
- WILO Pumps Ltd., Busan plant/Korea
- Mather & Platt Pumps Ltd., Pune plant/India
- Mather & Platt Pumps Ltd., Kolhapur plant/India
- Mather & Platt Pumps Ltd., Kolkata plant/India

SUBSIDIARIES
With more than 60 subsidiaries, Wilo is at home all over the world

Mather and Platt Pumps Ltd.

Mather and Platt started its Indian operation in the year 1913 from Kolkata. Since then we have been significant in fulfilling the need of water supply for more than 100 years in India to various business segments like building services, water management and industries. Our Chinchwad Works operations in Pune, Maharashtra started in the year 1959. Today, we are the manufacturers of the various types of centrifugal pumps and pumping systems.

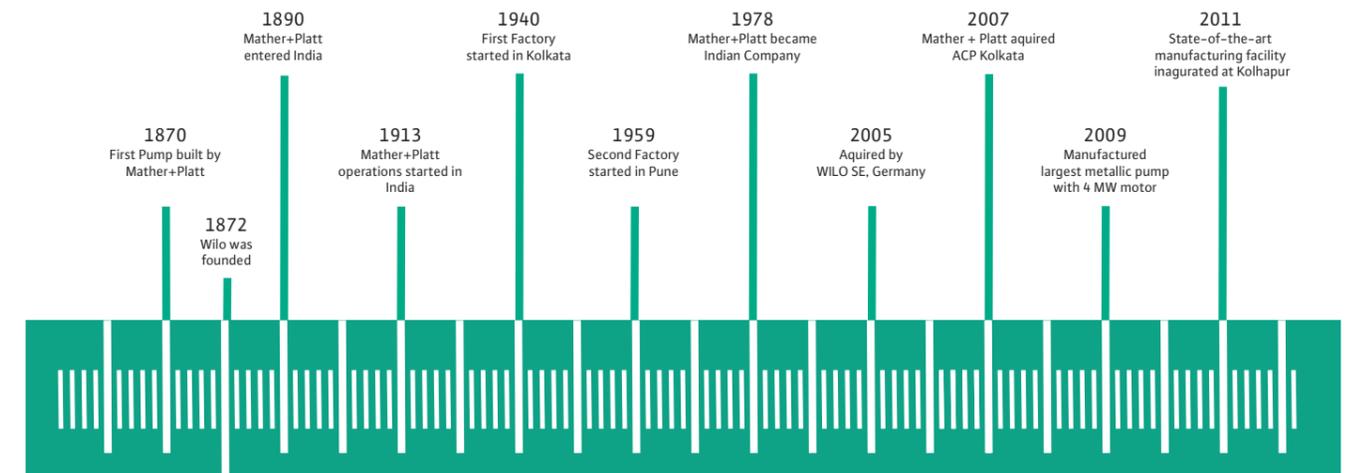
Mather and Platt Pumps Limited became a part of WILO SE in the year 2005.

A new state of art manufacturing facility at Kolhapur, approximately 260km from Pune, and covering over 6000 sq. meters was inaugurated in the year 2011, to manufacture the latest high efficiency products of Wilo India.

The Pune and Kolhapur plants have acquired the ISO 9001, ISO 14001 and OSHAS 18001 Certifications and all our products are CE certified. M+P is the manufacturer of one of the largest metallic vertical turbine pump in Asia supplied with 4 MW motor.

A Green feather in the cap.....

In April 2013, our Kolhapur plant received a **Gold Certification** from the Indian Green Building Council (IGBC).



Water is life.



Sustainability. Today's ideas, tomorrow's standard solutions.

Not much is required for highly efficient environmental protection. Just good ideas. Such as the idea for the high-efficiency pump which represented a milestone achievement in 2001 and the performance data which defined today's statutory limits. It requires up to 90 % less electricity than old, unregulated standard pumps.

The idea is only a good one however, if it pays off in the long term. Which is why Wilo high-efficiency pumps not only save energy, they save money too. Off every electricity bill. A small step for each one of us, but a big step for us all. Towards a better future for generations to come.



Quality. This is what matters.

Deviations of 70 micrometres – a hair's breadth – are just visible to the naked eye. This is still too much tolerance for real quality and this is why our quality assurance system combines the latest measuring methods with extensive testing procedures. These include, for example, an endurance test in which our pumps run non-stop under full load. This test and the most demanding eagle-eyed technicians mean that even the smallest of flaws do not go undetected. Only products that pass our tests with flying colours are put to use in your company. Quality means that we question every aspect of our products and actions, so that you are left in peace.



Service. Wherever you need us.

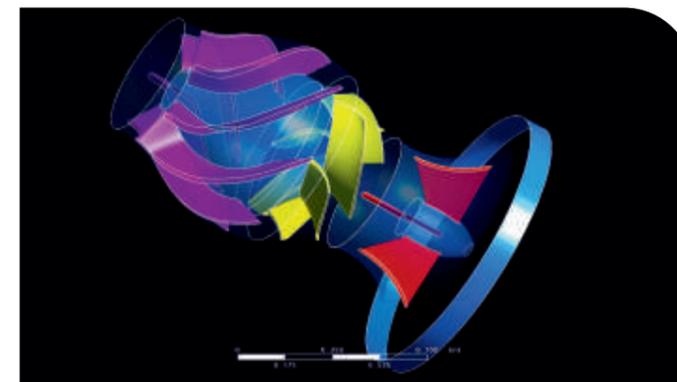
Flexibility is one of the most important qualities in the business world of today. Not only for the product range or service, but also spatially. Our specialists for development, quality assurance and production work in close cooperation with you when integrating our pumps in your production process. That begins with individual consulting during the planning stage, and goes far beyond installation and connection. A well-trained and worldwide active service department is another essential feature of our partnership philosophy. We're only happy when your business runs as well as our pumps.



Chinchwad Plant



Kolhapur Plant



We have state-of-the-art Advanced Research Technology Education Centre (ARTEC) facility at Pune where continuous research, developments/upgradation of products and services are carried out.

Following key activities are carried out at this Centre:-

- Geometric modeling
- Computational fluid dynamics (CFD)
- Finite element analysis (FE)
- Sump model & intake sump analysis

Applications

Building services commercial

Pumps and pump systems for heating, air conditioning, cooling, pressure boosting, water supply and sewage disposal in residential complex, administrative and commercial buildings.



Building services residential

Pumps and pump systems for heating, pressure boosting, water supply and sewage disposal in domestic households.



Water management

Pump and pump systems for water supply, sewage disposal and sewage treatment in municipal buildings and flood control.



General industry

Pump and pump systems for cooling water and heating systems, raw water intake, water and fire-extinguishing water supply and for water purification and industrial waste water.



Applications

Oil and gas

Pumps and pump systems for refineries, petrochemicals, PX-PTA plants, oil depots pipeline projects, oil exploration – on shore/off shore, fertilizers, ports and jetty for oil companies & cargo.



Energy

Pumps and pump systems for thermal energy coal base, nuclear energy, gas based energy, public, private and contractors, hydel power plants, solar power plants, cooling systems for wind power plants and captive power plants for 100% grid consumption.



Fire

All turnkey fire fighting systems along with the following products like deluge / valves / alarm, sprayers, projectors, control panels (conventional), control panels for foam and gas systems, control valves for foam and gas system, water / foam monitors and hydrant accessories.



After sales service

Supply of spares and installation support provided to all segments.





Product	Standard Horizontal Split Case Pump	Engineered Horizontal Split Case Pump	Vertical Turbine Pump
Range	<p>Q_{max}: 3400 m³/hr</p> <p>H_{max}: 235 m</p> <p>Temperature: up to 120°C; Higher on request</p> <p>Delivery Size: DN 50 – DN 400</p>	<p>Q_{max}: 18000 m³/hr</p> <p>H_{max}: 270 m</p> <p>Temperature: up to 120°C; Higher on request</p> <p>Delivery Size: DN 50 – DN 1200</p>	<p>Q_{max}: 50000 m³/hr</p> <p>H_{max}: 450 m</p> <p>Temperature: up to 80°C; Higher on request</p> <p>Delivery Size: DN 100 – DN 2000</p>
Product/Design Features	<ul style="list-style-type: none"> → Mounting: Inline horizontal → Stages : Single/ double, single/ double suction Impellers shaft with sleeves → Grease lubricated anti-friction bearing → Mechanical seal/ gland packing 	<ul style="list-style-type: none"> → Mounting: Inline horizontal → Stages: One/ two/ three stage single/ double suction impellers → Grease/Oil lubricated antifriction bearings → Mechanical seal/ gland packing 	<ul style="list-style-type: none"> → Vertical wet pit → Stages: Single / multistage → Closed impeller → Above or below floor discharge → Pumped medium lubricated line shaft bearings → Non pull out bowl/ rotating element Antifriction bearings
Optional Features	<ul style="list-style-type: none"> → Mounting: Vertical 	<ul style="list-style-type: none"> → Mounting: Centre line/vertical → Drive connection: direct/ cardan shaft bush bearing → Staggered vane design for fan pump application → Special suction/ delivery orientation* instrumentation & controls 	<ul style="list-style-type: none"> → Caission/ cannister construction → Tilted pad thrust bearings with cooling arrangement, semi-open impellers → Oil/ external water lubricated line shaft bearings → Pull out rotating element, instrumentation & controls
Material of Construction	<ul style="list-style-type: none"> → Casing – Cast Iron → Impeller – Cast Iron / Bronze/ Stainless Steel 	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys 	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Mild Steel, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys
Applications	<ul style="list-style-type: none"> → Water supply / general industry → Building service / fire fighting → Spray irrigation / district heating 	<ul style="list-style-type: none"> → Water supply/ general industry → Ports & docks/ fire fighting → Irrigation/ marine desalination 	<ul style="list-style-type: none"> → Water supply/irrigation → Cooling water for power plant → Flood control/ condensate extraction general industry/ fire fighting
Prime Movers	<ul style="list-style-type: none"> → Electric motors → Diesel engines 	<ul style="list-style-type: none"> → Electric motors/ diesel engines steam turbine with gear box or cardan shaft 	<ul style="list-style-type: none"> → Electric motors → Diesel engines via right angle gear box → Steam turbine via right angle gear box
Range of application (50 Hz)			



Product	Multistage Ring Section Pump	End Suction Pump as per ISO 2858	Norm Pump as per EN733
Range	<p>Q_{max}: 1000 m³/hr</p> <p>H_{max}: 1800 m</p> <p>Temperature: up to 160°C</p> <p>Delivery Size: DN 32 – DN 250</p>	<p>Q_{max}: 750 m³/hr</p> <p>H_{max}: 170 m</p> <p>Temperature: up to 120°C</p> <p>Delivery Size: DN 32 – DN 150</p>	<p>Q_{max}: 600 m³/hr</p> <p>H_{max}: 150 m</p> <p>Temperature: up to 120°C</p> <p>Delivery Size: DN 32 – DN 150</p>
Product/Design Features	<ul style="list-style-type: none"> → Mounting: Horizontal → Stages: 3 to 15 → Radial flow impellers with vane diffusers mechanical seal/ gland packing → Grease lubricated antifriction bearings 	<ul style="list-style-type: none"> → End suction top discharge → Mounting: Horizontal → Stage: Single → Back pullout design → Closed impeller → Mechanical seal/ gland packing → Grease lubricated antifriction bearings 	<ul style="list-style-type: none"> → End suction top discharge → Mounting: Horizontal → Stage: Single → Back pullout design → Closed impeller → Mechanical seal/ gland packing → Grease lubricated antifriction bearings
Optional Features	<ul style="list-style-type: none"> → Mounting: Centreline/vertical → Multi-outlet design → Balance valve design for axial thrust bush bearing/ roller bearing 	<ul style="list-style-type: none"> → Mounting: Centreline/vertical → Semi-open impeller → Oil lubricated antifriction bearings 	
Material of Construction	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys 	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys 	<ul style="list-style-type: none"> → Casing – Cast Iron → Impeller – Cast Iron / Bronze
Applications	<ul style="list-style-type: none"> → Mine dewatering → Descaling in steel mills → Boiler feed application → Reverse osmosis for desalination plants water supply / general industry → Fire fighting 	<ul style="list-style-type: none"> → General industry → Chemical & process → Water supply → Building service / fire fighting → Irrigation / sprinkler system 	<ul style="list-style-type: none"> → Building service → Sprinkler systems → Water supply → General industry
Prime Movers	<ul style="list-style-type: none"> → Electric motors → Diesel engines → Steam turbine 	<ul style="list-style-type: none"> → Electric motors → Diesel engines 	<ul style="list-style-type: none"> → Electric motors
Range of application (50 Hz)			



Product	End Suction Pump Engineered/Special	Horizontal Monobloc Pump	Vertical Inline Pump
Range	<p>Q_{max}: 3400 m³/hr</p> <p>H_{max}: 220 m</p> <p>Temperature: up to 120°C</p> <p>Delivery Size: DN 50 – DN 400</p>	<p>Q_{max}: 25 m³/hr</p> <p>H_{max}: 70 m</p> <p>Temperature: up to 110°C</p> <p>Delivery Size: DN 25 – DN 32</p>	<p>Q_{max}: 155 m³/hr</p> <p>H_{max}: 235 m</p> <p>Temperature: up to 100°C</p> <p>Delivery Size: DN 25 – DN 100</p>
Product/Design Features	<ul style="list-style-type: none"> → End suction top discharge → Mounting: Horizontal → Stage: Single → Back pullout design → Closed impeller → Mechanical seal/ gland packing grease/oil lubricated antifriction bearings 	<ul style="list-style-type: none"> → Mounting: horizontal → Stages : 2 to 7 → Corrosion proof wetted components mechanical seal with EPDM/Viton elastomers 	<ul style="list-style-type: none"> → Mounting: Vertical Inline → Stages: 2 to 24 → Antifriction Bearings → Corrosion proof wetted components Mechanical seal with EPDM/Viton elastomers
Optional Features	<ul style="list-style-type: none"> → Mounting: Centreline/vertical → Delivery flange orientation change possible → Bush bearing 	<ul style="list-style-type: none"> → Self priming models → Electronic control motor → Single & three phase 	<ul style="list-style-type: none"> → Connection: Oval / Victaulic → VFD on motor → Single & Three phase motors → High efficiency motors → Flameproof motors
Material of Construction	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys 	<ul style="list-style-type: none"> → Casing – SS (304/316L) /Cast Iron → Impeller – SS (304/316L) 	<ul style="list-style-type: none"> → Casing – SS (304/316L) /Cast Iron → Impeller – SS (304/316L)
Applications	<ul style="list-style-type: none"> → Water supply/general industry → Paper & pulp/building service → Fire fighting/irrigation/sprinkler system → Treated effluent 	<ul style="list-style-type: none"> → Water supply → Pressure boosting → Industrial washing → Sprinkling systems → General industry 	<ul style="list-style-type: none"> → Water Supply → Pressure Boosting → Jockey pump in firefighting → Boiler feed, Industrial Washing → Sprinkling Systems → General Industry
Prime Movers	<ul style="list-style-type: none"> → Electric motors → Diesel engines 	<ul style="list-style-type: none"> → Electric motors 	<ul style="list-style-type: none"> → Electric motors
Range of application (50 Hz)			



Product	Single Pump Booster	Multi-Pump Booster	Circulator
Range	<p>Q_{max}: 25 m³/hr</p> <p>H_{max}: 68 m</p> <p>Temperature: up to 110°C</p> <p>Delivery Size: DN 25 – DN 32</p>	<p>Q_{max}: 800 m³/hr</p> <p>H_{max}: 160 m</p> <p>Temperature: up to 120°C</p> <p>Delivery Size: DN 32 – DN 100</p>	<p>Q_{max}: 100 m³/hr</p> <p>H_{max}: 18 m</p> <p>Temperature: up to 110°C</p> <p>Delivery Size: DN 25 – DN 125</p>
Product/Design Features	<ul style="list-style-type: none"> → Pressure Boosting systems with Single pump in Horizontal or vertical inline design → Corrosion proof wetted parts 	<ul style="list-style-type: none"> → Multi-pump pressure boosting system from two up to eight pumps in stainless steel construction, → Fitted on a common baseplate with vibration dampers 	<ul style="list-style-type: none"> → Glandless circulation pump with threaded connection or flange connection, EC motor and automatic power adjustment. → Single/ three phase
Optional Features	<ul style="list-style-type: none"> → Fitted with Fluid Control or pressurised tanks & with float switch/ pressure switch → Option of inline shower 	<ul style="list-style-type: none"> → Horizontal /vertical pumps → Variety of panels with floating VFD/ with dedicated VFD/ → Without VFD, with PLC/without PLC, panels with customized requirements 	<ul style="list-style-type: none"> → Pre-selectable speed stages → Full motor protection → Combination flanges PN6/ PN 10 thermal insulation shells as standard for heating applications → Red-button technology for easy operation
Material of Construction	<ul style="list-style-type: none"> → Casing – SS (304/316L) /Cast Iron → Impeller – SS (304/316L) / Cast Iron 	<ul style="list-style-type: none"> → Casing – SS (304/316L) /Cast Iron → Impeller – SS (304/316L) 	<ul style="list-style-type: none"> → Engineering Plastic → Grey Cast Iron
Applications	<ul style="list-style-type: none"> → Pressure Boosting for Residential Buildings → Bathroom Shower panels 	<ul style="list-style-type: none"> → Pressure boosting for commercial complexes, hotels, industries, etc. 	<ul style="list-style-type: none"> → Electric motors
Prime Movers	<ul style="list-style-type: none"> → Electric motors 	<ul style="list-style-type: none"> → Electric motors 	<ul style="list-style-type: none"> → Electric motors
Range of application (50 Hz)			

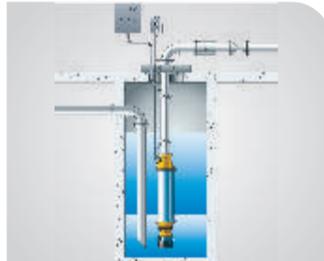


Product	Close Coupled Horizontal Pump	Close Coupled Inline Vertical Pump	Vertical Sump Pump
Range	<p>Q_{max}: 360 m³/hr</p> <p>H_{max}: 105 m</p> <p>Temperature: up to 140°C</p> <p>Delivery Size: DN 32 – DN 100</p>	<p>Q_{max}: 900 m³/hr</p> <p>H_{max}: 110 m</p> <p>Temperature: up to 140°C</p> <p>Delivery Size: DN 32 – DN 250</p>	<p>Q_{max}: 750 m³/hr</p> <p>H_{max}: 220 m</p> <p>Temperature: up to 80°C</p> <p>Delivery Size: DN 32 – DN 200</p>
Product/Design Features	<ul style="list-style-type: none"> → Low pressure end suction top discharge pump → Mounting: Horizontal → Stage: Single/ close coupled design → KTL coating for corrosion protection → 3 phase standard iec ip 55 motors → Mechanical seal 	<ul style="list-style-type: none"> → Low Pressure Inline pump → Stage: Single Stage → Close coupled design → KTL Coating for Corrosion Protection → 3 Phase standard IEC IP 55 motors → Mechanical seal 	<ul style="list-style-type: none"> → Vertical wet pit volute pump with Dry motor → Stage: Single → Closed impeller → Oil lubricated bearing arrangement antifriction bearing → Mechanical seal/ gland packing
Optional Features	<ul style="list-style-type: none"> → High efficiency motors → Flameproof motors 	<ul style="list-style-type: none"> → VFD on motor → High efficiency motors → Flameproof motors → Twin head pumps 	
Material of Construction	<ul style="list-style-type: none"> → Casing – Cast Iron → Impeller – Cast Iron / Bronze 	<ul style="list-style-type: none"> → Casing – Cast Iron → Impeller – Cast Iron / Bronze 	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys
Applications	<ul style="list-style-type: none"> → Building service → Hot water → Water glycol mixture → Cold water without abrasive substances 	<ul style="list-style-type: none"> → Building Service → Hot water → Water Glycol mixture → Cold water without abrasive substances 	<ul style="list-style-type: none"> → Emergency oil pump → Dewatering
Prime Movers	→ Electric motors	→ Electric motors	→ Electric motors
Range of application (50 Hz)			



Product	Drypit Nonclog Sewage/Wastewater Pump	Submersible Sewage Pump	Submersible De-watering Pump
Range	<p>Q_{max}: 8000 m³/hr</p> <p>H_{max0}: 70 m</p> <p>Temperature: up to 70°C</p> <p>Delivery Size: DN 50 – DN 800</p>	<p>Q_{max}: 8000 m³/hr</p> <p>H_{max}: 100 m</p> <p>Temperature: up to 60°C</p> <p>Delivery Size: DN 32 – DN 600</p>	<p>Q_{max}: 340 m³/hr</p> <p>H_{max}: 68 m</p> <p>Temperature: up to 40°C</p> <p>Delivery Size: DN 32 – DN 150</p>
Product/Design Features	<ul style="list-style-type: none"> → End suction top discharge → Mounting: Horizontal → Stage: Single → Casing with hand hole inspection cover mechanical seal/ gland packing large free passage up to 200 mm → Grease lubricated antifriction bearing 	<ul style="list-style-type: none"> → Vertical submersible sewage pumps → Stage: Single → Non clog (free flow/ single/ multi channel) impeller → Large free passage size up to 200 mm double mechanical seal → Oil barrier chamber with float switch winding/ bearing temperature indicators/ moisture sensor 	<ul style="list-style-type: none"> → Vertical submersible dewatering pumps → Stage: Single → Free flow impeller free passage size up to 45 mm → Double mechanical seal → Oil barrier chamber with float switch winding temperature indicators moisture sensor
Optional Features	<ul style="list-style-type: none"> → Mounting: Vertical → Delivery flange orientation change possible → Bush bearing 	<ul style="list-style-type: none"> → Stationary / portable installation → Dry/ wet pit installation → With/without macerator → Mixer head for agitation → With/without ceram coating for aggressive liquids 	<ul style="list-style-type: none"> → Stationary / portable installation → Dry/ wet pit installation → With/without turbulator → Level sensor for single phase versions with/without ceram coating for aggressive liquids
Material of Construction	<ul style="list-style-type: none"> → Cast Iron, Bronze, Ductile Iron, Cast Steel, Ni Resist, Stainless Steel, Duplex Stainless Steel & special alloys 	<ul style="list-style-type: none"> → Casing – Cast Iron/Engineering Plastic → Impeller – Cast Iron /SS/ Engineering Plastic → Other materials on request 	<ul style="list-style-type: none"> → Casing – Cast Iron/Engineering Plastic → Impeller – Cast Iron /SS/ Engineering Plastic
Applications	<ul style="list-style-type: none"> → Municipal raw sewage transfer → Sewage treatment plants → Effluent treatment plants → Dirty water in industry → Sugar mills 	<ul style="list-style-type: none"> → Municipal raw sewage transfer → Sewage treatment plants → Effluent treatment plants → Dirty water in industry 	<ul style="list-style-type: none"> → Dewatering dirty water containing sand → Construction sites → Fountains
Prime Movers	→ Electric motors	→ Submersible electric motors with IP68 protection variety of motors include oil cooled, media cooled motors, flameproof motors	→ Submersible electric motors with IP68 protection with variety of motors include oil cooled, media cooled motors, flameproof motors
Range of application (50 Hz)			



Product	Mixer/Re-Circulation Pump	Submersible Borehole Pump	Submersible Polder Pump
Range	<p>Q_{max}: 4.25 m³/hr</p> <p>H_{max}:</p> <p>Temperature: up to 40°C</p> <p>Delivery Size:</p>	<p>Q_{max}: 2500 m³/hr</p> <p>H_{max}: 580 m</p> <p>Temperature: up to 40°C</p> <p>Delivery Size: DN 25 – DN 400</p>	<p>Q_{max}: 1200 m³/hr</p> <p>H_{max}: 160 m</p> <p>Temperature:</p> <p>Delivery Size:</p>
Product/Design Features	<ul style="list-style-type: none"> → Submerged operating mode: S1 protection class: IP 68 → Two-stage planetary gear with exchangeable second planetary gear → Permanently lubricated anti-friction bearing → Max. Submersion depth: 12.5 m 	<ul style="list-style-type: none"> → Submersible, multistage borehole pump with radial impellers suitable for 100 mm, 600 mm bore sizes → Integrated non-return valve → Max. Sand content : 50 g/m³ → Up to 20 starts per hour → Protection class: IP 58/IP 68 → Single/three phase motor with NEMA motor 	<ul style="list-style-type: none"> → Mains connection 3~400 V, 50 Hz → Max. fluid temperature 20°C → Min. flow at outside shroud not necessary. Up to 10 starts per hour → Max. immersion depth 300 m → Protection class IP 68 → control range for frequency converter → 2-pole: 25–50 Hz → 4-pole: 30–50 Hz
Optional Features	<ul style="list-style-type: none"> → Stationary/flexible installation via lowering device → Can be swivelled horizontally for installation with lowering device installation with stand allows free placement in basin → Single-stage planetary gear 	<ul style="list-style-type: none"> → Horizontal installation → Cooling jacket 	
Material of Construction	<ul style="list-style-type: none"> → Engineering Plastic → Grey Cast Iron 	<ul style="list-style-type: none"> → Engineering Plastic, Grey Cast Iron, Stainless Steel, Bronze, other material on request 	
Applications	<ul style="list-style-type: none"> → Swirling of deposits and solids destruction of floating sludge layers → Activated sludge tanks for creation of fluid current → Homogenisation and prevention of floating sludge layer → Industry, agriculture & water supply 	<ul style="list-style-type: none"> → Sprinkling & irrigation → Pressure boosting → Water supply from borehole → Process water supply → Utilisation of geothermal energy and off-shore applications → Fountains, snow cannons 	<ul style="list-style-type: none"> → Potable and process water from tanks or shallow bodies of water; municipal and industrial water supply; sprinkling and irrigation; lowering the water level; utilisation of geothermal energy and offshore applications
Prime Movers	<ul style="list-style-type: none"> → Electric motors 	<ul style="list-style-type: none"> → Electric motors 	
Range of application (50 Hz)			



Pumping System	Turnkey Firefighting System	Prime Movers
<p>Design, engineering, manufacturing, testing, erection, commissioning, operation & maintenance of pumping systems along with allied electro-mechanical and instrumentation & control works on turnkey basis. Civil works for construction of pumping stations are also undertaken to provide one stop solution.</p> <p>Services offered:</p> <ul style="list-style-type: none"> → Techno-commercial feasibility study of pumping system → Project execution & management → Piping layout & mechanical design → Sump model study → Electrical power & control schemes → Instrumentation & control with PLC/SCADA based operation → Surge analysis → Energy audit → Retrofitting <p>Engineering capabilities:</p> <ul style="list-style-type: none"> → Intake design using CFD → Geometric modeling → Finite element analysis <p>Accessories:</p> <p>Unitised sets with essentials accessories as requested by the customer can also be provided by us to save time & energy.</p> <p>Scope of supply may include:</p> <p>Baseframe, coupling with coupling guard, valves, companion flange, flushing / sealing plan, instrumentation and controls</p>	<p>Complete range of fire fighting pumps & fire fighting management systems for buildings & industry on turnkey basis</p> <p>Specialises in following types of systems</p> <ul style="list-style-type: none"> → Water / gas / foam based → Fire detection & alarm → (conventional & addressable type) <p>Standard fire fighting system includes:</p> <ul style="list-style-type: none"> → Main pump with prime mover → Jockey pump with prime mover → Hydrant lines → Deluge valves → Spray nozzles → Fire detection equipment → Instrumentation & control panels → Complete accessories <p>Standards followed:</p> <ul style="list-style-type: none"> → Pumps comply to guidelines of → NFPA 20 / UL 448 / other standards on request* <p>Markets served:</p> <ul style="list-style-type: none"> → Residential & commercial buildings → Petrochemicals & refineries → Power plants → Chemical & fertilizers → General industry 	<p>Electrical motors:</p> <ul style="list-style-type: none"> → Types : Slip ring & squirrel cage induction motors as per NEMA –MG1 & IEC standards → Volts : 415/3300/6600/11000V → Rating : up to 4000 kW → Frequency : 50Hz/60 Hz → Enclosure : TETV, TEFC, SPDP, CACW, CACA → Protection : IP55, 56 → Flame proof motors: As per IEC standards for mining operations. → All motors come with standard accessories. Optional accessories are offered on demand.  <p>Diesel engines:</p> <ul style="list-style-type: none"> → Types : 4 stroke naturally aspirated & turbocharged. → Radiator, heat exchanger cooled → Power : up to 1040 hp@1500 rpm → Displacement : 6/8/14/19/28 → All diesel engines come with standard accessories. Optional accessories are offered on demand.  <p>Steam turbine:</p> <p>Single stage/multi stage condensing/ non-condensing type steam turbines suitable for handling superheated/saturated process steam along with gear box and oil lubrication system</p> <p>Optional features:</p> <ul style="list-style-type: none"> → Desuperheater with silencer → PLC based control panel → Acoustic enclosure
		