

Providing Pumping Solutions

# Water, Waste and Reticulation



### Water, Waste and Reticulation

Pump & Valve Specialties are proud to be actively involved in the Water, Waste & **Reticulation industry in New Zealand.** 

and Waste water operation.

As a supplier of quality pumps and valving products we are fully acquainted with what's important to you in ensuring efficient, trouble-free, reliability in your Water

Our vast range of innovative products and long service history to your industry will give you peace of mind when looking to upgrade or expand the equipment in your facility, from our extensive commitment to spares stock to our team of in-house engineers, we are totally committed to your industry and the contribution it makes to this country. We are able to offer full technical support for all products with our fully equipped in-house engineering facility, giving us the ability to provide quick turn-around service for both new equipment and refurbishment and maintenance on existing plant.

Our engineers have considerable experience and understanding that proves invaluable when those challenging applications come along, whether it be partnering with you on plant design or to bring greater efficiency and reliability to your existing operation we are here to provide the technical support you deserve.

With four branches nationwide we offer full on-site application assistance and commissioning to ensure your process is at its full potential.



MAG Drive Pumps are designed for chemical transfer.

### **Progressive Cavity Pumps**



#### **APPLICATIONS:**

Sewage treatment plants for sludge transfer and polymer dosing. **FEATURES/SPECS:** 

- Self priming capability
- Cost effective
- Non-clogging
- Low internal velocity
- Reversible
- Able to handle solids laden liquids







- Flows to 345 m3/hr
- Pressures to 48Bar
- kW range 0.18kW 75kW

### Rotary Rubber Lobe Pumps

#### **APPLICATIONS:**

Sludge transfer

### FEATURES/SPECS:

- Run dry capability
- Rapid self priming,
- Easy maintenance
- Large solids handling capability
- Can handle high and low viscosities
- Flows to 1000m3/Hr.
- Pressures to 16Bar

## Rota-Cut

#### **APPLICATIONS:**

Maceration of sewage, abattoir waste and by-products.

#### **FEATURES/SPECS:**

- Run dry capability Rapid self priming
- Easy maintenance
- Flows to 750m3/Hr.
- Reliable maceration of fibrous and coarse materials
- Protection from foreign objects for all downstream components
- Fluids and suspensions are homogeneous and less viscous, requiring less power consumption by mixing and pumping equipment.
- Auto reverse in case of jamming
- Self-sharpening blades



### **Dosing Pumps**

#### **SMART DIGITAL DOSING PUMPS**

#### FEATURES/SPECS:

- Powerful variable-speed stepper motor
- Internal stroke speed control
- Flow control with selective fault diagnosis
- Integrated flow measurement
- Auto flow adapt
- Auto de-aeration also during pump standby
- Batch modes (timer- or pulse-based)



### Grit Pumps

#### **APPLICATIONS:**

Grit Pumping, Sand & Gravel

### FEATURES/SPECS:

- Non clogging system
- Double shaft seal
- Increased efficiency
- Extended service life by generously dimensioned shafts and bearings
- Impeller options include open, single and twin vane, closed multi vane and vortex.
- Close coupled design
- Can be dry-mounted horizontally or vertically



- Always full stroke length even at small flow rates
- Smooth, continuous dosing
- SlowMode function for high-viscosity liquids
- Flow to 30 l/h
- Pressure to 16 bar
- Turn-down ratio 1:3000 (7.5-16) or 1:1000



### Peristaltic Hose Pumps

#### **APPLICATIONS:**

Lime Slurry and Chemical dosing

#### **FEATURES/SPECS:**

- Seal-less
- Can run-dry without damage
- High suction capability
- Choice of hose materials
- Suitable for very high viscosities
- Ideal for abrasive slurries
- Temperature range 0-80'C
- Up to 15Bar discharge pressure

### Magnetic (MAG) Drive Pumps

#### **APPLICATIONS:**

Chemical transfer

### **FEATURES/SPECS:**

- Easy set outer drive
- Multiple impeller diameters
- Multiple connections
- Run dry system
- Close-coupled design
- Flows to 60m3/hr
- Pressure to 90psi
- Viscosity to 150 cP
- Max temperature 90°C





## End Suction Pumps

#### **APPLICATIONS:**

Wash down areas.

#### **FEATURES/SPECS:**

- Pumps available according to ISO, DIN, or ANSI.
- Flows from 2 to 1000 m<sup>3</sup>/h
- Head from 2 to 160 m.
- Motor sizes fall in the 0.55 to 355 kW range.
- Impellers are hydraulic balanced to reduce axial thrust.
- The pumps are of the back pull-out design enabling removal of the motor, coupling, bearing bracket and impeller without disturbing the pump housing or pipework.

### Packaged Booster Sets

### **APPLICATIONS:**

Water Boosting, Irrigation Supply, Water Reticulation

### **FEATURES/SPECS:**

- Vertical multistage centrifugal pumps.
- Inline design
- A complete turn-key package, tailored to suit your requirements
- Economical, reliable and trouble-free
- Easy to install and connect
- Numerous control options within two main types (fixed and variable speed)
- A single inlet and outlet connection for multiple pumps
- means no manifolding of pipe work is required on site. • Flows to over 270 m<sup>3</sup>/hr
- Pressure to over 20 Bar
- Temp to over 140°C



### Sewage Pond Mixers

#### **APPLICATIONS:**

Sewage settlement pond stirring

#### FEATURES/SPECS:

- Ideally suited to effluent pond stirring to aid in the prevention of solids settling and surface crusting
- Mounting options via threaded bracked or box section slide guide
- Inbuilt motor protection via Klixon thermal cut out. Water in oil sensor, 10m cable
- Stainless steel and cast iron construction
- Stainless Steel propellers
- Triple seal system (with DI sensor
- Highest efficiency on the market (IE3 motors)
- Solids deflection ring protects mechanical seal
- Available up to 25kW

### CONTROL PANEL HAS THE **FOLLOWING FEATURES**

- Motor overload protection
- On/off/auto control switch with time clock for optimized energy savings
- 24 hour time clock for optimised energy savings
- Visual alarm



### AODD Plastic Pumps **APPLICATIONS:**

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Chemical transfer

#### FEATURES/SPECS:

- Positive displacement
- Can be run dry
- Various elastomers
- Anti-freeze/anti-stall and lube free air distribution systems
- Range of designs
- Self priming
- High suction lift capability

## **Odour Filters**

### **APPLICATIONS:**

Vent stacks, pump stations, air valves, receiving manholes, sewer lines, holding tanks and overflow tanks

### **FEATURES/SPECS**

- Low operating costs
- Long media life compared to standard carbon filters
- Reduces customer complaints
- Replacement media cartridges
- Economical & effective
- Can be adapted to any pipe size



- Low maintenance costs
- Adsorbs & treats gases fast
- Quick, safe & easy to install
- Size range to suit all sites
- Easy & safe servicing
- Wind assisted fans available

### Submersible Pumps

### **APPLICATIONS:**

For the pumping of wastewater and sewage from buildings and sites in private, commercial, industrial and municipal areas.

#### FEATURES/SPECS:

- NEMA Class A temperature rise.
- Premium Efficiency motors in accordance with IEC 60034-30 level IE3 with testing in accordance with IEC60034-2-1.
- Continuously rated motor suitable for submerged and non-submerged applications.
- Double mechanical seals; SiC-SiC at the medium side, SiC-C at the motor.
- All seals are independent of rotation direction and resistant to temperature shock.
- Anti-wicking cable plug solution (80C 150E), or water-pressuresealed connection chamber (100G - 201G).
- Hydraulic options of Contrablock and Contrablock Plus impellers for high efficiency, or vortex impellers for maximum solids handling.
- Lubricated-for-life bearings with a calculated lifetime of minimum 50,000 hrs. (80C - 150E), and 100,000 hrs. (100G - 201G).
- Stainless steel shaft. Designed with high safety factor to prevent fatigue fracture.
- Temperature monitoring by thermal sensors (140 °C) in the stator windings.
- Seal monitoring by a moisture probe (DI) in the seal chamber (80C 150E), or dry chamber (100G - 201G), which signals an inspection alert if there is leakage at the shaft seals.
- DN 80, DN 100, DN 150 and DN 200 radial slot DIN flange discharge.
- Maximum allowable temperature of the medium for continuous operation is 40 °C.
- Maximum submergence depth of 20 m.
- Explosion-proof as standard, in accordance with international standards Ex d IIB T4 and ATEX.
- Max Flow 1800l/sec
- Max Pressure 78m

## Pulsation Dampeners

#### **APPLICATIONS:**

Water treatment

#### **FEATURES/SPECS:**

- Dampeners reduce pulsation, water hammer,
- Extend life of pumps, valves and pipe work
- Creates steady flow for dosing and blending.
- Range of sizes available.
- Simple installation.
- Wide range of metals, polymers and rubbers available to suit most applications.

### Waste Water Blowers **APPLICATIONS:**

Aeration for treatment of municipal and industrial wastewater

#### **FEATURES/SPECS:**

- High efficiency, guaranteeing optimal life cycle costs
- Low noise: no need for additional soundproofing
- Magnetic Bearings
- Permanent magnet motor
- Very quiet
- Vibration free
- Does not need to be installed in a purpose built building.
- Air flow range 1,000-16,000 Nm<sup>3</sup>/h
- Pressure range 30-120 kPa

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## Environmental Solutions



Oil retention and containment

#### • Pump stations

• Oil retention and containment



Domestic Pump Station



Municipal/Industrial Pump Station



Service We have a dedicated service facility with trained engineers and test facility. Your pump is in professional, trained hands from the time it comes through our doors until it is returned to you. Every pump - where possible - is water tested on our test rig after service has been completed - providing total confidence in our workmanship.

### **Spare Parts**



Full range of spare parts stocked to support our product line. Spares stocked for all common industrial pumps and valves. Parts sourced for all products.



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