

# FLO-MAX<sup>®</sup>

Turbine Pumps



Submersible & Borehole



Vertical Sump Pumps



Propeller Pumps



Pontoon Pumps



Fire Pumps



Submersible Sump Pumps

Manufactured and supported in  
Australia since 2001

**Dynapumps<sup>®</sup>**  
DYNAMIC PUMP SOLUTIONS





**Manufactured and supported in Australia since 2001**

## **How we do it!**

**Flo-Max** pumps are manufactured in Australia and sold all over the world. You will find Flo-Max pumps in Africa, Asia and Europe. They are manufactured using local foundries and facilities. Our vast knowledge and experience in the manufacturing and application of our range of pumps has enabled the development of new innovations in pump design and materials.



**An extensive range of complete pumps and spare parts are held as part of our commitment to service.**

### **Processes Provided**

- **Qualified Welders**
- **CNC Machinists**
- **Material Certificates**
- **PMI Testing available**
- **Full documentation**
- **FAT Testing**
- **Commissioning**
- **Spares support**
- **Re-Engineering**

In house design, pattern making, casting and manufacturing is maintained and supervised by Flo-Max personnel to ensure quality and continuity is consistent. Flo-Max pump products include:

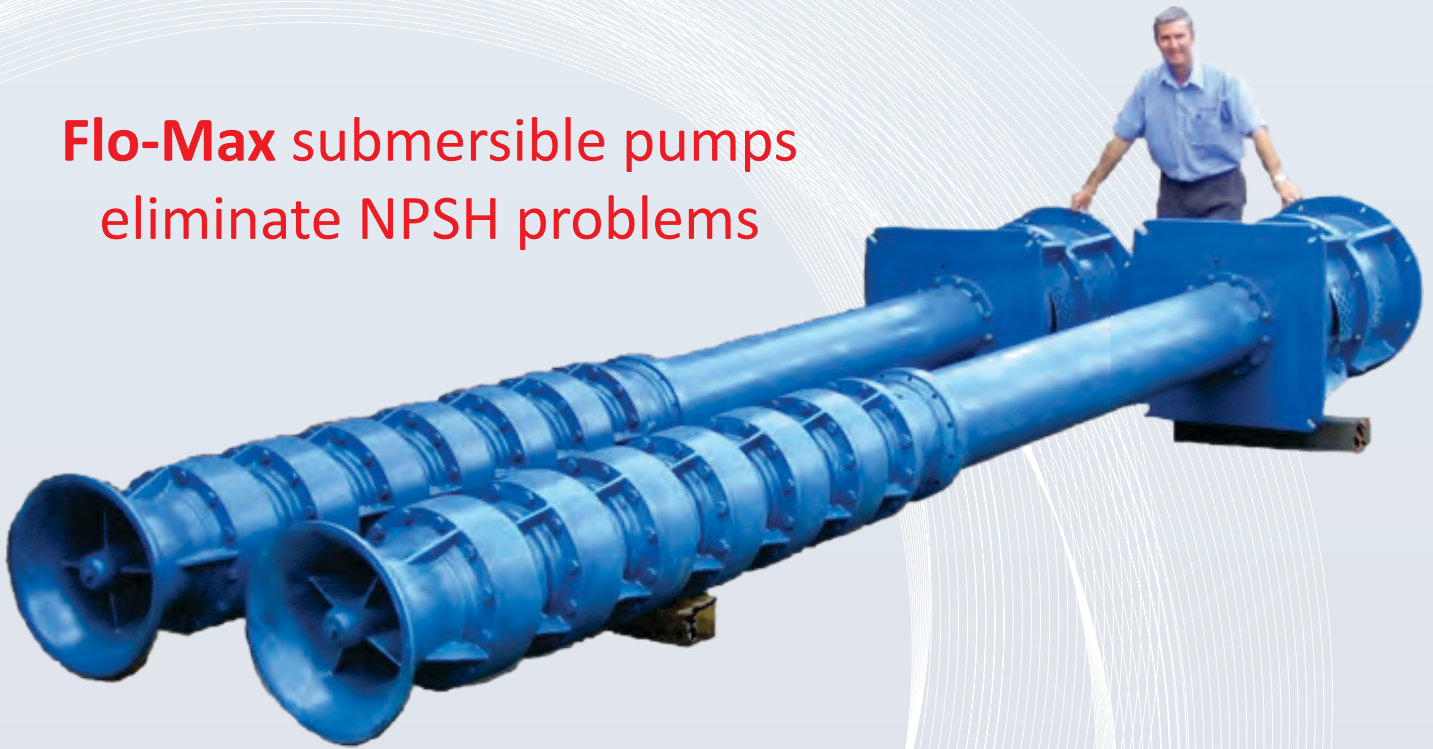
- Vertical line-shaft (Turbine)
- Axial Flow (Propeller)
- Submersible borehole
- Sump & cantilever sump
- Submersible sewage & waste water





**Manufactured in Australia and sold across the globe**

**Flo-Max submersible pumps  
eliminate NPSH problems**



**Flo-Max** pumps are manufactured in Australia and sold all over the world. You will find Flo-Max pumps in Africa, Asia and Europe. We offer a comprehensive range of vertical turbine and submersible borehole pumps. Sizes for the turbine pump range from 5" (125mm) through to 32" (800mm) sizes plus an extended range of axial flow pumps and larger turbines up to 54" (1400mm) are also available.

Submersible sewage and dewatering pumps are available up to 22 kW size.

Vertical (Direct driven) and Cantilever pumps (V-belt driven) with dry motors are manufactured for waste sumps in mining, oil and gas, power and general industry.

All pumps are available in standard cast iron, gunmetal bronze for normal applications with exotic materials available such as duplex stainless steel and zinc free bronzes for more specialized applications.



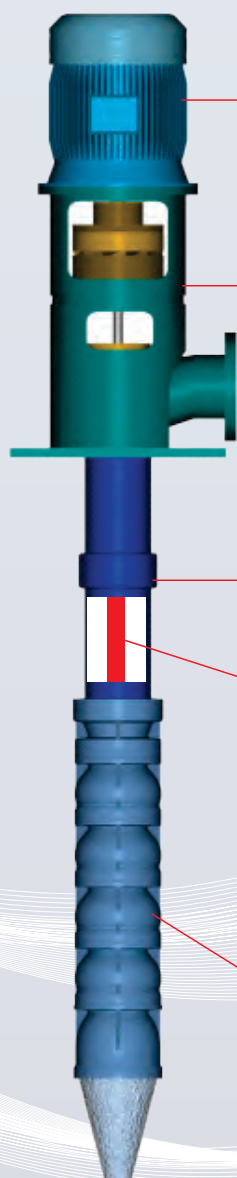
## Flo-Max Vertical Turbine Pumps

Manufactured in Australia by Dynapumps, Flo-Max vertical turbine pumps have wide uses in:

- Water Supply and Treatment
- Mining
- Agriculture
- Fire Protection
- Power Stations
- Chemical Plants

Standard pump bowls are constructed from cast iron, impellers from bronze and the shafting from stainless steel. The column is provided as standard in steel pipe, cast iron couplings and bronze bearing retainers for the product lubricated pumps. The enclosed column is provided with an internal steel oil tube and intermediate bronze bearings.

Alternative materials and types of construction are available to suit a variety of applications. Pumps can be supplied as vertical, horizontal or inclined configurations to suit pits and bores. Canned motor versions can be manufactured with a 'T' or 'L' discharge arrangement.



Motor can be supplied with a standard IEC flanged motor connected via an independent thrust bearing to the pump drive shaft assembly or with a NEMA vertical hollow shaft motor.

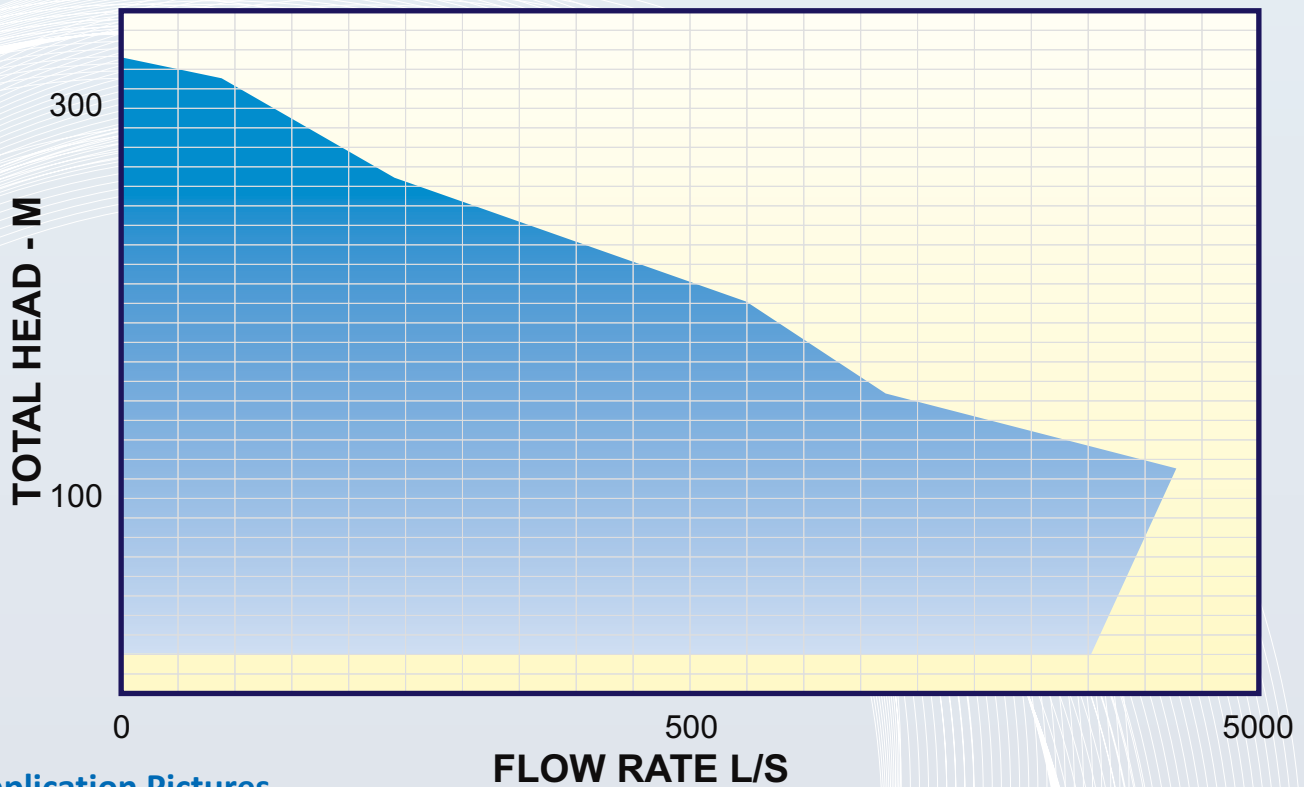
Pump discharge head in cast iron or special alloys can be mounted in any position to suit your piping. It supports the electric motor and acts as anchor thrust block to cope with piping forces.

Flanged or screwed discharge column is in carbon steel or special alloys. The standard column is protected with a bitumastic paint but other coatings or materials are available.

The column is provided as either an open line-shaft, water lubricated version or enclosed, oil lubricated. Bearings are located as standard at 1.5m or 1.0m.

Pump bowls and impellers are staged to achieve the required pressure. Pumps are supplied with foot (check) valve and strainer. Pumps can be supplied for hydraulic heads of 325 m and higher.

## Turbine Pump Curves



## Application Pictures



Dubbo Town Water Supply



Duplex SS Seawater pump for Nickel Mine



Cooling water for Victorian Power Station



Water supply from dam



## Flo-Max Borehole Submersible Pumps

The submersible pump is also constructed from the same series of modular pump bowl & impeller stages as a Flo-Max turbine pump but fitted to submersible electric motor.

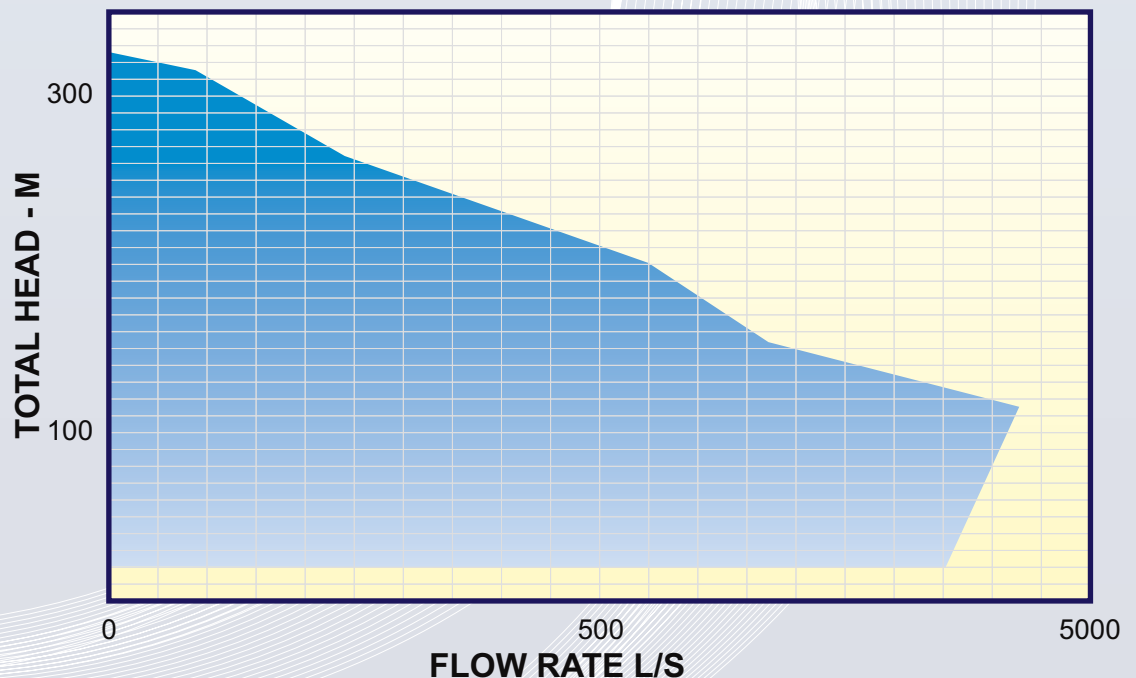
The advantage of this style of pump is the small surface footprint which is ideal for remote applications where vandalism may be a problem or environment issues demand minimum impact in that area.



The discharge of the pump is provided with a poppet style check valve. The water is transferred to the surface via rigid metal pipe or flexible rising main such as Wellmaster or Crusader Hose.

The motors provided will be either a hermetically sealed canned type where the windings are encapsulated and hermetically sealed within an external shell casing, or alternatively the motor will be a wet wound type where the windings are direct contact with the liquid medium.

Pumps and motors can be supplied in 304ss, 316ss or duplex stainless steel alloys such as SAF2205 or SAF2507.





## Flo-Max Vertical or Cantilevered Sump Pumps

The pumps are designed with all the standard features required to ensure reliable operation in heavy duty sump applications. For particularly harsh conditions, a wide variety of optional features are available. Vertical Sump Pump advantages include the convenience of automatic operation with float levels, low NPSH requirements, low maintenance, pumping hot and cold liquids, and are self-priming irrespective of the pit depth.

The basic design consists of a pumping wet end (of either an open or closed impellers), bearing frame, drive shaft, motor stool, top sole plate, and discharge piping. All models have the impeller adjustment at the surface, ball thrust bearings are above the liquid surface, no mechanical seals or packing to maintain, suitable for IEC standard motors.

Typical applications in which the Sump Pump can be used is on clean or dirty liquids in sump drainage, tank unloading and transfer, process circulation as well as some molten materials.

For slurries and small solids open impellers are well suited. For solids handling, a recessed impeller with bearing flushing is available.

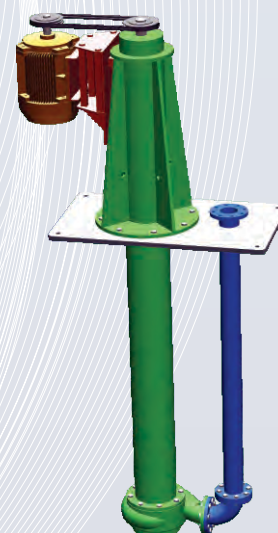
Where corrosion resistance is required a variety of alloys and bearing materials are available.

### Features:

- Depth settings of up to 10M
- Available in cast iron, 316SS, duplex SS or other cast-able, machine-able material construction for a variety of chemical duties
- Intermediate bearing materials selected to provide maximum performance in each specific application
- Column sections are squared and spigoted to ensure accurate concentricity of impeller and shaft within the pump casing
- Lubrication options for intermediate bearings include grease, clean water flush and product flush
- Optional level controls



**Vertical**



**Cantilevered**

### Performance Range:

- Flow rates up to 200L/S
- Heads to 100M
- Temperatures to 200°C

## Flo-Max Submersible Sump Pumps

### Flo-Max Pump Range

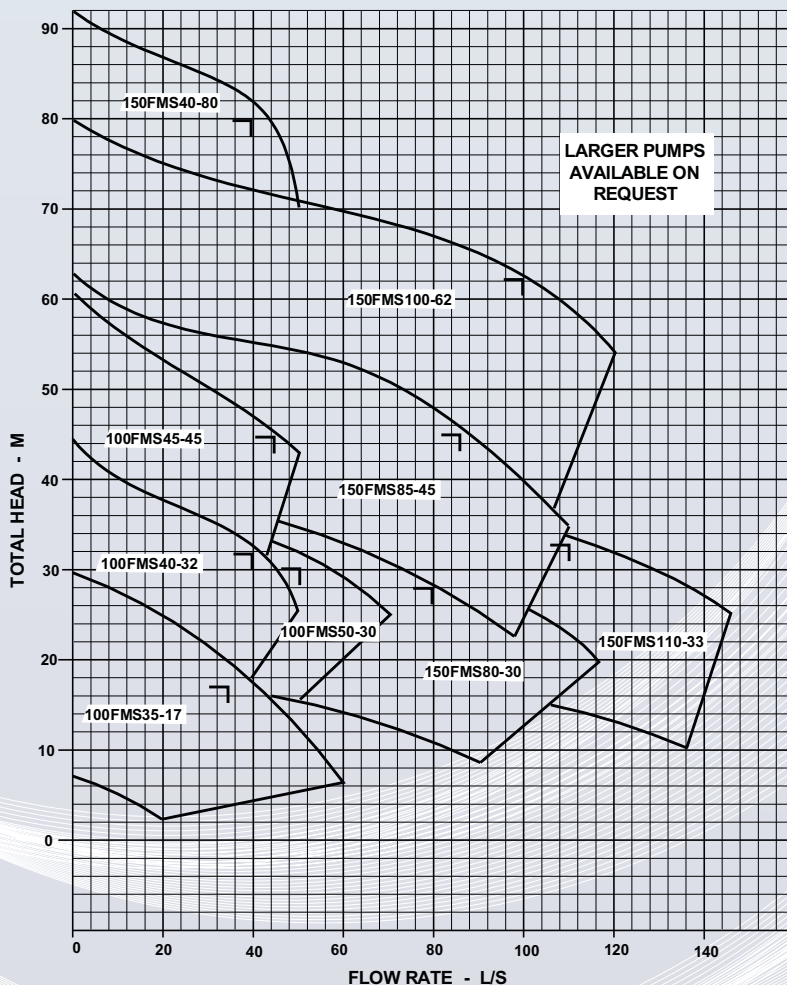
The pump range offered by Flo-Max extends up to a maximum 22kW and we are building on this every day. We offer different impeller designs to suit the applications that our pumps are used for. Impeller designs in the Flo-Max range include channel, vortex, grinder, semi-open and axial flow impeller designs.

### Pump Installation Systems.

Options include free standing submersible and guide bar mounted submersible. (We can adapt to your current guide bars so installation is easy for you). Flo-Max can offer you a solution for your applications with our wide range of pumps.



### SUBMERSIBLE WASTE WATER PUMPS 50Hz



### FEATURES

- High Efficiency MEPS 2 Motor Class H with thermistors.
- Double Mechanical Seal with hard faces submerged in oil chamber.
- Large oil chamber keeps seals cool.
- Leak detection probe for early warning maintenance advice.
- Quick release electric cable plug for ease of removing & maintenance.
- 431 SS Shaft supports overhung impeller and reduces vibration.
- Solid cast and dynamically balanced impeller can pass up to 75mm solids.
- Impeller SS wear ring fitted for long life.
- Centreline discharge also fitted with SS wear ring
- Greased for life bearings save on maintenance worries.

### EASY INSTALLATION

Flo-max pumps are designed to easily fit into existing pits and rail systems when specified.





## Flo-Max Propeller Pumps

Submersible propeller pumps are the best choice for pumping large volumes of water at relatively low heads. Typical application areas for this series of pumps include irrigation, sewage-treatment, storm-water reclamation, salt farms, land drainage and aqua-culture.



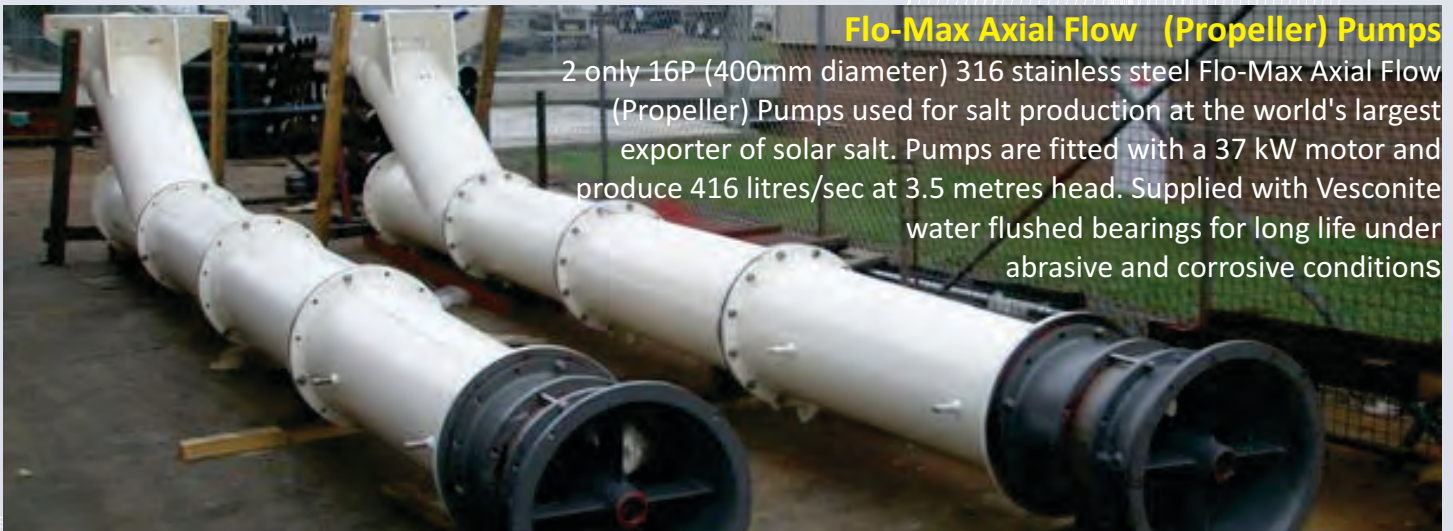
Flo-Max Axial Flow (Propeller) Pumps used for salt production at an evaporative sea salt farm



Axial Flow Impeller

**Capacities up to 1500 m<sup>3</sup>/h**

**Heads up to 5 metres**



### Flo-Max Axial Flow (Propeller) Pumps

2 only 16P (400mm diameter) 316 stainless steel Flo-Max Axial Flow (Propeller) Pumps used for salt production at the world's largest exporter of solar salt. Pumps are fitted with a 37 kW motor and produce 416 litres/sec at 3.5 metres head. Supplied with Vesconite water flushed bearings for long life under abrasive and corrosive conditions

## Flo-Max Specialty Pumps and Re- Engineering

Dynapumps has the ability to provide specialty pumps made from special materials or construction and adapting components from other manufacturers to meet customer's special needs.

We can and do re-engineer components for old and obsolete pumps providing new parts and repairing your existing pumps so that you can continue to use them without having to purchase a brand new pump.





## Flo-Max After Sales and Service Support

### Customer Support

We still look after you once you buy the pump, for spare parts, service and installation advice & assistance.

We can also provide assistance for commissioning or trouble shooting.

### Repairs & Re-Engineering

Not only can we supply new pumps but we are able to repair Flo-Max and repair or re-engineer all other makes of Turbine & Submersible Pumps.

### Spare parts

Because Flo-Max pumps are made in Australia we carry excellent spare parts to support you in field.

Our people have many years experience in this field.

