

Making the right choice

The concept of a specialised manufacturer supplying integrated pumping systems as packages has long been recognised as a cost effective way of achieving the highest standard of engineering and reliability.

Combining many years of expertise in pump hydraulics with a detailed understanding of electrical process controls and mechanical design principles enables Global Water to engineer complete pumping solutions. Utilising standardised designs, both stocked and custom components are integrated into an efficient and fully integrated system tailored to suit specific on-site requirements.

Global Water Packaged Pumping Systems have enjoyed acceptance in a wide range of applications including:

- Industrial
- Commercial
- Municipal
- Construction
- Mining
- Irrigation
- Agricultural
- Water Re-use

Pressure system packages

A specialised range of Packaged Pressure Systems have been engineered to answer the growing demand for precision control and constant pressure to eliminate cycling, pressure fluctuations and water hammer, and to reduce running costs and cyclic fatigue.

We offer two generic types of control:

- Fixed Speed Cascade Control
- Variable Speed Systems

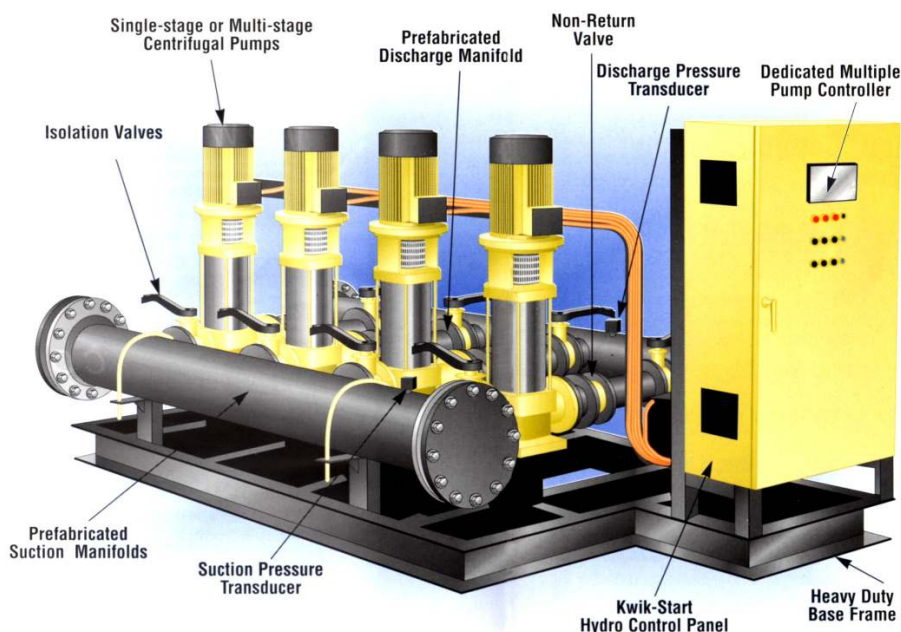
Single or multiple pump units are combined with pressure tanks, valves, gauges and pressure monitoring equipment, all mounted on a common base frame with inter-connecting pipework manifolds that terminate in a single suction and discharge point for ease of connection to the reticulation system.

Variable speed systems

Ultimate performance is obtained by utilising the concept of varying the speed of one or more of the pump units to produce a constant, non-pulsating system pressure, highly responsive to varying system requirements.

A dedicated process controller operates in conjunction with a digital frequency converter to vary the speed of the lead pump and cut in the other pumps relative to the signal from the pressure transducer.

This concept allows improved hydraulic efficiency, lower power consumption, reduced cycling and accurate tracking of system demand. Other features include friction loss compensation, remote status and fault monitoring, and multiple set-point selection.





Variable Speed Booster set for town water supply

Fixed speed systems

In their simplest form, these consist of one or more pumps with cascade pressure switch control. The system can be further enhanced by a dedicated pump controller fed by one or more pressure transducer with multiple-pump capability.



Fully Automated 5 Pump Water Supply Pumping System

Typical applications

- Town water supply
- Processing industry
- Multi-storey buildings
- Golf course reticulation
- Subdivision water supply
- Mechanical services

Industrial and commercial systems

Specialised pumping systems are designed and built to meet the highest engineering standards for a wide range of water use, treatment, circulation and disposal applications.

Fully automated packages incorporating process controllers are built to cater for specific design parameters.

Packages are prefabricated with pumps, pipework and valves, with the option of on-board electrical controls and instrumentation to simplify site installation.

Units are factory tested and operating parameters pre-set prior to delivery.



Effluent Pumping System at major Milk Factory

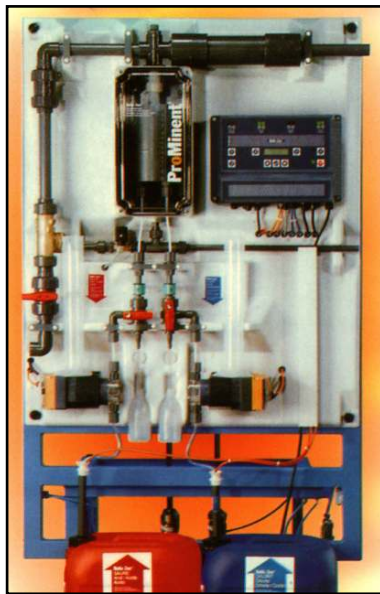
Typical applications

- Waste disposal
- Stormwater harvesting
- Batching
- Filtration and treatment
- Cooling systems
- Mixing and blending
- Food processing
- Effluent re-use

Water treatment systems

Greater community awareness of health and environmental issues in recent years has seen the need for water and effluent treatment systems of increasing complexity and automation. State-of-the-art instrumentation and process controls are combined with the latest developments in treatment and disinfection technologies, both physical and chemical, to engineer cost effective and reliable solutions to water and waste water treatment problems.

These are designed and manufactured from standardised components and modular designs to meet specific customer and site requirements and ensure compliance with relevant World Health standards and local statutory requirements.



Packaged Chemical Dosing Skid

Typical applications

- Water disinfection systems
- Sewage and effluent treatment
- Factory waste management
- Wastewater recycling
- Irrigation dosing systems
- Effluent monitoring systems
- Pollution control systems
- Obnoxious odour control

Fire protection pumps

To cater for the growing demand for turn-key Fire Protection Systems, a specialised range of packaged systems has been developed to comply with all relevant Australian Standards.

Support services are provided from initial engineering assistance through to on-site commissioning.

Fire Protection Pumpsets are available in diesel and electric drive configurations, assembled on a common fabricated base with pipework manifolds, valves and electrical controls to provide a fully automated system.



Diesel/Electric Fire Pumpset for major Hotel Complex

Testing

The key to a successful package is the ability to fully test and pre-commission the unit prior to delivery. This enables operational parameters to be set and the entire system sequence tested under simulated site conditions to reduce on-site installation time and ensure trouble-free and reliable operation.

Installation and commissioning

As part of our Total Package approach, we have facilities to provide a full turn-key project including civil, mechanical and electrical installation. Once installation is complete, our qualified personnel are able to conduct a full test and commissioning regime to fine-tune the system to suit site requirements. Our ongoing commitment to our clients is backed by our technical service division which includes a fully equipped workshop, self contained service vehicles and qualified maintenance personnel. To ensure maximum system efficiency and ongoing equipment reliability, preventative maintenance programs and service contracts are available.