

Aquate Pressure Sewer System

Technical Guide WW 8

Aquate Pressure Sewer Systems are a cost-effective, practical alternative to traditional gravity systems, providing low maintenance, efficient and reliable sewage reticulation.



Applications

Low pressure sewer reticulation systems are ideal for small to large communities where conventional gravity systems are difficult to install or cost prohibitive

Product Attributes

High quality progressive cavity grinder pump

Advanced electronic control system

Flexible design

Approvals/Standards

ANSI/NSF 46 pump certification

CSA tested to IEC 60335 2- 41:2012

AS/NZS 1546:1 2008 – tank certification

AS/NZS3000 – electrical controller

Powder Coating Institute® certified
Powder Coated Tough™

Quality/Environment/Health & Safety

ISO 9001:2015, ISO 14001:2015 and
ISO 45001:2018

Aquate Low Pressure Systems are ideal for areas where conventional gravity sewer systems are impractical or cost prohibitive.

In contrast to traditional gravity sewer networks where deep pipes are installed along with a series of large pump stations, low pressure systems utilise small pump stations on each property to transfer household wastewater to a centralised treatment facility. Utilising a high head grinder pump and small diameter pipes, the Aquate Pressure Sewer System can transport wastewater long distances and achieve large vertical lifts.

The Aquate pressure sewer system combines a proven progressive cavity grinder pump, an advanced electronic control system and a high quality polyethylene storage chamber to create a reliable, cost-effective solution for low pressure systems.

Features

- High quality PE pump chamber
- Shallow trenching
- No infiltration
- Adaptable to undulating terrain
- On-site storage capacity

Approvals/Standards

- RCM Registered
- AS/NZS 4130:2009 – Pipes for Pressure Applications
- AS/NZS 4131:2010 – Pressure Pipes and fittings

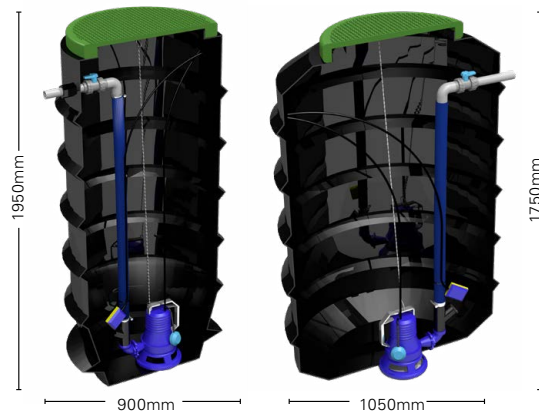


What system do you need?

The Aquate Pressure Sewer System is available as either a simplex or duplex models and comes in a range of tank sizes. Contact Hynds to discuss your technical requirements.

Models

- 900 Series – The 900 Series simplex pump station is perfect for individual houses. The 900 litre chamber includes 24 hours of storage for typical domestic houses and is manufactured from high quality polyethylene. The tank is designed and certified to AS/NZS 1546:1.
- 1350 Series - The 1350 Series simplex or duplex pump station is perfect for larger houses or small commercial applications. The 1350 litre chamber is manufactured from high quality polyethylene. The tank is designed and certified to AS/NZS 1546:1.



The best pump on the market

The Aquate pressure sewer system uses the Zoeller 7021 progressive cavity grinder pump that is certified to the ANSI:NSF46 requirements.

Zoeller utilises a hardened stainless steel cutter assembly which is field-tested and designed to provide a scissor-like cutting action, which means materials will not have the chance to wrap around the cutter or impellor and jam the pump. With this advanced engineering, the Shark® grinder pump can withstand anything normally found in a sewer application.

What makes this pump so reliable?

- Head capability up to 73m
- 2 kW motor
- Stainless steel hydraulic rotor and cutter
- Corrosion Resistant powder coated epoxy finish
- Hardened stainless steel cutter and disc. Rockwell C55-60
- Pressure relief valve
- Integral thermal overload protection with automatic reset

Aquate Pressure Sewer System

1. Internal pipework

All the pipework in the Aquate pressure system is 32mm and rated to PN16. Includes a non-return valve, anti-siphon valve and quick release coupling.

2. Progressive cavity high-head grinder pump

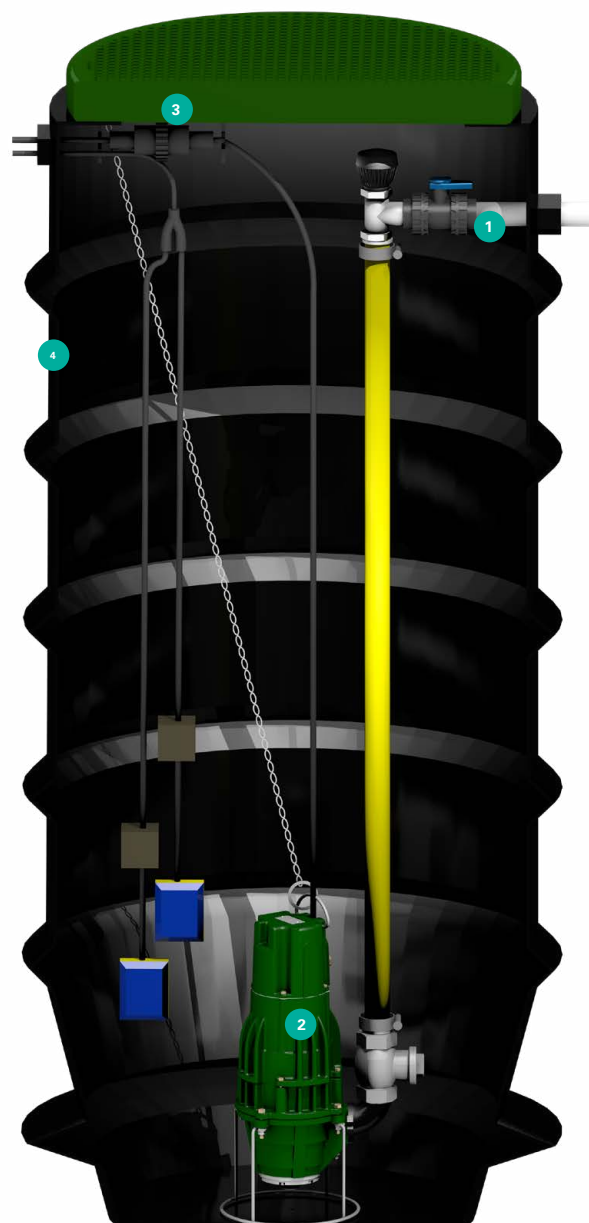
The Zoeller 7021 grinder pump. Unrivalled grinding capability combined with reliability and performance.

3. Quick disconnect plug

An IP66 rated plug makes installing and removing the pump (if ever required) quick and simple.

4. High quality tank

The 900 and 1350 series tanks are designed for strength and durability. Designed and independently certified to meet AS/NZS1546.



Electrical Controller

All Aquate Low Pressure Systems come complete with an advanced microprocessor controller specifically designed for pressure sewer applications.

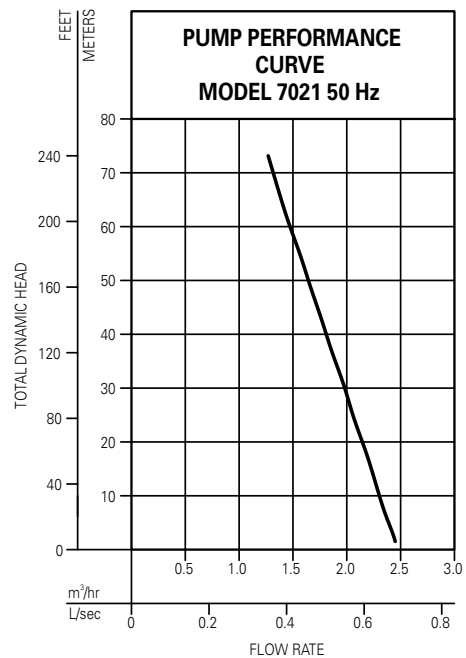
- Designed for harsh New Zealand weather
- Lockable IP 65 rated enclosure
- Four line LCD screen with programmable functionality
- Visual and audible alarm system
- High level alarm
- Over pressure protection
- Max. run time alarm
- Delay start in the event of a power failure
- Alarm history
- Pump motor protection against variable electricity supply
- Pump failure alarm
- Records performance data of the system
- Duty / Standby pump control option
- Telemetry if required

Design Assistance

Hynds offers a design service to assist Engineers design their low pressure systems. Call us to discuss your project.

Backup and Support

Hynds has service agents nationwide. These service centres provide support 24 hours a day, 7 days a week. In the unlikely event of an alarm activation there is sufficient storage in the tank for 24 hours of normal operation. Hynds or your council's utility services team will provide onsite service in the event of an alarm.



Branches Nationwide Support Office & Technical Services 0800 93 7473

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.