Pump Stations
Fibreglass

Built under ISO9001
Quality Management System
WSAA Appraisal No. 13/19
Certified by a Registered
Composite Engineer
**Fibreglass Pump Stations**

Aquatec’s Fibreglass Pump Stations are manufactured as a one-piece construction to exact project specifications. Delivered to site as a complete unit with a simple installation process, Aquatec’s Fibreglass Pump Stations are engineered to withstand internal and external loadings across all ground conditions.

**Service Capabilities**

Aquatec’s end-to-end service model incorporates consultation, custom design, manufacture and delivery, commissioning, training and life cycle management. Our service model streamlines the time and costs associated with managing multiple suppliers to deliver a superior level of quality control.

- Design & Drawing Services
- Project Management
- Procurement Officers
- Lifting & Excavation Briefs
- On-site Installation Training
- On-site Delivery Supervision
- Guaranteed Seal Integrity
- Qualified Mechanical Fitters
- Qualified Electricians
- Power Management
- Quality Assurance Audits
- Pre-testing, Commissioning & Compliance Checks
- Scheduling & Management of Final Testing & Commissioning
- Accredited Operation & Maintenance Training
- After Sales Service & Warranty
Hydraulic Designs

Aquatec takes an unbiased approach to hydraulic design to maximise pump efficiency and product longevity. Calculated in accordance with Water Authority requirements and the WSSA sewerage code.

Aquatec works closely with our clients to deliver expert knowledge across flows, friction loss, static lift, atmosphere, pipe sizing and air locks.

Design & Drawing Services

Aquatec’s Design & Drawing Services deliver a full set of drawings customised to meet the unique needs of your project. Our Technical Consultants work closely with our clients to establish a detailed understanding of site conditions to determine Pump Station size, flow rate, head pressure, storage requirements and layout solutions.

Expert guidance across Australian Standards, WSAA and WHS regulations together with recommendations on the latest global innovations combine to deliver a customised solution for the long-term.

Key Optional Accessories

Aquatec offers a wide range of Optional Accessories to meet or improve on your project specifications. Our Technical Consultants will make recommendations for enhancements to your Fibreglass Pump Station based on budgets and the unique demands of your application.

Key Optional Accessories include:
- Fibreglass Storage Vessels
- Lighting (internal / external)
- Mixers
- Flow Meters
  (separate pits available)
- Inlet Valves / Drop Pipes
- Fans & Blowers
- Scour Lines / Pump Out Points
- In Series Pumping
- Well Washers
Fibreglass Pump Stations form an integral part of Australia’s infrastructure and perform a vital service for the community. For the past 30 years, Aquatec’s commitment to product integrity has remained central to our daily operations.

**Product Integrity**

Government and Industry Bodies regularly consult with Aquatec for guidance on best practice product development and safety standards.

**Manufacturing Process**

Aquatec’s Fibreglass Pump Stations are manufactured in a controlled factory environment under strict ISO 9001: 2008 standards. The Pump Station mould designs are manufactured to exact specifications. Unlike cast in-situ Pump Stations, our product quality is not subject to weather, site conditions and associated time delays.

**Quality Control**

Aquatec’s manufacturing process is subject to a series of strict Quality Control measures to achieve superior product quality:

- Controlled factory conditions
- Computerised winders for controlled wall thickness
- Checklists / hold points
- Third party engineer’s certificates
- Transportation

Built to Australian / British standards. Certified by a Registered Composite Engineer.
WSAA Appraisal No. 13/19
**Design Innovation**

Aquatec’s Fibreglass Pump Stations offer considerable environmental benefits over pump stations poured in-situ.

Aquatec’s ability to deliver our product to site as a one-piece unit minimises excavation periods and disruption to flora and fauna. Our Integral Valve Chamber requires less space in the overall design, resulting in a smaller environmental footprint.

Every Fibreglass Pump Station design considers a provision for additional storage vessels to safeguard the environment against the potential risk of effluent overflow.

**Guaranteed Seal Integrity**

Aquatec’s Fibreglass Pump Stations are manufactured as a completely sealed, one-piece vessel. All penetrations and wall fixings through the structure are carried out in the factory with compatible materials, allowing no chance of ingress or egress.

### Product Range

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<th>Diameter</th>
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One-piece Chamber

The Pump Station base and sludge batter are mould formed as one piece to strengthen the overall structure, while the steep sludge batter is shaped to prevent solids build-up, eliminating dead zones behind pump pedestals. The top cover, walls and base are glassed together to provide an impervious, holistic structure. The Pump Station base is designed to withstand pump weights, vibrations and ground forces.

Filament Wound Construction

Aquatec’s Fibreglass Pump Stations are constructed using a state-of-the-art computerised winder and manufactured with the highest-grade resins and continuous rovings to achieve benchmark standards of quality and integrity.

Integral Valve Chamber

Aquatec’s Integral Valve Chamber incorporates industry leading operational and safety benefits for maintenance personnel.

Engineered to eliminate the line-up of separate valve chambers, Aquatec’s Integral Valve Chamber prevents differential ground settlement. The 90° dismantling elbows are located inside the integral valve chamber, facilitating the safe removal of pipework and valves for maintenance personnel without entering the wet well.

External Valve Chamber

Aquatec provide flexibility by offering a range of Fibreglass external valve chambers to accommodate large pipework. Our standard moulds are glassed in a controlled factory environment and delivered to site as a complete unit to increase time and cost efficiencies.

External Maintenance Access

Aquatec’s Fibreglass Pump Stations are designed so that most components within the wet well can be serviced externally without entering the chamber, eliminating the need for confined space entry permits and reducing safety risks for maintenance personnel.

Access Covers

Available in 316 stainless steel, aluminium, galvanised or cast iron, Aquatec’s wet well Access Covers feature a WHS approved safety grid as standard, providing an added lay flat safety fall arrest system for maintenance personnel.

External Maintenance Access

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Fibreglass Pump Stations
**Pump Controls**

Designed to deliver on individual Water Authority and Council requirements, Aquatec’s Control Systems are manufactured to AS3000 electrical specifications. From small wall-mounted controls to advanced, freestanding multi-door controllers, our solutions achieve optimum equipment protection, service reliability, ease of operation and simplified maintenance.

**Level Controls**

Aquatec offers a variety of methods for level control, including float systems, hydrostatic pressure transducers, ultrasonic, radar and probes for specific applications or preferences.

**Telemetry & Monitoring Systems**

Tailored to adapt to the off-site host control unit, Aquatec’s telemetry SCADA monitoring, phone dialing, sms and BMS systems cater for all types of applications.

**Telemetry, Monitoring & Control Systems**

Aquatec’s custom approach to Control Systems delivers a consistently high level of operational integrity.
Safety Features

Aquatec’s Fibreglass Pump Station designs have received recognition from WHS Industry Bodies, Water Authorities and Councils for setting new standards in safety and serviceability.

Aquatec incorporates advanced safety features into the design of every Fibreglass Pump Station for the safety of installation and maintenance personnel. Our product designs have dramatically reduced the likelihood of accidents by incorporating external maintenance and access methods.

External Maintenance Access

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Access Covers

Aquatec’s wet well Access Covers feature a WHS approved safety grid as standard, providing an added lay flat, safety fall arrest system for maintenance personnel.

Reduced Excavation Periods

Site excavations are often left unnecessarily exposed for long periods of time, presenting serious safety risks for installation personnel. Aquatec’s one-piece designs have the optional Integral Valve Chamber available to decrease installation time, reducing the excavation period required during installation.

Engineered Lifting Points

Aquatec provides Rated Lifting Points in each Pump Station to ensure safe installation.
**Safety Accessories**

Aquatec’s optional Safety Accessories offer added safety protection for maintenance personnel, supplied in accordance with WHS safety standards.

**Lifting Devices**

Aquatec offers a range of Lifting Devices to enable safe pump removal for maintenance personnel in accordance with WHS requirements.

**Access Ladders & Landings**

Available in 316 stainless steel, galvanised, powder coated, or glass reinforced plastic, Aquatec’s Access Ladders and Landings are incorporated into product designs where internal well access is required.

Our Technical Consultants can advise on landing depths and sizes in accordance with WHS safety requirements. Aquatec’s Ladders are available with non-slip knurled rungs for added safety protection.

**Handrails**

Aquatec’s range of permanent and portable Handrails offer additional safety protection for maintenance personnel. Available in 316 stainless steel, galvanised steel, powder coated or aluminium, our Handrails are incorporated into Fibreglass Pump Station designs in accordance with AS 1657-1992 or Water Authority requirements.
Odour Controls

Aquatec’s range of optional Odour Controls reduce unpleasant corrosive odours and gases while extending the life of your asset.

Ventilation Systems

Aquatec’s Vent Stack and Odour Filter Systems are designed to extract unpleasant odours, noxious and corrosive gases from sewerage systems. Available in UV resistant PVC, FRP, powdercoated steel, galvanised steel or 316 Stainless Steel, our Ventilation Systems are built to withstand long periods of exposure to Australia’s harsh climate.

Wet Well Washers

Aquatec’s Wet Well Washers eliminate the need for manual cleaning of wet well walls and components, preventing build-up of corrosive fat residues and reducing infrastructure corrosion. Manufactured from high-grade stainless steel and composite material, our Wet Well Washers are corrosion resistant, low maintenance and capable of operating via automated control systems.

Wet Well Wastewater Conditioners

Aquatec’s unique Wet Well Conditioners recycle and return wastewater back into the well to homogenise solids. This eliminates the need for water supply and prevents the build up of grease, fats, oils and increases dissolved oxygen levels. Clean out cycles are reduced by as much as 95% and liquid chemical (if fitted) usage is reduced by as much as 35%.

Dosing Systems

Aquatec’s Dosing Systems are tailored to accommodate Pump Station depths, diameters and flow rates. Designed to control odour, septicity and corrosion, Aquatec’s Dosing Systems systematically remove odours and phosphorus build-up over time.
After Sales Service

Maintenance Training
Aquatec’s Maintenance Training caters for existing personnel in need of additional assistance or new personnel unfamiliar with the operational and maintenance requirements of our Fibreglass Pump Stations.

Technical & Product Support
Aquatec’s Technical and Product Support Service responds to any product or technical enquiry, including recommendations on safe-use of our products.

Service Warranty
Aquatec are committed to providing full after sales service, support and long term warranty on all components and workmanship.