ALL
PURPOSE
PUMPS
PRECISION
ENGINEERED
TO FLOW...

HYDRA™

INDUSTRIAL WATER SYSTEMS
PRODUCT CATALOGUE

INTRODUCING ALL PURPOSE PUMPS

All Purpose Pumps is a trusted Australian pump manufacturing and systems company that has been operating since 1988, beginning as a small family-owned business. Over the years, it has grown into a full-service provider of precision-engineered pumping solutions, serving commercial building services, industrial water, wastewater treatment, fire systems, and more. With dedicated manufacturing and testing facilities in Melbourne and Geelong, the company is strongly committed to quality, reliability, and innovation. Guided by its core principle of "100/0/0." Taking 100% responsibility, making 0 excuses, and assigning 0 blame. All Purpose Pumps focuses on customer success, long-term partnerships, and continuous improvement.

OUR KEY BENEFITS:

- Over 35 years industry experience
- Proven experience in understanding unique system requirements
- Advanced and innovative solutions for the toughest applications
- Technical support and field service for peace of mind
- On site commissioning, matching system performance to actual site demands
- Best practice build and stringent factory testing for quality outcomes
- Fast turnaround times

WITH YOU EVERY STEP OF THE WAY

All Purpose Pumps (APP) delivers a fully integrated project delivery methodology, managing every stage from initial design through to long-term system support. Our approach ensures technical accuracy, compliance, quality fabrication, and seamless on-site execution. By maintaining end-to-end control, design, manufacture, installation, commissioning, and ongoing maintenance. We provide reliable, efficient, and compliant pumping and water management solutions tailored to each project's requirements.

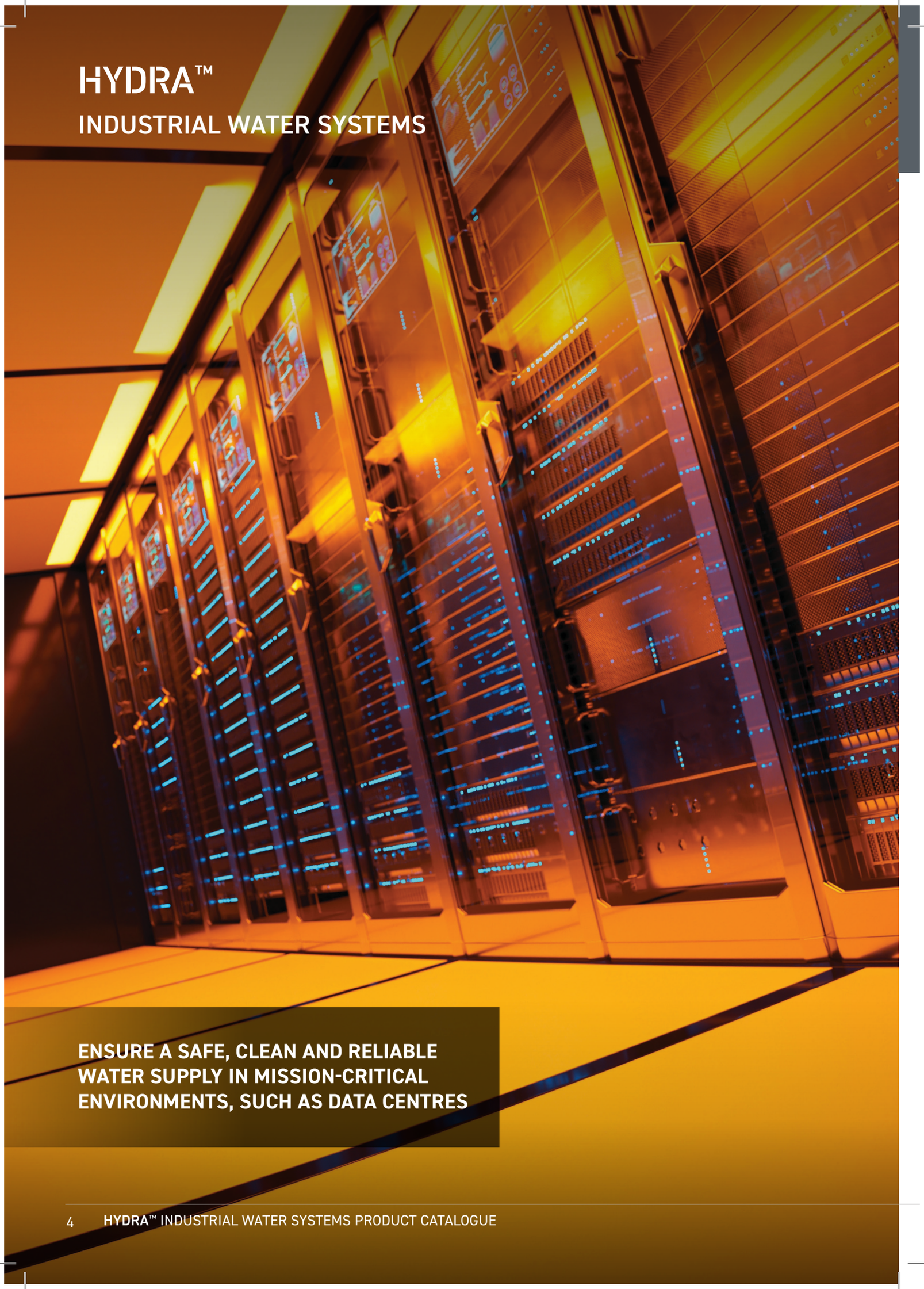
THE APP PARTNERSHIP METHODOLOGY

- System design, hydraulic calculations, structural integration, and control logic.
- Preparation of approval drawings, certification, and compliance documentation.
- Detailed technical reviews and coordination with consultants, builders, and authorities to streamline project delivery.

- Precision fabrication in-house to project specifications.
- Factory Acceptance Testing (F.A.T) to ensure performance and reliability.
- Rigorous material and component inspections to verify conformity with engineering and safety standards.

- Delivery and professional installation of tanks and associated systems.
- Commissioning, calibration, and witness testing to confirm operational performance.
- Integration of installed systems with site controls, BMS/EMS platforms, and final functional validation.

- Preventative maintenance agreements, servicing, and 24/7 on-road support.
- Long-term client relationship management to ensure ongoing system reliability.
- Scheduled performance reporting and asset health assessments to optimise life-cycle operation and reduce downtime.



HYDRA™

INDUSTRIAL WATER SYSTEMS

ENSURE A SAFE, CLEAN AND RELIABLE WATER SUPPLY IN MISSION-CRITICAL ENVIRONMENTS, SUCH AS DATA CENTRES

OVERVIEW

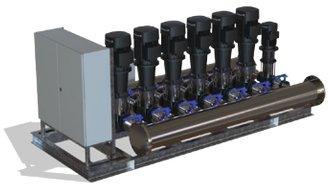
HYDRA™ represents All Purpose Pumps' premium range of engineered water infrastructure solutions, purpose-built for the demanding requirements of commercial, industrial and multi-residential applications.

The **HYDRA**™ suite includes potable water panel tanks, chlorine dosing and monitoring systems, and fully integrated recirculation and filtration packages. Each package is designed to ensure safe, clean and reliable water supply, even in mission-critical environments such as data centres.

At the core of the range are **HYDRA**™ Potable Water Panel Tanks, manufactured in accordance with Australian Standards and engineered to exceed structural requirements for wind loading, water pressure and long-term durability. These robust storage systems are complemented by **HYDRA**™ Chlorine Dosing Systems, which provide automated water treatment through continuous circulation, precision chemical injection and intelligent controls to maintain consistent free-chlorine levels. Supporting the complete lifecycle of the stored water, **HYDRA**™ Recirculation Filtration Systems deliver continuous circulation and high-efficiency filtration, reducing contaminants and protecting downstream equipment.

Together, the **HYDRA**™ product line forms a comprehensive, dependable and fully engineered water management solution. Backed by industry expertise and widely specified by leading consultants, **HYDRA**™ systems deliver exceptional reliability, compliance and operational assurance for projects where water quality and performance cannot be compromised.

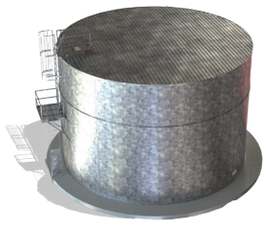
The **HYDRA**™ range is built for performance, compliance and long-term durability, **HYDRA**™ systems support critical operations where water quality and supply stability are essential. Each product is fully engineered to integrate seamlessly into potable water, process water and mechanical cooling supply networks.



WATER PRESSURE BOOSTER SYSTEMS
Pg6

RECIRCULATION FILTRATION SYSTEM
Pg8

CHLORINE DOSING & MONITORING
Pg10



INDUSTRIAL WATER STORAGE TANKS
Pg12

HYDRA™
WATER PRESSURE BOOSTER SYSTEMS

OVERVIEW

All Purpose Pumps' **HYDRA**™ Industrial Water Pressure Booster Systems are engineered to provide reliable, constant water pressure to mechanical cooling and process equipment. Optimised for flows from 1 to 150+ L/s, they ensure consistent performance across varying demand conditions. Each system is fully custom-designed to meet project-specific requirements and principal specifications. Advanced configurations, including dual redundancy (N+1), deliver uninterrupted operation and enhanced reliability for mission-critical applications.

HYDRA™ Pressure Booster Systems are engineered to handle a full range of flow conditions, including low-flow applications, through the use of low-flow jacking pumps. This approach maintains optimal hydraulic efficiency across all operating points, reduces mechanical stress on pump components, and extends the operational lifespan of the system while ensuring reliable, high-performance operation.

COMPONENT OVERVIEW

BASE:

- Common galvanised base plate and controller stand, capable of vibration isolation mount installation.
- Baseplate and lifting point designed to meet AS4100:1998 and AS1170.1:2002.

MANIFOLD:

- Stainless steel suction and discharge manifolds.
- Pump isolation and non-return valves.
- 20mm test and drain valve.
- Stainless steel liquid filled pressure gauge.
- Pressure accumulator tank.
- Pressure Sensing Transducer (VSD).

PUMPS:

- Vertical multistage pump with standard IEC motors and M.I.P (Maintenance in Place) capabilities.
- Cartridge mechanical shaft seal.
- Vibration isolation rubber mounts.
- AS4020:2018 potable water compliant.

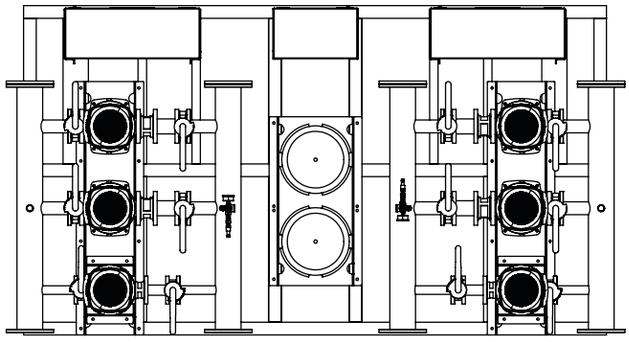
CONTROLLER:

- Incorporating colour touch screen & panel mounted VSD with communication interface.
- Manufactured in accordance with the relevant standards: AS3000:2007, AS1939:1990 and AS3439.1:2002.
- Constant Pressure VSD's (Variable Speed Drives) including capability for Ultra-Low Harmonics.
- High level interface for system monitoring and data logging.
- BACnet control (if required).
- IP 44 control panel enclosure as standard, with opportunity to increase IP rating upon request.
  - AS3000:2018 Electrical Wiring Rules.
  - AS1939:1990 Degrees of protection provided by enclosures.
  - AS3439.1:2002 Low voltage switchgear and control gear assemblies.

FEATURES

- High Flow Vertical Multistage Pumps.
- Low Flow Vertical Multistage Pump.
- Reliable and proven control logic.
- Variable Speed Drive Controller with LED Screen.
- Fully Fabricated Stainless Steel Manifold and Valves.
- Pressure Tanks.
- Common Steel Base for easy transport and installation.

DRAWING



TECHNICAL DATA

APPLIES TO N+1 ARRANGEMENTS

STANDARD RANGE*	
Number of pumps	1-6
Flow range	1L/s - 150+L/s
Maximum head	2000kpa
Liquid temperature	0°C to +50°C
Ambient temperature	0°C to +30°C

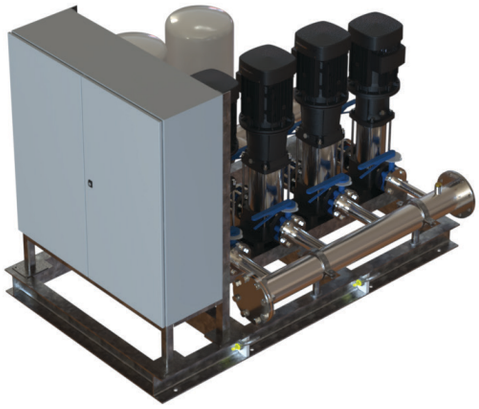
*Note – contact our team for higher capacities

INCLUSIONS

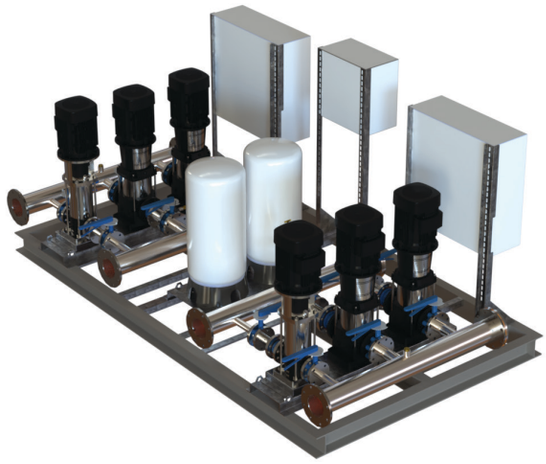
- Delivery to Site - optional crane truck.
- Factory Acceptance Testing (F.A.T) at our state-of-the-art facility.
- Onsite Commissioning.
- 24/7 technical support.

TYPICAL ARRANGEMENTS

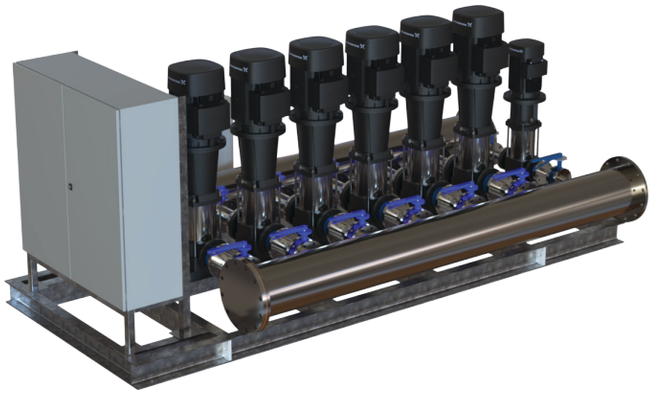
N SYSTEM

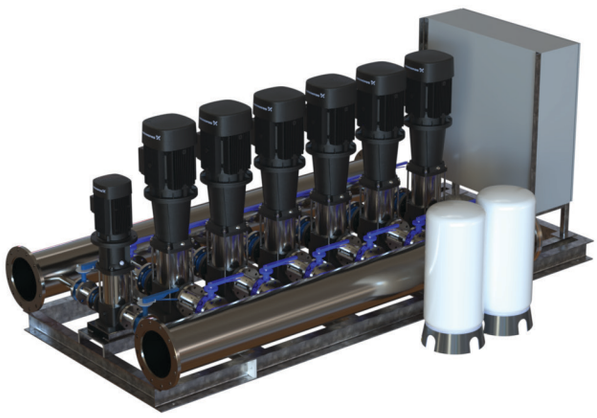


N+1 SYSTEM



HIGH-FLOW SYSTEMS





HYDRA™
RECIRCULATION FILTRATION SYSTEM

OVERVIEW

All Purpose Pumps **HYDRA**™ Industrial Water Recirculation Filtration Systems are engineered to provide continuous circulation and high-efficiency filtration of industrial water within storage tank networks. These systems ensure water quality is maintained, protecting downstream equipment and supporting reliable operation of mechanical cooling or process systems.

Each **HYDRA**™ system is fully custom-designed to meet specific project requirements and principal specifications. Advanced configurations including dual redundancy (N+1) and integrated skid-mounted solutions, combined with Water Pressure Booster Systems, are available to deliver enhanced reliability and seamless integration into complex water infrastructure.

SYSTEM OVERVIEW

BASE:

- Common galvanised base plate and controller stand.
- Baseplate lifting point designed to meet AS4100:1998 and AS1170.1:2002.

MANIFOLD:

- Stainless steel or PVC suction and discharge manifolds.
- Pump isolation and non return valves.
- 20mm test and drain valve.
- Stainless steel liquid filled pressure gauge.
- Pressure accumulator tank.
- Pressure Sensing Transducer (VSD).
- Flow control valves.

PUMPS:

- Single stage end suction pump or vertical multistage pump with standard IEC motors and M.I.P (Maintenance in Place) capabilities.
- Cartridge mechanical shaft seal.
- Vibration isolation rubber mounts.
- AS4020:2018 potable water compliant.

CONTROLLER:

- Manufactured in accordance with the relevant standards: AS3000:2007, AS1939:1990 and AS3439.1:2002.
- Constant Pressure VSD's (Variable Speed Drives) including capability for ultra-low harmonics ULH.
- High level interface for system monitoring and data logging.
- BACnet control (if required).

FILTRATION:

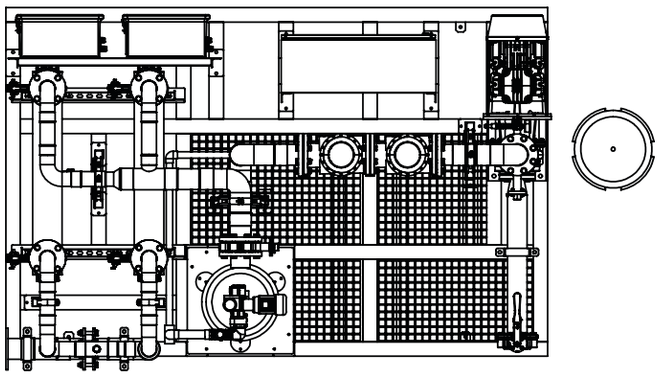
Watermark® Automatic Backwash Filters with BMS comprising of:

- 100um automatic backwash filter – Judo.
- 50um Judo, with provisions for 100um spacer. Custom solutions available to suit site requirements.
- 6um AUTOFINE automatic self-cleaning screen filtration.
- Ultraviolet Disinfection – a range of highly customisable Watermark-certified UV disinfection systems, designed for long life with up to 12,000 hours lamp life & low maintenance with self-wiping capability.

FEATURES

- Vertical or Horizontal Multistage Pumps.
- Reliable and proved control logic.
- Variable Speed Drive Controller with LED Screen.
- Fabricated Stainless Steel Pipework and Valves.
- Pressure Tanks.
- Common Steel Base for easy transport and installation.

DRAWING



TECHNICAL DATA

APPLIES TO N+1 ARRANGEMENTS

STANDARD RANGE*	
Number of pumps	1-2 Pumps
Flow range	1L/s - 120L/s
Maximum head	2000kpa
Liquid temperature	0°C to +50°C
Ambient temperature	0°C to +30°C

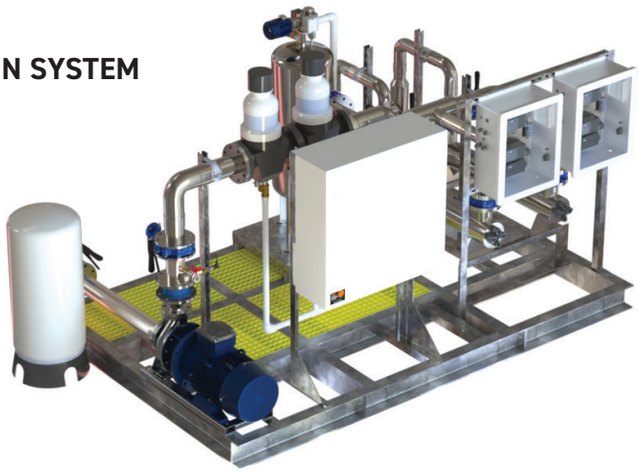
*Note – contact our team for higher capacities

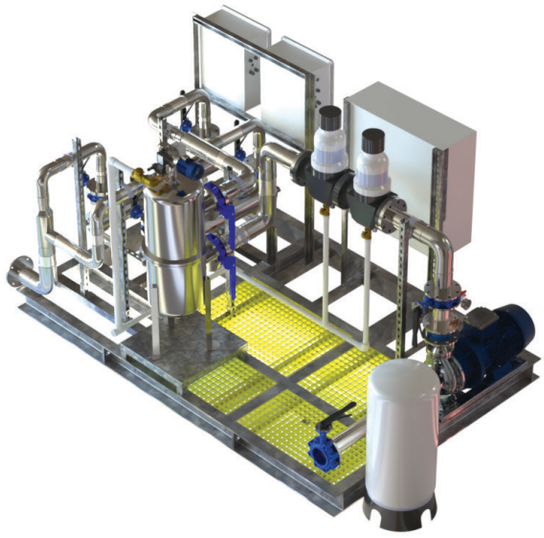
INCLUSIONS

- Delivery to site - optional crane truck.
- Factory Acceptance Testing (F.A.T) at our state-of-the-art facility.
- Onsite commissioning.
- 24/7 technical support.

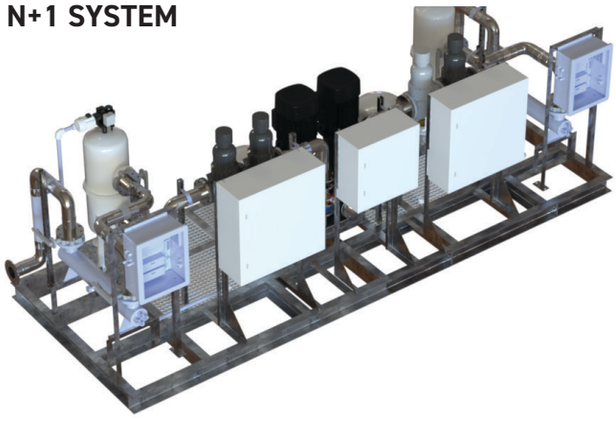
TYPICAL ARRANGEMENTS

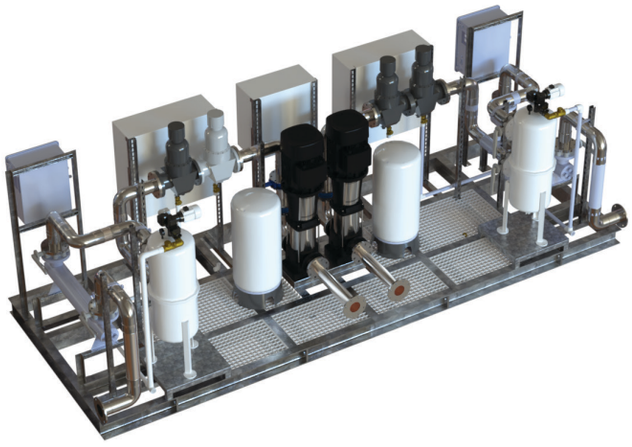
N SYSTEM



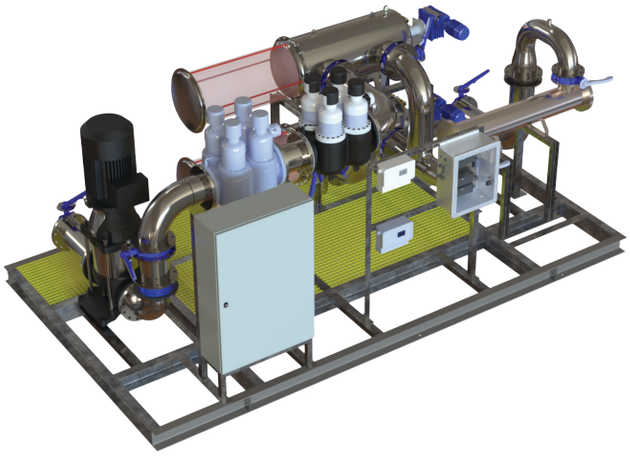


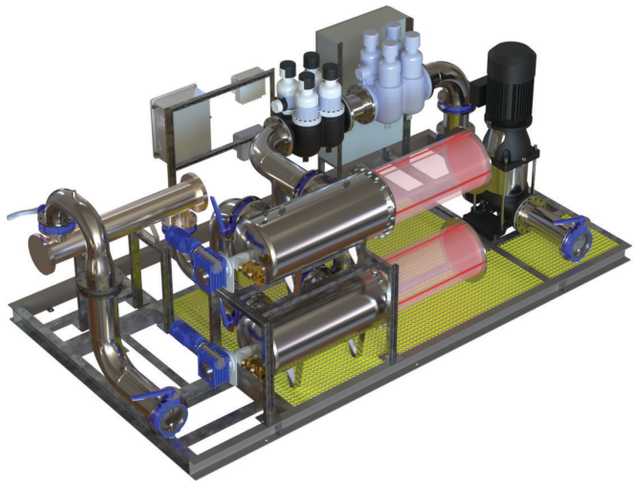
N+1 SYSTEM





HIGH-FLOW SYSTEMS





HYDRA™
CHLORINE DOSING & MONITORING SYSTEM

OVERVIEW

All Purpose Pumps' **HYDRA**™ Chlorine Dosing & Monitoring Systems provide a premium, engineered solution for maintaining safe and compliant water quality in both potable and industrial storage applications. By accurately controlling free chlorine levels through continuous circulation, precise chemical injection and intelligent automation, **HYDRA**™ ensures disinfected, stable water with minimal manual input—ideal for commercial, multi-residential and industrial environments.

Building on this capability, **HYDRA**™ Monitoring Dosing Systems are purpose-designed for mission-critical sites such as data centres. These systems pair active chlorine dosing with real-time monitoring of key water parameters to ensure stored and circulating water consistently meets strict operational standards. Together, **HYDRA**™ Chlorine Dosing and Monitoring Systems provide a dependable, intelligent and fully engineered treatment solution, safeguarding water quality wherever reliability is essential.

SYSTEM OVERVIEW

CONTROLS:

- HMI colour touch screen display coupled with a complete dashboard of indicator lights.
- Permanent data storage with system log.
- USB download of logged data.
- System run time clock.
- Expandable for monitoring and control of additional parameters, as required.

REDUNDANCY AND ALERTS:

- Early chemical storage low level warning.
- Low flow protection.
- ORP monitoring to override.
- Integrated run-time monitoring provides overdose protection.

FUTURE EXPANSION:

- Controls incorporate the logic and allow space for additional channels.
- The manifold is configured with ports to support additional sensors.

REMOTE CONNECTIVITY:

- Modbus TCP/IP.
- Voltage Free common fault for up to 10 scenarios.

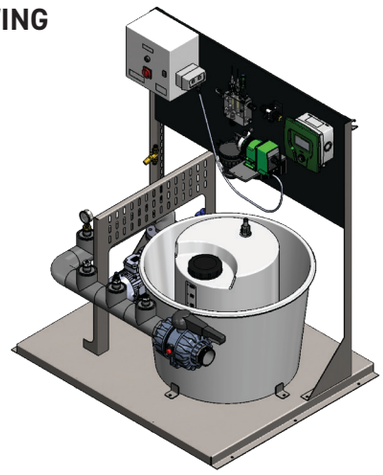
PUMP:

- Slower operating speeds enhance long-term reliability and durability.
- Stainless steel construction.

FEATURES

- Large LCD Full Colour Touchscreen Display.
- Large capacity storage for logging.
- High-performance microprocessor & operating system.

DRAWING

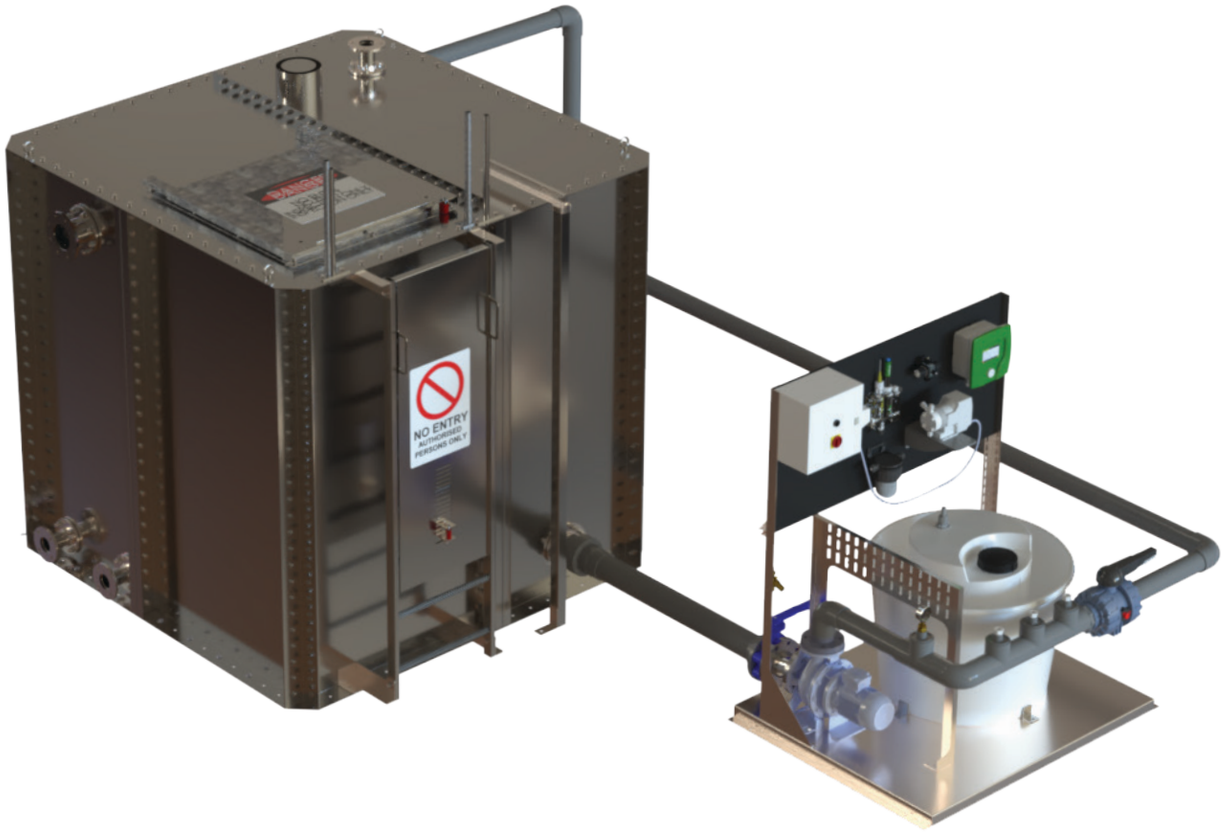


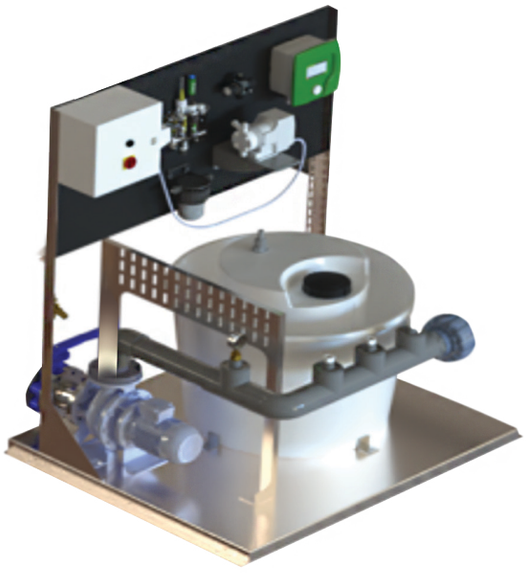
TECHNICAL DATA

STANDARD RANGE*	
Tank volume range	$2m^3$ to $+287m^3$
Chlorine storage	110L
Sample line discharge	8mm
Options	pH Monitoring Salinity Monitoring
BMS communication	Common voltage free output for up to 10 events Modbus TCP/IP

*Note – contact our team for increased capacities

TYPICAL ARRANGEMENTS





HYDRA™
INDUSTRIAL WATER STORAGE TANKS

OVERVIEW

All Purpose Pumps' **HYDRA**™ Industrial Water Storage Tanks are engineered for data centre, healthcare, and commercial applications, delivering durable and reliable water storage solutions. Manufactured in compliance with Australian Standards, **HYDRA**™ tanks are widely specified by leading industry specialists for their proven quality and performance.

Each tank is fully engineered to exceed structural, seismic, and wind-loading requirements, ensuring safe, long-term operation in demanding environments. Every **HYDRA**™ system is custom-designed to meet project-specific requirements, with the All Purpose Pumps experienced engineering team; collaborating closely with clients throughout design, coordination, and integration with existing infrastructure. Our professionals provide complete installation and commissioning services, ensuring tanks are installed to the highest safety standards and deliver a seamless, reliable, fully engineered water storage solution.

SYSTEM OVERVIEW

COMPRISING

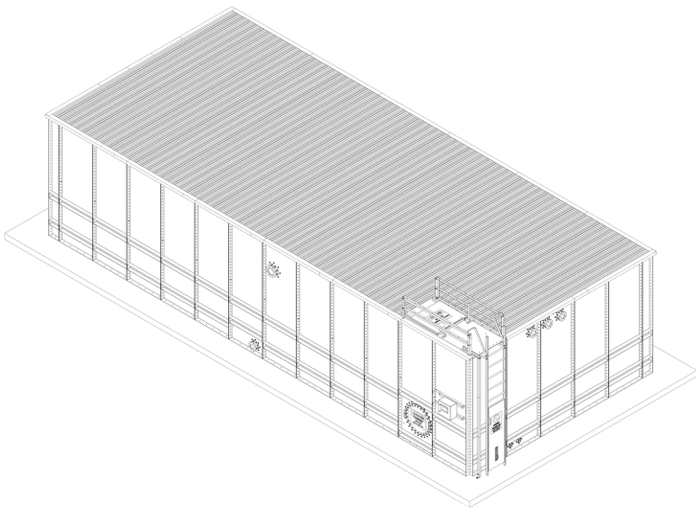
- Steel Panel Tank (bolted) with internal PVC Liner suitable for use with potable water, available in the following material:
  - Galvanised Steel.
  - 304 Stainless Steel.
  - 316 Stainless Steel.
  - High Grade Galvanised GR450 & LDX 2101 Stainless Steel for complex & large storage.
- Manufactured in accordance with relevant Australian Standards.
- Sheet metal roofing with anti-vermin protection.
- 750 x 750mm inspection access in top of tank.
- 600 x 600mm manhole access inside of tank at low level.
- External galvanised steel access ladder constructed in accordance with AS1657:2018.
- External ladder fitted with lockable guard.
- Mechanical Tank level indicator with signage.
- Inlet, overflow connection & outlet connection with anti-vortex plate.
- Drain outlet.

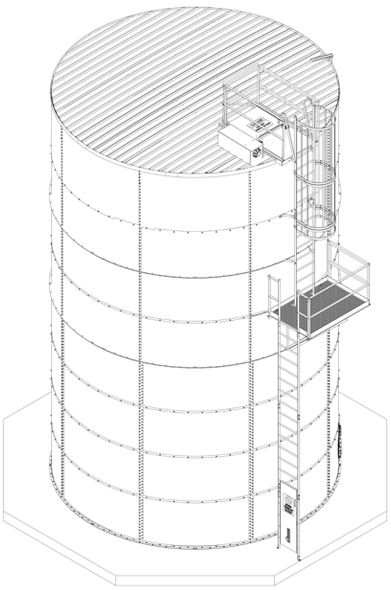
INCLUSIONS

- Each tank is customised to suit individual site installations.
- Expert Engineering & Project Management assistance – Plinth construction, egress, pipework connections, installation program & coordination, delivery logistics & compliance.
- Construction on site by APP Specialist Tank Installation Team.
- General Arrangement Design drawings provided in PDF format for the above equipment after time of order.
- BIM models.
- Suitable for use with Chlorine Dosing systems.

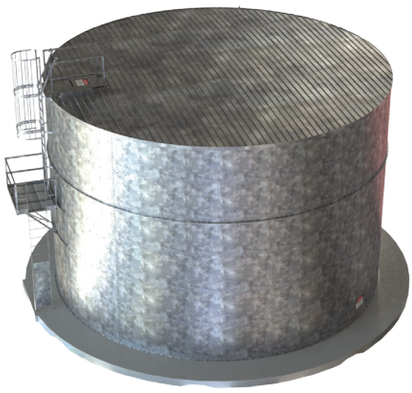
OPTIONAL

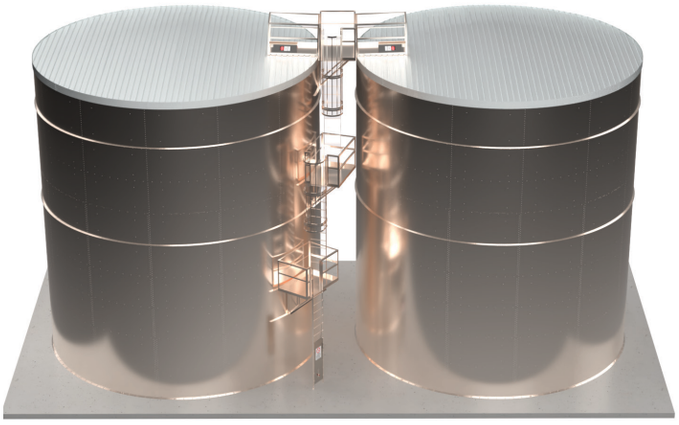
- Digital tank level indicator.
- Stair access.
- Reg 126 packages.
- Roof access - central walkway & platforms to connect to adjoining tanks or structure.
- Stair access - custom solution to fit any installation.
- Insulated tank options for Thermal Mass Storage.
- Customised lining solutions for Bentonite, Corrosion Inhibitors & other chemical resistance.
- Liner solutions for insitu tanks.

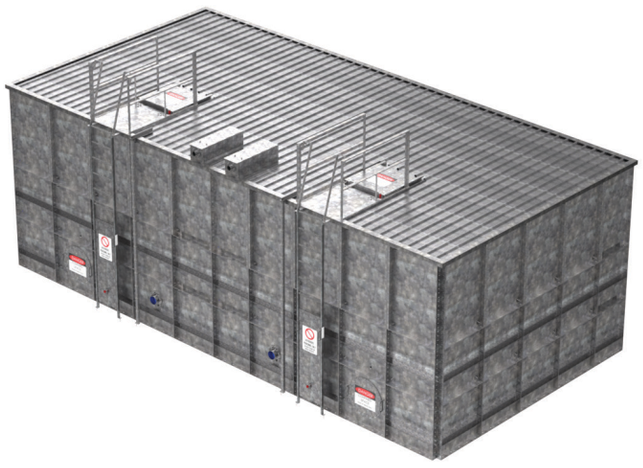




TYPICAL ARRANGEMENTS







HYDRA™
AUTOMATIC SCREEN FILTRATION SYSTEMS

OVERVIEW

Our HYDRA™ Automatic Screen Filtration System is engineered to safeguard mission-critical cooling infrastructure by delivering clean, reliable domestic water to industrial Water Storage Tanks. Designed around high-performance automatic backwash filters, the system provides continuous filtration without interrupting downstream flow; ensuring stable water quality for chillers, heat exchangers and other essential cooling equipment.

The system is available with single or dual-stage filtration and includes a complete manifold with an integrated bypass. Fully automated, differential-pressure-triggered backwashing ensures consistent performance, even with variable authority water conditions. Each filter operates independently and features its own built-in bypass and dedicated drain connection, allowing for easy maintenance and long service life.

Engineered for dependability, automation, and compliance, this filtration system provides confidence that your cooling water supply remains clean, stable, and ready to support continuous uptime.

SYSTEM OVERVIEW

BASE

- Common galvanised base plate and controller stand.

MANIFOLD

- Stainless steel suction and discharge manifolds.
- Manual bypass & isolation.
- 20mm test and drain valve.
- Stainless steel liquid filled pressure gauges on suction & discharge manifolds.

FILTERS

- Automatic backwash via differential pressure and timer control.
- Efficient screen cleaning ratio of 1:1 using point rotation principle.
- No interruption to water flow during screen cleaning.
- AS 4020:2018 potable water compliant.
- Stainless steel screen that is Silver coated to inhibit bacterial growth.

CONTROLS

- BMS connections for operation, fault, and backwash status available.
- Manufactured in accordance with the relevant standards: AS3000:2007, A51939:1990 and AS3439.1:2002.

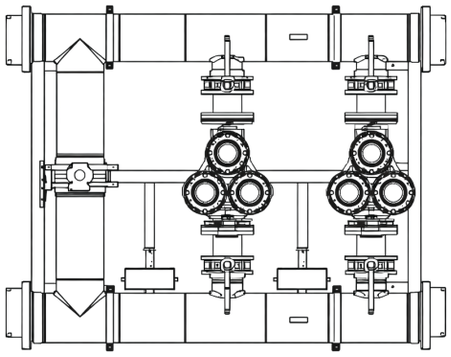
INCLUSIONS

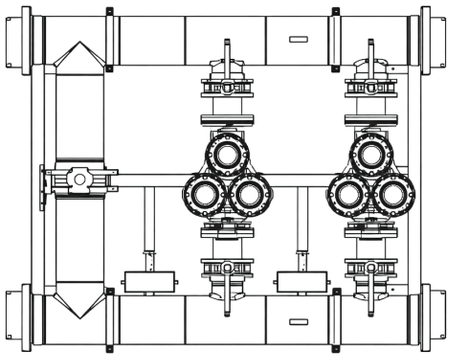
- Delivery to site - optional crane truck.
- Factory Acceptance Testing (F.A.T) at our state-of-the-art facility.
- Onsite commissioning.
- 24/7 technical support.

FEATURES

- Eliminates suspended particles that lead to pitting, corrosion, and blockages.
- Fully automatic screen cleaning by pressure differential control.
- Uninterrupted water flow during screen cleaning.

DRAWING





TECHNICAL DATA

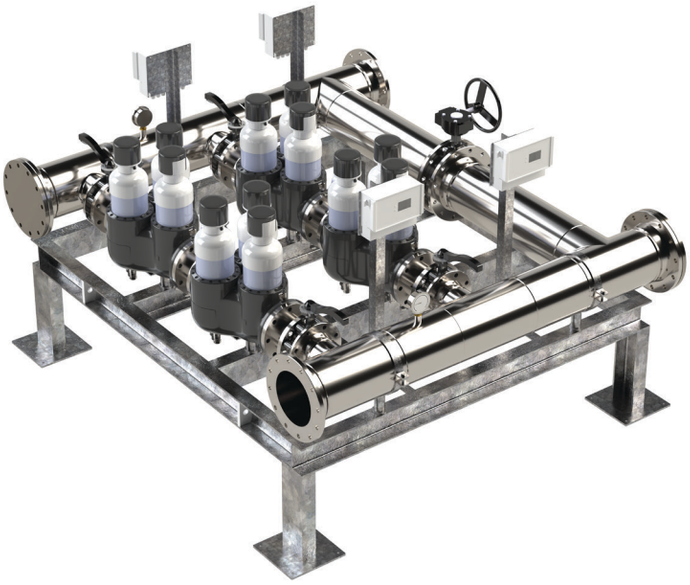
APPLIES TO N & N+1 ARRANGEMENTS

STANDARD RANGE*	
Arrangement options	N (duty or duty/duty) N+1 (duty/standby)
Filtration series	1-2 Per N System
Filtration micron	30um to 500um
Flow range	1L/s - +110L/s
Maximum head	1000kpa
Liquid temperature	0°C to +50°C
Ambient temperature	0°C to +30°C

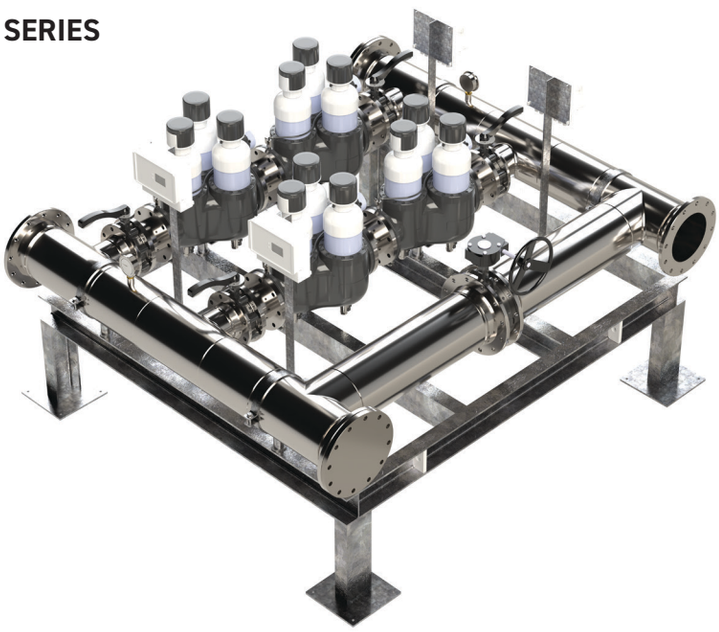
*Note: Contact our team for increased capacities.

TYPICAL ARRANGEMENT

SINGLE FILTRATION SERIES



DUAL FILTRATION SERIES



ALL
PURPOSE
PUMPS
PRECISION
ENGINEERED
TO FLOW...

QUALITY POLICY

In 2014, All Purpose Pumps was recognised as having ISO 9001:2008 standard Quality Management systems. We take the quality of everything we do extremely seriously, our policy on quality being:

To meet or exceed our customer requirements and expectations in a proactive, professional and cost effective manner.

GET IN TOUCH WITH US
MON- FRI 7AM - 5PM (GMT+11)

LOCATIONS:

21-23 Industrial Avenue
Hoppers Crossing VIC 3029

70 Technology Close
Corio VIC 3214

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Edwardstown SA 5039

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