

AQUIKO

Water Flow Control



**Expert
Support**



**Reliable
Engineering**



**Manufactured
In The UK**



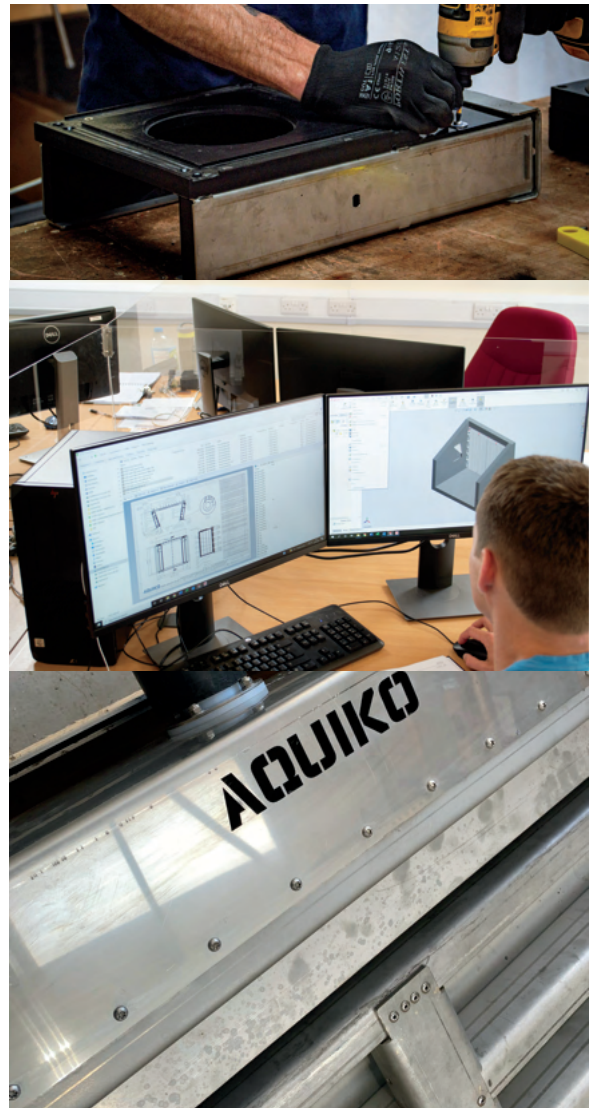
**Sustainable
Solutions**

AQUIKO

Founded by the team behind Aquatic Control Engineering Ltd (ACE), AQUIKO was born from decades of hands-on experience supplying and installing specialist equipment across the UK drainage and water industry. That knowledge is built into every product we make, delivering solutions engineered for exceptional strength, long-term reliability and low-maintenance operation trusted by contractors and resellers on projects across the country.

The majority of our products are designed and manufactured in-house. Shorter supply chains mean reduced logistics, locally stocked spares and the ability to deal direct with the manufacturer, giving our customers greater control, faster support and peace of mind.

With most of our stock available for same-day dispatch from our UK warehouse, and a dedicated team of specialists on hand for expert advice and guidance, AQUIKO is ready to support your project from enquiry through to delivery.



SUSTAINABILITY

AQUIKO selects materials with the lowest possible carbon footprint without compromising on quality or strength. HDPE requires significantly less energy to manufacture and transport, while offering exceptional durability and zero corrosion in water. Our compact, modular product designs reduce weight and size, minimising environmental impact. Where possible, welding has been engineered out - making products modular so parts can be easily exchanged.

FULL RANGE

STANDARD RANGE

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PENSTOCKS

02

FLAP VALVES

03

WASTOP®

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ORIFICE PLATES

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HEADWALLS

BESPOKE SOLUTIONS

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TILTING WEIRS

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COMPACT SOLAR CONTROL

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STOP LOGS

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SIDE HUNG DOORS



01 PENSTOCKS

Penstocks (also known as sluice gates) are vital components in water flow control – designed to regulate, isolate or redirect flows.

Precision-engineered and manufactured in the UK using high-grade 316 stainless steel and robust HDPE. Designed for a service life of up to 50 years, penstocks deliver long-term reliability in diverse water flow control applications.

Key Features

Durable construction: Made from marine-grade 316 stainless steel, offering superior resistance to corrosion, pitting, and crevice damage - ideal for harsh, high-moisture environments.

Leak-tight performance: Complies with BS7775 leakage standards, ensuring enhanced sealing and peace of mind.

Compact & versatile design: Space-efficient frame allows for easy installation in confined areas. Fully compatible with AQUIKO's ancillary products for seamless system integration.

Large size range: Available in sizes from 100mm to 1,500mm, meeting a broad spectrum of project requirements.



PENSTOCKS

STANDARD PENSTOCK

A reliable solution for general flow control applications.

- ✓ Lightweight & robust construction
- 🔧 Simple, effective operation

Sizes from 100mm
to 1,000mm



FLOOD-DEFENCE PENSTOCK

Designed for high-performance flood defence and water management.

- ✓ Quick installation
- 💧 Corrosion resistant

Can be used with Actuator
Operates against a full head of water
Sizes from 100mm
to 1,500mm



INLINE PENSTOCK

Compact inline design for efficient flow regulation.

- ✚ Space-saving inline design
- 🔧 Self-cleansing

Sizes from 100mm
to 600mm



HAND STOP

Manual flow control for irrigation and water systems.

- ✋ Manual operation
- ✓ Durable and dependable

Sizes from 100mm
to 500mm



02 FLAP VALVES

Designed to prevent reverse flow and ensure reliable operation, our flap valves deliver dependability in demanding UK environments.

Flap Valves provide a simple yet highly effective method of flood prevention. Installed across a wide range of applications, they prevent backflow into outfalls and reduce the risk of flooding.

Key Features

Efficient, lightweight design: Manufactured from robust, UV-stable HDPE, the valve is exceptionally lightweight, reducing head loss, minimising opening pressures, and making installation easier, especially in confined or challenging locations.

Reliable flood protection: All AQUIKO Flap Valves are rated to a minimum of 8MwC pressure as standard, with bespoke higher-pressure configurations available to meet specific project requirements.

Rapid installation: With no need for casting in or grouting, installation time can be reduced by over 12 hours when compared with stainless-steel or cast-iron alternatives. The lightweight structure also enables simpler handling and the use of smaller lifting equipment.



FLAP VALVES

WALL MOUNTED FLAP VALVE

A reliable solution for simple and effective flood prevention.

- ✓ Lightweight design reduces head loss
- 🔧 Simple, quick installation



PIPE MOUNTED FLAP VALVE

Compact inline design for efficient flow regulation.

- ✓ Robust material and shock absorbent
- 💧 HDPE low carbon footprint



FLANGE MOUNTED FLAP VALVE

Designed for high-performance flood defence and water management.

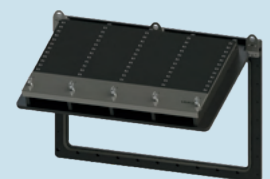
- ✓ Reliable and effective design
- 🔧 Custom fit on to existing flange



SQUARE FLAP VALVE

To prevent backflow into outlets and minimise the risk of flooding.

- ✋ Customisable pressure ratings
- ✓ Low maintenance and low head-loss design



03 WASTOP® INLINE CHECK VALVE



We are proud to have the ingenious WaStop Inline Check Valve within our portfolio. The WaStop has been efficiently preventing back flow since its inception in 2000. An inspired solution to all of the deficits of traditional non-return devices. It is used around the world and protects millions of people from flooding. With no mechanical parts which can be prone to blockage from rag and debris. The membrane ensures that debris cannot prop the valve open which can be an issue for flap valves.

The WaStop inline check valve can be installed at any angle and even inline. It's also incredibly versatile as it does not require a head wall. Installation is quick and flexible taking only a fraction of the time compared with traditional flap valves. It requires greater pressure to open than it does to close. This ensures your pipelines stay clean and debris passes through with ease because of the flushing action which it creates.

Testing shows the WaStop has 65% lower head loss than a competing inline check valve at 150l/s – often meaning competitors need larger, more costly valves to achieve similar performance.



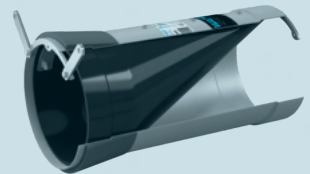
WASTOP® INLINE CHECK VALVE

The WaStop Inline check valve provides direct and reliable protection against flooding and backflow in wastewater and stormwater systems. With its unique self-sealing design, WaStop effectively prevents not only water from flowing back but also blocks odours and pests, making it an excellent safeguard for both people and property. The valves simple yet ingenious function is instantly activated by pressure changes in the pipes with no need for electricity – making it a sustainable, maintenance-free solution.

WASTOP

Direct and reliable protection against flooding and backflow.

- ✓ Resistant to blockage
- 🔧 Virtually maintenance-free



WASTOP FLANGED

Flange for bolting onto a head wall.

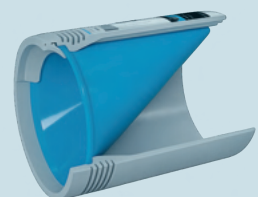
- ✓ Resistant to blockage
- 🔧 Secure and fast installation



WASTOP RESIDENTIAL

Designed for installation inline on the sewer lateral.

- ✓ Reliable and effective design
- ⚙️ Available in multiple sizes



04 ORIFICE PLATES

Reliable and cost-effective method of controlling and restricting water flow in drainage and wastewater systems.

The AQUIKO Orifice Plate range is precision-engineered and manufactured in the UK from high-quality High-Density Polyethylene (HDPE). Designed to regulate or restrict water flow, these orifice plates deliver reliable, repeatable performance across a wide range of water and wastewater applications.

Key Features

Durable construction:

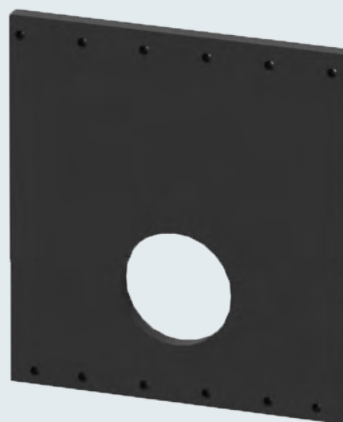
- Manufactured from high-grade HDPE for long-term reliability.
- Suitable for harsh, corrosive, and chemically aggressive environments

Accurate flow regulation:

- Precision machined orifice sized to meet defined hydraulic conditions.
- Designed to control flow rates while minimising disturbance and head loss.

Ease of installation:

- Designed for straightforward installation and retrofitting.
- Supplied with all necessary components for a fit-for-purpose installation.



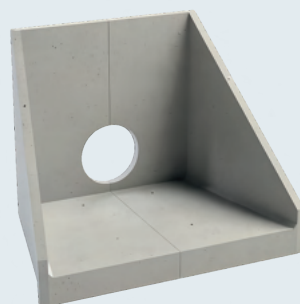
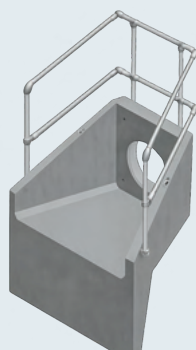
05 HEADWALLS

Critical components for shaping, protecting and managing water discharge from pipes, culverts and drainage networks.

Headwalls are reinforced concrete structures designed for pipes up to 2m in diameter. Available in three standard configurations with varying wing wall angles, they provide robust outfall protection and erosion control. Precast for precision and efficiency, each unit includes RD20 lifting points and stainless steel sockets for optional handrails and gratings. Brackets can also be supplied for use with a ground anchor system.

Our range of Headwalls include:

- Standard Headwalls
- Wingwall Headwalls
- Reflex Wingwall Headwalls
- Sloped Headwalls
- Toe Extension Headwalls
- Custom Headwalls



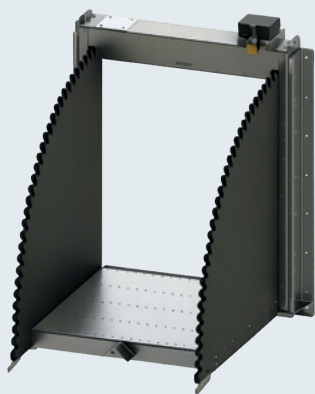
06 TILTING WEIRS

Specialised flow-control solution that pivots rather than sliding vertically, enabling precise water-level regulation.

AQUIKO Tilting Weirs offer the ultimate variability and precision in water level management. Tilting weirs are specialised flow-control solutions that pivot rather than slide vertically, enabling precise water-level regulation, simplified mounting and minimal head-loss. Ideal for drainage, land-management, flood-defence and conservation applications, AQUIKO's tilting weirs deliver engineered performance and long-term reliability.

Key Features

- Flexible manual or automated operation – suitable for both simple level control and fully integrated systems.
- Combine with Compact Solar Control (CSC) for automation on isolated site locations with no mains power.
- Innovative tilting design – eliminates the need for deep recesses at the end of a channel and enables smooth flow-over operation.
- Durably engineered materials – available in HDPE and stainless steel 316L for both lightweight and high-resilience applications.



07 COMPACT SOLAR CONTROL

Intelligent solar powered actuator which allows autonomous operation of all AQUIKO products up to 150Nm.

The Compact Solar Control Unit is equipped with its own power supply, a powerful motor, and universal open telemetry. For fully automatic control, one or two level sensors are connected.

Key features:

- Makes automated water management possible, especially when there is no mains electricity.
- Communicates with various main Scada systems.
- Various substations possible, including UDSO (standard) and LMX400.
- Own energy supply, based on solar energy.
- Easy installation on any existing product.
- Low maintenance.
- Standard 7" touchscreen for user-friendly operation and commissioning on site.
- Controls adjustable via the display e.g upper level and lower level.
- Powerful industrial motors, emergency/manual operation possible.
- Standard 4-20 mA inputs available for connecting level measurements.
- Anti-burglary and vandal-resistant solar panel.



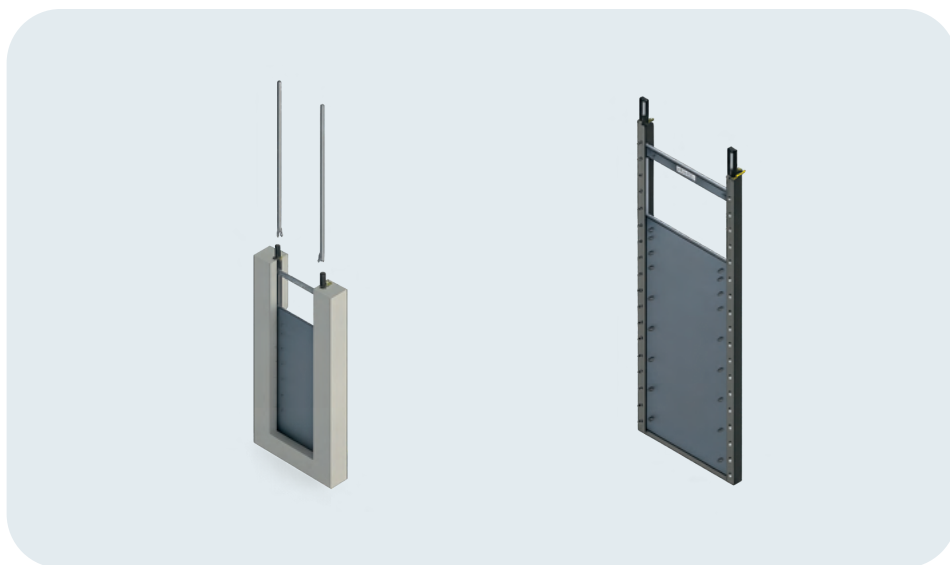
08 STOP LOGS

Also known as removable barrier sections, stop logs are effective solutions for completely isolating water flow.

Stoplogs provide a simple yet instantly effective barrier to a watercourse, making them ideal for isolation of fixed plant for maintenance, or more long-term use as a fixed weir. Using lightweight materials such as aluminium, AQUIKO stoplogs are designed to be easy to handle and deploy, without compromising safety or durability.

Key Features

- Manufactured in marine grade Aluminium, fitting into Stainless Steel 316 frames with integral seals. Stainless Steel, coated steel and composites, and bespoke designs are available on request.
- Ideal for either quickly deployed temporary barriers, or long-term penning of a watercourse.
- Easy to handle, deploy and easily retrieved once submerged with lifting beams, telescopic poles and other ancillaries help with deployment and removal.
- UK-manufactured for quality assurance, rapid supply and trusted performance.



09 SIDE HUNG DOORS

High-performance non-return protection while maintaining fish-friendly passage and minimal maintenance.

The AQUIKO Side Hung Doors offer a reliable and secure flood defence. However, unlike other forms of non-return valve they pose no barrier to fish migration. A simple yet effective concept based on traditional mitre door designs. The water flow pushes them open and closed depending on the flow. Once open, free flow between the two water bodies is possible.

Key Features

- Material options include HDPE and stainless steel 316 for lightweight installation and optimum corrosion resistance.
- Supports fish migration as side-hung hinged design aligns with best practice for eel and fish passage.
- Simple installation – typically mounted to a bespoke frame or bolted using resin anchors with no grouting required.
- Minimal maintenance due to self-lubricating hinges, no greasing needed and designed for long service life.





Carbon Management

AQUIKO firmly believes in supplying the water industry with high quality solutions producing a low carbon footprint. We source materials with the lowest possible carbon footprint, while not compromising on durability and strength.



Team of Experts

AQUIKO has a team of experts on hand to deliver specialist advice and guidance on your product needs. We stock products from 75mm to 1500mm and the majority of these are available for same day dispatch from our UK warehouse.



Manufactured in the UK

AQUIKO design and manufacture most of our products in house. This provides environmental benefits due to reduced logistics and short supply chains as well as ensuring spares are stocked locally. Customers get to deal direct with the manufacturer.

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