BWT News

Welcome to the latest edition of BWT News. Inside, you'll find news and product information from the BWT team.

IN THIS ISSUE

BERMAD water technologies
Serving Australia for over 25 years

News

A focus on learning and technical prowess

Thanks to the ongoing support from our long-term customer base, Bermad Water Technologies is beginning another financial year in the thriving water industry.

Bermad continues to engage with the people that utilise our products, investing in demonstrative content that promotes learning and offsite training.

We want to enable remote technical training for our full range of products. The demand in the industry for installation and operational knowledge is increasing – and we support this growing trend.

Our growing library of 'how to' articles, video demonstrations and animations, manuals and data sheets provide easy access to valuable resources.

For specific information on our online resources, visit the Knowledge Hub on our website.

Transforming Bermad's online experience.

Part of promoting educational content is ensuring resources remain accessible. We continue to push for content that is showcased online. After much development, the new site is being rolled out over the next few months.

This change is more than aesthetic – bringing about faster and easier access to the Bermad site.

Product pages now feature direct links to articles, data sheets, manuals, CAD drawings and training videos in one simple location.

An inside look at the BWT testing facility

News

Since Bermad's move to our new Thomastown office – we've made some improvements to our training centre and testing facility.

We've set up a space that enables us to cover more of our product range for industry professionals.

A purpose-built classroom is now part of the testing facility, enabling a hands-on session that incorporates theory and practical observation.

Our team can train up to 16 individuals at a time in our classroom and test rig. The testing facility incorporates control valves, meters and Magflows – as well as Australia's first air valve testing bench.

The Bermad Training Academy offers demonstrations of air release valves and their performance under simulated conditions.

Valves can showcase their ability to seal under varying pressure and flow conditions. Our dynamic air flow bench is able to demonstrate air flow performance under vacuum and discharge air flow.

This contributes to improved practical design understanding and knowledge.

If you wish to attend a session at the Bermad Training Academy and testing facility, please don't hesitate to contact your local sales office, or visit the Bermad website.

Image: Bermad training facility classroom

Email colin@bermad.com.au to sign up to our workshops. We look forward to seeing you!

Bermad air valves set the bar for treated effluent applications.

Case Study

Bermad Water Technologies has had great success with Australian Water Authorities – supplying air release valves for a variety of applications and pipeline needs.

One such application is rising main pipelines where treated effluent is pumped to dams or into re-use schemes.

This is often a difficult application for air release valves, as the treated sewage tends to have a high organic content in the water. Regular air valves can suffer from leakage due to the nature of effluent's water quality.

The Bermad C10/C30 range of air valves was designed with the ability to work with water of varying quality, including effluent. At pressures close to zero, the Bermad range maintains reliable, positive sealing performance.

The key to the product's ongoing success is in the design of the sealing mechanism and float. Bermad's unique design tends to be less problematic than most manufacturers in the market.

In addition to the design of the internal mechanism, the valves are completely non-metallic. This prevents compatibility issues when the water contains high salt content, as there is nothing in the internal design that is prone to corrosion.

Australian water companies have used our air release valves in a wide variety of pipeline rising main designs and pumping stations. Our products ensure maximum pumping and transfer efficiency by reducing entrapped air within the pipeline. Entrapped air is usually located at the high points of the system, causing water hammer and potential pipe damage.

The Bermad range is applied extensively in effluent filtration systems. The air release valves work to prevent entrapped air in the filters, which can reduce the effective screening area.

If you wish to learn more, please don't hesitate to contact your local sales office, or visit the Bermad website.

Images: Bermad C10 air release valve

For further information on the Bermad range of air valves, including resources and data sheets – visit our product page on the BWT website.

How to clean and service the Bermad C10 valve

How to

Air release valves are an important addition to your irrigation system. They play an integral role in water transfer by ensuring efficient air release for optimum pipeline performance.

The issue

Maintaining your air release valves supports their role within your pipeline. Over time, anything that floats within the water pipeline can enter the air release valve. This may include dirt, foreign objects or debris that can cause the valve to potentially leak.

It is critical that valves remain in good working order, and are not isolated from the pipeline. The Bermad C10 air release valves are high performing and are very simple to service.

How to clean and service the Bermad C10 valve

We suggest the following procedure should be used to clean and service the Bermad C10 valve:

- Isolate the air valve by closing the inlet ball / gate valve.
- If there is no isolation valve, then drain the pipeline below the elevation of the air valve.
- De-pressurise the valve carefully by removing the drain plug on the side of the valve.
- Remove the cover and expose the inner float assembly of the valve.
- Check the inner cover for dirt, debris or poly-shavings.
- Expose the inner seal of the valve to make sure there is no dirt under the rubber seal.
- Clean the upper seal to make sure there is no dirt around the rubber.
- Re-assemble the valve and the drain plug, and slowly open the isolation valve.
- If IP or SP kits are fitted, inspect the rubber membrane for dirt or debris prior to reassembly.

Need more guidance?

Bermad has prepared a video presentation that demonstrates exactly how to maintain and service the C10 air release valve. Whether you're undergoing training, or out on the field, watch the video on the Bermad Youtube Channel for a comprehensive look at how to clean the Bermad C10 valve.

Should you require the Bermad C10's operation manual or data sheets, visit our product page or get in touch with your local Bermad office today.

Who's who at BWT

Profile

COLIN KIRKLAND

Air Valve Product Manager & Technical Sales Representative

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With more than 30 years' experience working in water supply and Australian irrigation, and over 16 years at Bermad Water Technologies – Colin Kirkland is a leader in his field.

Colin is a mechanical engineer and a fitter and turner, who prides himself on taking a hands-on approach when designing and implementing successful installations across all aspects of Bermad's products and markets.

His success in the water industry flows from his practical engineering background and years of onsite commissioning and project management.

He also credits his training at Weir pumps in his native Scotland for providing him with a solid grounding in pipeline design.

Colin is based in Bermad's Melbourne office and covers a sales territory that spans across Tasmania, Victoria and southern NSW. In addition to his sales experience, Colin manages the air valve range within Bermad Australia. This role sees him conducting seminars across the country – showcasing his expertise on the operation, design and functionality of air release valves.

If you're interested in learning more about Colin's expertise, you can catch him on the Bermad Youtube Channel – hosting a variety of knowledge-based videos for our customers.

Colin's technical and operational knowledge is unparalleled – and he brings great passion, dedication and experience to the Bermad team.

What to consider when choosing an Electromagnetic Flow Meter.

Technical feature

Often referred to as Electromagnetic Flow Meters or Magflows, these state-of-the-art meters accurately measure the volume and flow rate of water.

These meters have a range of outputs that are compatible with standard control equipment. However, there are some widely unknown facts regarding battery-powered Magflow meters. Battery Magflows meters are incapable of continuous flow measurement. They typically sample the flow every 30 seconds.

Every 30 seconds, the coils are energised, and a flow reading is collected. As the coils are de-energised outside this time, the meter is unaware of any changes to the flow until the next reading.

When compared to powered Magflow meters – battery Magflow meters are less accurate, and cannot measure lower flow samples. Powered meters can supply higher currents to coils, resulting in a better signal-to-noise ratio. If a sample is below the low flow threshold, the flow reading is read as zero.

These limitations are made more significant in applications of low, varying flows. For example, in the case of a single line feeding water to a building or apartment, any small flow of water (i.e. taps being turned on) can be missed or undetected.

Euromag addressed these limitations when developing the MC406/MUT2300 battery Magflow meter, incorporating the latest in electromagnetic flow technology. Euromag's meters utilise high performance Tadiran lithium thionyl chloride inorganic electrolyte batteries.

Unlike other Magflow manufacturers, Euromag have published the battery life of the meters vs. the sample rate for each meter size. This allows the user to make an informed decision on the optional sample rate for each application.

When the meter detects no water, it will automatically stop powering the coils – saving battery life until it is used again.

This can be beneficial for temporary applications, or in agricultural applications where the line is drained for months at a time. Depending on the application, this feature has the potential to double the battery life of the meter.

The MC406 converter has an accuracy of 0.2% +/-2mm/s, a battery life of up to 22 years and a low flow reading down to 0.01m/s (0.08l/s on a 4" line). It records three years of historical flow data for your pipeline or water network. When used in conjunction with the MUT2300 sensor (which is certified for 0DN/0DN straight pipe lengths), it's an ideal solution for nearly any application.

To download the free-issue MC406 software, Euromag flow calculator, and other technical data please visit bermadmeters.com.au or contact your local Bermad Water Technologies office.

Interested in this solution for your next project? Contact your nearest BWT state office to speak with one of our representatives.

Image: Euromag's MC406 converter

Get in touch — BWT can be found Australia-wide.

For more information or to speak to one of our staff, call the number in your state
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