EXPECT
STORIES FROM THE AVK WORLD

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FRONTPAGE PICTURE

Image of a large-diameter valve, delivered by AVK, to the new pumping station near the Danube - the second longest river in Europe.
Budapest, Hungary.

Index

DEAR READER

Water is a strategic asset
The report "EU BUSINESS PRIORITIES ON A FUTURE – PROOFED EU WATER POLICY", was just launched by Business Europe to the European Parliament.

The report states:
"Water is essential for the economy and the successful implementation of key EU initiatives, but increasing pressure from climate change makes equitable access for all users more critical than ever."

Water is undeniably one of the most vital resources on our planet, serving as the foundation of life for both humans and nature. Unlike other resources, the emphasis is not only on the quantity of water consumed but also the specific way it is applied.

For industry and business, water holds fundamental importance, being a critical resource across all sectors. For instance, it is utilised in manufacturing or industrial processes across various sectors such as construction, food production, pharmaceuticals, textiles, steel and aluminium production, chemicals, fuels and paper manufacturing. Industries use and consume substantial quantities of water for both cooling and production processes.

A significant portion of this water is recirculated and regenerated, indicating that many companies are already implementing efficient water management practices. Water also serves as a key energy source for power generation, with hydropower and nuclear providing reliable base load electricity, flexibility, and storage capacity to stabilize the grid in times of increasing shares of intermittent renewable energy. Moreover, water is essential for other economic sectors such as agriculture and urban water cycle.

It cannot be said enough to the politicians how important water is, and it seems that the message is received, due to the impact of climate change. Massive floods, draughts, and everything in between. Rivers are running dry, power stations in danger of losing cooling water, and cities flushed away due to heavy rain, wildfire getting out of control due to lack of water.

Groundwater is the most crucial resource in meeting the worlds freshwater needs and provides a resilient component to water supplies challenged by crisis and change.

But sustainable groundwater exploitation is a tricky task.

Groundwater is not easily visible to us, and it finds its own way through the labyrinths of the subsurface.

We will never be able to achieve a complete understanding of the groundwater dynamics, which lends a bit of mystery to the art of a groundwater-based water supply.

Enjoy reading,
Michael Ramlau-Hansen

SECURING A LONG-TERM AND RESILIENT WATER SOLUTION

HUNGARY

By Tamás Bedegi, General Manager, AVK Magyarország

AVK delivers large-diameter valve solutions to the rehabilitation of key water management infrastructure on the Danube – Europe's second longest river – in Budapest, Hungary.

The Kvassay Dam and Pumping Station, located in Budapest, Hungary, is undergoing an extensive rehabilitation to safeguard its continued role in regional water regulation. Often referred to as “The Lord of the Danube,” the more than 100-year-old complex plays a critical part in flood protection, water level management and ecological stability in the Ráckevei (Soroksári)-Danube branch (RSD).

The upgrade, co-financed by the Hungarian State and the Cohesion Fund under the Environmental and Energy Efficiency Operational Program, was launched in response to record low water levels in the Danube, including a historic minimum of just 33 cm in 2018. These conditions exposed limitations in the existing infrastructure and underlined the need for long-term, resilient solutions.

Ensuring continuous water flow

The new pumping station is designed to maintain water supply to the RSD even when the Danube’s natural flow is not able to sustain it. The new setup can deliver at least 30 m³/s of water, even at record-low water levels of as little as 17 cm. This is essential, not only for maintaining water levels, but also for biodiversity, agricultural irrigation, fishponds and proper dilution of treated wastewater discharged from the South Pest wastewater treatment plant.

Supporting long-term reliability in critical infrastructure

The rehabilitation of the dam and pumping station ensures that it is ready for future challenges such as climate changes. With its expanded capabilities, the facility will continue to contribute to water management, flood defense and energy supply to Budapest and to the surrounding areas.

AVK Magyarország has delivered large-diameter valve solutions for the rehabilitation project designed for long-term reliability under demanding operating conditions.

AVK double eccentric butterfly valves

AVK manufactures double eccentric butterfly valves in DN150-2800 designed with durability in focus.
The tilted and firmly secured disc, the optimised seal design and the corrosion protected shaft end zones all exceed market standards.

Products delivered to the project

- 4 pcs tilting disc check valves (DN1800) with hydraulic dampers
- 4 pcs dismantling joints (DN1800)
- 4 pcs double eccentric butterfly valves (DN1800) with AUMA actuators
- 26 pcs rubber-metal flange gaskets (DN1800)

SMART IRRIGATION IMPLEMENTED IN SOUTHERN ITALY

As part of a comprehensive initiative aimed at enhancing the functional efficiency of irrigation distribution networks, the Water Authority of Basilicata has implemented a wide network of ACMO-AVK Hydropass systems throughout Southern Italy.

By Irene Schiavon,
Digital Content Creator,
AC.MO S.r.l

Italy has a deeply rooted agricultural tradition, and the Basilicata region excels in strawberry production.

Like many countries around the world, Italy is facing the urgent challenge of reducing water loss in its irrigation systems. In response, extensive rehabilitation projects are underway, supported by European, national, and regional funding. These initiatives aim to enhance the efficiency of the national irrigation system and combat the effects of climate change, with a strong emphasis on sustainable water use.

In this context, the Water Authority of Basilicata has made strategic investments to boost the performance and sustainability of its irrigation systems, with the clear goal of optimizing water usage monitoring, promoting sustainable water and energy practices, and conserving water.

To support this initiative, AC.MO, in a recent project, has supplied more than 6,000 Hydropass HNS ultrasonic meters units and 12 communication gateways across the authority's service area, covering approximately 14,000 hectares of territory.

Ensuring long-term performance and energy efficiency

The Hydropass system stands out for its exceptional durability and effectiveness. Designed for long-term performance and energy efficiency, it integrates hydraulic components, flow metering, and valve controls into a single, robust steel housing, which also contains the control and management electronics. Fully autonomous, the system does not require an external power supply and is equipped with the necessary communication interfaces.

Control is managed through either a battery-powered Hydrokey card and the Hydropass mobile app. Data is collected using dedicated software that provides both graphical and tabular data displays. Its built-in LoRa communication module allows for long-distance data transmission without generating additional traffic costs.

It is based on LoRaWAN™ technology (Low Power Wide Area Network) specifically designed for a bidirectional communication via the Gateway. The gateways automatically receive usage data from individual units and transfer it to the central management system.

Communication occurs over multiple frequencies and data rates, ensuring reliable and efficient transmission of information for analysis and storage.

This solution for precision irrigation has significantly improved the functional efficiency of the water distribution networks, allowing the management of the master data, the accounting of the consumption and the generation of reports, contributing to a smarter resource management.

SMART WATER: WHAT, WHY, AND HOW?

DENMARK

Applying Smart Water can help increase the robustness of our water infrastructure. The technology and solutions are already there. The only challenge is to see the possibilities for application and the final value.

By Lars Enevoldsen,
CDO, Product Development,
AVK Holding A/S

A critical need for efficient water management

The changing times we live in affect which topics are prioritised in our society, due to their urgent relevance. Smart Water is one of these, now more relevant than ever before.

The EU CER Directive is designed to increase the resilience of critical infrastructure in times of conflict and war close to the EU.

Water supply and distribution is indeed critical infrastructure.

At AVK, we can contribute to the functioning of our infrastructure with high quality products.

With Smart Water, we can also contribute with transparency for those who need to use our critical infrastructure, such as the emergency services, in the event of a critical situation, such as a climate event, conflict or similar, where we cannot expect everything to function as usual.

We can protect fire hydrants from misuse in "peace times" so they will work the day they are unfortunately needed. We have Smart Water solutions that can send an alarm to the utility company when a hydrant is opened, so the utility company can check if it was authorised use or not and then check if everything still works.

What is the Critical Entities Resilience Directive (CER)?

The Critical Entities Resilience Directive lays down obligations on EU Member States to take specific measures, to ensure that essential services for the maintenance of vital societal functions or economic activities are provided in an unobstructed manner in the internal market.

In order to address in a comprehensive manner, the resilience of those entities that are critical for the proper functioning of the internal market, the Critical Entities Resilience Directive creates an overarching framework that addresses the resilience of critical entities in respect of **all hazards, whether natural or man-made, accidental or intentional.**

Under the Critical Entities Resilience Directive, EU countries will have to carry out risk assessments on essential services and will have to identify critical entities **by July 2026**. Once identified as critical, these entities will have to carry out their own risk assessments and adopt resilience-enhancing measures to better prevent, respond to and mitigate incidents disrupting the provision of essential services.

Source: www.critical-entities-resilience-directive.com

We also offer the possibility for emergency responders to get a snapshot in a crisis situation of which hydrants have water pressure and which do not. This can save firefighters' crucial time in an extinguishing situation. The solution is of course an extra cost compared to status quo, but not a huge one. We think it makes sense, and we actually believe it is a requirement to be compliant with the new CER directive.

That is why we are working together with the emergency services in Denmark.

Crises also occur because of our climate. We are experiencing increasing problems with water from all directions; elevated groundwater, storm surges and very heavy rainfall. Recently, most people have heard about the tragic and costly incidents in Valenzia, Spain, and Florence, Italy, but many other places are facing the same critical issues.

Can AVK and Smart Water help here too?
The answer is a resounding yes.

The bottleneck during heavy rainfall is often our wastewater treatment plants. Part of the problem is that we cannot avoid the rainwater having to pass the treatment plants, as the rainwater is mixed with wastewater from households and industry. Here we work with others to find solutions that work together across the board, from a reliable warning system from national weather services to the design and construction of our wastewater system so that a few hours before a heavy downpour, we can pump wastewater to our treatment plant and empty the sewage pipes. With valves, we can shut off the wastewater and let the wastewater accumulate in the pipes in a decentralised way for up to 24 hours, which no one will notice.

With other valves, we can allow rainwater to flow directly through empty pipes and bypass our treatment plant during the short period of heavy rainfall. To avoid environmental disasters, Smart Water is essential. The contribution of Smart Water is monitoring that valves are positioned correctly and wastewater is not mixed with rainwater, as well as remote closing and opening of actuator-controlled valves.

The hallmark of everything mentioned here is that the technology exists. The real challenge is getting it deployed.

That is why we work with the Danish Ministry of Climate, Energy and Utilities and the Ministry of the Environment, utilities and other companies to find solutions together.

Ultimately, however, it is all about selling it to our utility companies, who are responsible for the increasing demand and who have a great responsibility for securing our critical infrastructure.

Want to learn more about our Smart Water solutions?

Take a look at our global website to learn more:

FUSION PRESENTS NEW FITTINGS AND WELDING MACHINES AT WOD-KAN 2025

POLAND

At the WOD-KAN Conference 2025, we presented our new F-Series electrofusion welding machines and Fusamatic tapping valve saddle electrofusion fittings.

By Kelly Hearnshaw,
Marketing & Communications Officer,
Fusion Group Ltd

Fusion recently participated in WOD-KAN Scientific and Technical Conference, one of the leading events in the water and wastewater industry. Held in Białowieża, Poland, this year's event brought together industry leaders, innovators, and experts to discuss the latest advancements in water and wastewater systems.

Radek Kapusta (Managing Director, Poland) and Konrad Grzegorczyk (Senior Sales Manager, Poland North) delivered engaging presentations on our new F-Series electrofusion welding machines and Fusamatic tapping valve saddle electrofusion fittings. Attendees had the opportunity to learn first-hand how these solutions support the evolving needs of the water and wastewater sector.

Interactive introduction
In addition to the presentations, Fusion hosted a table-top exhibition area, providing visitors with an up-close look at our new products and solutions. This interactive setting allowed industry professionals to discuss best practices, explore our latest technologies, and strengthen long-term partnerships that drive industry growth.

We would like to thank everyone who visited our stand and attended our presentations during the conference. Events like WOD-KAN reinforce the importance of collaboration and knowledge-sharing in shaping the future of the industry. We look forward to continuing to support our partners with solutions that go beyond products – delivering performance, reliability, and long-term value.

SUPPLYING VALVES AND HYDRANTS FOR NEW CITY'S VITAL INFRASTRUCTURE

KUWAIT

AVK is delivering products to the "New South Sabah Al Ahmad City" project, which covers the construction work for the upcoming city's vital infrastructure.

By Anurima Roy
Regional Marketing Manager
AVK Gulf DMCC

A significant move toward Kuwait's urban future is underway as the Public Authority for Housing Welfare (PAHW) has awarded a major construction contract to Kuwait Arab Contractors Company. The project covers critical road works, utility services networks, and rainwater tank systems for the new South Sabah Al Ahmad City also known as the "Garden City". The project is a flagship development poised to redefine modern living in Kuwait.

Located 80 km south of Kuwait City and spanning 61.5 km2, the city is set out to be a dynamic, multi-functional urban hub. The city will feature 10 neighbourhood clusters arranged around its central business districts and will be bordered by a ring of light industrial buildings.

The city is designed to become a benchmark in sustainable urban development where the local population lives, works, and thrives in a secure and environmentally conscious setting. It is set to become the urban core of Kuwait's southern sub-region, home to 280,000 residents, and a catalyst for 145,000 jobs across sectors including construction, medicine, manufacturing, and culture.

With expansive green zones and a multi-modal public transport network, the development embodies a forward-thinking approach to urban lifestyle.

Scope of the Project
The comprehensive scope includes the construction, completion, and maintenance of main roads and traffic systems, alongside a full suite of infrastructure services.
This covers stormwater drainage, sewage, irrigation, treated sewage effluent (TSE), freshwater networks, fire water networks, as well as the installation of rainwater tanks.

Our scope of work involves supplying a complete range of valves, including gate valves, air valves, butterfly valves, and diaphragm control valves for pressure reducing applications, serving stormwater drainage, sewage, irrigation, treated sewage effluent (TSE), and freshwater networks. Also, we are supplying fire hydrants and fire valves for the fire water networks.

Awarded on 11 April 2023, to Kuwait Arab Contractors, the project is set for completion within three years — a testament to its scale and importance.

AVK's role in the city's infrastructure
In early consultations with PAHW, it became clear that the project demanded a reliable, high-quality solution that would minimise operational challenges and maintenance needs. AVK rose to the occasion by delivering a complete package with a project value of AED 10.7 million (EUR 2.57 million).

Unlike conventional offerings in the market, we proposed a fully integrated solution via our wide-ranging product portfolio. This approach allowed the seamless interconnection of multiple utility networks under a unified system — a significant advantage in a project of this magnitude. By offering end-to-end compatibility, we simplified procurement and ensured long-term operational reliability.
Positioned against strong competition in the region, we stood out by leveraging several key advantages: fast delivery from our Saudi Valve Manufacturing Company (within just 4–5 days post-readiness), a 5% cost saving on products made in Saudi Arabia due to customs exemptions, and the ease of a single-source supply for the entire package.

Complementing these strength, Arabi Company, our local partner in Kuwait, played a vital role in ensuring timely approvals from the client, coordinating third party inspection works at our factories during production and final FAT, and managing all local operations.

This included clearance of our land and sea shipments from the ports and ensuring on-time delivery to the customer, as committed.
Adding to our competitive edge was our ability to support 24/7 - from daily operations to after-sales services.
Our Regional Sales Manager, Amr Abdo, describes:
"We were dedicated to completing the production of more than thousand of valves from Anhui, China, including large-diameter butterfly valves, within just four months from the date of receiving the production release note. Also, we are the only supplier with a regional manager on the ground, ready to support the customer with their daily operations, project planning, installation activities, and after-sales services."

These strengths directly addressed our client PAHW's priorities — speed, value for money, and seamless integration — makes AVK their preferred partner.

As the new city takes shape, moving toward completion by 2026, AVK is proud to support the infrastructure that will enable this visionary development. The project is more than a construction milestone — it is a blueprint for the cities of tomorrow.

Products supplied to the project:
- 688 gate valves, metal seated
- 84 gate valves, resilient seated
- 165 ai r valves
- 118 double eccentric butterfly valves
- 18 diaphragm control valves
- 269 fire hydrants
- 287 gate valves for fire protection

AROUND THE WORLD

Dias Thottan, General Manager for AVK Flow Control LLC, have spotted an AVK hydrant outside of Aarhus Train Station in Denmark

PREMIER VALVES:
A LEGACY OF EXCELLENCE

Premier Valves has a rich history that dates to its first manufacture in 1954. Originally established to produce a full range of wedge gate, butterfly, sleeve dispersal, and automatic control valves, Premier Valves quickly became a cornerstone in the waterworks Industry.

By Nicole Singh,
Marketing Coordinator,
AVK Valves Southern Africa

In 2014, AVK Valves Southern Africa acquired a majority interest in the Premier Valves Group, merging it with its existing AVK South Africa business under AVK Holding Southern Africa (Pty) Ltd. This merger led to substantial investments in expanding and upgrading the old Premier Valves factory, building a new AVK Manufacturing facility, and establishing a modern office building with an in-house training academy and a central distribution centre.

Applications and Sizes
Gate valves are used for various water applications, including water supply and wastewater treatment services. The valve sizes range from

Mr. Jantjies, the CEO of Zenzele Valves Manufacturing expresses his commitment to development of local manufacturing capabilities, aligning with the goals set forth by the Department of Trade, Industry, and Competition. He will collaborate closely with Mr. Stanley Steenkamp, who has been appointed Managing Director at AVK Valves Southern Africa. Together, they are poised to drive innovation and excellence in the valve manufacturing sector.

small diameters (2” or DN50) to very large diameters (60” or DN1500) upon request, ensuring versatility for different industrial needs.

Types of Premier Valves

- Wedge gate valves: known for their reliability and ability to provide a tight seal, these valves are used in water and wastewater applications.
- Sleeve valves: these valves offer precise control of flow and are commonly used in energy-dissipating applications.
- Multi-door check valves: these valves are designed for various water applications, providing efficient control over back flow.
- Boving butterfly valves: these high-performance valves are commonly used in cooling water applications and are known for their durability and reliability.

Common Applications

Gate valves are versatile and widely used in various industries due to their ability to provide a tight seal and reliable performance. Here are some common applications:

1. **Water Supply Systems:** Used for isolation in the flow of water in municipal water supply systems.
2. **Wastewater Treatment:** Ideal for isolating the flow of wastewater in treatment plants, ensuring efficient functioning of the system.

Compliance with Local Content Requirements

Premier Valves is complying with the Department of Trade and Industry's (DTI) 70% minimum local content threshold specification. This compliance is crucial for waterboards such as the Department of Water and Sanitation (DWS), Umgeni Water, Johannesburg Water, and Rand Water.

Future Manufacturing

Looking ahead, Zenzele Valves Manufacturing will assume the responsibility for manufacturing these valves, maintaining the legacy of quality and innovation. AVK will continue to supply these valves to the market, ensuring that customers consistently receive the high-quality products they have come to expect.

The Premier Valves gate valve remains a testament to engineering excellence and innovation, serving industries with reliable and efficient solutions for over six decades.

Sole manufacturer of Premier and Gunric products

At AVK Valves Southern Africa, we are thrilled to announce the appointment of Zenele Valves Manufacturing (ZVM) as the exclusive manufacturer of the AVK Premier and Gunric valve ranges. This agreement marks a significant milestone in advancing local manufacturing and supplier development initiatives.

Under this new agreement, Zenzele Valves Manufacturing (ZVM) will produce Premier's wedge gate valves, Boving butterfly valves, check valves, sleeve valves, and needle valves, as well as Gunric's triple eccentric butterfly valves, double eccentric butterfly valves, and non-return valves.

AVK Valves Southern Africa continues to sell and provide full support and services for the commercial distribution of these high-quality products, throughout sub-Saharan Africa and abroad.

This partnership underscores the dedication of both AVK Valves Southern Africa and Zenzele Valves Manufacturing to fostering local expertise, enhancing quality, and contributing to the economic empowerment of South Africa.

ESTABLISHING A NEW BENCHMARK FOR GREEN ENERGY WATER SUPPLY

CHINA

AVK collaborates with Hefei Zhongxing Water Plant under the concept of sustainable development. The plant will add new vitality and security to the urban water supply system in the area.

By Ken Yan,
B&D Marketing Director,
AVK Shanghai

New state-of-the-art plant using sunlight to generate electricity

In the context of pursuing sustainable development, Hefei Zhongxing Water Plant emerged as the times require; it serves not only as a crucial hub for urban water supply but also as a pioneer in green energy water supply and low-carbon development.

As the first water treatment plant in Hefei equipped with a full-process water purification technology integrated with a photovoltaic (PV) power generation system, the plant has deeply fused PV energy with its water supply system, achieving efficient energy utilisation and harmonious coexistence with the environment.

Under sufficient sunlight, the PV power generation system can produce over 2,000 kWh of electricity in one hour, generating more than 2 million kWh of electricity annually. This provides ample power support for the high-voltage motors in the pump house and saves operational costs by over RMB 1 million; equivalent to EUR 120,000.

The addition of this new plant will greatly alleviate water demand in the region, promote interconnection and complementarity in water supply between Hefei's central urban area and Feidong County, and significantly enhance the resilience and reliability of urban water supply. Furthermore, the initiative will further optimise the city's water supply structure, improve water quality and safety standards, and inject strong momentum into Hefei's sustainable development.

Two years in the making

The Zhongxing Water Plant is located at the northeast corner of the intersection of Yuandian Road and Zhongpai Road in Feidong County, occupying an area of approximately 189 acres. With a construction scale of 400,000 tons per day, the total

investment is 1.386 billion yuan (EUR 165.8 million), including the raw water pumping station, water transmission and distribution pipelines, and the water purification plant. The raw water is sourced from the Zhongxing Reservoir and transported to the water purification plant through two pipelines with a diameter of 1.6 meters via the Zhongxing Raw Water Pumping Station.

The plant adopts a full-flow water purification process of "pretreatment + conventional treatment + advanced treatment" to produce qualified drinking water, which is then delivered to households.

The project was officially commenced in June 2023 and is scheduled to be officially commissioned for water supply and operation in March 2025, adding new vitality and security to the urban water supply system.

Finding the ideal valve solution

The water intake pumping station, which serves as the "first water intake station" of the entire water plant, is not only the largest and most difficult individual project in terms of construction scale; it also carries the vital task of water extraction. With a building area of 1,462 square meters, it plays a crucial role. Here, the valves used in the water intake and connecting pipes face unprecedented challenges. As they are submerged in water for a long time, it requires the valve design and performance to meet extremely high standards. The distance between the valve center and the electric actuator center reaches 15 meters, and the valve must possess bidirectional pressure-bearing and bidirectional sealing capabilities to ensure stable and reliable operation under any working conditions.

AVK knife gate valves for harsh conditions

In response to this severe challenge, AVK leveraged its profound valve technology accumulation and innovation capability to provide a tailored solution: the WS series of large-diameter high-performance knife gate valves (DN1600-DN1800).

Article continues on the next page >

This series of valves adopts a full stainless steel material and features bidirectional pressure-bearing, bidirectional sealing, and a design with a valve cover.

The design of the knife gate valve with a valve cover ensures that the internal structure of the valve is completely isolated from external media, not only achieving maintenance-free upper sealing but also reducing the operating torque of the valve. This is particularly suitable for working environments where the valve is submerged in water for long periods.

The guide rail grooves and wedge inside the valve body, combined with the guide rails on the valve plate, form a guiding and closing system that possesses both high-level zero leakage and bidirectional pressure-bearing sealing performance. The unique design effectively cuts and removes algae, weeds, and other suspended impurities in raw water, preventing clogging issues caused by impurity accumulation during valve operation and ensuring long-term stable and trouble-free operation.

Ensuring operational safety and efficiency

As the final stage in reducing the turbidity of the effluent in the treatment process of the Zhongxing Water Treatment Plant, the filter's operating condition directly impacts the quality of the water leaving the plant. AVK has supplied 220 electric centerline (vulcanised seat) butterfly valves for this process section, playing a crucial role in the opening, closing, and regulation of the filters. The vulcanised rubber seat of these valves exhibits exceptional bidirectional sealing performance, ensuring robust air and water scouring intensities. This effectively mitigates the risks of air entrapment within the filters, abnormal turbidity in the effluent, and elevated total bacterial counts due to valve leakage.

Joining forces to co-create a sustainable future

In the new plant, AVK valves are a vital force in safeguarding water quality and in advancing the overall green water cause. At AVK, we firmly believe that through continuous innovation and dedication, and through collaboration with global partners, we can continue to establish a greener, smarter, and more efficient way of managing our water. Let us jointly anticipate a greener and more sustainable water supply future!

AVK SPAIN PARTICIPATES IN SMAGUA 2025

SPAIN

Once again, AVK Spain participates in SMAGUA, an exhibition that focuses on innovation and technology for efficient water management.

By Abigail Izquierdo Torres,
Technical Marketing,
AVK Válvulas, S.A.

The prestigious International Water and Irrigation Exhibition SMAGUA 2025 was held from 4-6 March in Zaragoza. This edition has been particularly significant, as SMAGUA celebrated its 50th anniversary with resounding success in attendance and commercial activity. With more than 25,000 visitors, the event reaffirmed its position as one of the most important meetings in Europe for the water industry, bringing together professionals from around the world in a space where innovation and technology took center stage.

A benchmark in the water industry

SMAGUA has established itself as a key event for the sector, standing out for the quality of its technical conferences and for showcasing the latest advancements in equipment and solutions applied to the water cycle. In this context, AVK Válvulas has once again demonstrated its commitment to developing innovative technologies that optimise water management and promote sustainability.

Innovations presented by AVK

During the event, we showcased our latest innovations designed to improve efficiency and sustainability in water management. The featured products included:

- The PRV Controller, for advanced pressure regulation.
- Smart Water Solutions, wireless IoT sensors providing a comprehensive view of the network.
- Needle valves, designed for precise flow and pressure regulation.
- Hydropass with NB-IoT technology, optimizing management and efficiency in irrigation.
- Premium 100 gate valves, designed to last for 100 years.
- Double eccentric butterfly valves with fully welded seat.
- Fusion fittings and the new F90 welding machine, ensuring secure connections in PE pipelines.

A look into the future

AVK Válvulas' participation in SMAGUA 2025 has been yet an enriching experience. We thank all the visitors who stopped by our stand to exchange ideas and learn about our solutions. We bid farewell with gratitude and enthusiasm, looking forward to meeting again at the next SMAGUA in 2027.

FROM CHALLENGE TO OPPORTUNITY: A STRATEGIC FOCUS ON THE O&M MARKET

QATAR

Turning post-pandemic disruption into a long-term opportunity, AVK Flow Control (AVK FC) is increasingly focusing on the operation and maintenance market in Qatar – most recently in a refurbishment project in collaboration with Veolia.

By Dias Thottan
General Manager
AVK Flow Control LLC

The global projects and construction market witnessed a significant downturn in 2020–2021 following the COVID-19 pandemic. It was during this challenging period that AVK Flow Control chose to shift its focus - moving to explore opportunities within the O&M segment with Qatar's major operation and maintenance (O&M) contractors.

It took time to reach the right decision-makers within the O&M contracting companies. But by the end of 2021, these persistent efforts began to yield results. AVK FC was invited by O&M contractor Metito to carry out inspections across several pumping stations. The objective was to identify and record all installed Glenfield and AVK valves and recommend spare parts that should be locally stored for ongoing maintenance of these valves.

This scope was executed successfully and on schedule. As a result, AVK FC was awarded its first spare parts order valued at EUR 25,000 for manufacturer-recommended spares, mainly for series 37 and 54 gate valves, and 641 recoil check valves.

In 2022 and 2023, AVK FC continued its engagement with the O&M market through training initiatives. These sessions focused on the basics of operation and maintenance of penstocks and highlighted AVK's range of products and services suited to the needs of O&M and framework contractors. Further training modules on large-size gate valves, butterfly valves, check valves, and control valves are currently in the pipeline.

Increasing focus on maintenance and long-term operation

As market confidence in AVK FC's expertise grew, the team began receiving direct requests for valve condition assessments in various sewage treatment plants (STPs)

and pumping stations. Two major refurbishment projects emerged between 2022 and 2024.
The first project involved the refurbishment of approximately 15 Glenfield gate valves and butterfly valves that had been in service for more than two decades at Doha North Sewage Treatment Plant. The job, carried out in the beginning of 2022 for O&M contractor SUEZ, was successfully completed at the facility of AVK FC's local after-sales service partner.

In early 2023, AVK FC was approached by Veolia for an initial assessment of around 30 valves at the same plant. A preliminary report was followed by detailed discussions on refurbishment possibilities. In mid-2024, instructions were received for the inspection of 60 valves which required dismantling of the valves and internal review at AVK FC's After sales service partner's facility. These included metal-seated gate valves, swing check valves, and recoil check valves originally supplied by Glenfield Valves UK and knife gate valves from CyL in 2008. The inspection resulted in two key recommendations to the contractor in 2024: refurbishment of 30 valves in the size range of (100-1000mm) and replacement of 30 Wouter Witzel butterfly valves.

A detailed commercial proposal covering both refurbishment and replacement was submitted and, in July 2024, AVK FC was awarded the full scope; an order valued at approximately EUR 150,000 that was for the replacement of 30 butterfly valves (DN200–900) plus refurbishment of 30 valves. Coordination with AVK Anhui and AVK CyL ensured the correct procurement of spares for the refurbishment work, which was executed by a well-trained and experienced valve service team.

The refurbishment process was carried out in four phases and included thorough testing in line with customer standards. By end of January 2025, all valves had been refurbished.

Each valve was returned to Doha North Sewage Treatment Plant fully refurbished, accompanied by test and warranty certificates. The final replacement was completed in April 2025.

Looking ahead, AVK FC is now conducting initial inspections of large-size metal seated gate valves originally supplied to a major pumping station in 2010. Two technical presentation sessions are planned in 2025 for O&M and framework contractors, with a focus on AVK's pipe repair solutions. These sessions are designed to help our AVK team to interact with the O&M teams who run the pumping stations, sewage treatment plants, and operate and maintain the water networks, so they understand their challenges and issues and recommend the right solutions to counter those challenges on-site.
The customer service philosophy remains consistent across the Middle East: staying close to the end user ensures better service, better planning, and ultimately, better asset performance. With Ashghal approvals for AVK Anhui and AVK SVMC received in October 2025, we are well-positioned to support clients with valve replacements when valves are too old to be refurbished.

Through our dedicated after-sales support services, AVK Flow Control LLC is helping clients monitor, maintain, and extend the service life of their assets - transforming valves from passive infrastructure into actively managed components of Qatar's water network.

AC.MO COMPANY HEADQUARTER: DRIVING INNOVATION THROUGH CHANGE

ITALY

In recent months, AC.MO has taken significant steps toward a more sustainable and functional future, with key changes focused on adopting new technologies and optimising infrastructure.

By Irene Schiavon,
Digital Content Creator,
AC.MO S.r.l

Article continues on the next page >

A photovoltaic system for energy independence
One of the key changes has been the installation of a photovoltaic system with a capacity of 99.735 kWp, consisting of 183 solar panels. This new installation represents a major innovation in sustainability. With an estimated annual output of approximately 113,551 kWh, the system makes AC.MO nearly self-sufficient for the energy needs related to production and the use of refrigeration units for heating and cooling. This investment in solar energy reduces reliance on non-renewable sources, promoting greater sustainability and a greener future for generations to come. But that's only the beginning! AC.MO has plans for more solar panels to achieve greater sustainability in the future.

A new electric vehicle charging station
As part of its commitment to sustainability and reducing environmental impact, AC.MO has acquired new electric vehicles for its operations and, alongside this, has installed an electric vehicle charging station in the company's parking area. This new infrastructure enables fast and efficient vehicle charging, powered by clean energy generated from the company's photovoltaic system.

The adoption of electric vehicles and the ability to recharge them directly at headquarters represents another step toward more sustainable mobility, helping reduce CO2 emissions and promoting eco-friendly and responsible business practices.

A new modular tunnel for optimising storage space and daily operations
In addition to its commitment to energy innovation, AC.MO has also invested in increasing and optimising its facilities. A new mobile tunnel has been installed, connecting various production and storage areas. This modular enhances the movement of goods while creating additional storage space, offering the flexibility to adapt the area to meet changing needs. Thanks to this new tunnel, the storage area has increased by approximately 300 square meters, providing a significant advantage in optimising warehouse management and streamlining daily operations.

Renovation of office spaces
Equally important are the improvements made to office spaces. AC.MO has renewed the office area by creating new work setups. The new configuration provides a larger and more comfortable workspace, creating the ideal conditions for greater productivity and collaboration.

Looking toward the future
These changes are just the beginning of a process of growth and innovation. The adoption of renewable energy solutions and the optimisation of spaces are all decisions made to meet business needs while also contributing to the well-being of the planet.

A PLACE FOR COLLABORATION AND LEARNING

SLOVAKIA

Located in the town of Poprad, close to the High Tatras mountains in Central Slovakia, we have opened an AVK showroom. It was officially opened in August 2023.

By Anton Makel,
Product & Promotion Manager,
AVK Slovakia

The showroom serves as a practical space for customer interactions. It is designed for presentations and product displays, and often hands-on product training is part of the workshops hosted at the location.

The local water company Podtatranska vodarenska spolocnost (PVS) provides the premises, and AVK has taken care of design, interior and products for exhibition and training. Together with my wife Maya, we have set up the showroom from scratch, choosing furniture and accessories, and decorating windows and building with photos and company logo.

The space is used for meetings, workshops, practical training sessions and other activities for customers and business partners. The location in Poprad is very good; in the middle of Slovakia and close to the highway. A lot of effort has been put into making the place cozy so visitors can easily feel comfortable and welcome. And it has been received very well and positively.

On average, the showroom is visited by guests a couple of times a month, depending on the season. Since the beginning in 2023, approximately 250 people representing more than 10 water utilities, distributors and designers have visited the showroom. More of them even several times.

Recently, one of the workshops gathered 45 participants — an impressive turnout, and despite the showroom's seating capacity of 22 people, we found everyone a nice seat for the presentation.

When visiting the showroom, participants have the opportunity see AVK products and learn about real-life installation scenarios, combining theory with practical insights. And our facilities provide a platform for meaningful collaboration and knowledge sharing with customers and partners.

We are looking forward to welcoming even more visitors!

AVK CELEBRATES WATER'S VALUE IN SOCIETY

DENMARK

From the moment we wake up in the morning, water is an essential part of our existence. It is the key element in making sure we can keep ourselves healthy, hydrated and safe from disease throughout the day. What a blessing, right?

By Katrine Klejnstrup Larsen Flecha, PIM Manager, AVK Holding A/S

And then there are all the processes around us, making sure we have our other needs met, such as food, clothes, heating or cooling, gadgets, espresso, cars, travels, you name it. While it might seem less tangible, because we don't see that water being used, producing all these commodities for us is way more water-consuming than most of us would imagine.

Have you thought about how much water is used for basic things we do or consume on a regular basis?

Here's a few examples:

- 1 average ChatGPT prompt = 0,5 litre
- 1 10-minute shower = 100 litres
- 1 cup of coffee = 140 litres
- 1 pint of beer = 170 litres
- 1 hamburger = 2,400 litres

While 0,5 litre doesn't sound like much for a ChatGPT prompt, there are +1 billion prompts performed every day, meaning that every single second globally around 5,800 litres are used to assist in the production of this massive amount of data. Cheers.

Our resources are not limited

Even though our planet is almost completely covered with this liquid goodness, there isn't much we can use for the above-mentioned purposes. About 97% or earth's water is salty, a further 2% locked up in ice caps and glaciers, leaving only a tiny 1% of freshwater for our heavy water cravings.

And our management skills matter

So that 1% of freshwater we have left, how are we able to manage it? Not as smart and efficient as we could - far from, actually. On a global scale, about 1/3 of all the cleaned, produced drinking water leaving the water utilities never reach the end-user, often due to poorly maintained water networks causing leaks in pipes and equipment.

Yes, a third! And as if that wasn't enough, think about all the energy that has been used to clean and pump all this water, for simply no reason. And to produce that energy was used a lot of, yes, water.

To honour water on its big day, we asked some of our many water-loving employees in the AVK Group to share their creative expressions of how water is valuable to them in their daily life:

Amanda Evelyn de Souza Reis, HR Analyst, AVK Valvulas do Brasil Ltda

In the Amazon, water is more than just a resource – it is the essence of life. When the rivers dry up, it's not just the landscape that changes; it's the fate of thousands of people. Without water, there is no transportation, no food, no future. Preserving it is not a choice; it is a necessity. This photo, taken on a boat on the Rio Negro, deep in the Amazon, is an urgent reminder: Either we protect our waters, or we watch our history disappear with them.

Lone Aagaard Østerbøg, Sustainability Communications Specialist, AVK Holding

Recognising water's significance, I have committed myself to conserving it in every possible way. One of the practical steps I take is to repurpose the water collected from my tumble dryer. Instead of letting it go to waste, I use it to nourish my household plants. Every drop counts!

Nicole Singh, Marketing Coordinator, AVK Valves Southern Africa

The Lifeblood of Existence: The Value of Water, to me, feels like life's quiet hero – always there, always giving, and often overlooked. It reminds me of childhood days, splashing in puddles after the rain or watching my garden come alive after a good soaking. It's more than just a necessity; it's a companion in every moment of life.

Without it, I wouldn't have the simple joys of a refreshing drink on a hot day, the sound of rainfall at night, or the beauty of rivers and oceans that connect us to something greater. Water holds stories, memories, and endless possibilities – truly a treasure worth protecting. As stewards of this blue planet, it's our collective responsibility to conserve and protect water for future generations

Stefan Munk, Marketing Coordinator, AVK Nederland B.V.

Water is more than just a valuable element to me—it's a source of freedom, connection, and creativity. Surfing brings me closer to nature, whilst photography lets me capture moments in its reflectiveness, such as a beautiful sunset on the pier. For me, water shapes my experiences, fuels my passion, and offers a way to express my creativity.

Article continues on the next page >

Daniel Garrido Arias, ACMO Product Manager,
AVK Válvulas, S.A.

Water is the natural element that makes Earth a habitable planet and allows life to emerge. Let's take care of this increasingly scarce resource.

Tiago Miranda da Silva, Quality Assurance Assistant,
AVK Valvulas do Brasil Ltda

Water reflects life, nature and the future. A precious resource that we must preserve for future generations.

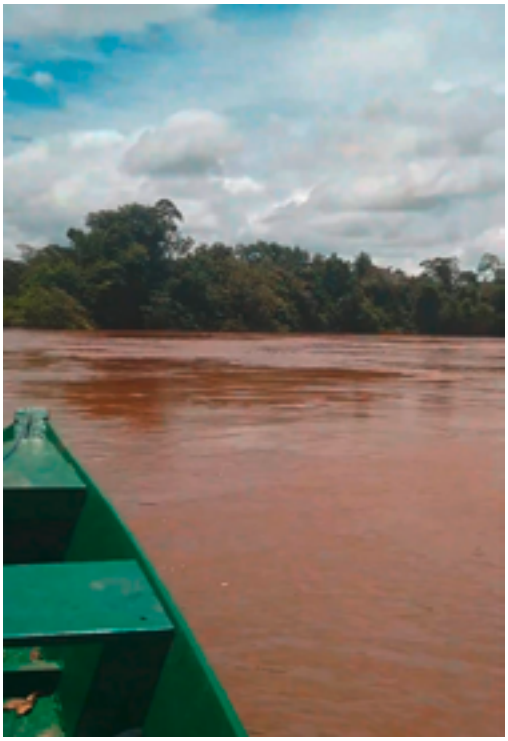
Juliana Cristine Celestrim, Marketing Analyst,
AVK Valvulas do Brasil Ltda

Hello! My name is Lugano and I love water! Water is essential for me, especially because the days here in Brazil can be very hot. There's nothing better than cooling off! As a 43 kg Golden Retriever, I need about 2 to 3 liters of water a day to stay healthy and hydrated. Take care of your water, it's vital for all of us! Au Au!

Henrique Camargo de Moraes, Safety Technician,
AVK Valvulas do Brasil Ltda

I would like to share this image, taken by me, from the interior of Brazil, in the state of Rondônia, in the Amazon. Without a doubt, one of the most important regions due to its biodiversity and the need for its preservation, which brings numerous benefits to the planet, especially to the area where AVK Brasil is located.

An interesting fact is that, although the state of São Paulo, where we are located, is far from the Amazon, there is a direct connection between the rains in our region and the Amazon rainforest. All the water that reaches the state comes through what are known as "flying rivers," meaning the humidity in the clouds of the Amazon that moves here, generating rainfall in the Southern and Southeastern regions of Brazil. With this, I would like to reflect with everyone on the importance of preserving our natural wealth, which is essential for our own survival.



AVK BRASIL USES SCRAP PAPER IN PACKAGING FOR SMALL PARTS

BRAZIL

At AVK Brasil, we are reinforcing our sustainable commitment to reusing paper in packaging for small parts. This practice reflects a commitment not only to environmental preservation, but also to economic efficiency and waste reduction.

By Juliana Cristine Celestrim, Marketing Coordinator, AVK Válvulas do Brasil

Why is this action relevant?

- Waste reduction
  Reusing scrap paper reduces waste generation, which reduces the need for disposal and the associated environmental impact.

- Conscious use of resources
  Paper production requires large volumes of water and energy, in addition to being directly linked to deforestation. By reusing paper, AVK Brasil minimises the demand for new materials and reinforces its contribution to the preservation of natural resources.

- Efficiency and savings
  In addition to the environmental benefits, this initiative also generates a positive economic impact. Reducing paper consumption contributes to optimising operating costs and encourages a corporate culture of efficient use of resources.

- Sustainable engagement
  Adopting sustainable practices demonstrate commitment to social and environmental responsibility, a factor increasingly valued by customers, partners and employees. The project was born from a suggestion by Francisco Morais, an employee in the Warehouse department, who emphasised the importance of the action:

  "*To ensure a safe planet for future generations, we need to act now. Let's recycle!*"

ADDITIONAL FRESHWATER SERVICE RESERVOIR TO MEET FUTURE DEMANDS

HONG KONG

To accommodate to the fast development of the North District in Hong Kong, AVK has supplied the valve solution for a new freshwater service reservoir.

By Stig Th. Bondrup,
General Manager,
Hong Kong, Macau, Taiwan & Korea,
AVK Group

Ensuring sufficient supply

The Hong Kong Government is constructing an additional freshwater service reservoir at Tong Hang with a capacity of 55,000 cubic metres under Contract 3/WSD/18 of Water Supplies Department (WSD). This will improve the freshwater supply and cope with the anticipated increase in water demand arising from planned new housing developments in Sheung Shui and Fanling areas.

The ideal valve solution

The selection of valve equipment was critical, as the products directly affect the daily operation of the reservoir and water plant. Performance and reliability are the top priorities of the project. The AVK Hong Kong team has managed to reach out to WSD's lead engineer and to arrange workshops with the end user and contractor for product introduction. As one of the leading valve manufacturers worldwide, AVK has become the chosen valve supplier relying on our high quality and professional product design.

Since 2022, AVK Hong Kong has delivered over 70 pieces of metal seated gate valves, butterfly valves and air valves to the project. Three sets of AVK Series 756 Double Eccentric Butterfly Valves (DN900) with electric actuation are used for installation at inlet and outlet pipework of the reservoir. The majority of the supplied valves were installed in the underground valve chambers. Our team also offered supervision during valve transport and installation on-site.

By combination of the collective expertise of AVK Group and localised strategy, AVK Hong Kong has established itself as a trusted partner of all local customers. AVK Hong Kong is committed to providing solutions that meet and exceed customer expectations in terms of quality, reliability, sustainability and customer service.

The construction site at the reservoir >

AVK VALVES INSTALLED IN A UNESCO WORLD HERITAGE SITE

CZECH REPUBLIC

In the heart of Český Krumlov, a UNESCO World Heritage site in Czech Republic, renowned for its historic charm and stunning architecture, a significant transformation is underway. One of the city's most important bridges is being completely reconstructed.

By Tomáš Tichý
Managing Director,
AVK VOD-KA

This ambitious project goes beyond simply restoring and strengthening the bridge. It also focuses on modernising and optimising the city's infrastructure, integrating high-quality solutions such as AVK valves.

Combining high quality with thoughtful preservation, this initiative not only revitalises a vital connection, but also ensures a sustainable and reliable infrastructure for generations to come.

We are proud to see AVK solutions play a role in such an iconic project!

CONTINUOUS ENERGY OPTIMISATION IN OUR PRODUCTION

DENMARK

At AVK GUMMI as we strive for sustainability by improving resource efficiency, reducing energy consumption, and minimising our environmental impact.

By Kresten Krogh,
Plant Manager,
AVK GUMMI

As part of these efforts, we have replaced the first batch-off mill, which was installed on one of our mixing lines in 2001, with a new, more energy-efficient mill.

With this, as a part of our planned maintenance programme, we continue to reduce our carbon footprint, while ensuring mixing capacity.

With three advanced mixing lines, we are strongly positioned to deliver consistent, top-quality rubber components to our customers worldwide.

AVK BUTTERFLY VALVES CONTRIBUTE TO CO_2 REMOVAL

BELGIUM

The fight against climate change requires innovative solutions to reduce or even eliminate carbon dioxide (CO_2) emissions from the atmosphere. One pioneering project is the Jacaranda project, launched by Sirona Technologies in collaboration with Cella. This project combines direct air capture technology with permanent CO_2 storage in Kenya. The use of AVK butterfly valves in this project is unique in several ways, as these valves are normally used in other applications.

By Philippe Dewolf,
Account Manager, Industrial Valves,
AVK Belgium

Direct Air Capture (DAC) is a technology that removes CO_2 directly from the atmosphere. The captured CO_2 is then permanently captured by means of mineralisation processes, where it is converted into large quantities of substances such as carbon dioxide. This process ensures that the CO_2 emitted into the atmosphere is released, which is essential for climate protection.

The system from Sirona Technologies works without the need for specialised chemical filters. An absorption medium absorbs the carbon dioxide when it is released in gas form. The CO_2 is then compressed and packaged in geological formations.

Why Kenya?
“We deliberately installed our machine in Kenya,” says Gauthier Limpens, co-founder and technical director at Sirona Technologies. “The country offers abundant renewable energy resources, particularly solar energy, which is produced in equal quantities almost daily. This is because the land is on the equator and there are no seasonal variations. In addition, there is a lot of available space where we do not compete with human habitation or agricultural land. The soil also contains the right rock types to store CO_2 for long periods of time. Finally, the government provides support; they actively facilitate initiatives like ours."

AVK butterfly valves
Two DN600 AVK butterfly valves were supplied. The system must be completely shut off at certain times. Sirona Technologies needed the valves urgently, and we were able to deliver immediately.

Gauthier Limpens describes:
"Delivery of this type of valve is often a challenge. AVK had them in stock, which was a big advantage for us. In addition, procurement support was excellent.”

The container in which AVK's two butterfly valves operate is the pilot for Project Jacaranda. “For the prototype phase, AVK allowed us to use a standard solution directly,” said Gauthier Limpens. “We built one container as a pilot project. Our plan is to then scale up production: this year we launched our first full-fledged container, next year we will increase production to 30 containers, and by 2027 we want to quadruple this number again, reaching 120 containers.”

AVK's contribution to a sustainable future
For Project Jacaranda, AVK is providing essential butterfly valves to ensure integrity and efficiency of the DAC system. AVK's expertise in developing durable and reliable valves and other components contributes to the robustness and proper operation of the system. This collaboration highlights the importance of partnering with leading industries to deliver innovative climate solutions.

DEVELOPING THE WATER SECTOR THROUGH PRODUCT KNOWLEDGE SHARING

LATVIA

As an associate member of the Latvian Water and Wastewater Works Association (LWWWWA), we are proud to contribute to the development of the water sector. The association plays an important role in sustainable development of the water sector in Latvia by connecting professionals across the industry, promoting knowledge sharing and solving common challenges through collaboration.

By Jurgis Trams,
Product & Promotion Manager,
The Baltic States, AVK International

Supporting
Late 2024, AVK partnered with LWWWWA to host a comprehensive product training at our Latvian office. We organised a two-part training programme that combined theoretical insight into product functionality with practical exercises, giving participants a hands-on approach to learning about products and solutions for the water industry.

Over 12 days, 135 participants from 23 water utilities and a design company successfully completed the training. Feedback from the participants was overwhelmingly positive, and we would like to thank all participants, water companies and LWWWWA for making this training programme a success.

ENVIRONMENTAL COMPLIANCE SECURED WITH AVK VALVE SOLUTION

FRANCE

A custom valve solution, including a DN400 knife gate valve from AVK France, ensures environmental protection for a new urban development project.

By Ines Graslin,
Marketing Manager,
AVK France S.A.S

As part of the development of the ZAC Plaisance, an urban expansion zone in Rennes, France, a new stormwater control system was implemented to align with French environmental regulations and ensure long-term safety in case of accidental pollution.

The project, led by Rennes Métropole, involved a close collaboration with Sade, responsible for installing the equipment, and AVK France, who delivered a custom technical solution tailored to the site's unique requirements.

Meeting legal and environmental obligations

The ZAC Plaisance development, located along the Ille-et-Rance canal, features a dual DN400 stormwater discharge network that directly feeds into the canal. Although the existing network was in good condition and retained during the redevelopment, the expansion triggered legal obligations under France's Water Law (loi sur l'eau). Specifically, Rennes Métropole was required to implement a pollution control mechanism to prevent

accidental discharges into the natural environment.

The need was clear: provide a reliable isolation point at the outfall of the ZAC to enable swift intervention in case of contamination on site.

A challenging installation environment

The technical complexity of the project stemmed from the limited space and shallow depth at the outfall location. The installation area offered minimal headroom and required a highly compact solution.
AVK France quickly responded with a tailored approach, proposing a knife gate valve (DN400) installed in a horizontal position — an ideal choice to meet both the spatial constraints and operational requirements. To allow easy handling in this restricted environment, the valve was equipped with a cover to be backfilled, bevel gearbox, and an offset.

The complete installation included a valve chamber, the knife gate valve, a check valve, and a siphon partition wall, fulfilling both the design and regulatory requirements.

A proactive solution, ready if needed

Although the system has not yet been used in response to a pollution event, its presence ensures Rennes Métropole's compliance with environmental legislation and provides peace of mind for future operations. The AVK France solution protects the nearby canal and supports the city's sustainable urban development goals.

"The AVK France team quickly provided a compact and functional solution that matched the exact needs of the site. The adaptability of the equipment was key to making this installation a success."
— Julie ARTOLA, Project Manager, Rennes Métropole.

AVK BRASIL RECEIVES ADDITIONAL ISO CERTIFICATIONS

BRAZIL

Due to our commitment to quality, sustainability and safety, AVK Brasil now also holds the important ISO 14001 and 45001 certifications.

By Juliana Cristine Celestrim, Marketing Coordinator, AVK Válvulas do Brasil

AVK Brasil Directors showing off the new certifications

AVK Brasil reinforces its commitment to operational excellence, sustainability and safety through certification in international standards. The ISO 9001 recertification strengthens the continuous pursuit of quality, while the ISO 14001 (Environmental Management) and ISO 45001 (Occupational Health and Safety Management) certifications represent a strategic milestone in the structuring of sustainable and safe practices.

By obtaining these certifications, AVK Brasil evolves from a Quality Management System (QMS) to an Integrated Management System (IMS), consolidating a holistic approach that encompasses quality, environment and occupational health and safety. This integration strengthens corporate governance, improves operational efficiency and ensures compliance with the highest international standards.

ISO 14001 and ISO 45001 Certification Process

With the aim of consolidating its sustainable operations and ensuring a safe work environment, AVK Brasil began the ISO 14001 and ISO 45001 certification process, going through the following stages:

- Initial Diagnosis: Survey of existing practices and identification of opportunities for improvement.

- Stakeholder Engagement: Active communication with employees, suppliers and customers for efficient management of environmental and safety impacts.

- Training and Awareness: Team training to promote an organisational culture focused on sustainability and safety.

- Adjustments in Processes and Documentation: Implementation of new procedures to mitigate environmental and occupational risks.

- External Audit: Assessment carried out by a certification body to validate compliance with regulatory requirements.

Obtaining the certifications was not just an end goal for AVK, but rather the beginning of an ongoing journey to ensure a safe and sustainable working environment for all parties involved.

ISO 9001 recertification

AVK Brasil, already certified under the ISO 9001 standard since 2016 (Quality Management), is currently in the process of recertification, with a third-phase audit cycle scheduled for December 2025 and with a validity until June 2027. The main actions for this recertification include:

- Process Review: Continuous evaluation and improvement to ensure the efficiency and quality of products and services.

- Internal Audits: Identification and correction of possible non-conformities prior to the external audit.

- Team Training: Employee training to ensure compliance with regulatory requirements and strengthen the culture of quality.

- Stakeholder Engagement: Guarantee of alignment between customers, employees and suppliers with quality standards.

- External Audit: Final inspection by a certification body to ensure compliance and renewal of certification.

In addition, AVK Brasil implemented improvements in the control of documents and internal processes, reinforcing the traceability and reliability of information. New metrics were also adopted for continuous monitoring of organisational performance, ensuring a more proactive approach to quality management.

The ISO 9001 recertification reaffirms the constant search for innovation and continuous improvement, ensuring that AVK Brasil continues to be a reference in quality, sustainability and safety in the sector.

In addition, the certification and recertification of ISO standards at AVK not only guarantees compliance with international standards but also reflects AVK Brazil's commitment to offering high-quality products and services, with environmental responsibility and occupational safety.

Employees involved in carrying out the certification

THE VALVES MARKET: A CATALYST FOR ECONOMIC GROWTH AND SUSTAINABILITY

SOUTH AFRICA

When you think about innovation or infrastructure, industrial valves might not be the first thing that comes to mind. But in South Africa, these unassuming yet indispensable devices are quietly powering the nation's transformation – an exciting tale of resilience, reinvention, and hope for a sustainable future. Recently, our MD, Stanley Steenkamp, brought this story to life in an interview with Tseliso Molebatsi, discussing South Africa's valves market and its impact on the country's economy and beyond.

By Nicole Singh,
Marketing Coordinator,
AVK Valves Southern Africa

The Pulse of Progress

In the water and industrial symphony, valves are like conductors – controlling, regulating, and orchestrating the flow that keeps the melody alive. From ensuring water reaches communities to keeping energy systems efficient, valves are the linchpins behind the scenes. For South Africa, they're not just gadgets; they're gateways to economic growth, vital to the industries that build GDP and transform lives.

A Focus on AVK Valves Southern Africa

AVK Southern Africa has been setting benchmarks in quality and innovation for over three decades. Renowned for its high-quality valves. AVK prioritises sustainability and efficiency, crafting solutions that minimize water loss and enhance network performance. With a strong focus on local manufacturing, AVK Southern Africa operates two factories and two distribution centres, employing over 90 people. Their commitment to skills development and technological advancement makes them a key player in driving transformation within the industry.

At the core of AVK Southern Africa's success are its unwavering values: quality, innovation, sustainability, reliability and customer service.

These guiding principles make AVK not just a manufacturer, but a trusted partner in South Africa's growth story.

The Storms Ahead: Challenges in a Changing Landscape

Challenges? There are plenty. Trade disputes, geopolitical tensions, import-export bottleneck. They all add friction. Add to this the limitations in local manufacturing capacity and the ever-shifting demands of global markets.

Yet, these aren't insurmountable mountains – they're just stepping stones. With stronger private-public partnerships, the valves sector can overcome these hurdles, turning obstacles into opportunities.

Policies as Catalysts

To nurture this promising future, the right policies are paramount. Support for local manufacturing, robust training programs, and incentives for innovation will be critical. These aren't just abstract plans – they're the foundation for a thriving industry that benefits both the economy and society.

The story of South Africa's valves market is not merely about industrial growth – it's about resilience, ingenuity, and a nation's unwavering commitment to progress.

PIONEERING SMART WATER MANAGEMENT

INDIA

As groundwater becomes increasingly scarce, efficient water management must become a central part of how we build resilient infrastructure. Fortunately, there are talented people working on projects like the Narmada-Kshipra Multipurpose Scheme in Madhya Pradesh showing that sustainability, cost savings and efficiency can be achieved.

By Chaitanya Krishna K,
General Manager,
ACMO Water Technology India Pvt Ltd

Article continues on the next page >

A Milestone for Smart Water Infrastructure in India

ACMO Water Technology India Pvt Ltd (ACMO India), a member of the AVK Group, has reached an important milestone with the successful execution of the Narmada-Kshipra Multipurpose Project. A project that is truly transforming irrigation and water supply in Madhya Pradesh. The flagship project was inaugurated on 20 March 2025, by the Honourable Chief Minister, Dr. Mohan Yadav. The initiative represents a significant step forward in India's ability to deliver water sustainably to its people — combining smart irrigation, real-time monitoring, and infrastructure at scale.

The project aims to lift and distribute 15 Cumecs of water from the reservoir to transform water access in the Malwa region, particularly in the districts of Ujjain and Shajapur.

Key facts and figures about the solution:

- 36,000 m^3 water/hr dedicated to irrigation areas as 30,000 hectares are cultivated using advanced micro-irrigation systems that deliver water efficiently to individual farm plots (up to 2.5 hectares each)
- 90,000 farmers in Dewas, Ujjain, and Shajapur will benefit from the project
- 18,000 m^3 water/hr allocated to meet domestic and industrial demand
- A 200 km pipeline network navigating a 425 m elevation, powered by a 132 kV transmission line
- Variable Frequency Drives (VFDs) adjusting to fluctuating water needs with minimal energy loss

Closing the Loop: From Linear Supply to Smart Distribution

The traditional approach to water infrastructure has been linear: extract, use, discharge, repeat. However, ACMO India is working to close this loop through automation, monitoring, and precise delivery. This is not only smart irrigation, but also smart stewardship. When water is delivered precisely to the crops that need it, at the time they need it, farmers can grow more with less. The result maximises crop yield while conserving resources and reducing groundwater depletion. Precision water management also aligns with the national mission “Per Drop More Crop,” ensuring resource conservation for future generations.

The project's impact is already clear:

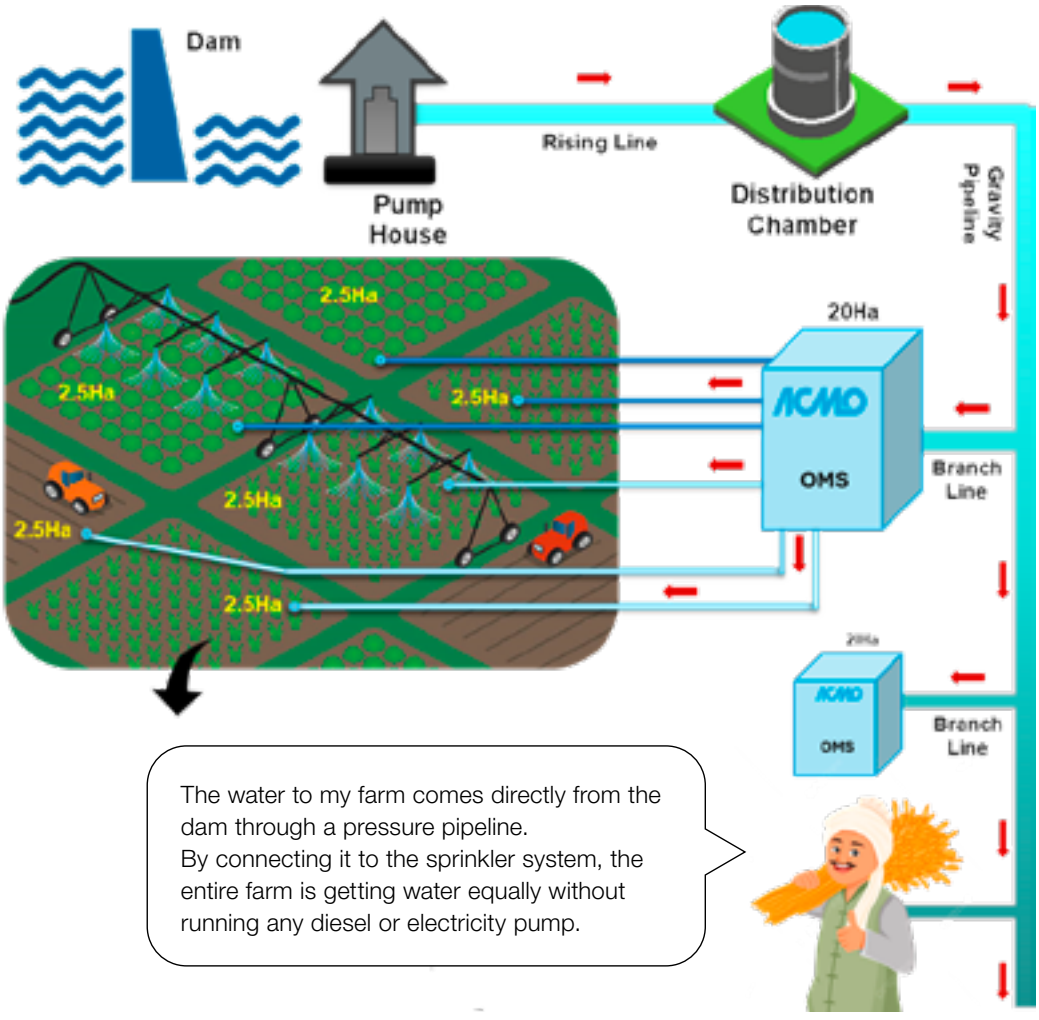
- 30,000 hectares of farmland are now sustainably irrigated.
- Complete instrumentation and automation of all six pumping stations, brake pressure tank and distribution chamber via SCADA (Supervisory control and data acquisition) systems, enabling real-time monitoring and control
- Over 1,170 air management system (AMS) units support smooth distribution
- 62 wireless communication gateways ensure data flows seamlessly between control rooms and the field
- Fully integrated centralised control & monitoring using PLC (Programmable Logic Control), AMSs and OMSs (Outlet Management system), ensuring real-time management at every pumping station
- Cities like Nagda, Dewas, and Ujjain receive reliable water for domestic and industrial use, supporting regional growth

With SCADA systems at the heart of the project, real-time control ensures every drop is accounted for. Water is not simply delivered —it is managed with intention, from the source to the field. At the local level, OMSs are installed at every 20-hectare block. These systems regulate delivery through a predefined Rotation Management System (RMS), maintaining a consistent supply even during communication breakdowns. Each OMS tracks water flow and pressure, feeding back to a central SCADA hub.

Likewise, AMSs safeguard the pipelines themselves. Triple acting air valves prevent pressure surges, reduce the risk of damage, and maintain consistent flow. Pressure sensors and battery-operated RTUs flag anomalies early, preventing waste and ensuring operational stability.

A team-driven effort with a broader vision

This remarkable achievement would not have been possible without the unwavering dedication and relentless efforts of ACMO India's team, who worked tirelessly to bring this ambitious project to life. Their expertise, commitment, and problem-solving approach played a pivotal role in overcoming the challenges. Their broader vision is to achieve a future where every project is built with sustainability in mind, and where smart systems guide our infrastructure choices — not just for efficiency, but for the environmental and social impact. Together with the AVK Group, ACMO India is committed to reshaping what's possible in water management and to continue to push the boundaries of automation, efficiency, and environmental responsibility.



COMPETITION

We are happy to announce that the winners of the competition in AVK InterLink no. 67 are:

- Ryan Huang, Wuhan Office Manager, Orbinox China
- Joana Parrilla Castro, Technical Office, AVK Válvulas, S.A.
- Dan Chang, Management Trainee, AVK Taiwan

The correct ans wer was: 3D printing
Gifts are on their way.

New competition:

Which type of valve is assisting in the removal of CO2 in a recent project in Belgium?

Send an e-mail with the correct answer in which you state your address and the gift you would like to receive – if you win.

E-mail to: kakl@avk.dk

Choose between:

Beach towel with AVK valve

Picnic grill in a cooler bag

Ocean bottle

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