

SUMMER 2018

Expect... **X**

A WORD FROM OUR CHAIRMAN GROWING TOGETHER



Paul Hubbard

FEATURING IN THIS YEAR'S ISSUE

- Fusion Group a year on
- AVK PENTOBOX water meter boundary box is "the solution to a number of problems"
- AVK achieves ISO/TS 29001 standard
- Glenfield Refurbish two Needle Discharge Valves
- AVK Hydrant Security Goes from Strength to Strength
- Innovative AVK UK Valve and Hydrant solutions on Scottish water schemes
- Network control solutions

The theme of our conference in December was Growing together which you can read more about in this issue of Face 2 Face. All the UK companies were represented along with the Fusion companies from Australia, China, Indonesia, Italy, Malaysia and Poland. It was a great networking event which provided AVK, Invicta, Glenfield and Fusion an opportunity to better understand each other's business and identify how synergies can be gained through greater collaboration and working together. Our customers and how to further provide added value services were at the heart of the conference (read more on page 5).

I am delighted to report that the figures at June, 9 months into our financial year are +15% and realising good growth for the AVK side of the business including Invicta and Glenfield and more than +20% growth from Fusion. Shaun Robb and his team in Australia leading the pack with an excellent performance with great prospects for the year ahead. We have also made very good progress in developing both our product programme and service offer which again I am sure you find interesting reading in this addition of Face 2 Face.

To further support our growth agenda in May this year we announced changes in the management and organisation across the UK.

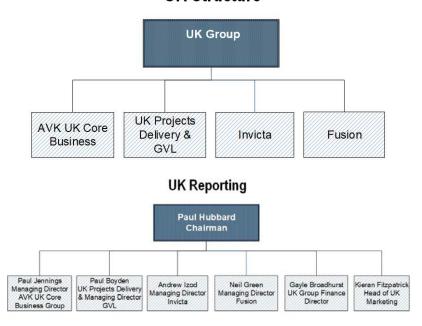
Paul Jennings outlines in this edition his priorities for the core AVK UK business and introduces the leadership team for this important part of our UK business. Paul Boyden also explains how we have created a very exciting project organisation; One team, three brands and many solutions. (some of which are featured, read on). Invicta during the past 18 months has made excellent progress in developing its site solutions business, Andrew Izod and his team will be moving Invicta into its next phase of development which will include flood defence solutions and progressing further into the specialist water/ waste water site solutions valves and penstock segment.

We have now passed our first anniversary of Fusion being a part of the AVK family and as outlined earlier we are realising good growth and through Neil Greens leadership, appointed as Group MD in December 2017 we are working hard in developing our organisation, service offer and product programme to meet customer requirements; exciting times at Fusion.

Below you can see how we have grouped the UK business and introduced shared services for Marketing, Finance, IT and HR.

Paul Hubbard

UK Structure











AVK UK RECORD MONTH



Paul Jennings Managing Director, AVK UK

In March 2018, AVK UK achieved a record month of order intake across its combined water, waste water, gas and fire protection business segments.

Bookings in all segments were strong and included a sizeable order for dry barrel hydrants and UL/FM gate valves for fire protection ring main at a major UK Power station.

We were able to book our largest order to date for Pentobox's from a major UK Water Company in the month.

Order intake for our year to date October to end of June is 27% up on what was a strong order intake year last year for AVK and it was encouraging to see a lot of this growth has been generated from new product lines and/ or new customer segments that we have been cultivating over the past couple of years.

Our Gas sales received a boost from the continued uptake of PUR coated valves which have provided our customers with a product that they can use below ground without the need for additional corrosion protection.

Sales of our Clearway throughbore hydrant continue to grow year on year with more and more water companies recognising that this product provides them with a fantastic opportunity for line inspection and data capture without the need to dig holes and stopping water supply.

We have an additional exciting range of new products ready to bring to the market over the next few months which will further strengthen our position in our four key segments.





CORE MANAGEMENT TEAM

In May 2018, we announced a change to the structure of the four core businesses in the UK (namely AVK UK Ltd, Bryan Donkin Valves Ld, Aqua Gas Manufacturing Ltd and AVK Syddal). Hence forward we have a single AVK UK Core Group structure bringing together the manufacturing and sales team into a single organisation. I am excited about leading the new team and have created a single senior management team to support me in the task as illustrated in the chart below.

The new AVK UK Core Management Team has essentially two priorities:-

Delivering profitable growth. To do this
we will continue to expand our footprint
in supplying the Water and Gas utilities
where we have geographic responsibility
as well as growing our Fire protection and
Non conventional gas segments. Through
product innovation, a leading quality and
service capability and stronger customer
engagement we will provide our customers
with the best value for money solutions.

Fulfilling customer needs within the shortest time and minimum stock. We will ensure that we provide a market leading service capability to our customers without absorbing cash within the business.

These two themes will drive our objectives over the next year and onwards over our 3 year plan. By working together as one team (sales and manufacturing), we will provide a more effective customer focused organisation. We will embrace the concepts of LEAN manufacturing to cut out waste and to support us in our journey.

Paul Jennings - Managing Director, AVK UK

Managing Director AVK UK Paul Jennings

Managing Director Manufacturing Fran Brody Logistics & Supply Chain Martin Brody Water Business Development Graham Charnley

Water Pipeline Oliver Gambling Gas Sales Richard Stone UK Group Finance Gayle Broadhurst

WATER AND WASTE WATER ENGINEERED SOLUTIONS



Paul Boyden
Managing Director, Glenfield
and UK Projects

ONE TEAM, THREE BRANDS, MANY SOLUTIONS...

The UK Water Industry is currently focussing on "future proofing" it's water and wastewater infrastructure; this objective looks to continue into the next AMP investment cycle.

This focus concentrates on a number of key areas, supply continuity, sustainability and resource management in the face of challenges such as population growth, climate change, environmental impact and affordability.

Strategic investment in water and waste water projects is key to delivering a resilient infrastructure and achieving the water companies goals.

To provide enhanced support to our customers during this process, we have combined the relevant water and waste water expertise of AVK UK, Glenfield and Invicta into a single Projects Team.

This team, headed by Paul Boyden, will comprise of six experienced project managers, who will bring an unrivalled technical, product and added value service proposition to the water companies and their delivery partners, all strongly driven through a TOTEX approach.

A further key benefit for our customers of this integration, is the centralising of the specific competencies of the 3 brands, namely the engineered site solutions capability of Invicta, the major project management experience of Glenfield through their Dams, Reservoirs and Hydropower expertise, and the vast product range and logistical capability of AVK UK.

Our new team will be fully supported by our existing technical product management, administration and service teams who will continue to deliver our market leading proposition.

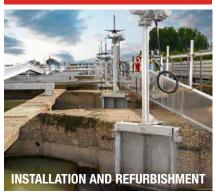
For further information please go to:
E: UKWaterProjectsTeam@avk.dk
W: www.avkuk.co.uk/MeetTheTeam







INVICTA Site Solutions, Valves & Penstocks



FUSION GROUP A YEAR ON



Neil GreenGroup Managing Director,
Fusion







Amazingly it is a year since the acquisition of Fusion Group Ltd by AVK and what a year...!

I thought I would take this opportunity just to run through the not inconsiderable number of key activities and changes that have happened this year-

 We moved offices – Lisa Shelton, Patsy Gilthorpe and their team achieved an incredible transformation which included building works and remodelling in a very short space of time, everybody feels very much at home in the new space.

We strengthened our organisation in key areas, with the appointment of:

 Gayle Broadhurst who in April took up the post UK Group Finance Director.
 Darrin Leahy joined us as Commercial Director in March to lead the growth in Local and Global Markets. Adam Tkacz moved across from AVK UK as Senior Business Development Manager to grow sales in International markets. Ash Cliffen our equipment specialist, Sam Thorneloe, Zhanna Troshina and Ashleigh Ellis also joined us to strengthen our customer facing team

- We started on an ambitious programme of new product development, based on a global product gap-analysis led by Paul Else, Group Director-Manufacturing
- We have created an ambitious investment strategy which will improve customer service and future proof for our growth in demand in the future.
- We have started to integrate some business systems with AVK including our product data- base, led by Richard Dobney, Group Director-IT
- Kieran Fitzpatrick, the UK Group Head
 of Marketing is driving a fully defined
 marketing strategy to support our growth
 across the global business giving a new
 look and feel, and the ability to capitalise
 on new opportunities. This included a big
 project delivered by Kelly Hearnshaw, to
 put together our Global PE Product Offer

which combines our products with traded products and items from the AVK range including valves and boundary boxes.

None of this would be possible without everybody involved, Fusion and AVK people, all pulling in the same direction and supporting each other.

I would like to thank everyone for maintaining focus through what has been a challenging 12 months and look forward to the successes that this will bring going forward.

Kevin Raine continues to operate as Group Director working on projects on behalf of the board.

Neil Green - Group Managing Director, Fusion

AVK IN THE UK GROWING TOGETHER



Kieran Fitzpatrick Head of UK Marketing

At the beginning of December 2107 we held our 2 day, UK conference at the Hilton Hotel on the outskirts of Sheffield.

The theme of the conference was "Growing Together" this being particularly pertinent as we had new members of the AVK family to welcome from the Fusion Group Limited who had joined earlier in the year.

All of the UK companies were in attendance along with a strong representation by Fusion from the UK, Australia, China, Indonesia, Italy, Malaysia and Poland; there were a total of 62 people in attendance.

As well as being an excellent networking opportunity for all, the various presentations

of the company's plans and objectives demonstrated the synergies across the group which could be combined effectively to grow revenue and profit in our core segments by offering added value.

We had guest speakers from AVK Group on key initiative being launched globally across the 2017-18 financial year.

Lykke Elmose presented an overview of our exciting new digital marketing strategy, the flagship of which is a new website platform for the AVK Group and AVK UK which was launched in June 2018.

Karsten Nielsen presented a paper on the future of Smart Water Networks which are being implemented globally to future proof our water supplies through population growth and changing weather patterns and demonstrated how this was an opportunity for us going forward.

Birgitte Torben and David Parkinson did an excellent presentation on the LEAN initiative with very entertaining demonstrations of the principals, followed up with an update of where we are on the journey from a local and group perspective.

The keynote speech was given by Toni Minichiello, the Head Coach to Jessica Ennis Hill our UK Olympic Gold Medal Heptathlete who demonstrated how Jessica's success owed a great deal to the collaborative approach of a multidiscipline support team, including dieticians, physiotherapists, and performance specialists all of whom had the same common goal.

The event was judged to be a great success; the feedback was all very positive with a number of new initiatives now being developed as a direct result.









FUSION GROUP EXHIBIT AT AQUATECH AMSTERDAM 2017 AND ASIA WATER 2018



Kelly Hearnshaw
Group Marketing Executive





Aquatech Amsterdam 2017 saw a record number of visitors, reaching 20,490 on closing day. With 928 exhibitors, the show sold out 6 months in advance.

Aquatech Amsterdam is the world's leading trade exhibition for process, drinking and waste water.

The biennial exhibition, held on 31st October to 3rd November 2017 at RAI Amsterdam, is a unique concept in Europe with a 100% focus on water.

Fusion Group hosted an exhibition stand at this important event, opting this year for a space only stand Fusion appointed Motion Five exhibition

stand builders, to build the stand to our design and specifications.

The key theme of the stand was 'Global PE Network Solutions' showcasing the products and solutions which Fusion can offer the customer. Products on show included electrofusion and spigot fittings, PE Ball Valves, access chambers, electrofusion machines and associated equipment and tooling.

Stephen Tann and Brian Atkinson (Fusion Group Sales Managers) hosted the stand during the 4-day event. Stephen went on to say 'Aquatech Amsterdam was an excellent platform for showcasing our Global PE Network Solutions product offering. It provided ideal networking opportunities with new and existing suppliers and customers, as well as generating interest and enquiries in our product range. The exhibition was well attended with comments about how professional our stand design looked'

Asia Water is the region's largest and most comprehensive water and waste water event in ASEAN with more than 1000 exhibitors in attendance from 32 countries.

The biennial exhibition was held on 10th – 12th April 2018 at Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia with the exhibition held over 11 Regional and International Pavilions.

Fusion Group hosted an exhibition stand at this important event building upon the theme of 'Global PE Network Solutions' which was rolled out at the Aquatech Amsterdam exhibition in November 2017.

The stand showcased the products and solutions which Fusion can offer the customer, whilst building up the awareness of the Global PE Offer. Products on show included electrofusion and spigot fittings, PE Ball Valves,

access chambers, electrofusion machines and associated equipment and tooling.

Seow KokHooi (Regional Director – AWT Fusion Malaysia) and Darien Chew (Sales and Marketing Manager – AWT Fusion Malaysia) hosted the stand during the 3-day event and were supported by Darrin Leahy (Commercial Director) and Kevin Raine (Group Director) from Fusion Group UK.

Seow went on to say 'The Asia Water exhibition was an excellent way to build upon our Global PE Network Solutions product offering which was initially launched during the Aquatech exhibition in 2017. As the exhibition was held in the local market it provided an ideal location to network with new and existing suppliers and customers, with AWT Fusion Malaysia's customers travelling from the North and South regions, Borneo, Indonesia, Cambodia, Brunei, Singapore, Philippines, Lao, Korea and surrounding areas. The exhibition was well attended, positive discussions were held in which a lot of interest and enquiries in our product range were generated'.





AVK UK AND FUSION GROUP CIPS SUSTAINABILITY INDEX



AVK UK Ltd and Fusion Group Ltd are now both rated suppliers on the CIPS Sustainability Index.

CIPS Sustainability is a collaboration of the Chartered Institute of Procurement and Supply, the University of West England and PRGX. Research indicated there were limited cross-industry standards that assessed the "three pillars" of sustainability for suppliers and buyers, the CIPS Sustainability Index was therefore developed to create a consistent sustainability measurement.

Benchmarking:

The Benchmarking Statistics available on the CIPS website show that AVK UK Ltd and Fusion Group Ltd are both performing on average considerably better not only than other Companies of the same size and in the same sector, but also better than all Companies rated on the CIPS Sustainability Index.

Supplier Metrics

	Economic	Environmental	Social
Fusion Group Limited	94	100	98
AVK UK Limited	91	96	92
Other Companies Same Size	72	73	81
Other Companies Same Sector	73	74	83
Other Companies Same Size & Sector	73	76	85
All CSI Suppliers	82	73	72

What is sustainability and what value does the CIPS Sustainability Index add in this area?

In a Business environment a sustainable business is typically expressed as an enterprise that has no negative impact on the global or local environment, community, society, or economy. Many organisations group their sustainability activities together under a Corporate and Social Responsibility (CSR) policy. The CIPS Sustainability Index uses the academic definition of social, economic and environmental criteria to underpin its methodology and approach. A key element in being recognised as a sustainable business is to understand the sustainability credentials of your supply base. This is both from a pure sustainability standpoint, i.e. wanting to use suppliers where possible who have the same values, but also as part of business risk strategy.





The 'three pillars' of sustainability are key to the CIPS Sustainability Index approach:

The CIPS Sustainability Index uses a series of questions for each of the "three pillars" to assess and score an organisations performance in those areas

The Social Pillar:

Social sustainability has gained more importance over the last few years, often as a result of pressure from Investors and Customers. Additionally many of the sustainability related reputational risks can be found within this pillar e.g. how employees are treated. Social sustainability typically embraces the key areas of Employment Practice, Corporate Citizenship / Philanthropy, People Management and Development, Human Rights Compliance, and Social factors within the Supply Chain.

• The Economic Pillar:

More than ever before organisations are reviewing and minimising risk of suppliers being affected by the current economic climate. Additionally, it is becoming increasingly important to demonstrate stable economic credentials, which is where the CIPS Sustainability Index adds significant value. Economic sustainability typically embraces the key areas of Corporate Governance, Financial Robustness, Innovation Capacity along with Business Integrity and Ethics.

• The Environmental Pillar:

Environmental sustainability has often been at the forefront of an organisations 'Sustainable' thinking. This has been spurred on by the debate on climate change, legislative requirements, government targets, customer and stakeholder pressure and in many cases a real business case to do something in this area. Environmental Sustainability typically embraces the key areas of Environmental Management, Greenhouse Gas Emissions, Energy Consumption, Waste Management, Water Management, Sustainable Sourcing and Materials and Resource Utilisation.

Key Benefits of the CIPS Sustainability Index:

- Having gained a score, this can be provided to a large number of current and potential customers avoiding the need to waste time and effort repeating answers to often identical questions
- It enables suppliers to demonstrate their sustainability credentials to buyers and provides a valuable showcase to potentially increase their customer base
- It allows suppliers to benchmark their sustainability credentials against their industry peers
- Reduce business risk and enhance business opportunities
- Enhance brand recognition and reputation
- Enhance a Company's ability to strategically plan for the longer term
- Measure improvements in a Company's sustainability scores

Source: CIPS Sustainability Index https://cips-sustainabilityindex.com/

AVK UK NEW WEBSITE



Nicola Kirk Marketing and Communications Officer



On 1st June we launched our new web platform. The UK were chosen as the pilot region for the first phase of our Group Digital Marketing Strategy as we had been most active in promoting digital technology in our market segments; driving efficiency and therefore reduced transactional costs for all parties.

The first phase has been developed as a tool to allow our customers (and colleagues) the quickest possible access to product technical data in order to help product selection and to support them through the cycle of a project with all the support documentation they may need.

It is our strategy that our web platform becomes the "go to" site for Gas and Water Utility engineers, their delivery partners and procurement teams, for a comprehensive library of support material from data sheets, through operation and maintenance manuals and 3D models for BIM infrastructure design, to our "solutions" brochures, case studies and academic papers.

The highly visualised nature of the new site is specifically designed to attract and assist new users to quickly access the information they require and then allow them to build their own "basket" of data which they can return to as often as they want to, this will help to retain customers in the long term.

Our customer facing teams are actively promoting this new platform to our customers and initial feedback has been extremely positive.

EXPECT... WESSEX WATER GRADUATES ARE GIVEN AN INSIGHT INTO AVK UK'S PROMISES OF "SOLUTIONS NOT ONLY PRODUCTS" AND "QUALITY IN EVERY STEP"



Stuart Montgomery Water Projects Sales Manager

n an industry that is always trying to engage with young people and graduates of all disciplines to impart knowledge, expertise and enthusiasm. **AVK UK Water Projects** Sales Manager, Stuart Montgomery developed a unique idea aimed at achieving this with young Wessex Water graduates. This is wholly aligned with Wessex Water's ongoing apprentice programme of which there are over 100 at present.





Stuart explained, "I have long thought that the best way to encourage and engage with younger members of our industry was to get to know them on an informal basis, engaging with them on an equal footing. I find that they are then more receptive to receiving information and knowledge acquired by more experienced and established people".

With this in mind, Stuart liaised with Wessex Water and formulated a two-day training programme developed explicitly for four Wessex engineers that included three placement students and a project engineer. The two days included visits to four of AVK's key production and distribution facilities in the UK - AVK Donkin in Chesterfield, AVK Syddal in Manchester, Aqua-Gas Manufacturing and their National Distribution Centre in Corby.

"The visits were designed to give them a unique insight into our manufacturing processes, meet our highly diverse skilled and experienced design engineers and to introduce them to common terms that can be very confusing at the beginning as we all have slightly different ways of saying things. In all my years with AVK UK, we have never had the opportunity to gather a group of young engineers and give them such an insight into our capabilities. It also gave them an opportunity to see how things work practically rather than looking at them in a brochure."

The days included presentations from Stuart (Water Projects Sales Manager), Stewart Collier (Fittings Business Development Manager) and David Hurley (Technical Sales Manager - Control Valves). They covered a wide range of topics, including; general information regarding AVK UK, fittings and valve selection and applications, control valve modular designs, the evolution of gate valves and hydrants and innovations that AVK has introduced into the marketplace. Also, there were opportunities to have guided tours of all locations where the graduates were shown the extensive range of products and manufacturing expertise that AVK UK provides - even getting their hands dirty with some practical demonstrations!

"There were lots of positives from the day, and at the end of it, I believe the graduates had a better understanding of a high-quality production process, controlled supply chain management and the benefits of the long term strategic view we provide to support the water industry, as a whole. Also, that we offer solutions and not just products and to expect quality in every step — these are key promises in our Expect Values. The one thing that pleased me the most was that they left understanding engineering manufacturing is alive and well in the UK and that AVK UK design and manufacture world-class products entirely within the UK, concluded Stuart".

All, including the graduates and Wessex Water Management, received the whole exercise warmly and it led to the following responses from Wessex Water.

"Just to reiterate what everyone else has already said, thank you very much for hosting the guys over the past few-days. I know that each of them has got a lot out of the trip. Seeing how the supply chain works and getting training on specific applications will be invaluable in their further development. Can you also please pass on our thanks and gratitude to everyone involved over the past few-days? These sorts of things are not easy to organise and getting shown around and having presentations by all the various people was excellent. I'm sure that I will take you up on your offer for next year's intake." Simon Whaley, Project Manager, Wessex Water

"I Would just like to thank you for organising the visit with Stuart, we all had a great time and learnt loads." Thomas Edwards, Placement Student

Wessex Water provides apprenticeship opportunities in a variety of different roles from office-based to technical departments, including engineering and construction.

For further information on career opportunities at Wessex Water visit:

www.wessexwater.co.uk/careers

For further details on factory visits and training, please contact:

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AVK UK CADENT GAS STAVELEY VISIT



Ross Chester
UK Gas Sales





Cadent Gas Ltd network supervisors are given an insight into AVK UK's provision of solutions not only products and quality in every step.

Over a 3 day event, a total of sixteen network supervisors from gas distribution company, Cadent Gas Ltd, recently visited the AVK Donkin Factory in Staveley where they received a series of presentations and a short training course on the benefits, quality and heritage of AVK's gas products.

Each day a new group of network supervisors were warmly received by AVK personnel.

Ross Chester of the UK Gas Sales team explained the objectives and the content of the event. "We wanted to put together a day that was full of good and informative content about AVK UK gas products and to be able to fully engage and get to know the Cadent network supervisors."

Each day began with a presentation about the heritage of Bryan Donkin Valves Limited who produce a vast range of high performance valves and accessories for the gas supply industry from its state of the art manufacturing facility in Staveley. Donkin gas valves and fittings have been used in the UK and worldwide gas industry for over 160 years and are suitable for all types of pipe systems.

"We felt that it was important to give a brief history lesson about Bryan Donkin valves limited and the fact that they have been manufacturing excellent quality and resilient products for such a length of time, the first gas valve being manufactured in 1857. Products that were made more than 100 years ago are still in action today, exceeding their 50 year expected life span." Ross continued.

The supervisors were then given a short training course on earlier valve design. This was a 'hands on' course where they could look at valves in more detail and learn to identify the previous generations of valves in the network that have been superceded.

The training completed, the Cadent team were given a guided tour of Donkin's factory site where they were able to inspect the array of gas products that AVK UK has to offer, an insight to the types of products supplied to Cadent and the innovations the company has developed.

Two examples of product supplied are the PUR polyurethane coated Series 555 valve (a product adopted by Cadent) and governor riser fitting in both PE80 and PE100. A new innovative, Series 217, factory entry elbow with a split flange was presented to the network supervisors emphasizing the main benefit of eliminating the need to employ a coded welder at installation.

To conclude the day AVK UK's quality manager, Jerry Payne, gave a presentation explaining the exceptionally high quality standards, including the recently rewarded TS standard which AVK are the first manufacturer in the gas distribution sector to achieve the international standard, and processes that all AVK UK's products have to undergo.

"This was a great opportunity for the Cadent and AVK UK's teams to get together, network, share knowledge and best practice. We have had some positive feedback from those network engineers who attended." Ross concluded.

Wayne Broadhead, network supervisor, repair operations for Cadent said, "I would like to extend a thank you from the whole team, I am hearing great feedback and appreciation for the days you put on for us."

For further details on factory visits and training, please contact:

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AVK UK SUPPLY - WESSEX WATER -THE GRID



Stuart Montgomery Water Projects Sales Manager

£230 MILLION EIGHT YEAR PROGRAMME 200KM OF TRUNK MAINS 24 REFURBISHED OR NEW PUMPING STATIONS 12 NEW STORAGE RESERVOIRS/TANKS...

only some of the important facts associated with Wessex's major Water Supply Grid project that AVK UK were proud to be involved in. This major 8 year project was designed, built and recently commissioned by Wessex Water.

The £230 million project to create a new water supply grid will enable Wessex to meet water demand for the next 25 years and eliminate the need to develop additional resources.

The eight year programme started in 2010 and was completed safely, on time and within budget in March 2018.

It comprised more than 50 individual schemes across Somerset, Wiltshire and Dorset and allows Wessex to move water to where it is needed.

Wessex have now laid more than 200km of trunk mains, build or refurbished 24 pumping stations and constructed 12 new storage reservoirs/tanks.

The projects valve requirements from AVK was significant, with over 1500 items delivered over the contract period. The range of product types also reflected the complexity of the programme from pumping stations to truck main systems and included Series 41 swing check valves, Series 21/55/54 gate valves, Series 75 and 756 butterfly valves and Series 701 air valves.









With the main focus of the programme being pipelines, isolation valves for the 200km of trunk mains were key. AVK's resilient seated gate valves up to DN600 were installed as standard, more than half of these being manufactured in AVK's UK Corby production facility. All components were made within AVK's own supply chain including the EPDM wedge, and the core of the valve was manufactured at AVK's plant in Denmark, AVK Gummi. This valve offers drop tight seal as well as the ability to be placed in the horizontal plane without costly reworked internal components. It is for these reasons that many water companies are now routinely using Series 55 large diameter resilient valves in their systems and moving away from the traditional metal seated valve. AVK have been manufacturing DN800 resilient seated valves for some time and will soon be adding DN900, DN1000, DN1200 to the range.

AVK UK's involvement in the programme was more than simply supplying product, one of AVK's promises was to Expect...Solutions not only products. In the build up to the project, AVK supported and advised many of the designers and engineers in valve recommendation, ensuring the correct valve was selected by application. In addition a host of ancillaries such as extensions stems, headstocks and actuators were supplied to the many locations within the Wessex region.

If you need support or advice on your project or valve selection please contact:

Stuart Montgomery Water Projects Sales Manager E: stmo@avuk.co.uk M: +44 (0) 7876 798775

AVK UK SUPPLY LARGE DIAMETER GAS VALVES FOR LONDON REGENERATION PROJECT



Alan Bite
Product Manager, Gas

AVK UK Limited has been awarded a contract by National Grid and Elster to supply in total 15, large diameter gas valves for the 'Fulham Gas Holder Site Regeneration Project.' With an approximate value of £250k, the valves are a mixture of 24" and 36" and works on the site renovation began in the summer of 2016 and are due for completion in the summer of 2017.

The disused gas holder site is located in Sands End and falls within the London Borough of Hammersmith and Fulham's South Fulham Riverside Regeneration Area. The gas holders are located between Imperial Road, Michael Road, Gwyn Close and the London Overground rail line at the rear of the site.

Landowner National Grid was granted planning permission by the London Borough of Hammersmith and Fulham in November 2014 to dismantle five of the six gas holders at Imperial Road, Fulham.

By removing the gas holders, National Grid will make way for the long-term regeneration of the site

The 4 Grade II listed buildings on the site, including gas holder No. 2 – the world's oldest gas holder – will be preserved and incorporated into a new outline master plan for the site.

This plan will set out a long-term vision for the redevelopment of the site with new homes, shops, offices and public spaces.

The dismantling works are an important first step towards regenerating the site and delivering an exciting future for the Imperial Road area, in the heart of Fulham.

Alan Bite, AVK UK Limited, Product Manager,

said, "We are delighted to have been awarded this supply contract for the 'Fulham Gas Holder Site Regeneration Project,' it is an important step in the London Regeneration programme. We have already successfully supported National Grid on the 'Battersea Gas Holder Project' and will continue to work closely together on further London regeneration gas holder schemes."

As part of the solution the AVK Donkin engineering design team based in Chesterfield, worked closely with National Grid and Elster to ensure that the design was a resilient one that would ensure the longevity of the project.

Alan continued, "The first key challenge for us was to ensure that the valves could seal bi-directionally for this project. This is because uniquely, testing and operational flow is in opposite directions, thus requiring a 100% gas tight seal in both. The AVK team succeeded in redesigning the valves to achieve this.

The second challenge was to make the valves suitable to be fitted in either vertical or horizontal orientations; also at varying installation depths. The AVK design solution to this challenge was to supply rollers to support the valve doors, and also bevel gear boxes where appropriate."

Through collaboration between AVK and the project delivery team, a fully sustainable solution was provided for this prestigious project.

If you need support or advice on your project or valve selection please contact:

Alan Bite
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AVK UK SUPPLY VALVES, PENSTOCKS AND STOP LOGS TO WOOLSTON



Stuart Montgomery Water Projects Sales Manager



As a framework supplier to Southern Water, AVK UK have been supplying an extensive range of valves and penstocks to the Woolston Wastewater Treatment Works Redevelopment since 2014.

Originally built in 1966, the treatment works has been undergoing a multimillion-pound redevelopment since 2014. During the project, wastewater continued to be treated through an adjacent temporary plant whilst the new plant is designed and built. The completed project will:

- Reduce odours to surrounding areas
- Ensure the treated wastewater leaving the site meets new, higher environmental standards
- Ensure the redesigned works fits in with the ongoing redevelopment of the area

The result will be a modern wastewater treatment works that will serve the area long into the future. The new site will replace open air tanks, where the odours originate, with new treatment processes that are fully odour controlled and contained within the buildings.

The range of valves and penstocks delivered to site included:

- DN50-400 Series 21 resilient gate valves manual and electric operation
- DN100-400 Series 41 Non-return valves with Lever weight and guard
- DN150-250 Eccentric plug valve electric operation

- DN50-350 Series 75 butterfly valves electric operation
- DN50-800 Series 702 knife gate valves, manual and electric operation
- Variety of Series 772 stainless steel penstocks and stop logs as well as multitude of small diameter stainless steel ball valves

The valves were manufactured in AVK UK factories and other AVK plants across the world ensuring consistent high quality and supply chain management.

AVK Technical Solutions

AVK UK promises to offer solutions not only products as perfectly demonstrated by the sizable knife gate valves shown below. The issue was the vast distance of 3m from the centre line to the operating platform above. The standard practice would be to fit the valve with an extension stem leading to a floor mounted pillar and actuator on the operating platform.

Normally this would need the design of a costly floor structure suitable for supporting the pillar and actuator equipment. AVK's manufacturing plant experts removed the need for a complex flooring arrangement and designed an innovative and cost-effective solution by creating a self-supporting framework mounted to the body of the valve. This bespoke design also catered for the extreme coastal environment and was delivered in a timely manner to avoid programme delays.

Product and Quality

Key to AVK's high standard of manufacture is the robust testing procedures for all valves prior to despatch, as shown below for a Series 702 DN600 knife gate valve. Regardless of the combination of size and type of valve being



supplied to Woolston, the seat is tested to 1.1 times the rated working pressure, and the body tested to 1.5 times the rated working pressure.

It was not just the product, size and scope of the valves supplied that was complex. Given the coastal location of Southern Water's redevelopment, many of the valves supplied were manufactured to the AVK coastal specification. Amongst other features, this includes enhanced coating and increased specification of the material grades used. This ensures AVK's valves survive the arduous atmospheric conditions and harsh environments.

If you need support or advice on your project or valve selection please contact:

Stuart Montgomery Water Projects Sales Manager E: stmo@avkuk.co.uk M: +44 (0) 7876 798775







AVK NETWORK CONTROL SOLUTIONS



David Hurley
Technical Sales Manager
Control Valves



The water industry is determined to make the water system smarter and more resilient; to reduce water loss, cope with demand and create a smarter more efficient water network.

To meet this demand, AVK offer, **AVK Network Control Solutions**, the complete package for a smart water network combining the key 3 elements, product offer, site services and local support.

"The main focus of these elements are added value in terms of installation, operation / service and availability, and also in true life cost... these being fundamental aspects of the TOTEX approach."

One of the key products included in this package is the AVK control valve, available with reduced and full bore. Control valves with reduced bore are appropriate for most applications, as the smaller bore often offers more accurate regulation. Control valves with full bore are recommended, if high Kv values are needed, e.g. in front of hydrants.

Automatic control valves such as pressure reducing, pressure sustaining, constant flow and

pressure relief, control and optimise the systems performance. These can be used to provide optimum pressure and flow conditions for a system, resulting in:-

- Less leakage
- Less wastage
- Less impact on the environment
- Less disruption to consumers
- Improved financial savings to water companies



PRODUCT OFFER

Wide variation of control valves to suit the application Verified to all applicable standards Size range: DN50-1200 Associated AVK UK products and ancillaries



SITE SERVICES

Supply, install, commission Upgrading of existing valves Installation of controllers Scheduled and emergency maintenance and servicing Fully qualified site personnel

AVK NETWORK CONTROL SOLUTIONS



LOCAL SUPPORT

UK design, manufacture and stock
Sales and technical support
Online support information
Training videos
Training days and manufacturing
visits

If you need support or advice on your project or valve selection please contact:

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AVK UK AND THAMES WATER HYDRANT SECURITY FIELD TRIAL



Graham Charnley General Sales Manager Water

Thames Water and their fire brigade partners have been experiencing numerous instances of hydrant outlet theft and unauthorised use of their asset hydrants, both flushing points and operational hydrants. Over the past few years numerous attempts have been made to utilise the industries protection for the hydrants with limited success.

AVK UK Ltd were contacted and in a joint partnership with Thames Water it was agreed to identify hydrants that were consistently being targeted by vandals and trial the latest innovation from AVK; the Series 29/10 hydrant security device.

The hydrants were identified in the East End of London at the junction of Ferndale Street and Yeoman Close, Beckton London E6 6NN. The two hydrants in question are a flushing point for the Thames Water Operations team and located in a system of bypass and flushing points from a 24" diameter, cast iron main, circa 1950's. These two hydrants have a history of abuse with local children letting the hydrant open during warm periods causing water pressure issues, supply interruptions, discolouration issues as well as damage to the surrounding area due to corrosion from the water.

These events led to complaints from customers and local councils and Thames Water were tasked with identifying and implementing a colution.

In conjunction with Geoff Johnson of Thames Water and Graham Charnley of AVK UK Ltd, samples of the security device were delivered to site and the hydrant chambers inspected. It was noted that there was an outlet security device installed, however the local operations engineer confirmed that they provided limited protection to the hydrants. Being constructed of a "soft" aluminium they frequently "binded" to the gunmetal outlets causing difficulty in removing them but, on the other hand, could easily be removed by unauthorised persons.

The AVK device was fitted to both hydrants within seconds and then demonstrated to show that they would resist removal attempts without the appropriate keys. Installing the universal base plate allowed the older hydrants to be secured, both on the outlet and the operating cap. Due to outlet corrosion, the second cap was stiff to install and the plate was slightly loose, however it was still offering protection to the hydrant and could not be removed without the key.

During installation the use of the new, revised key was confirmed as providing a secure fit to the top of the security device.

That there are only two components, coupled with the simplicity of installation, it was agreed that the device was quick and easy to use, and would cover an area of hydrant abuse with minimal time and allocation of resources.

Primarily the device is intended to protect the asset of the fire hydrant, but it was agreed that the additional benefits extended to:

- Water loss
- Water theft
- Local flood and corrosion damage when a hydrant has been opened without authorisation.
- Customer supply interruptions
- Discolouration issues
- Loss of pipeline pressure
- Theft of outlets
- Security of hydrant for future access or use
- Protection of operational staff

The security devices will now be left in-situ and reassessed in a few weeks to confirm their performance. As the general area has been subjected to numerous incidents of hydrant abuse, the trial will determine if the devices will be considered for further installation.

If you need support or advice on your project or valve selection please contact:

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AVK PENTOBOX WATER METER BOUNDARY BOX IS "THE SOLUTION TO A NUMBER OF PROBLEMS"

or nearly 40 years AVK UK has been known throughout the water industry for its leading edge products and rock-steady place in the supply chain. It is also now leading the pack in launching a range of new water mains-tometer products with the AVK Pentoflow range, developed to be 'the most durable range on market'.

The full range includes:



SSE Enterprise Utilities (SSE), part of Scottish and Southern Energy has, since January 2017, installed nearly 1000 of the class leading AVK Pentobox incorporating a Grade B Surface Box tested to fully withstand an 8 tonne load.

AVK Business Manager, James Pick, explains: "We consulted end users, including utilities, construction giants and self-lay companies, about the day-to-day issues they face when installing water meter-to-mains products.

"The key matters raised were reliability, durability, value and connectivity. So they became the starting point for the AVK Pentobox

SSE specifies AVK Pentobox

SSE is the largest independent water company outside the established regional network and now have over 20 water inset licences contracted. They became the first utility company to put the AVK Pentobox boundary boxes, part of the AVK Pentoflow range, into the ground, in a huge housing development near Didcot. The 4,200-home development will benefit from the AVK Pentobox following SSE Water's commitment to switching from a generic product to the only boundary box with an 8-tonne loading.

James Pick says: "To have SSE give such a resounding vote of confidence is marvellous. AVK underwent extensive field trials with SSE and proved the through-life value the entire range brings to developments of all sizes. They really put it to the test and it came through with flying colours.

"On developments such as this, every detail counts, every product matters. Contractors need to get the installation of products right first time and need to reduce replacement works to a minimum."

AVK believe that the durability of the AVK Pentobox is key to the products' success. Investment has been made in design and materials to deliver better made, longer-lasting and easier to install products. The AVK Pentobox gives you a boundary box that is better built. Saving you time and giving you peace of mind.

Only the AVK Pentobox provides:

- Unique Grade B composite lid with an 8-tonne load rating
- Class 1 fully sealed
- A full 7° angle of tilt, for use on gradients
- Telescopic adjustment of the guard pipe from 555-850mm
- Push-fit connections which can be demounted by simply unscrewing the nut
- A fully WRAS approved product

As Kieran Fitzpatrick Head of AVK UK Marketing says: "Seeing contractors get their hands on the products and understanding how the AVK Pentoflow range really takes mains-tometer connections a giant leap forward is very

New product field test: industry expert examines strength and ease of fit of AVK Pentobox boundary box

The AVK Pentobox boundary box has been designed to be the most durable, class-leading boundary box on the market, with a surface box that will withstand an 8 tonne load, made of stronger composites to withstand site damage and lid failure. AVK claims it will reduce the need for retrofits and repairs, drastically cutting 'through life' costs.

But can it really stand up to the toughest tests in the business? Industry expert Phil Frost has been there, done that, got the t-shirt in almost every role in the water industry, so who better to put the AVK Pentobox through its paces?

Getting the right height

Nowadays a well-respected trainer and lecturer. Phil's first comment on the AVK Pentobox is a general note of guidance: "The installation and reinstating industry guidelines are there for a reason. This is what I teach and if you follow them, you can't go far wrong. Boundary boxes and other products are designed to be installed properly," he says.

"What I liked immediately about the AVK Pentobox," said Phil, "was that the telescopic adjustment does actually give and maintain a precise height. When I started filling in the trench the outer sleeve gripped the inner one, so



James Pick Business Manager

it stayed at the optimal height.

"This is a clever feature, as other boundary boxes I have used slide down the tube and needed digging out pretty quickly. The design of the AVK Pentobox achieves the flat surface required. We tested it at different levels and they all worked."

AVK consulted end users when developing the entire AVK Pentoflow range, so the telescopic adjustment was designed specifically to enable a faster, easier installation.

Phil's work as a college lecturer covers everything, as he says: "how to dig, to reinstating and the whole lot." He has been familiar with AVK products for many years. But surely one boundary box is pretty much the same as the next?

Phil disagrees: "The push-fit connections on the AVK Pentobox work well and make installation easier. Of course, being a lecturer, I would again emphasise doing this right first time."

In reinstating the trench, Phil used a 56 kilo vibro tamper. "I can happily report it compacted and held very well," he says. "With other boundary boxes they can sink into the ground when it comes to laying the tarmac surface. So really, this new product will solve those problems."

By aligning itself with utility companies and contractors growing focus on Totex-driven requirements for a water mains-to-meter range, the design of the AVK Pentobox has reduced installation time with maintenance and operation costs well below that of other existing ranges.

The AVK Pentobox is delivered from stock from AVK's National Distribution Centre in Corby.

For more information about the AVK Pentobox and AVK Pentoflow range contact:

James Pick Business Manager M: +44 (0) 7568 429327 E: japi@avkuk.co.uk



AVK UK NOT ONLY VALVES



Graham Charnley
General Sales Manager Water

AVK UK's already extensive range of fittings for water is about to become bigger with new products poised for launch Summer 2018.

AVK UK, the market leading experts, design and manufacture these high performing products to BS EN ISO 9001 quality systems.

- Repair clamps
- Tees
- Flange adaptors
- Couplings
- Tensile resistant products
- Wall starter
- Dismantling joints
- Flange convertors
- End caps
- Encapsulation collars
- Pipe measuring service
- Site solutions

Products fit the vast majority of pipe types (Polyethylene, PVC, ductile iron, cast iron, GRP, steel, stainless steel, clay, concrete and asbestos cement), are held in stock, the coating is of tough, durable epoxy, WRAS approved and WIS-4-52-01 compliant and seals are WRAS approved EPDM rubber as standard — BS EN 681-1...

...just some of the many features and benefits.

24/7 Emergency repair clamp service for water mains call us on: 0800 202 8228

For more information contact:

Graham Charnley General Sales Manager Water M: +44 (0) 7778 536288 E: grch@avkuk.co.uk













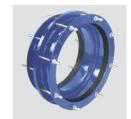






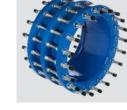




















AVK UK FIRE PROTECTION



Adam Simpson **Business Development** Manager - Fire Protection







WHEN EVERY SECOND COUNTS... COUNT ON AVK VALVES AND HYDRANTS!

When it comes to Fire Protection and dealing with emergencies, you need a product and supplier you can trust and rely on.

AVK's fire protection offer is gaining greater recognition in the industry with significant increases in the order book and enquiries coming into the business.

Production plants that work with flammable material or high temperatures must be effectively protected against fire. This is established by means of a fire water main that covers the entire production area with hydrants and monitors. These hydrants and monitors have a dual role to

- Extinguish the fire and...
- Ensure that the areas not on fire, are sprayed with water to prevent further spread of fire.

AVK can supply fire protection products for all parts of the fire water ring main from approved gate valves for isolation, butterfly valves, to hydrants and monitors that extinguish the fire, all of which comply with the relevant approvals UL, FM and VdS.

AVK's offer for fire protection includes:

- Wet barrel hydrants
- Dry barrel hydrants
- Below ground hydrants
- Monitors
- Indicators
- Gate valves
- Float valves Swing check valves
- Butterfly valves
- **Ancillaries**

For more information contact:

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AVK ACHIEVES ISO/TS 29001 STANDARD



Jerry Payne Quality Engineer

Safety-critical products benefit from highest manufacturing standard.

AVK Achieves Gas distribution sector's First ISO/TS 29001 Standard for manufacture of the Donkin gas valve range.



Certificate of Registration

QUALITY MANAGEMENT SYSTEM - PO ISO/TS 29001-2011

This is to certify their

Bryan Devicts Values Limited
College Tools
Valued Incident Bottle
College Tools
Value Incident
College Tools
Value Incident
College Tools
Value Incident
Value

AVK has become the first manufacturer in the gas distribution sector to achieve the international standard ISO/TS 29001:2011 for its entire design-to-delivery, gas valve manufacturing process. Achieved by its Bryan Donkin Valves production facility, this is the highest safety-based standard a manufacturer can achieve in this sector.

AVK invested two years in securing the standard for the Donkin Valves brand, which has been supplied within the global gas sector for over 150 years.

ISO/TS 29001 defines the quality management system for product and service supply organisations for the petroleum, petrochemical and natural gas industries.

Achieving ISO/TS 29001 has seen AVK conduct a business-wide exercise starting with the design process, procurement and flow analyses at the foundry production stage. It has also had to demonstrate how it has eliminated non-conforming products; installed specific preventative activities; imposed a new testing regime for safety factors; reduced variations and waste. It also means that they continuously verify and validate the exercises it carried out to achieve the standard.

"ISO/TS 29001 sets the bar very high for the global gas distribution sector and means we will be delivering the ultimate products and service," says MD Fran Brody.

"It's especially important in safety-critical components and achieves a whole new level of manufacturing and supply management. It endorses our culture of continuously improving our customer and production focussed professionalism across our entire team".

"We know that our customers and the regulators see our attainment of ISO/TS 29001 as a key reason to work more closely with AVK, given the fact it eliminates variations in process and validates our entire product range. It is a clear endorsement of procuring, designing, manufacturing and supplying to the highest possible standards and we are proud to be the only valve manufacturer that holds this standard in this sector."

Standard means continuous quality improvement across the entire business.

ISO/TS 29001 requires manufacturers to develop a continuous improvement regime across its entire business, from suppliers through to product delivery.

As part of the global AVK Group, the Bryan Donkin manufacturing facility already held the ISO9001, ISO 14001, PED certificates and GIS Kitemarks for specific products, but wanted to achieve the highest standard recognised within the gas industry as a means of driving quality up throughout its own business and across the sector.

Quality Engineer Jerry Payne oversaw the entire challenge of securing the standard: "Achieving ISO/TS 29001 demonstrates that AVK takes seriously its commitment to working responsibly and mitigating risk," he says. "It shows a commitment to managing operations safely and effectively within a hazardous industry; it assists with gas tender opportunities, as the standard will become a prerequisite for gas customers supply chains."



GLENFIELD REFURBISH TWO NEEDLE DISCHARGE VALVES



Jim McAllister Project Manager, Sales

Glenfield Valves Limited was recently awarded a contract by Dales Engineering Services Ltd for overall client Scottish and Southern Energy (SSE) to refurbish two Needle Discharge Valves – one 48" and one 12" on the Sloy Hydroelectric Power Station.



In May 1945 construction began on the Sloy Hydroelectric Power Station on the banks of Loch Lomond in Scotland. The power station was completed five years later and was opened on 18th October 1950 by the late Queen Mother - It is still the largest conventional hydroelectric power plant in the UK.

The Loch Sloy Dam, built as part of the project, is 56m high and 357m long and raised the surface level of the loch by approximately 47m. The resulting Sloy Reservoir has a 17km² direct catchment area, although various pipes and intakes have provided a further 63km² of the indirect catchment area. The total volume of water held in the reservoir by the dam is approaching 36 million m³, and a 3km long tunnel takes water from Loch Sloy to a valve house positioned approximately 197m above the tank. From the valve house, four DN2000 steel pipes carry the water down into the powerhouse that is situated on the west coast of Loch Lomond

Jim McAllister, Glenfield Valves Project Manager for the project, explained about the valves and the company's involvement.

"The Needle Discharge valves are the original ones fitted in the 1960's by Glenfield Valves, and it is the first major refurbishment they have had. We still have the original drawings in our extensive drawings library that enabled us to understand what was needed for the refurbishment."

The valves were originally removed by Dales Engineering Services Ltd and were delivered to our workshop.

From there the Glenfield Valves engineering team were able to remove and replace the bronze seat and face rings on both valves. The most challenging aspect of replacing the seat and face rings is ensuring that the 'bedding' or "lapping" between the seat and face rings was accurate. This is done by hand and is a highly skilled process; one which is fundamental to the successful and cost effective valve refurbishment.

Jim explained, "During the assembly, we have to rebuild all the gearing within the valve and replace the bronze piping for the grease lubricating pipe. We then have to undertake the 'lapping' element to match the seat faces - this is also carried out by hand. It entails introducing a marking dye on one surface and then closing the valve until the two surfaces are engaged. This indicates the high points on the surface that have not been dyed. It is then that the most intricate and skilled aspect of the works takes place. The engineer fitter has to file or grind the surfaces by hand until they are completely engaged and 'drop tight' - no leakage whatsoever! The valves are then fully assembled, painted and hydrostatically tested.

We received a visit from the Dales Engineering Services Limited and SSE Engineers who witnessed the successful testing of the valves post refurbishment. The SSE engineer commented that he looked forward to another 50 years of successful operation."

For further details on the Sloy Hydroelectric Power Station scheme, please contact: Jim McAllister Project Manager, Sales E: jim.mcallister@glenfield.co.uk







INVICTA ENVIRONMENTAL WATER MANAGEMENT SOLUTIONS FOR RESILIENT FLOOD PROTECTION



Andrew Izod Managing Director - Invicta

Nobody could have failed to be shocked by the 12 or so severe flooding events in the last 15 years in the UK such as those in the South West in 2014, Yorkshire and Lancashire in 2015, and then paradoxical drought warnings and hose pipe bans that have been issued in the same years as the floods!







These type of events are designated by the government and their agencies as being "100 year events", but since the increased frequency, DeFRA have embarked on a 6 year capital plan worth $\mathfrak{L}2.3$ billion delivered through the EA, to mitigate the impact of these extreme weather events.

The 6 year plan for England running from 2015 - 2021, is to invest in capital projects. This they believe will bring them a total benefit of $\mathfrak E30.3$ billion which includes the mitigation of $\mathfrak E23.1$ billion in 300,000 high risk property flood damage costs, plus $\mathfrak E7.2$ billion in additional benefits such as transport and infrastructure, agricultural risk through flood risk reduction and water management.

The investment is divided 55% to inland schemes and 45% to coastal.

Having investigated this market thoroughly, it became apparent that Invicta had roughly 80% of the product requirement for this segment and unlike most of the competition within this sector, also had a site solutions design, installation and commissioning capability.

The 20% of products that were required to complete the offer are sourced through partnership trading agreements, these are typically fish and eel friendly penstocks, wiers and flap valves which allow free movement whilst controlling the water.

Invicta have planned to ultimately grow their sales into this segment to 20 % market share and have put in place the resources to deliver the growth.

No. of properties at risk by risk type

3.8m
Properties at risk of surface water flooding

2.4m
Properties at risk of river and coastal flooding

1m Properties at risk from river, coastal and surface water flooding

AVK DONKIN ASSET PROTECTION SYSTEM



Richard Stone Sales Director, Gas





Success of AVK UK PUR coated valves continues to grow within the gas sector becoming universally accepted across the UK.

Since the launch of the AVK Donkin PUR coated valves in March 2016, demand continues to increase as all Gas Distribution Networks and Gas Transporters approve their use. Both the flanged and PE tailed version (part of the Donkin Asset Protection System*) of the Series 555 Valve is in high demand as customers realise the installed cost value.

In summary, the main benefits are: -

Reduced valve wrapping

The valves are polyurethane coated.
The PE tailed valves can be installed without any further corrosion protection required.
Valves with flanged ends have fully protected valve bodies but will still require wrapping on the connecting flanges.

This is a major saving on both models when compared to wrapping the whole valve.

Quicker installation

Installing a Donkin Polyurethane coated, PE tailed valves eliminates bolting connecting flanges and fully wrapping - estimated potential labour saving of 2 hours on a DN300 valve

Reduce potential for underground leaks.

Because the PE ends are directly electrofused to the PE pipeline the potential for leaks is removed and increases the asset integrity value of the pipeline.

The AVK Valve Installation Tracker.

Logs GPS location and provides full auditing of installed works.

Approved to recognised standards.

The AVK Donkin Polyurethane is fully type tested to European standard EN 10290 and complies with all the relevant parts of UK gas standard T/SP/CW/6-2. Plus, additional site-specific tests to validate and approve the robustness of the coating.

Available ex-stock from AVK UK



*Donkin Asset Protection System

The system in its entirety has been designed to ensure that valve installations are quicker, of a consistently high quality, and are fully traceable and auditable. The system also improves the asset life and integrity of the valve whilst negating the need for additional protection systems.

The full Donkin Asset Protection system is comprised of five main elements that deliver these benefits: -

- A unique, factory applied, high performance Polyurethane coating, specially developed by AVK to withstand the rigors and challenges of underground installation.
- Factory fitted PE tails.
- The AVK Valve Installation Tracker to log, locate and audit the valve installation.
- Stainless steel spindle.
- Stem cap.

Find out more, contact gas sales: T: +44 (0) 1246 479100

E: gasenquiries@avkuk.co.uk

INNOVATIVE AVK UK VALVE AND HYDRANT SOLUTIONS ON SCOTTISH WATER SCHEMES

AVK UK Limited has been commissioned to supply valves and hydrants on two schemes for end client Scottish Water.

The schemes, Gorbals (Corsehouse) Pumping Station for contractor ABV Alliance (Amey, Black & Veatch JV) and Caledonia Water Alliance, (CWA) Morrison Utility Services, AECOM) respectively has a combined value to AVK UK of approximately £1.5m.

Gorbals (Corsehouse) consists of the construction of a new Pumping Station and tie-ins to three existing service reservoirs at Drumboy, South Moorehouse, Thornlibank and Amlaird Treatment Works and is part of the £120m Ayrshire Improvement Scheme. It began late 2015 as completed in April 2017 and has a value to AVK UK Limited of approximately £1.2m.

Over 200 valves on the Gorbals (Corsehouse) scheme have been supplied and include:

- Gate Valves (including Gearbox, Electric Actuators and Ancillary Equipment)
- Recoil Check Valves
- Flow Control Valves
- Air Valves
- Ball Valves
- Hvdrants

Sizes range from DN25 up to DN1000mm with pressure ranges from PN16 and PN25.

AVK UK has been working closely with the ABV engineers and the project manager for the scheme from January 2016 (six months) to support and recognise any potential value engineering solutions.

As a result of this AVK UK provided calculations to change the design from originally specified conventional NRV's to Recoil Check Valve (reducing a risk of a surge by up to 90%).

This was achieved by utilising support from design engineers from AVK UK Limited's sister company Glenfield Valves Limited.

Close collaboration between AVK UK Limited's Project Manager for the scheme, Wilson McPhail, and the ABV Project Managers and designers has been key to ensuring that the valves and hydrants are 'fit for purpose' and on site at the right time.

He explained, "We have been working with the ABV designers over the past several months to select optimum valves including: Flow Control Valves, Recoil Check Valves for pump protection/surge prevention and a number of large Actuated Gate Valves."

We have used our Glenfield office (Prestwick), to offer technical support to ABV from our design engineers who have supplied surge calculations, performance curves and other technical documentation including drawings to support our technical offering.

This was key to giving ABV the peace of mind to allow them to progress onto the manufacturing & construction phase.







Wilson McPhail Business Manager - Scotland

Our Kilmarnock assembly and distribution facility was also used to ensure that initial critical delivery dates on phase one were met by using their stock of DN900 gate valves and fitting actuators and gearboxes in just a few weeks which allowed ABV to start some early tie-in work and ensuring they met their initial delivery commitment.

AVK UK also faced a logistical challenge with there being five different sites for this one scheme, it meant that AVK UK and the ABV team had to ensure all deliveries were suitable for each of the five different sites, this included consideration of vehicle restrictions, site access, off loading facilities and other specific delivery rules for each of the five sites.

AVK UK continue to work closely with ABV having daily contact and site meetings, this service will continue right through to the commissioning stage and until the project is handed over to Scottish Water.

The Amlaird Pipeline is a 13-Mile strategic pipeline running from Newton Mearns to the Fenwick/Waterside area for Scottish Water. The pipeline is being laid by the Caledonia Water Alliance. AVK UK Limited has been commissioned to supply valves for the pipeline and has an approximate value of £320k.

The Construction of the first phase started in early 2016 the £120 million investment by Scottish Water in its drinking water network; this will benefit more than 200,000 people and

businesses in much of Ayrshire and parts of East Renfrewshire.

The route of the first phase section of water main is being constructed mainly through farmland and open moorland. It starts at Waulkmill Glen Reservoir in the north and goes south via Drumboy Hill, close to the M77 and A77 to Amlaird Water Treatment Works near Fenwick with branches to the South Moorhouse and Corsehouse water treatment works.

AVK UK Limited has supplied 69 valves on the Amlaird Pipeline and include:

- 9 x DN900 metal seated gate valves, PN16
- 5 x DN900 metal seated gate valves,
- 5 x DN1000 metal seated gate valves, PN16
- 50+ air valves, gate valves, and hydrants

The pipeline had a tight delivery program, through working closely with CWA, AVK UK supplied and worked to a delivery schedule with numerous 'milestone dates' giving regular updates to both CWA and Scottish Water and successfully managing to deliver the valves early.

AVK UK supported and value engineered design alterations on all valves with the integral bypass arrangement being specially altered for this project to satisfy site-specific requirements. This was accepted after the submittal of GA

Drawings to ensure it met with the designers' expectations and approval. This demonstrated the flexibility and willingness of AVK UK and its designers to offer customer and site-specific solutions.

AVK UK worked closely with the CWA designers over a number of months to carefully select and locate the air valves across the 13-mile pipeline route using their unique air valve sizing software.

Once each location and size was agreed by both AVK & CWA, a final report was signed and submitted by AVK UK to CWA was also used by alliance designer AECOM as part of their final hydraulic analysis.

If you need support or advice on your project or valve selection please contact:

Wilson McPhail Business Manager - Scotland E: wimc@avkuk.co.uk M: +44 (0) 7515 576658



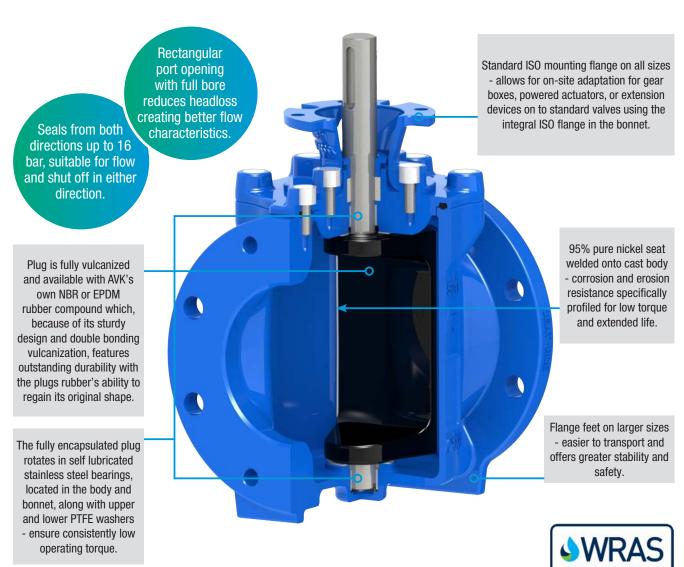
AVK EXTENDS IT'S PRODUCT RANGE AVK SERIES 764 ECCENTRIC PLUG VALVE



Greg Morris Technical Manager, Water

The Series 764 Eccentric
Plug Valve - used for
isolation in water and waste
water installations, for pumpcontrol shut-off and flow
control applications.

- Available in pressure ratings up to 16 Bar, flanged to suit BS EN 1092-2 PN16.
- Size range DN80-300.
- We offer sizing, engineering and technical expertise. Our site solutions team offer a complete installation package, mechanical and electrical.
- Available from stock at AVK UK.
- Easy to use product. Design, selection and installation information is available on the website and in the brochure. www.avkuk.co.uk

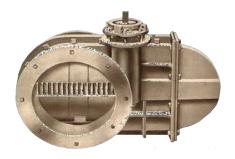


If you need support or advice on your project or valve selection please contact:

Greg Morris Technical Manager - Water E: grmo@avkuk.co.uk M: +44 (0) 7810 377246

250TH ANNIVERSARY OF THE BIRTH OF **BRYAN DONKIN**

The 22nd March 2018 marked the 250th Anniversary of the birth of Bryan Donkin, pioneering Mechanical Engineer and founder of the Bryan Donkin Company.



Born in 1768, Bryan Donkin was a contemporary of the Great British Industrial Engineers such as Thomas Telford, Marc and Isambard Brunel and as such partnered them in some of their most prestigious projects including the Caledonian Canal and Thames Tunnel. Bryan Donkin is credited with several innovations; not least, inventing the food

preserving "tin can", the first steel pen nib and fundamental to our current business, the first gas valve and as a result, he became a founder fellow of the Royal Society.

Manufacturing gas valves since 1847, Bryan Donkin Valves Limited still produces a vast range of high performance valves and accessories for the gas supply industry from its state of the art manufacturing facility in Chesterfield. Donkin gas valves and fittings have been used in the UK and worldwide gas industry for over 170 years and are suitable for all types of pipe systems.



AVK GROUP **TRANSITIONS TO ISO 2015 STANDARDS**

The ISO 9001:2015 and ISO 14001:2015 standards are the latest internationally recognised standards which have recently been under review and have been updated from their previous version. These are compiled by the British Standards Institute (BSI) which stipulate the best practice for implementing management systems within business.

In order to remain market leaders in the Gas, Water and Waste Water industries it has been of crucial importance that the AVK UK Group remains accredited to both ISO 9001 and ISO 14001 standards. This demonstrate to our customer base that we prioritise the quality and integrity of our products and services, as well as the environmental impacts related to our operations.

The AVK UK Group of companies have had three years to transition to the revised ISO 9001:2015 and ISO 14001:2015 standards with the deadline date of September 2018. After September 2018, the ISO 14001:2004 and the ISO 9001:2008 certificates will no longer be valid.

Therefore, it is our pleasure to announce that all AVK UK Group companies have successfully transitioned to the ISO 9001:2015 and ISO 14001:2015 standards.

If you wish to download our Certificates, they can be found in the Downloads section of the AVK UK website, www.avkuk.co.uk

Expect Solutions not just Products



JANET STASCH RETIRES

Group Director Finance and IT retired in May after being with the business for over 30 years.

Janet, who started working for Aqua-Gas (Valves and Fittings) Ltd, (which was fully bought by AVK in 2000), was instrumental in the successful acquisitions and integration of six businesses in the UK, all of which make up the AVK group of businesses in the UK today with a collective sales revenue of over £75m.

Janet has an infectious pride in the AVK business and was one if its most passionate ambassadors, this drove her and inspired others around her, to really make a positive difference to the business.

Janet and her husband Kevin, as well as a number of sporting interests, are also keen travellers and have family as far afield as Brazil, so won't have any problems filling the time once spent at the office!

We are grateful for Janet's support and major contribution to the success of AVK in the UK and wish her and Kevin a long and happy retirement.



AVK UK SPONSORSHIP ADAM MOREWOOD

children or as adults have dreamt of one day being a world champion in a particular sport or of being the 'best in the world' in a particular field? - Quite a few probably. For most of us though they remain dreams and are never achieved.

However, for Adam Morewood, son of Bryan Donkin Valves Limited Technical Manager, Robin, his dream of being a world champion has already been realised having by the age of sixteen winning four World, four European and eleven British titles in the relatively unknown sport of Bike Trialling!

AVK UK Limited is proud and delighted to be sponsoring Adam in his quest to now become a world champion at senior level.

Robin explained the theory behind Mountain bike trials, "It is a discipline of cycling in which the rider attempts to pass through an obstacle course without setting foot to ground.

Adam has been riding since he was six years old and in that time has steadily progressed through the junior ranks of the sport amassing titles along the way. He now rides for Belgian outfit Jitsie who are a major supplier of kit and sponsorship

within bike trialling and he is a well-known competitor on the circuit

"Adam is well established now and becoming more successful. He is competing all over Europe and the World. As you can imagine, the more he progresses the more expensive it becomes, especially with regards to travel so the sponsorship for support towards travel is very welcome He will be travelling to China at the end of the year for the UCI World Junior Championships" Continued Robin. Adam commented on the AVK UK sponsorship and his aspirations, "It was a very successful 2017 season during which I won the BIU World, European and British Championships in the under 16's category. I wish to thank AVK UK for their support and have the AVK logo on the sleeve of my clothing. For 2018 I have a very busy season planned competing in the UCI World Junior Championships in China and the BIU World Championships in Sardinia. Aspirationally, I want to get into the top thirty in the World Ranking of all riders"

AVK UK Head of Marketing, Kieran Fitzpatrick said of the sponsorship, "We are delighted as a company to support Adam in his quest to progress and hopefully one day be a senior world champion. We wish him every success."

For further details on Bike Trialling, please contact:

Robin Morewood, Technical Manager 07879 482734, romo@bdvl.co.uk





AVK UK CONFERENCE AND EXPECT AWARDS









Acelebratory dinner at the AVK UK Sales Conference @ the Doubletree by Hilton, Sheffield took place on 30 November to present the AVK Expect Awards. Managing Director, Paul Jennings did a sterling job as Master of Ceremonies and announced the winners for 2017.

The awards are an annual recognition and acknowledgement to employees across the seven UK companies, some based as far afield as Australia, who have excelled throughout the year demonstrating above and beyond commitment, dedication and performance in-line with one or more of the eight AVK Expect promises.

The AVK Promises:

- #1: Expect Solutions, not only Products
- #2: Global Leadership and Local Commitment
- #3: Expect Quality in Every Step
- #4: Expect a Prompt Response
- #5: Expect Lasting Innovation
- #6: Expect Total Savings
- #7: Expect a Long Term Partnership
- #8: Effective and Easy to do Business With

2017 Winners:

Expect More of Yourself

Jonathan Gubbins - #1, #2, #3 Amani Leonard - #1, #2, #3

Innovation

Ben Shipley - #5 Adam Tkacz - #5

Customer Response

Paul Gorman - #3, #4 Shaun Robb - #3, #4

Customer Service

Oliver Gambling - #7, #8 Ben Howard - #7, #8

Best Site

Aqua-Gas Manufacturing, Corby #1, #2, #3, #4, #6

Top left photo: Paul Hubbard, Oliver Gambling (UK Water Sales Manager), Ben Howard (Supply Chain Demand Planner, Supply Chain), Paul Jennings (Managing Director). Top right photo: Ben Shipley (Product Engineer). Bottom left photo: Jonathan Gubbins (Bids and Projects Manager, Sales), Amani Leonard (Semi Skilled Assembler / Operative), Paul Jennings (Managing Director). Bottom right photo: Adam Tkacz (UK & International Gas Sales & Service Manager, Sales)

CORBY REWARD AND RECOGNITION



David Parkinson Continuous Improvement Manager



Arecognition ceremony was held on the 29th March 2018 to celebrate the achievements gained by employees at the Aqua Gas Manufacturing Company. The entire workforce were invited to be part of the certification ceremony and to enjoy a fantastic buffet lunch.

Fran Brody the Manufacturing Director started the recognition ceremony with a brief speech that outlined what the AVK UK intentions were going forward with regards to the Lean journey.

David Parkinson the Continuous Improvement Manager for the UK then talked about lean and how it would impact in our processes, standards and our employees. As part of reward, recognition and celebrating success, certificates were awarded to employees for their achievements in gaining Six Sigma Yellow Belt and Level 2 NVQ Diploma in Business Improvement Techniques qualifications.

We will look forward to all the achievers applying their newly learnt skills into projects where continued improvements are made within our processes, standards and employee learning.

Left to Right: Susan Thomson (Financial Controller), David Macdonald (Shop Floor Operative), Yvette Massimi (Administrator), David Parkinson (Continuous Improvement Manager), Mark Heath (Shift Manager), Steph Walters Accounts Assistant), Paul Gorman (Quality & Project Technician), Gabe Mocanu (Supervisor)

ABOUT THE PEOPLE



Adam Simpson Business Development Manager - Fire, AVK UK

Adam Simson joined AVK UK as Business Development Manager for Fire 21 May 2018. Adam joins us with significant experience within the fire protection market. Adam joins us with a thorough understanding of the market, products and applications used. The main purpose of the role will be grow our position in the Fire Protection Sector.



Vicky Stonehouse Human Resources, AVK UK

Vicky Stonehouse joined AVK UK as Head of HR and Organisational Performance 4 June 2018. Vicky has spent the majority of her career working for companies such a WM Morrisons as Business Subject Matter Expert and more recently for Hovis as Head of HR. Vicky's Head of HR role is critical as we grow our Group, the main purpose of which is to support the business in delivering a comprehensive HR service by providing high quality, expert HR advice and quidage.



Nigel Gascoyne Regional Business Manager - Sales, AVK UK

Nigel Gascoyne joined AVK UK Sales Team as Regional Business Manager - South East 1 February 2018. Nigel has more than 30 years' experience in the water industry and was previously with AVK UK Limited until 2007, but remained with the Water Industry, including GPS Plastic Pipes. Nigel will be responsible for achieving budgets and targets, maintaining and developing existing and new customers, covering mainly Thames Water, Anglian Water and Affinity Water.



Sean RudkinHead Supply Chain,
Fusion

Sean Rudkin joined Fusion Group as Head of Suppy Chain. Sean has over 20 years end to end Supply Chain leadership experience across multiple FMCG retail sectors with a proven track record in developing business process and supporting IT systems. Sean will be responsible for ensuring the efficient and effective processing of all orders. All relevant KPI's to be achieved as well as to interface with all customers, suppliers (and hauliers) to provide an effective supply chain for Fusion Group.



Andy Powell Production Manager, Donkin

Andy Powell joined AVK Donkin on 2 October 2017 as Production Manager. He has 19 years experience in production management roles latterly with Parker Hannifin Limited. His role will be to maintain all manufacturing processes to the highest standards, whilst driving change and continuous improvement in all aspects of manufacturing, value engineering, planning and resource utilisation.



Darrin Leahy Commercial Director, Fusion

Darrin Leahy joined Fusion Group as Commercial Director in January 2018. Darrin has worked for Gardner Denver Limited and Parker Domnick Hunter and will bring to Fusion experience in innovative sales strategies and delivering results in challenging and demanding markets. His main focus will be to build the core business ares of gas and water utilities, in addition to securing new partners and developing new markets and segments.



Gayle Broadhurst
Group Finance Director,

Gayle joins us from the ECCO Safety Group where she held the position of European Director of Finance, HR & IT. She brings a wealth of experience from operating in an international manufacturing environment. Gayle will take the Financial responsibility for the AVK UK - Water business companies. Gayle will also take the lead for UK HR, IT & Procurement.



Stephen Greer Country Manager Ireland,

Stephen Greer Joined AVK UK as Country Manager Ireland 18 June 2018. Stephen joins us with a degree in Civil Engineering and experience in value engineering and design with Irish Consulting Engineers and associated concrete manufacturing. Stephen will be responsible for achieving the annual target for Water sales into Ireland, to manage the relationships with Irish Water as well as Northern Ireland Water and the associated T1 Contractors.



Oxana Sirman Commercial Manager

Oxana Sirman joined AVK UK as Commercial Manager 27
November 2017. Oxana previously works as Proposals
& Bid Writer for Clancy Docwra and has a number of
years experience in submitting bids and tenders for other
companies including British Gas and Technip E&C Ltd
(Offshore Oil & Gas). She brings news skills and competence
that will be particularly helpful in strengthening our frame
work submissions.



Imran Qaiyum UK Sales Manager, Glenfield

Imran Qaiyum joined Glenfield Valve Ltd as UK Sales Manager 01 February 2018. Imran joins us from VAG where he was most recently the Sales Director for the UK. A degree qualified Mechanical Engineer with over 20 years' experience. Imran will have responsibility for the continued development and growth of the Dams, Reservoirs and Hydro Market sector in the UK, and will concentrate on maintaining and developing existing and new customers.



Luka Heljic Graduate Sales Engineer

Luka Heljic joined AVK UK as Graduate Sales Engineer 1 August 2018. Luka joins us from a background in Civil Engineering having recently graduated with a Masters of Civil Engineering with Environmental Engineering from the University of Portsmouth. I am sure this skill set and genuine interest in the water industry will be beneficial in his career at AVK.



Lewis Jones
Regional Sales Manager

– South West

Lewis Jones joined AVK UK Limited as Regional Sales Manager, South West 6 August 2018. Lewis joins us from Hobbs Valves Limited where he was a Sales Engineer responsible for the Northern American region. Lewis will be responsible for achieving budgets and targets for designated water accounts, to maintain and develop existing and new customers and to be aware of and manage all activity within the designated accounts.

ABOUT THE PEOPLE



INTERNAL TRANSFERS/PROMOTIONS

Neil Green appointed as Managing Director - Fusion Group

Adam Tkacz appointed as Senior Business Development Manager - Fusion Group

Sandra Zmuda-Adamska moved into Sales - Invicta Dan Brown moved to Site Services - Invicta Marc Hayles promoted to Site Supervisor - Invicta

AVK LONG SERVICE AWARDS - 10 YEARS

Sean Brody - AVK Syddal - 29 October 2017 Paul Jennings - AVK UK - 25 June 2017 Claudiu Mocanu - AGM - 6 August 2017 Mick Cook - AVK UK - 26 November 2017 Kieth Lee - AVK UK - 28 January 2018

AVK LONG SERVICE AWARDS – 20 YEARS

Alan Bite - AVK UK - 5 June 2017
Paul Bircumshaw - AVK Donkin - 5 June 2017
Steve Browett - AVK Donkin - 5 June 2017
Paul Elliott - AVK Donkin - 5 June 2017
Steve Gaging - AVK Donkin - 5 June 2017
Mick Moore - AVK Donkin - 5 June 2017
Robin Morewood - AVK Donkin - 5 June 2017
Josie Neely - AVK Donkin - 5 June 2017
Brian Poole - AVK Donkin - 5 June 2017
Paul Robb - AVK Donkin - 9 February 2018
Terry Taylor - AVK Donkin - 5 June 2017
Janet Turner - AVK Donkin - 5 June 2017
Steve Watts - AVK Donkin - 5 June 2017
Nigel Woodhead - AVK Donkin 5 June 2017
Mike Skeemer - AVK UK - 1 October 2017

AVK LONG SERVICE AWARDS - 30 YEARS

Paul Gorman - AGMC - 24 August 2017 Dave Lattimore - AGMC - 12 October 2017 Christopher Dean - AGMC - 28 February 2018

FUSION GROUP LONG SERVICE AWARDS - 20 YEARS

Gary Wright - General Operative - 14 April 2018
Paul Marshall - Raw Materials Controller - 15 June

Jason Owen - General Operative - 05 October 2018 Anthony Moss - General Operative - 20 October 2018

FUSION GROUP LONG SERVICE AWARDS - 30 YEARS

Marcus Evans - General Operative - 28 February 2018 Kevin Raine - Group Director - 10 October 2018

MARRIAGES

Kieth Lee married Chloe Harper August 2017 Ceri Knight married Peter Heasman on 7 July 2017

BIRTHS

Wilson McPhail - a baby girl, Beth Catherine 17 May 2017

Tomas Janusaitis - a baby girl, Guste - 11 August 2017 Stuart Mason - a baby boy, Jace - 12 September 2017 Kevin Byrne - a baby girl, Mila Lauren - 14 Oct 2017 David Hurley - a baby girl, Aela Violet - 21 Nov 2017 Ben Lavin - a bably boy, Edward - 15 December 2017 Eleanor Develin - a baby girl, Evie Amaya - 5 Jan 2018 Alex Philo — baby girl called Saffia, born on 22 Feb 2018

RETIREMENTS

John Weightman - AVK Donkin Gerald Wilmot - AVK Donkin Janet Stasch - AVK UK Gill Davis - AVK UK

QUALIFICATIONS AND TRAINING

Sam Ogden - AVK Donkin - NEBOSH (National General Certificate in Occupational Health & Safety) Greg Morris - AVK UK - Chartered Engineer (CEng MIMechE)

Marc Hayles - Invicta Valves — SSSTS Course
Oliver Gambling - AVK UK - MBA Master of Business
Administration

Adam Tkacz - Fusion - MBA Master of Business Administration

Patrick Elvidge - Fusion - L3 Extended Diploma In Eng Technical Support

Jed Lath - Fusion - L3 Extended Diploma In Engineering Maintenance (Mech)

Garion Richardson - Fusion - L3 Advanced Apprenticeship in Electrical Engineering Lewis Siddall - Fusion - L3 Ext Dip In Mechanical Manufacturing Engineering (Fitting & Assembly) Liam Turner - Fusion - L3 Extended Diploma In Engineering Maintenance (Mech) Cath Mchugh - Fusion - L3 Management







