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BVAA Annual Review



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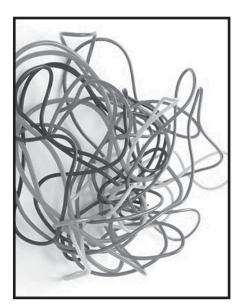
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Cover: Courtesy of Denholm Valvecare



## Comment

by BVAA Director, **Rob Bartlett** 

## Time for a Huddle?

Growing up on a farm, as I did, one became quickly attuned to the subtle signs and signals from Mother Nature that trouble was afoot. Our dairy herd huddling together for example was a sure sign of an impending storm.

As an instinctive survival strategy it's actually a pretty sound one. Panic and 'run for cover' under the trees, and you could soon find yourself alone and being zapped by lightening! Not easy to survive, indeed I lost a very good friend that way.

As the most sapient creature on this Earth, we humans huddle too. What sets us apart however is our ability to act with judgement - precisely why we are called Homo sapiens. So is a storm coming? And should we 'huddle'?

As a trade association Chief Executive, I'm in the business of huddling. But huddling for a purpose.

China, the 'engine room' of the global economy, is for the first time in a generation, having a significant splutter and a cough. The ripple effect on other developing countries has been enormous, the impact far reaching. When such economies struggle too, the market for our goods starts to diminish. Then there are the woes of the British steel industry...

Add to this the rehabilitation of Iran, with its monumental reserves suddenly coming onto an already depressed and oversupplied oil market, and the future doesn't look quite so certain as it once did. Sub-\$30 barrel oil is here – but for how long? I've already heard respected analysts in the news predicting eventual stratospheric prices once again, once all the producers have cut back to the bone and demand outstrips the ability to supply again. In the meantime the cuts will stifle investment – which brings its own efficiencies – and cull expertise that's already in short supply. Result: the initiation of another 'boom/ bust' cycle. A crazy way to do business!

So why huddle? Firstly, a trade association like BVAA can provide the fora necessary for our 200+ members to exchange views on the challenges our industry faces.

Secondly, our collective ability to 'act with judgement' can address the issues, lobby the necessary parties, get the actions taken.

Together we can plan, prepare and deliver the services necessary to help survive the storm. And provide the tools and events to showcase the members' talents and products.

We can collectively engage the right advisors, commission reports and analyses, prepare standards and guidelines that would be beyond the scope of us all as individuals. We can also see off the more preposterous demands that emerge in such times. The 'grey beards' in a collective can also offer the wisdom of experience, having experienced the vagaries of business cycles before.

Standing together as one in a time of uncertainty is certainly reassuring, but thanks to the networking opportunities, it may well also lead to doing business together, as is frequently described in this journal.

I very much hope you enjoy this special issue, which contains our 'Annual Review' which features a snapshot of our activity over the last year, and also a copy of our latest DVD – enjoy!

# 

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Flange Integrity, Gasket Technology and Safety in the Valve Industry - Thursday, 17th March (Cleckheaton) - Members: £260.00 | Non Members: £390.00 Introduction to Valves - Monday 11th April - Members: £260.00 | Non Members: £390.00 Introduction to Actuators - Tuesday 12th April - Members: £260.00 | Non Members: £390.00 Introduction to Hydraulics - Tuesday 12th April (Worksop) - Members: £260.00 | Non Members: £390.00 Control Valves - Wednesday 13th April - Members: £260.00 | Non Members: £390.00 Introduction to Pneumatics - Wednesday 13th April (Worksop) - Members: £260.00 | Non Members: £390.00 Safety Valves - Thursday 14th April - Members: £260.00 | Non Members: £390.00 Introduction to Electrics - Thursday 14th April (Worksop) - Members: £260.00 | Non Members: £390.00 Valves - Advanced Level (2 day course) - Monday 18th & Tuesday 19th April - Members: £390.00 PED / ATEX Directives - Wednesday 20th April - Members: £260.00 | Non Members: £390.00 Combating Corrosion - Wednesday 27th April - Members: £260.00 | Non Members: £390.00 PED / ATEX Directives - Wednesday 27th April - Members: £260.00 | Non Members: £390.00 Combating Corrosion - Wednesday 11th May (Peterhead) - Members: £260.00 | Non Members: £390.00 Safety Integrity Levels (SILs) - Thursday 12th May (Peterhead) - Members: £260.00 | Non Members: £390.00

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## Supplier Day Success



Late October saw our first 'cluster event' in Brighouse, which proved far more popular than we ever hoped!

#### Northern Regional Dinner

On Tuesday 20th, we kicked off with a Northern Regional Dinner at the Brighouse Holiday Inn – right at the heart of 'Valve Valley.' 80 members enjoyed a convivial dinner together, but were also put to work by BVAA Director, Rob Bartlett. 'It was too good an opportunity to miss,' explained Rob. '80 members all in one place gave us the chance to poll them on what BVAA services they felt they needed or needed improvement - to help take their businesses forward. All of the proposals made, even the wackier ones, were put before the BVAA Board as promised. They were also more recently put before the new Business Development Group too and several are already being taken forward."

#### Supplier Day

A new event to BVAA and held the morning after the Regional Dinner, this was made possible by our substantial supplier section in the membership these days and the generosity of several of our major manufacturers.

The format saw nine manufacturing companies make themselves available for

'speed dates' with a vast array of suppliers to the industry. In a single morning, over 120 such 'one-to-one' interactions were facilitated, helping both parties to explore business opportunities together. At the same time, 18 exhibitors immediately outside the meeting room were able to display their products to the 80+ attendees. Kept on track with enthusiastic use of the BVAA air raid bell, the whole event received fantastic feedback and will certainly be repeated.

#### **Score Desktop**

Our third consecutive day in Brighouse saw another of our Desktop events, this time at the local Score Europe facility. Eleven members exhibited along with several of Score's own divisions. Visitors included numerous Score staff and also several important customers. Held over the lunch hour for minimum downtime, these events are perfect for valve and actuator customers to find potential suppliers.

Could your business benefit from a Valve & Actuator Desktop Exhibition, arranged free of charge to yourselves? Contact rob@bvaa.org.uk for further details.



# View from the **Other Side**



This article, the fifth of our 'View from the other side' feature columns from our colleagues in the USA, is provided by Chris Warnett. Chris, a UK expatriate, is the President of CPLloyd Consulting Inc. Rochester NY, providing marketing and applications expertise for the valve and automation industry. Chris has over 38 years of engineering, sales and marketing experience in valves and automation. Reach him at chris@cplloydconsulting.com | Tel 001 585 298 6239

## Pneumatic actuator accessories in the US oil industry

The continuing weakness in the price of oil has had a significant impact in the US oil industry. At first, improvements in the operational efficiency of the many production companies engaged in the shale oil boom contributed to their survival even with \$40 per barrel oil. But as oil prices remain soft the strain is showing.

The oil and gas support industries have also been forced to look hard at their operations and trim overhead and costs where possible. Of particular interest to the valve and actuator supply industry is the pressure on distributors to reduce inventory overhead.

Specifically, some major distributors are looking at the complexity and variety of accessories needed to support sales of pneumatic actuators for the oil and gas industries.

Most large distribution companies in Houston for example, are either global themselves, or supply global customers. This necessitates an inventory capable of satisfying not only the domestic US market, but also the various demands of the global market.

There are significant differences between the inventory required to supply electric actuators and that needed to supply pneumatic actuators.

Electric actuators are mostly selfcontained, with integral motor starters, switches and controls all prewired in a



Photograph courtesy of Rotork Fluid Systems

hazardous area certified enclosure. Many electric actuators are also supplied with manual override devices as standard. For domestic applications this reduces the inventory variables to the size and speed of the actuator output, voltage and certification being fairly standard for the USA.

Pneumatic actuators, particularly large types, have a much greater range of options to be satisfied. The traditional method of supplying a pneumatic actuator is to take the basic prime mover, a scotch yoke, rack and pinion or other type of actuator, and attach control accessories as required by the application and the customer's preference. This means that the switches, solenoid direction control valves (DCV), tube and fittings may all be different for each individual customer, even though the general application may be the same.



The fact that these components are "bolt on" devices leads customers to select their preferences for standardization on site. In contrast, electric actuators enclose all the control components inside the actuator housing and so they are out of sight. This allows electric actuator manufacturers to standardize on their internal components as an integral part of the device. The result is that procurement specifications do not mandate the details of these internals.

On the other hand, pneumatic actuator procurement specifications often call out a specific brand of solenoid DCV, position switch and sometimes even the tubing and fittings. This gives the typical oil and gas industry stocking distributor has a difficult task when trying to rationalize and streamline their inventory of pneumatic actuator accessories.

This does not impact other industries in quite the same way. Pneumatically automated valves used in general industrial applications are often much smaller, allowing the smaller pneumatic actuators to use standardized mountings and accessories. The NAMUR standard, for example, grew from the German chemical industry and has migrated to other industries that use the smaller pneumatically automated valves. However, these standards do not scale up to the larger actuators that are commonly used in the oil and gas upstream and midstream applications.

Because of the size and variation in shape of the larger pneumatic actuators it is very difficult to standardize on integrated, internal air supply lines as is done on smaller rack and pinion actuators, for example.

There is a degree of sophistication that has been achieved with electric actuators in terms of torque or thrust output sensing, non-intrusive set up and diagnostics that is not as common in pneumatic actuators. In theory all of these functions could be achieved on pneumatic actuators and the smart positioners used in process control modulating applications provide these functions to a degree. But this leaves the majority of large pneumatic isolating applications without a complete solution.

There are some combination switch and solenoid DCV assemblies available and some even have digital communications capability for field bus systems. They can be supplied with one of a variety of hazardous area certifications and so this would seem to be a concept that, potentially, could satisfy the simplification requirements of the suppliers to the oil and gas industry.

The challenge for the manufacturers of these products is obtaining the approval of the global customers that like to have their preferred solenoid DCVs and position switch brands.

There should be an opportunity for an effective design that can incorporate the required functions of a solenoid DCV, position indicating switches, non-intrusive set up, diagnostics and digital field bus communications in a robust enclosure that meets the hazardous area requirements.

This would require solving the problems that occur when different solenoid voltages, DCV functions, switch capabilities and certification requirements have to be accommodated within the design. Such a device should go some way to solve the current inventory problems of the distributors.

# **BVAA** New Members

The following companies have joined BVAA since the last issue of Valve User Magazine:











## **BVAA**" NEWS

# 2015 AGM – Another Belter!

Dancing to 'Star Band'



November 27th saw the Annual gather of members and their partners for the 76th **BVAA Annual General Meeting** incorporating - of course - the Annual Dinner & Ball.

he venue for 2015 was the spectacular Crewe Hall – a new hotel to many of us with a unique blend of old and new.

The format of commencing the day with a mini-conference was repeated this year; exploring alternative markets, how to make the ones we have more efficient, and how to get support for funding exports.

All the papers are available on our website.

While the members worked, our partners were subjected to the 'Colour Me Beautiful' fashion choices experience. The host's caustic wit and scathing criticism proving perilous for some, but hugely entertaining for all!

The evening Dinner and Ball was another great success, largely thanks to the small band of members who continue to subsidise the entertainment via generous sponsorship – our grateful thanks again to Asco Numatics, KKI, Saco, Rotork and Zoedale.



BVAA was able to splash out on a new stage set and lighting, and the cabaret was firstly the incomparable 'Out of the Blue' a Capella band – who we understand, suitably encouraged, were still bringing the house down in the bar until well after midnight. Also amazing were the hugely popular 'Star Band' who managed to live up to their name.



'Out of the Blue' – Oxford undergraduates who donate their proceeds to local hospices.

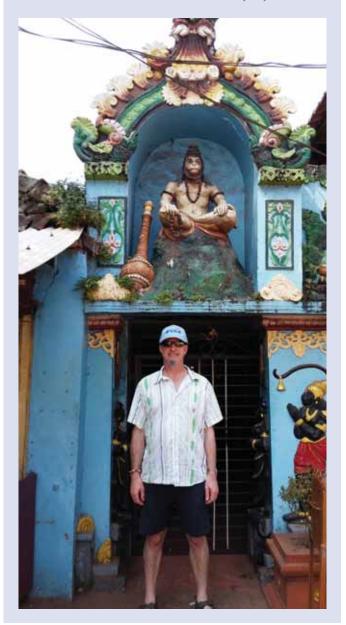


# **BVAA's** Mad Hatters

## How far can you go wearing a BVAA Hat?

### Competition

Here's Bob Peters of Zoedale using his BVAA hat to keep the sun out of his eyes in this exotic location. Can you tell where Bob is? The first correct answer to rob@bvaa.org.uk wins a £50 charitable donation to the charity of your choice.



### **Charity Event? Hat up!**

If you are planning an event for charity, take a picture in a BVAA hat and we'll donate £50 to the cause. BVAA hats available free of charge on request to isobel@bvaa.org.uk

### **Competition WINNER!**

In Valve User Magazine Issue 35 we gave you this picture of Editor Rob Bartlett and asked you to guess where he was in the world.

Paul Sharples of BiS Valves Ltd correctly guessed that Rob was stood next to the Whalebone Arch at North Berwick – He was correct, well done!

A £50 cheque has since been sent to Breast Cancer UK on Paul's behalf.



## **Albion** Introduces New Range of MCVs

**Albion Valves** (UK) Ltd, an increasingly popular UK valves supplier has announced the addition of Motorised Control Valves (MCV's) to its ever-expanding product range.

ith a choice of either rotary or ball valve construction, Albion's new 2 and 3 port MCV's are suitable for a host of mixing, diverting, circuit control and zone isolation applications.

Valves play an integral part in fluid flow mixing circuits, however valve actuation can be problematic if valves are either too large to be manually operated, require frequent operation, or are in inaccessible or hazardous locations. MCVs offer a solution to this.

An MCV is designed for years of high performance and precision operations; these valves are generally the hardest working components in a central heating system. As such they are required to be robust enough to cope with long periods of operation, frequent temperature and pressure fluctuations, as well as potential contaminations within the media such as scale, grit, sludge and chemicals.

MCV's suit a wide variety of applications, in building services they are commonly used for central heating and air conditioning and they perform especially well in underfloor heating systems.

In industrial applications, MCVs are increasingly commonplace in the biomass and renewables sector, as well as plants with hot and cold fluids, water systems and automation systems.

The new comprehensive Albion range includes both 2 point and 3 point modulation, as well as numerous options for voltage, run time, auxiliary switching and manual control.

The 2 port MCV can simply be operational as a standard valve with an on/off

function, but electrically actuated rather than manually controlled. In addition, the 2 port can also be a characterized control ball valve determining the degree of opening and closing, and ultimately determines whether more or less flow rate occurs. The actuator would typically have a modulating signal e.g. 0-10V so 5V is half open, whilst 10V is fully open and therefore a greater flow rate.

There is also an option for WRAS approval on the 2 port MCV and they all come with a quick-release actuator, which clips on without the need for an adaptor kit.

In the case of the 3 port MCV, an example of the mixing function could be priority control in a central heating system to ensure a hot water cylinder is heated even when heating demand is ON. The flow is sent to the cylinder first when required and once satisfied then flow is then resumed through the heating circuit.

In a renewable energy application, the renewable energy source e.g. solar or biomass is used first then the circuit will allow the gas boiler or secondary power source to function if the heating demand is too great. Once the biomass boiler reaches capacity the other source acts as a top up.

Les Littlewood, Albion Valves (UK) Ltd, Sales Director commented:

"It is our intention at Albion to offer as comprehensive a range of valves as possible to all of our distributors. MCVs are used in a wide range of industries so by stocking this new line we hope to help our distributors open up new markets and area of opportunity. Our technical team is always informed on our new product ranges, and are a useful source of information for customers ordering new lines."



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# No Leakage in 10 Years with Kalrez<sup>®</sup> Perfluoroelastomer Seals



Dramatic increases in instrument performance and reliability have been achieved where original PTFE gasket seals have been replaced with Kalrez<sup>®</sup> custom gaskets from the DuPont<sup>™</sup> Performance Polymers range of products, available in the UK from **Dichtomatik Ltd**.

Finnish manufacturer of process refractometers was utilising process media at temperatures ranging from -20° to +220°C and pressures from 0.7 bar to 25 bar. These aggressive operating conditions resulted with the PTFE seals needing to be regularly replaced on a 6-12 months operating cycle. However, after the seals were replaced by Kalrez<sup>®</sup> custom gaskets, there was no experience of fluid leakage over a 10 year period, even though the sealing products were subject to permanent in-line fluids immersion during this period.

Because of inherent inelasticity, the original PTFE gaskets were also unable to withstand the dynamic temperature fluctuations of many food, pulp and paper production together with chemical manufacturing processes. The DuPont<sup>™</sup> Kalrez<sup>®</sup> perfluoroelastomer parts have a well proven history of superior performance in a wide range of demanding sealing applications. They are thermally stable up to 327°C, and are resistant to more than 1800 chemicals while retaining high elasticity and long term sealing performance.

The delicate digital detector circuits and fibre optics located within the sensor head of the refractometer are protected by twin gaskets which are now more positively sealed from aggressive process media attack. The elasticity, heat resistance and outstanding chemical properties of the Kalrez<sup>®</sup> gaskets have also substantially reduced the frequency of costly repairs of the refractometer products, resulting in overall savings for both the manufacturer and end-user customers who benefit from vastly reduced disruptive interruptions to their manufacturing and production processes.

Since the introduction of Kalrez<sup>®</sup> perfluoroelastomer parts over 25 years ago, their superiority of performance has been established in an ever widening variety of difficult and demanding sealing applications.



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# **AllValves** Gains Extension of Exclusivity on Sun Yeh Electric Actuators

Following a very successful initial 2 year period, **Allvalves Online** have secured a two year exclusivity extension with the global electric actuator manufacturer Sun Yeh.

aving secured the initial 2 year exclusivity back in 2013, Allvalves have worked tirelessly to re-establish the Sun Yeh brand in the UK and European markets and the extension confirms the success of this work.

## SUNYEH



During a factory visit in 2014, Allvalves were honoured to have access to the President of Sun Yeh, this allowed Allvalves to feed back the needs of the European market to him; and true to Sun Yeh's pursuit of the perfect solution, ATEX versions, multi-turn and failsafe functionality should now all be available towards the end of 2016.

New failsafe electric actuators will initially cover torque outputs from 50Nm to 4500Nm in the popular OM2-OM13 range, and the high volume 35Nm OM1 will be available with a battery back-up failsafe system soon afterwards. Allvalves' biggest Sun Yeh order to date was for close to £100,000 worth of mechanical spring return actuators, supplied via Allvalves' German partner.

The quality and reliability of the Sun Yeh, and a globally recognised name, has helped Allvalves establish partners in the Netherlands, Poland and South Africa, all resulting from initially visiting the Allvalves stand at Valve World, and thanks go to the BVAA for their help and support at Valve World.

Sun Yeh, ever keen to help find solutions to problems, provided Allvalves with a 3 position actuator to drive a 3 way ball valve in 3 seconds, something that was not available at a commercially viable price until then, and helped Allvalves secure a contract with an important OEM.

Adam Chapman, Managing Director of Allvalves is pleased to have secured the extension to the exclusivity and commented: "We have worked hard for 2 years to re-establish the Sun Yeh brand. Many of us had forgotten the Sun Yeh actuator but once we were able to offer it again it is an easy sell as people know it is a 'fit and forget' actuator. The range is comprehensive, the product is robust, durable and reliable and with housing options from aluminium to stainless steel, is ideal for a very wide range of applications.

Sun Yeh's interest in and desire to look at bespoke solutions is a massive 'plus'. In 2016 Sun Yeh will relocate a short distance to their hugely impressive, brand new purpose built facility in Taiwan, and we very much look forward to being part of the celebrations."

Allvalves Online Ltd are the exclusive distributor for Sun Yeh electric actuators in the UK and Germany.



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# **DNV Approved Products**

## In Partnership With Haitima

Stainless Steel Ball Valves fitted with a Pneumatic Actuator

Stainless Steel Flanged PN16 2 Piece Full Bore Direct Mount Ball Valve



Stainless Steel Full Bore Valves (Screwed or Weld End)

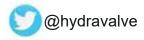




# Contact Hydravalve to find out more about the products...

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## UK's First Open-access Downhole Test Facility Launched by **BHR Group**

**New facility** gives subsea equipment providers fast, onshore access to real-world testing.



Barbon HR Group, the experts in fluid engineering, have launched a commercially available, openaccess downhole test facility, based in Cranfield, UK. The onshore facility is the first of its kind in the UK, providing an easily-accessible, secure, flexible, onshore environment that accurately reproduces downhole conditions. The facility can be utilised for a variety of applications across a number of different sectors, and can be booked over 6 months in advance.

With the growing need for deepwater exploration and production (E&P) and future plans for ultra-deep wells, the reliability of subsea and downhole equipment is of vital concern to the oil and gas sector. In hostile downhole environments, long service life is crucial for equipment that can be extremely costly to repair and maintain. Assuring reliability is crucial since intervention, where it's possible for subsea equipment, frequently involves the mobilisation of specialised technologies and often has a significant impact on production.

To minimise the risk of a costly well shutin, greater emphasis is being placed on the reliability of subsea systems, and realistic downhole testing of subsea components is a critical part of product development, testing and approval.

BHR's new facility – the latest addition to a range of different rigs and facilities – is fully fitted with CCTV that can be accessed via VPN, enabling round the clock monitoring. The facility's instrumentation and the data generated can also be viewed over the VPN allowing remote, real-time access to data, by clients anywhere in the world. The downhole test facility is entirely customisable and able to be modified for specific technical requirements. Tests can be conducted to national, international or industry standards or to the client's own test specification.

Dr Carl Wordsworth, senior consultant at BHR Group, commented: "This facility is set to be a game changer for many subsea equipment providers, whose customers are conducting deeper E&P than ever before, putting increasing pressure on the reliability of the products being used. The downhole test facility gives organisations independent data to prove their technologies and demonstrate the capability of their components and systems."

The downhole test facility can be utilised by organisations for product development and qualification testing of downhole equipment, such as:

- Pumping equipment
- Jet pumps
- Separators
- Instrumentation
- Drilling fluid

With the capacity to achieve 40bar at the base of the well, BHR's facility can simulate a 400m fluid depth with representative well conditions for development, performance and reliability testing of components and systems. It is able to test with a variety of fluids in single or multiphase flow at elevated pressure and temperature for extended durations. The facility incorporates accurate, high speed measurements of downhole pressure, temperature and flow, ensuring that product performance can be mapped under a range of conditions and providing a comprehensive equipment testing capability.



EXPERTS IN FLUID ENGINEERING

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## Have a Drink on **Duvalco**

Now offering fully WRAS approved butterfly and gate valves for drinking water duty.

n addition to our existing material approvals, we are pleased to announce that we now hold full WRAS product approval for our ranges of rubber lined butterfly valves and soft seated gate valves.

Our butterfly valves are available in wafer, mono-flange, fully-lugged and double flanged designs ranging from DN40 up to DN2200. We can supply these in 10 and 16 bar rated versions as standard, with an optional 3 bar variant available.

Our SFGV gate valve range is available from DN50 up to DN600, with options for handwheel operation, cap drive and ISO mounting for actuator attachment. For valves DN350 and above we also have an option to have an integral bypass valve fitted.

With our in-house rubber manufacturing and vulcanisation we maintain full

control of our elastomer quality, which is particularly important when adhering to the strict requirements of WRAS for drinking water duty.

Our UK team are here to help with your enquiries and our technical experts are always on hand.



Tel: 07572 900 544 Email: sales\_uk@duvalco.net Web: www.duvalco.net



## A New, Compact, **Heavy Duty Multi-turn Actuator** You'll Want to Phone Home About!

**Zoedale Ltd** is the sole UK distributor for Bernard Controls Electric Actuators who have recently launched their new ET range in response to customer demand.

he ET range is primarily for use in the Water, Oil and Gas / Petrochemical and process industries as well as being used in some construction projects where reliability and durability are key. It's a new addition to the simple, sturdy and economical "First BC" range – designed to combine quality and reliability without the hefty price tag of the "BC Premium" range of actuators. These weatherproof multiturn actuators adapt to most multi-turn valves, with a torque range from 30Nm to 200Nm and an IP67 rating as standard.

The key mechanical features are; selflocking gearing, adjustable torque limiter, vibration-proof camblock system with a wide range of number of turns available. Within the ET Range there are two types of controls available, the ET SWITCH for onoff applications and the ET LOGIC for onoff or positioning applications. The LOGIC control is non-intrusive with simplified settings thanks to the easy to use keys and menus on the local display. (See Image)

The range is easy to commission and use thanks to its compact design and local display and signaling (ET Logic version as described) as well as largely being maintenance free.

The following voltages are available: 230V/50Hz/60Hz, 440V/50Hz, 460V/480V /60Hz. Actuators comply with: EC directives 2004/108/EC, 2006/95/EC and standards EN 61000-6-4, EN 61000-6-2, EN 60034-1 and EN 60529

Delivery is typically 4-6 weeks dependant on model & specification type.For more information contact Stuart Plews at Zoedale Ltd.





Tel: 01234 832 832 Email: enquiries@zoedale.co.uk Web: www.zoedale.co.uk

# Automation Scheme Holds Back the Tide to Improve Flood Protection

A new **Rotork IQ3** intelligent electric actuator will improve flood protection in a vulnerable area of a coastal town in west Wales.

The River Ritec flows towards Tenby, where it discharges via a 780 metre culvert/outfall system that passes beneath a railway embankment and sand dunes to discharge into the sea below typical low tide level. There is a history of flooding upstream of the culvert which imposes a restriction on the discharge of flows from the river catchment area during high river flow events. This is particularly true when high river flows coincide with high astronomic tide levels.

The valve installed below ground in a chamber at the beach end of the culvert is designed to close off the rising tide which can otherwise fill the length of the culvert and prevent "washing" of the Victorian brick culvert.

Due to its inaccessibility in the chamber, the actuator previously installed on the valve was locally operated by pushbuttons in a nearby top-side enclosure. However, local operation was imprecise, requiring call-outs at any time, day or night, and relying on human judgement for factors including the state of the tide, the rate of rainfall, the weather forecast and the risk of flooding.

In a contract awarded to Rotork Site Services by Natural Resources Wales (NRW – formally Environment Agency Wales), the old actuator has now been replaced with an IQ3 actuator and two

<complex-block>



ultrasonic level sensors installed in the valve chamber. The new installation is programmed to automatically close-off the rising tide to ensure that the length of the culvert is then available to act as a storm tank and receive as much river flood water as possible. By automatically opening the valve when the tide begins to recede, drainage capacity is also maximised, enabling any flooding that may have occurred to drain away as quickly as possible. As on other NRW sites, operation is now remotely monitored via a telemetry system and, if necessary, can be overridden from central control rooms and mobile devices.

Operation of the actuator is also supported by a Remote Hand Station installed in the top-side enclosure, which provides an exact duplicate of the actuator's monitoring and control interface. From here the user can not only locally operate the actuator, but also interrogate, configure and download data from it using the Rotork hand-held setting tool with its secure wireless Bluetooth<sup>®</sup> link. Retaining all of the actuator's functionality, the Remote Hand Station presents an identical window into the plant, showing diagnostic data including the valve torque and usage profiles and facilitating real time analysis directly at the cabinet to assist with preventative maintenance and asset management.

# **rotork**<sup>®</sup>

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# New Year Success for **Denholm Valvecare**



International valve service supplier **Denholm Valvecare** 

continues to fight against falling energy prices and a tough trading climate, with high hopes for 2016.

he Aberdeen-based firm, which also has operations in Great Yarmouth, Lincoln, and Azerbaijan are well positioned to capitalise on growth with plans for diversification whilst their core business remains in Oil & Gas. Whilst the company has grown steadily during its eight years in operation, the last year had been challenging as it adjusted to a lower oil price and customers reducing their non-essential expenditure.

In the face of lower energy prices driving down the number of available contracts, competition, increased significant operational complexity and shortages of talent in key markets, Managing Director Roy Wood said: "Despite the current market conditions, we have developed an agile strategy to achieve growth and remain well positioned as a fundamentally sound business. Although we continue to have to adapt like many other businesses, we pride ourselves on an international growth strategy that is coherent, in line with market trends, continually monitored and implementable within our available resources.

Denholm Valvecare also believes this could be an opportunity, as they are able to offer more innovative turnkey solutions to customers than alternative suppliers.

Mr Wood added: "We believe that innovation is key and our team are fully aligned to our growth strategy for the next five years. Our relationships with current and prospective customers, and what we can offer them, remains at the forefront of all that we do. We plan to enhance our operations for local client support while increasing our international footprint."

As a result of this, Denholm Valvecare has been successful in securing a 5 year contract from the Caspian Sea Region covering over 100,000 valves and will be run via a joint venture between Glensol (Nobleoil) and Denholm Valvecare. A new company has been formed under the name of GVL LCC.

The scope of services under this contract is for the provision of all personnel, materials, equipment, plant, management, engineering and supervision necessary to perform valve management services. This will all be performed from our new Caspian operation.



DENHOLM VALVECARE

Tel: 01400 273 370 Email: sales@denholm-valvecare.com Web: www.denholm-valvecare.com

# **AUMA** Extends SIL Solutions

TÜV certification achieved by **AUMA** confirms that the company's SQ .2 part-turn actuators, SA . 2 multi-turn actuators and AC .2 actuator controls in SIL version comply with the highest safety requirements.

he actuators have achieved full latest IEC 61508 edition 2 certification and are approved for safety-related systems up to SIL 3 (for redundant system architecture). The TÜV certification also applies to low temperature versions for temperatures ranging from -60° C to +60° C.

The safety function of AUMA's SIL actuators can be configured with different seating criteria, including forced limit or torque seating to protect the mechanical integrity of the valve. If required by the application, different seating criteria for the safety function and standard actuator functionality can be set.



TÜV certification achieved by AUMA extends functional safety/SIL actuator options.

The investment in standards accreditation by the leader in modular electric actuation technology supports increasing demand for functional safety/SIL, particularly for installations with high risk potential for both people and the environment. The initiative underpins AUMA's commitment to comply with the industry's highest safety standards.

In addition to the company's top-of-therange SIL devices designed to meet the highest safety requirements, AUMA offers a Safety Figure Calculated [SFC] range of actuators that is extremely adaptable with a high degree of configuration capability and cost flexibility. These actuators, with safety parameters assessed by exida – a leading functional safety notifying body, are ideally suited for applications with modest SIL1 or SIL 2 safety requirements. The SFC product range comprises SA and SQ actuators with AM and AC (standard version) actuator controls plus GK, GST and GS gear boxes.



AUMA electric actuators, as pictured, support functional safety systems up to SIL 3.



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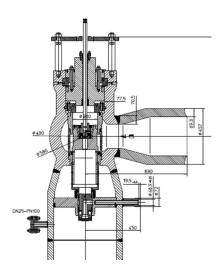


## Advanced Valve Solutions Announce Order from RWE Generation UK

HP Bypass Valves to be installed at the Didcot B CCGT power station

### **Didcot B Power Station**

Didcot B is one of a new generation of highly efficient, gas-burning power stations, which has been in commercial operation since 1997. The station is powered by natural gas and uses the latest generating technology (combined cycle gas turbines -CCGT) to produce electricity.





Engineering Solutions for Critical Valve Applications in Power Generation, Oil & Gas and Petrochemical

Advanced Valve Solutions (UK) Ltd www.advancedvalvesolutions.co.uk



Didcot B can produce 1,360MW, enough power to meet the needs of 1 million households.

## Advanced design for two shift operation

After being in operation for almost 20 years, and designed for base load operation, switching the station to a two shift operation has accelerated the wear on the HP bypass valves. Since 1997 the design of HP bypass valves has changed significantly and Advanced Valves Solutions quoted to supply state of the art HP bypass valves with an integrated steam atomiser for steam cooling. With an optimised, shaped forged valve body with bespoke trim fitted for the application desuperheater, Didcot B now has an HP bypass designed for two shift operation.

### **Anticipated Benefits for Didcot B**

## The installation of the new HP Bypass valve will lead to:

• Less energy required to bring the boiler up to operating conditions after overnight shutdown

- Reduced amount of thermal stress in the upper valve body
- No thermal stress caused by the desuperheater
- Increased temperature controllability especially at lower loads during start up

AVS has installed new valve packages and replaced existing valves in critical applications in UK power stations and has a proven track record in protecting stations from loss of production and saving £000,000s in repairs and replacement parts.



Tel: 01270 534 685 Web: www.advancedvalvesolutions.co.uk

# Flow Technology Services: The DeZurik Rotary Control Valve

The **DeZurik RCV Rotary Control Valve** has been specially engineered for extremely precise throttling control in severe-service applications in the pulp and paper, chemical, power, petroleum and refining industries.

The RCV is ideally suited for tough applications where high-pressure media contain entrained water vapour or suspended abrasive particles:

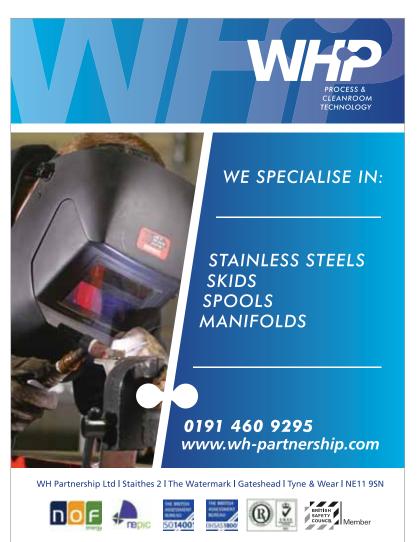
- Scaling liquor service,
- Dirty steam service,

Kaolin slurry,

Lime mud,

- TiO2 slurry,
- vice, Fly ash slurry,
  - Coking, and
  - Other hard-to-handle liquids, gases and slurries.

The DeZurik RCV Rotary Control Valve combines the control accuracy of a globe valve with the strength of a severe-service ball valve. Traditionally, a ball valve that could withstand erosion, corrosion and scaling media





couldn't provide precise throttling accuracy. A globe valve could provide great control, but could only handle clean media. With the RCV you don't have to sacrifice control to get a valve that can withstand the tough applications.

Hard-faced trim components and unique design features provide erosion resistance up to eight times better than trim produced from Alloy #6. The RCV is designed for high-capacity, bi directional flow capability and includes four trim options for flexibility.

In the event maintenance is needed, DeZurik' S unique design facilitates fast, easy breakdown and assembly of valve components with no special tools required. The result is reduced maintenance time and the lowest overall cost of ownership.

Available in sizes 1–12" (25–300mm), the DeZurik RCV Rotary Control Valve is available in ANSI 150 and 300 ratings. Body material options include 316 and 317 stainless steel, carbon steel, Hastelloy C or Titanium. Flanged or flangeless designs meet ANSI or ISA faceto-face dimensions.

Metal-seated valves provide FCI 70-2/ANSI Class IV shutoff and temperature capabilities up to 1000°F(540°C). Soft-seated valves utilizing reinforced PTFE provide FCI 70-2/ANSI Class VI shutoff.



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# BVAA to Exhibit at Fluid Power & Systems 2016

**The British Valve and Actuator Association** (BVAA) have signed-up to exhibit at **Fluid Power & Systems 2016**, to be held at the NEC, Birmingham from 12th to14th April 2016. Association staff will be on-hand on BVAA's 28 sq m stand (AF640) to provide guidance, advice and updates to attendees.

Bartlett, commented: "Fluid power remains a vitally important power and motion control solution for the valve industry and its customers. Consequently, BVAA has a number of members who are specifiers, manufacturers, suppliers or indeed users of the technology. Participating in the FPS show is therefore of clear benefit to the association and its members.

### **Business opportunities**

"Due to our strong ties to our customerbase, BVAA is very much focused on delivering business opportunities to our members as well as the more traditional trade association roles. That coupled with our impressive service portfolio is why we've quadrupled our membership in just a decade."

Rob continued: "One of our main goals at FPS will therefore be to represent our 200 members and bring their products and services to the attention of the very wide customer base that the show attracts. In addition we will be there to appraise and advise potential members of the benefits of joining a dynamic, hugely successful association such as ours, and to highlight the many opportunities we can deliver. We will also be promoting our independent training courses, Guidelines, publications and the superb technical support BVAA has to offer."

### Conduit

BVAA Chairman, David Millar (Heap & Partners), added: "A huge proportion of BVAA members are engaged in wide variety of end-user industries such as oil and gas, chemical, petro-chem, power, waste water etc. Many of these industries demand fluid power control solutions, and as the conduit between suppliers and customers, we see the show as being one of our important opportunities to bring quality suppliers and discerning customers together."





DFA Media commercial director, Ryan Fuller, commented: "We are delighted to welcome BVAA to this year's Fluid Power & Systems exhibition. There is a great deal of synergy between the visitor profile of the show and what the Association membership can offer in terms of equipment and industry expertise in a variety of sectors. We are sure that BVAA and its members will make a valuable contribution to the show, and benefit from the highly relevant customer base that the show attracts."

Fluid Power & Systems is the only event in the UK that is 100 per cent focused on a comprehensive range of hydraulic and pneumatic equipment, together with products that facilitate better electromechanic system design and application for improved process automation, control and monitoring.

### **Co-located exhibitions**

Fluid Power & Systems will again be co-located with Air-Tech, Drives and Controls, European Offshore & Energy, Plant & Asset Management, Mach and National Electronics Week. These combined exhibitions bring over 40,000 visitors to the NEC over a single week. Fluid Power & Systems will also include a full programme of free technical seminars supported with top-class speakers offering expert insight and practical advice on the issues that affect you the most.

### Wide representation

Established in 1939, BVAA represents the interests of over 200 British companies,

which are responsible for over £1billion sales each year. BVAA member companies employ more than 11,000 personnel directly in manufacturing and an equal number in support industries.



Tel: 01732 370 340 Web: www.fluidpowersystems-expo.com

# **Score** Training's New Specialist Training Facility Officially Open

On Tuesday 3rd November 2015 **Score Group plc** officially opened their new specialist training facility in Peterhead



he facility will be the new headquarters of Score Training and seven dedicated training workshops are to be devoted to the provision of technical training courses to the company's oil and gas industry clients in addition to employees of Score Group plc.

Sixty guests were provided with tours of the training workshops, design and multimedia suites and parts of the original buildings within the six acre expanse, located on the site of the former HMP Peterhead.

Newly developed amenities for training in valve awareness, joint integrity and pressure testing were unveiled. Workshops are equipped with a range of tooling, hydrostatic and gas test cells and PSV test cell. A flow loop and PSV container were also shown to demonstrate how the company simulates real working conditions throughout each hands-on training course.

Examples of the company's promotional, training and safety videos, each created by a team of in-house graphic designers, were also shown. These are produced for the Score Group of companies as well as third party clients.

During the opening presentation Leighton Willox, Managing Director of Score Training explained how the expansion of facilities will allow for increased course availability and an enhanced training experience. Speaking of recent ECITB approval to conduct Mechanical Joint Integrity (MJI) training and testing, plans to attain further approvals for Small Bore Tubing (SBT) training delivery were also revealed. Presentations touched on the history of the site and on plans to mix the old with the new during phase 2 of the development – restoring part of the site to pave the way for the creation of a museum and tourism hub which will open to the public next year.



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# Flowstar's New Seawater and Stainless Steel Reducing Valves



**Flowstar Ltd**, the Hull based stockist of safety, relief and reducing valves, has added a new Berluto product to its extensive range from the German manufacturer.

for Berluto Pressure Reducing Valves and Float valves for over 10 years. Berluto have over 50 valves in their range.

### New Product: Seawater Reducing Valve

The latest product launch comprises of a series of valves specifically designed for seawater applications. All types are optimally suited for the use in ships, oil platforms, or desalination plants.



The applied materials are carefully selected providing maximum corrosion resistance. All versions are offered as standard with BSP female threads or PN16/25 flanges, but other special solutions like external thread, NPT threads or ANSI flanges can be supplied. Apart from standard pressure ranges (Inlet up to 25 bar, Outlet from 0.5 bar to 9 bar) further individual pressure ranges can be implemented.

The sealing material as standard is NBR. We can also offer FPM which can tolerate media temperatures up to 190°C or EPDM seals which can go up to 120°C. Double-sided manometer connections for outlet pressure indication (up to DN50) or manometer connections on both flanges for inlet and outlet pressure indication (from DN65 upwards) makes them user-friendly.

### New Product: Stainless Reducing Valves

The new series of stainless steel pressure reducing valves tolerates media temperatures up to 190°C and

is thus ideally suited for critical media like aggressive gases and liquids or fully desalinated water.

Despite the compact dimensions, the valves provide a high discharge rate with smooth flow characteristics. All types are a balanced design i.e. fluctuations of the upstream pressure will not affect the downstream pressure. As standard the valves are offered with internal BSP threads (ISO 228) or flange connections (DIN EN 1092). Special versions with NPT threads, ANSI flanges or dairy couplings are available on request.

### Product Spotlight: Berluto Float Valves

Berluto float valves are extremely robust and reliable. No matter what kind of media you will use and regardless of the flow rate we will have the most qualified float valve for your specific use. Available in brass, red bronze or stainless steel, with NBR or FKM seals, and PE, copper, or V4A floats.



Tel: 01482 601 030 Email: hull@flowstar.co.uk Web: www.flowstarvalveshop.com

# Hardide Coatings Opens New US Production Facility in Virginia

MARTINSVILLE, Va - **Hardide Coatings**, Inc., the United Kingdom-based provider of advanced surface coating technology, announced the opening of its new Virginia production facility.

n January 2015 the company commenced an investment of up to \$7million in Martinsville to expand its production operations to North America. The new facility is expected to create up to 29 jobs over the next three years.

This expansion has been driven by increased demand from North American customers, with sales to the US and Canada more than doubling during 2015. The 26,000 square foot facility in Martinsville-Henry County, will service existing and new customers for the company's patented range of hard wearing tungsten carbide coatings in the oil and gas and flow control markets. In addition, the company also plans to expand in the aerospace and advanced engineering sectors and develop applications for its newly-patented coating for diamonds.

Philip Kirkham, CEO of Hardide plc said: "Having a local production facility in North America will support the increased demand from existing customers and significantly boost opportunities to expand provision of our coatings throughout the region. We have installed two large capacity chemical vapor deposition (CVD) coating reactors and work is already progressing well on some very exciting customer trials. I would like thank all in Martinsville-Henry County and Virginia Economic Development departments for their help and assistance, and in particular Governor McAuliffe and Secretary Jones for their personal support in helping to get this project underway in Martinsville."

"I congratulate Hardide Coatings on the opening of its Virginia manufacturing facility in Martinsville," said Governor of Virginia, Terry McAuliffe. "Growing jobs in the advanced manufacturing sector is a large part of our efforts to build a new Virginia economy, and these jobs will pay well above the average prevailing wage in a region that needs them. We welcome the company to Virginia and Henry County and look forward to a long partnership with the Commonwealth."

"We welcome Hardide Coatings to our community," said Mark Heath, President & CEO of the Martinsville-Henry County



Jamey Ewing (L) Coatings Supervisor and Barry Farmer (R) Pre-Treatment Supervisor at Hardide Coatings, Inc, Martinsville, Virginia



Hardide coating reactor being loaded with components

Economic Development Corporation (EDC). "Their presence here strengthens our growing aerospace sector and demonstrates that our community is a great place for business from all across the globe."

"We are excited to have Hardide Coatings among our growing list of international companies," said Tim Hall, Henry County Administrator. "The Henry County Board of Supervisors was glad to partner with the EDC, our friends in Richmond, and Hardide Coatings to make this opening a reality."

The first two senior employees at the facility, Jamey Ewing, coatings supervisor and Barry Farmer, pre-treatment supervisor, spent 12 weeks during the summer in the UK at the company's head office and main production site in Bicester, Oxfordshire, being trained on the Hardide coating production processes and techniques. They returned to Virginia in September 2015 to assist with the installation and commissioning of the process, production and quality control equipment.

"Production for North American customers, currently being carried out in the UK, will be gradually transferred to Virginia on a case-by-case and phased basis, taking load and capacity of both sites into consideration," continued Mr Kirkham. "We have also invested in an ultra-fast broadband cable between the UK and US sites enabling both facilities to operate on the same fast, secure network."

The range of Hardide coatings are highly abrasion, erosion, corrosion and chemical resistant while also being tough, ductile and impact resistant. Applied by chemical vapor deposition (CVD), the process can not only coat external, but also internal surfaces and complex shapes. The coating technology is proven to offer dramatic improvements in component life, delivering cost savings to customers through reduced downtime and increased operational efficiency. Hardide Coatings, Inc. is part of Hardide plc (AIM:HDD) which is listed on the London Stock Exchange and based in Bicester, Oxfordshire, UK.



Tel: 01869 353 830 Email: info@hardide.com Web: www.hardide.com

# **SMC** Meets Market Demand with Long Life Angle Seat Valve

The **VXB Series** is an angle seat valve for air, steam and heated water which has been created to meet market demand for valves that deliver an extended operating life, low levels of leakage and are compact in design.

MC, the worldwide leading expert in pneumatics, has designed the VXB Series angle seat valve, which can deliver up to 5 million air and 3 million steam cycles. It also has a special FKM rubber seal that minimises internal air leakages to just 10 cm<sup>3</sup>/min or less.

With a compact design of just 100 mm height in the 3/8 valve, the VXB is the ideal solution for applications including temperature control, hot water systems, industrial washing machines, sterilising and cleaning equipment.

Further design features help users keep costs to a minimum by extending the lifespan and efficiency of the valve through a double protective construction. Foreign particles are prevented from interfering with the VXB's performance thanks to a protective seal and a resin scraper.

SMC UK Marketing Manager Bob Hitner said: "Through listening to our customers' needs we set about creating a multipurpose angle seat valve that delivers cost savings, minimal maintenance, reliability and space savings."

"Initial feedback for the VXB has been really positive and we are confident that it will be a popular addition to our valve range."

Available in three port sizes, 3/8, 1/2 and 3/4, the VXB can be ordered in bronze or stainless steel (316L equivalent) with a pilot port location that can be placed in three of its four sides.

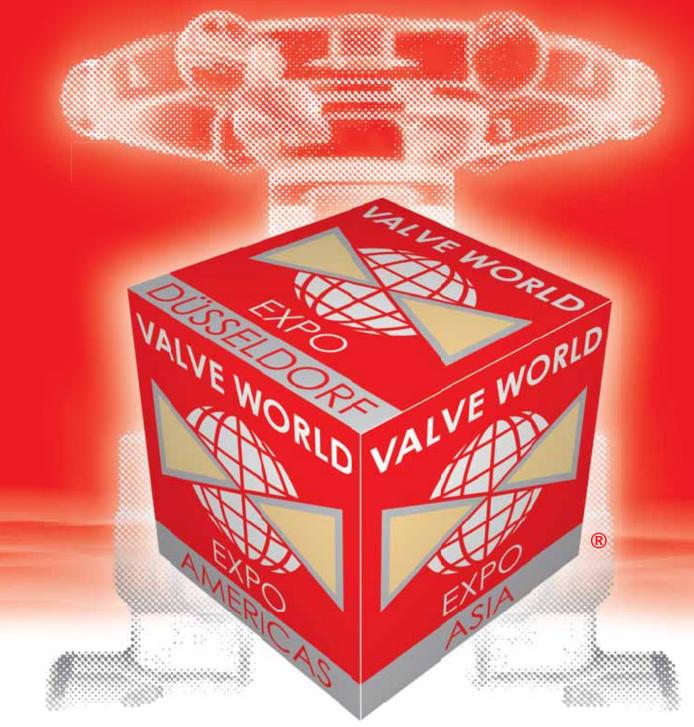
For more information on the VXB angle seat valve, visit the SMC new product page: www.smc.eu





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## Statoil Visits W H Tildesley Ltd Forging

Drop forging specialist **W H Tildesley Ltd** welcomed Statoil to its

manufacturing site in the West Midlands.

Statoil's Engineers were on site to review the recent NORSOK qualification by Aker Solutions.

As a result, W H Tildesley is now included on Statoil's in-house M-650 list for NORSOK M-650 Ed.4 QTRs.

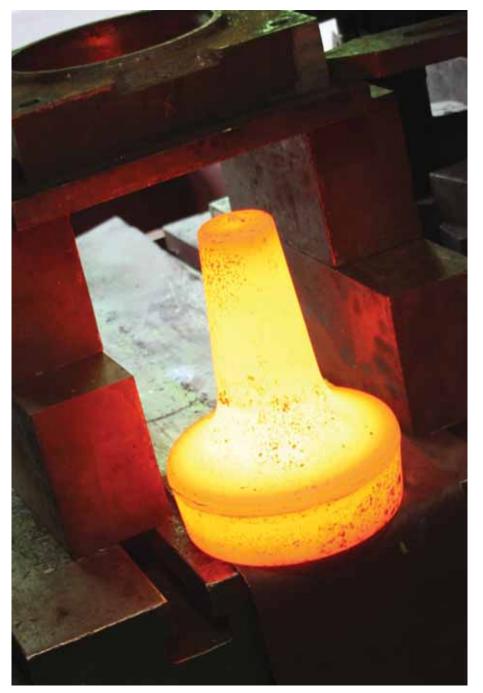
Sales & Marketing Manager Phil Hobley: "Obviously Statoil is a huge player in the Oil & Gas market, as is Aker who worked with us on the qualification itself. It gives us a lot of confidence in our processes to receive approval from two of the most respected operators in the industry.

Whilst the nature of W H Tildesley's product means that we would probably never supply product directly into a company such as Statoil or even Aker, many of our existing customers certainly do. We have several live enquiries for forged components that will ultimately be supplied to support the Johan Sverdrup project.

We have been producing components under NORSOK qualifications since 2008"



MORE POWERFUL THAN YOU CAN POSSIBLY IMAGINE...... .....contact sales for more details



W H Tildesley produces a wide range of forged components including, Flanges, Nozzles, Valve Bodies, Valve Components and Fittings.



New M650 Edition 4 QTRs extend W H Tildesley's qualification until mid-2020. Materials covered are duplex stainless steel F51 (UNS S31803) plus super duplex stainless steels F55 (UNS S32760) and austenitic stainless steel F44 or "6Mo" (UNS S31254).



Tel: 01902 366 440 Fax: 01902 366 216 Web: www.whtildesley.com



# Chairman's Statement



David Millar, BVAA Chairman

Our March 2015 year-end confirmed that the **BVAA had had its best year ever again**, with record turnover and activity levels.

have however been acutely conscious of the rapid decline in global oil and gas activity, the impact this has had in particular on the UKCS, and most especially on our many affected members in that sector.

On a practical level, BVAA 'bedded in' to its new freehold HQ in Banbury, and swiftly took prudent steps to significantly reduce our mortgage. The 'Peter Churm Technical Centre' has been well used by members and trainees alike and is proving to be a tremendous asset.

Despite the industry turmoil, membership again grew to a remarkable peak of 207, but already we have seen the first signs of consolidation in the industry and entrenchment among members, plus the inevitable examination of the benefits returned by BVAA membership.

With that in mind, we have expanded services again, one example being our recent, hugely successful Regional Dinner and Supplier Day in Brighouse, the attendances at which exceeded all expectations. A thoroughly worthwhile event which we plan to repeat.

Training held up well throughout the year with a slight fall off towards year-end. This coincided however with an expansion of delivery to centres in Yorkshire and Aberdeen. Taken into account, overall we've seen more 'dilution' of training business rather than 'evaporation.' I am however particularly proud of the new BVAA *'Future Leaders'* initiative (see Training).

Our new Technical Consultant Martin Greenhalgh has rallied his technical troops magnificently and we welcome the engagement of Ron Strang and Paul Reeve into the fold of advisors and consultants. The 'Technical Expert Groups' (TEGs) initiative has launched successfully, with several new TEGs having met to develop technical issues that will ultimately benefit all members.

The role of BVAA Chairman would be extremely difficult without the support and fellowship I receive from my colleagues on the BVAA Board, plus of course the sterling work undertaken by the Association's various working groups and chairs, and I thank them all for their hard work.

I close with my sincere thanks to BVAA Director Rob Bartlett and his hard working Secretariat team who continue to provide members with such a professional service while all the time making one feel a member of a close-knit family.



Looking to alternative markets... 1" ASME 600 'Phase' Ball Valves (316 Ti + Hardide coating) complete with Rotork IQT actuators for a nuclear application (Heap & Partners)

**Director's** 

Report



Rob Bartlett, BVAA Director

## 'Our best year yet, but...' 200 membe

Regular readers will know that a report of significant growth at BVAA – on several measures - has generally been the norm for the last decade. Indeed so it was in 2015, fiscally our best year ever...

But with oil prices plummeting globally, the UKCS sector – where many members are focussed - is proving a particularly difficult place for them to win new project business. Yet perversely there was a recent announcement of a significant upturn in year-on-year UKCS production - the huge investments of recent years having obviously paid off. A lesson to be learned there for us all perhaps. Even so, not all the operators can turn a profit in the prevailing conditions, but some notably can, and we must ask ourselves 'why not all?'

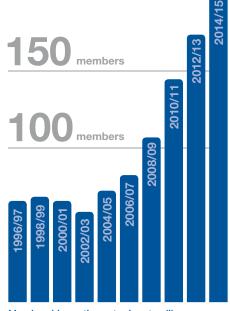
Given the situation it will therefore come as no surprise that our Board have focussed attention on what BVAA can do to help the UKCS operators with efficiencies so they can continue to invest, while at the same time – through the formation of a new BVAA Business Development Group starting to explore opportunities in other markets for the industry.

Last year the Secretariat girded itself for a turn down, taking the appropriate measures, but again contrarily we were busier than ever ourselves. Despite consolidation in the industry BVAA membership continues to grow, albeit in a less dramatic manner. We did cross the 200-member threshold though – heady stuff compared to our low point of just 55 in 2003.

The new HQ is proving a solid, wellused investment and as our Chairman indicated we are already setting about reducing our modest mortgage. Seeing 32 delegates training on the same course together in the *Peter Churm Technical Centre* is certainly a very rewarding sight! As was the first of meeting there of our aforementioned *'Future Leaders'* group – another huge BVAA investment in the future of our industry.



2016 will again see the BVAA participate in Valve Word, and host the British Reception.



Membership continues to rise steadily.

This year also saw something of a renaissance in the already-busy Technical section, with several new strands of activity being launched, and the introduction of Technical Expert Groups - a new concept in the way technical matters will be managed.

Also new was our 'Supplier Day' initiative, bringing the valve industry supply chain and our many diverse members together. And at first offering, it was the best-attended event of the year, save the AGM. There's more on this in the following reports.

All this could not be done of course without my hardworking team of the BVAA Chairman, Board and members, and in particular the working group chairs.

Lastly I would also like to take this opportunity to personally thank my small team of Karen Webb, Barbra Homer, Isobel Goldthorpe and our Accountant Chris Griffin, plus of course Technical Consultant Martin Greenhalgh, who help keep the Association running so efficiently.

# Technical Report

Martin Greenhalgh, BVAA Technical Consultant

### **BVAA** Technical Service

I was deeply honoured to be asked to take over as Technical Consultant at BVAA, an organisation with which my family have been continually associated since its formation in 1939.

In order to provide a technical service 'fit for purpose' I felt it was necessary to first establish what the membership required from the technical function, and then to re-organise our efforts to deliver that, within the budget and resource available.

From the resultant survey it was clear that standards still played an important part in the lives of our technical experts. But as per our multi-faceted industry, a tremendous number and variety of standards were being utilised. In discussions with Rob Bartlett and my colleagues on the BVAA Board, the technical Working Groups, etc., it became clear that a new approach was required.

We have decided therefore to prioritise our time and resource on the standards that affect most members – the generic standards (materials, tests, etc.) - while at the same time facilitating a system whereby those interested in the usually product-specific standards had a route to participating in their development too.



SILs 'TEG' meeting with Paul Reeve leading the discussions



Casting Quality a likely new 'TEG' for 2016 (DMI)

I recently took over the Chair of BSI committee PSE/18, which mirrors all valve and actuator standards activity in ISO/TC153 and CEN/TC69, which I regularly attend, with ISO/TC185 similarly covered by my colleague Mike Gray (Pentair). BSI operates a very efficient document distribution and voting system so we felt it was not necessary to duplicate this at BVAA, however we did need BVAA fora that facilitated coverage of the generic work and also the specialist product-specific standards when required.

We created a new system whereby I would issue a timelier, easy-to-use monthly report on standards development and progress. Generic standards would continue to be discussed in the Valve Working Group, which I continue to attend and support. A new system of *Technical Expert Groups'* was formed however to allow the formation of small, time-limited groups to cover product specific standards and other topics of interest as they arise. Current groups include:-

- Fire Testing
- Butterfly Valves
- Safety Integrity Levels
- Subsea valve and actuators (API focussed)

More of these are envisaged, on Fugitive Emissions and Casting Quality, and no doubt others will follow. The '*TEGs*' as they've come to be called address specific issues with a feedback loop to ensure BVAA members are informed of their progress, outcomes etc., the latter possibly including a position paper, guidelines on the topic, maybe a training course, perhaps even a new standard. These outcomes gel perfectly with my other goal; to ensure that the technical service was an invaluable educational tool for members, as it was for me in my early days in the industry.

#### **Directives**

Firstly I'm pleased to welcome Ron Strang (Alco) to our growing band of advisors, Ron being our resident expert on PED and ATEX - an area where new texts are in need of study and interpretation. A warm



PED expert and associated course lecturer, Ron Strang

welcome to Paul Reeve (Silmetric) also, who advises in a similar capacity on SILs.

Secondly, one major European country has decided to take a different position on the Machinery Directive - specifically on the subject of actuated valves - to that of BVAA and indeed the European Valve body, CEIR. I am participating and providing assistance on this complex issue which looks like it will encompass PED issues too.

### **Member Support**

My routine day-to-day support to members on technical issues continues of course, as does my support in a technical capacity at BVAA events like exhibitions, the BVAA Conferences, AGM, etc.

### Goals for 2016

With the assistance of the Secretariat I aim to complete the revision of the text for the 7th Edition of Valve and Actuator User Manual, BVAA's most successful publication.

I also have ongoing work updating the material for the Introduction to Valves course, which I deliver, and in which I hope to incorporate more of the Manual's excellent content.

I also have an ongoing goal of increasing the number of active participants in standards making, so that BVAA members' interests are taken into account in new and revised standards.

Finally I am indebted to the BVAA team and especially our BSI Programme Manager, Charlie Duncombe, for their ongoing support.

## Training Report



Karen Webb, Member Services Manager

### It's been a year of yet more new and interesting developments in the Training strand.

he first was the introduction of our new 'Advanced Valves' course developed by Martin Greenhalgh - sold out and well received at the two deliveries to date. Spread over two days, this was the natural next step on from our 'Introduction' course and has much more in-depth coverage of technical issues such as corrosion, design, materials, etc.

We also took BVAA courses 'on the road' for the first time. Although we've always offered – with some success - an in-house option for customers at their own facilities, we've never previously offered scheduled dates other than at our HQ. Venues were selected in Brighouse (courtesy of Severn Unival) and Aberdeen, and both were tremendous successes which we aim to repeat.

Our portfolio has continued to grow with our range of Introduction to Pneumatics and Hydraulics courses, delivered in partnership with the National Fluid Power Centre. A further addition this coming year will be Introduction to Electrics – the 'brains' behind the fluid power brawn essential to many actuated valves. Our own scheduled courses at the *Peter Churm Technical Centre* continue to flourish, despite the turn-down which has impacted only lightly so far on our training arm. Students this year came from as far away as Africa and Brunei – crossing continents apparently no barrier to good valve training! Members' customers still make up 35~50% of our students and they are often repeat visitors.

Further courses in development at the moment include HIPPS, Control Valve Sizing, Sealing, etc. Most of our hugely knowledgeable lecturers are volunteers, and we are eternally grateful for their support and cannot thank them enough for their time in re-developing the courses, as well as their delivery.

Another thank-you goes to my colleague Barbra Homer who oversees all the bookings and production of materials, and of course accommodates the many nuanced requests we receive for further assistance.

Scheduled BVAA course dates are already fixed for spring, summer and



**BVAA's Future Leaders Group at BVAA** 

autumn 2016. Details can be found at www.bvaa.org.uk/training or contact karen@bvaa.org.uk

#### **Future Leaders**

To close, a mention of the 'Future Leaders' initiative here at BVAA. A small group of talented people, nominated by their senior management, have engaged in a pilot programme spread over a year. The aim is to give the group the opportunity to benefit from a series of valve industry experiences, specially organised by BVAA, which they might not otherwise come across inside their own workplaces. The events include 'experience days' at manufacturers' sites, free personal development and technical training, and tours of 'Centres of Excellence' connected to the industry. Plus of course the opportunity to develop their own network of contacts. Launched in December 2015, the plan is to review and develop the initiative with a view to making it a rolling programme of talent development, helping to ensure the future of our industry.



BVAA Trainees at the National Fluid Power Centre, Worksop.



Just one of BVAA's training partners (Academy of Joint Integrity)

## Valve Working Group



Peter Burnett, Heap & Partners



Velan ball on Hardide Coatings' CMM (Hardide Coatings)

#### Meetings

The Valve Working Group has continued with its regular programme of two meetings per year. The March 2015 meeting involved a very informative visit to the Hardide coatings facility in Bicester, giving us an insight into their hardness coating process and its many applications. This was coupled with an afternoon WG meeting at BVAA – our first chance to see and utilise the impressive *Peter Churm Technical Centre*.

Our September meeting was at the equally interesting Noel Village (Foundries) facility in Doncaster, where we learned a great deal about weld-free castings. Once the *Holy Grail* of the industry, it was gratifying



**BVAA Valve Working Group** 

to see a foundry able to deliver what was once thought impossible.

In 2012 we deliberately set out to open members' eyes to the technical opportunities in our own supply chain and I'm delighted that the Valve WG is doing its part in this regard.

Of key support to my WG was the rolling out of the *Technical Expert Group* initiative. Finding time to discuss all the detail of all the standards under our jurisdiction in our meetings was proving impossible. The TEGs however have allowed us to spin out issues like Fire Testing, Subsea and Butterfly valves to dedicated groups.

#### **International Standards**

Another benefit of the TEGs will be the opportunity for those interested in any particular 'product standards' in CEN and ISO to form their own TEGs, alleviating our group from covering these in our meetings.

We can focus our attention now on core standards that cut across all valves types and disciplines such as test standards. Plus of course relevant directives like the PED, where a new text, and new national interpretations, seem likely to require our input.

Before and after – how applying process control expertise can lead to dramatic improvements in Duplex and Super Duplex castings (Noel Village)

The Valve WG will however continue to receive reports on the valve related strands of activity and offer guidance and advice as required.

#### **The Future**

Our plans / goals for 2016 include focussing effort on maintaining well attended meetings, ensuring timely communications with membership on key industry issues, growing representation / involvement of members in UK Technical Work and increasing attendances and activity in API and ASME or others where required.

As for myself this will be my last report as I plan to Chair the Valve WG for 2016 and then, having served 5 years, to rotate out to allow someone else the chance to lead this vibrant technical group. I would like to thank all my members for their considerable support, the BVAA team for looking after us so well, the new TEGs for their welcome assistance of late and of course the many hosts and speakers we've persuaded to make our meetings so much more informative.

## Actuator Working Group



Peter Hirst, Rotork

ere at BVAA we've been quite busy preparing for revisions of some of our most important standards. As ever we do this by meeting regularly in conjunction with the BSI PSE/18/5 group, which comprises essentially the same experts.

#### ISO 5210 & 5211 Attachment Standards

The joint BVAA/BSI working group were able to meet and prepare our own proposed revisions of ISO 5210 'Industrial Valves – Multi turn actuator attachments' and its part-turn equivalent, ISO 5211. Since these are widely used, and both also adopted as 'BS' (British) and 'EN' (European) standards, they are hugely important projects to us and our valve manufacturer colleagues.

The BVAA-prepared texts were adopted by BSI, submitted as UK proposals, and formed a significant part of the discussions in ISO/TC153 /WG1 in which we participated. Many details of the texts were subsequently examined and additional content discussed. A provisional target of February 2016 has been agreed for circulation of the texts for formal voting.

#### The key changes are:

ISO 5210 - inclusion of additional flanges to extend the torque/thrust range: F05 (20Nm / 10kN), F48 (20,000Nm / 2,000kN)



Rotork



Mounting kit (Heap & Partners)

and F60 [40,000Nm / 4,000kN]. New couplings "C" and "D" for transmitting torque only have been added along with defined linear outputs.

ISO 5211 also has new flanges F80 (500,000) and F100 (1,000,000 Nm) and new couplings for involute spines, bi-square and an improved flat head design coupling. Informative annexes on the calculation basis for transmittable torques/ thrust and sizing have been added to both standards.

ISO New work item proposal from China and Korea for an electric actuator standard.

The proposal is limited to isolating duty electric actuators only and is unclear in its intent. It appears that they are indicating a lower specified life test and duty requirement. TC153/WG1 have tasked them to provide a clearer NWI proposal for circulation and voting in the first quarter 2016.

#### **CEN Standards**

The actuator group within CEN – TC69/ WG1/SG10 has been reformed due to several new work item proposals and our group remains heavily involved. The proposed revision of EN 15714-2 'Industrial valves - Actuators - Part 2 : electric actuators for industrial valves – Basic requirements' to make it consistent with another largely unrelated water valve standard, was cancelled.

The study of possible conflicts between the EN 15714 series and the ISO 12490 pipeline valve actuator standard has continued as it is proposed that ISO12490 be adopted by CEN. The fundamental differences in design, and indeed operation of these two types of actuator - chiefly regular process operation versus very infrequent pipeline isolation operation - was deemed sufficient not to support the adoption of ISO 12490 directly as a 'part 5' of the EN 15714 series. Consequently it is proposed that a Part 5 will be drafted to indicate cross references and exclusions.

A proposed EN 15714- part 6 covering linear pneumatic and hydraulic actuators is also being mooted and early UK comments have already been submitted via BVAA and BSI. Work on these two aspects will commence in 2016



Stainless steel valve gearbox (Qucikits)

#### Valve Gearboxes standard

It's gratifying to note that the BVAA gearboxes guide was used as a basis for the original content of a proposed new EN standard on gearboxes due for development in 2016. However, as many years have passed since this was first drafted, our working group discussed ways in which to improve this content, including rationalising duty classes, torque bands, locking arrangements, etc. An updated draft has been submitted to CEN.

#### Sub Sea Actuators

The ISO/TC67/SC2/WG18 project on "Actuator mechanical integrity and sizing for subsea pipeline valves" (ISO 16441) remains halted largely due to international political reasons outside the BVAA's control. API however continues to develop their standard 'API 6D SSX' for sub sea actuators. The meetings are helpfully held concurrently with the associated API 6DSS meetings for sub sea valves. UK delegates are occasionally able to attend these meetings, supported by BVAA travel funding, or alternatively submit comments for consideration. Such is the importance of these standards, a new dedicated sub sea 'Technical Expert Group' has been formed at BVAA led by my colleague Chris Williamson (BEL Valves).

I would like to close with my sincere thanks to my fellow working group members who give so freely of their time. Also to BVAA, particularly Martin Greenhalgh and Rob Bartlett for their support. My thanks also to BSI's Charlie Duncombe, for his skill in helping us prepare drafts and comments destined for the international standards groups.

## Marketing Focus

#### **Business Development**

It's been a time of considerable change for the BVAA's Marketing function - the last few months particularly.

Our former Marketing & Comms Manager left and I took over a number of his Marketing related duties. Our long-time Chairman of the Marketing Committee, Laurence Kettle (Rotork) also stepped down after magnificently leading this activity strand for many years. In January 2016 the group appointed a new Chair, Tim Guest (Zoedale) and additionally the BVAA Board extended and reassigned the Marketing Group to focus on *Business Development*' rather than steering our marketing function. So a few changes to be going on with!

#### **Supplier Day**

One of our greatest success stories this year has to be the new 'Supplier Day' held in October in Brighouse. Our plan was to bring together a small number of the major manufacturers in the association together with a range of our supplier members, and give them the opportunity to 'speed date' with a view to facilitating future business together.

A free-to-attend event, it proved far more popular than we'd ever imagined! Nearly 120



New BD Chairman, Tim Guest



Mini expo also a part of the proceedings



One-to-one meetings at the Supplier Day



'1-to-1 meetings' were facilitated, with many more informal ones in the mini exhibition next door. We received hugely positive feedback on the day and afterwards, and will definitely run the event again.

#### Valve User

The success of BVAA's very own Valve User (VU) magazine continues to astound. Nine years since its launch as a very modest 24 page newsletter, the magazine now regularly tips the scales at 120+ pages.

The strength of the magazine has to be its core ethos; to be a service to *members and readers*, not a profit-generator. Unrivalled in its coverage of valve industry news, application stories, product launches and company profiles, the magazine recipients are predominantly in the customer base, with an opt-in readership – not many publications can claim that, and very few indeed can legitimately claim to be produced – *at a subsidised rate* – solely for the benefit of the membership of a trade association and their customers.

C.35,000 hard copies are produced each year, with many thousands more appearing on the BVAA DVD – and of course there is

the dedicated, new-look valveuser.com website, where the accumulated 2000+ articles live on forever.

Members tell us they win business through VU, and BVAA recruits many a member from it too. More importantly, our customer base is, via VU, perhaps the best informed in the world.

#### **Exhibitions**

#### **Offshore Europe**

The bi-annual Offshore Europe show in Aberdeen in September was eagerly awaited by many, largely it has to be said as a bellwether as to the state of the oil and gas industry and particularly the UK Continental Shelf. Busier than many anticipated, the show was nevertheless quieter than the previous event and confidence in that important valve sector appeared somewhat dented.

On the up side, BVAA were able to see, in just a few days, almost half of the companies in membership, making it a particularly pleasurable and fruitful event for the Association.

Such was the sector malaise, a decision was made early on in the year at BVAA to



Isobel Goldthorpe, BVAA Marketing Manager



Just some of the BVAA members we met at Offshore Europe 2015.



BVAA Desktop exhibition at Score's Brighouse facility.

rein back from other international oil and gas related events, so Offshore Europe was our only major external exhibition this year. I did however attend the PILOT Share Fair event (also Aberdeen) in November and had some useful dialogue with our members' customers.

#### **Desktop Exhibitions**

Always popular with members, we managed to host three 'desktop' exhibitions towards the latter half of the year. These included one at SNC Lavalin in London in September, a return visit to Bechtel London in October, and another new venue in Score Europe's Brighouse facility – an event that spun out of the post-desktop debrief at Score's Peterhead event in February 2015.

There's no doubt the UKCS downturn has led to a slow-down in EPC project activity, and consequently our plan to extend the number of desktop events in 2015 was affected.

#### Market Reports/Intelligence

In November BVAA circulated that latest edition of our free-issue annual 'EIF Report' on the global valve industry. One of our most popular services, this includes a comprehensive 5 year forecast covering 63 of the world's most industrialised countries. The data is classified by nation, end-user industry and product type.

Our monthly series of 'industry intelligence' emails continues to grow, with more and more data sourced by ourselves. This bulletin includes news and project awards from the power, chemical/ petrochemical, oil & gas, and water industries. Well received, we look forward to adding content to it during the coming months, and perhaps additional market reports.

#### **Product Sourcing**

We appreciate finding a new supplier can be an uncertain exercise so, through our product sourcing facility, we make sourcing the best of the British Valve industry easy for our customers. The tool contains information searchable by product type, company name and brand name, (including the manufacturer's and any distributor's details) and can be accessed via the BVAA homepage, www. bvaa.org.uk. It's also distributed on our DVD via VU, at Exhibitions, events and via our extensive contact network.

Huge orders are reported to have been won through the service, so it's important for members to keep their data up to date, and for customers to note this service can save hours of time trawling the internet for potential new suppliers.



www.valveuser.com



BVAA's latest literature DVD

## Activities Report

#### **BVAA AGM**

A lively and well-attended 2015 AGM at Crewe Hall saw a continuation of the miniconference theme, with four speakers on topics as diverse as Export Finance, Biogas, Nuclear and UKCS Efficiency – each in their own way very thought provoking.

While members worked, their partners were hosted with a champagne lunch and fashion-themed partners' programme. A special presentation was also made later to outgoing Marketing Chair Laurence Kettle, who has completed 30 years' service on BVAA committees.

The evening Dinner and Ball was captivating, with a more 'atmospheric' stage set and cabaret provided by the amazing 'Out of the Blue' a Capella band – who kept the bar rocking until the early hours - and the equally indefatigable Star Band.

#### **BVAA Spring Conference**

The BVAA Dinner Dance is subsidised via member sponsorship – our grateful thanks once again go to Asco Numatics, KKI, Saco, Rotork and Zoedale who gave so generously.

Again generously sponsored by members HSP, Saco and Taylor Forgings, the BVAA Spring Conference was our best yet according to the feedback. Conference papers covered the use of CFD in the valve industry, development of subsea HIPPS valves, valve condition monitoring, API standards affecting the industry, the global oil and gas market outlook and more specifically the EIF world valve and actuator valve market forecast.

An extended Conference feature this year was the well-attended mini exhibition, which attracted 18 stands, mainly from our supplier members.

#### Golf

Again held in May at sun-blessed Celtic Manor, Wales, the Conference was followed by the usual members' dinner,



The pre-AGM mini-conference in session



BVAA Chairman David Millar presents Laurence Kettle (right) with his well-earned BVAA cufflinks.



Mini expo at the BVAA Spring Conference



Hugely entertaining 'Star Band'



Dave Anderson of Score presenting at the Conference





'Out of the Blue' – all Oxford undergraduates and not an instrument in sight.





Wiining team HSP - at the Inverurie 1st tee and later with the BVAA Cup

and then the Annual Golf Day. As keenly fought as ever, and supervised superbly by honorary Golf Director Rob Boycott (Cameron) the eventual winners were the defending Champions Valvestock with an impressive 85 points.

Our customer golf day in Scotland – also generously sponsored by GPEC/ATV and Schoolhill Hydraulics - was held this year at Inverurie at the recommendation of our Scots Golf Director, Peter Robertshaw (BEL Valves). And what a day it was! Again blessed with the most fantastic weather, despite the late September date, the tournament was won by 2013 winners HSP with a whopping 97 points!

A smaller golf day was also held at Cleckheaton at the kind invitation of Control Valve course lecturer Dave Martin (Valve Solutions) after the Brighouse Supplier Day - local knowledge obviously paying off as Dave's team won again!

#### **CEIR & VMA**

BVAA's Director Rob Bartlett and Technical Consultant Martin Greenhalgh participated in the CEIR Congress in Yorkshire in June. Although not members of this European body for some years, and with limited industrial valve activity of relevance to the UK, some of the sessions did prove useful with Rob participating in one of the panel sessions. BVAA has offered to participate in ongoing European Directives work to assist CEIR, as and when we can.

Rob Bartlett and Chairman David Millar attended the Valve Manufacturers of America Association (VMA) event in Naples, USA in October. The two Associations share many members and with ever-closer co-operation, such as at Valve World, find they have the same challenges and much in common.







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## Inside Rotork UK at Leeds



#### A sales subsidiary adding value to the experience provided to customers.

#### Introduction

The BVAA recently visited the headquarters of Rotork UK in Leeds. As a Rotork subsidiary, Rotork UK incorporates the UK sales and customer support operations for Rotork Controls, Rotork Fluid Systems and Rotork Gears. Leeds is also a Rotork stocking centre and houses one of Rotork's

UK Site Services operations, dedicated to 24/7 asset management support of companies and industries throughout the UK and Ireland.

Supported by regional centres at Bath and Glasgow, the modern 7,450 m<sup>2</sup> Leeds manufacturing and operation facility provides the focus for customers for the



complete suite of flow control products and services available from Rotork.

#### The role of the subsidiary

Richard Holbrook, the Regional General Manager of Rotork UK, explains the importance and benefits of the subsidiary structure, which he describes as: "A customer facing business providing products from all Rotork's divisions and Site Services locally. It gives us a clear focus on customers, enabling the local delivery the complete sales and fulfilment processes, after sales care and service support. The development of close customer relationships assists the provision of complete solutions, drawing on the full range of Rotork products. And, of course, it makes it easier for the customers to deal with Rotork."

The facilities at Leeds support Rotork UK as the leading supplier of valve actuation solutions and service support to the UK power, water and chemical industries. The site is also a Centre of Excellence for complete valve actuation solutions, serving customers with project management encompassing assembly, test and inspection, installation, commissioning, servicing and preventative maintenance. The extensive workshop and valve automation centre is staffed by engineers trained and qualified to deliver overhauls, repairs and factory fitting of actuators to free-issued valves. Field service engineers operate throughout the country providing preventative maintenance, repairs. upgrades, installation, commissioning,

The Leeds facility houses one of Rotork's UK



health checks, loan actuators and shutdown services.

Richard continues: "When an end user needs to replace an actuator or automate a manual valve there is often more work required than just supplying the actuator. As a sales and service subsidiary we have the capabilities to design and deliver complete mechanical and electrical packages and system integration with the control room."

"For some power station customers we remove, overhaul, re-install and commission over 200 actuators in our workshop during a maintenance shutdown. When requested we carry out additional actuation projects simultaneously to ensure that customers make the most of their shutdown time. Tasks include preventative maintenance, making sure actuators are fully functional, upgrading



Leeds is the manufacturing and R&D centre for Skilmatic electro-hydraulic actuators

and replacing obsolete products, overhaul and testing both on and off-site."

Framework agreements are an important part of Rotork UK's activity. Water company frameworks include United Utilities, Seven Trent, Yorkshire, Thames, South West, South East, Wessex and Scottish Water.

#### Manufacture and test

The Leeds facility is the worldwide headquarters of Rotork Gears, which manufactures an extensive range of valve gearboxes, both quarter-turn and multi-turn, designed to withstand harsh operating environments including subsea and nuclear. Some gearbox ranges are manufactured at Leeds and all of them are tested in the facility. The emphasis on testing is important, as unlike some other gearbox manufacturers, Rotork Gears tests every size of all its products. Matthew Knapton heads the team at Leeds that is responsible for research, product development and testing of the entire Rotork Gears portfolio of products manufactured in the UK, The Netherlands, Italy, China, India and the USA. He explains: "We are investing heavily in new products and new equipment with which to test them. For example, our engineers are currently completing the development of a new rig which is capable of testing gearboxes with up to 400 tons thrust and 100,000 Nm output torque.

"At any one time specialist design engineering teams are working on several projects, optimising designs, meeting new specifications, designing new models and

performed by Rotork Gears at Leeds

increasing the output performance range of products at both ends of the scale. They are assisted by the new product introduction team, which takes the product from design to production. Two of the main areas of activity at the moment involve new products and the development and testing of products to meet the latest specifications for the nuclear power industry."

In addition to gearboxes, Rotork Gears also provides a complete range of mounting kits, chain wheels, pedestals and accessories for the valve and actuation industry.

Much of Rotork Fluid Systems attention at Leeds is centred on the Skilmatic range of intelligent electro-hydraulic failsafe actuators for safety related valve control. Skilmatic activity includes manufacturing, research, development and testing, sales and after sales support for the worldwide Rotork sales network. In addition, as a Rotork Fluid Systems Centre of Excellence, the Leeds facility provides sales, custom engineered solutions and stock distribution of all Rotork pneumatic, hydraulic and electro-hydraulic products throughout the UK and Ireland.

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2016

MASTERCLASS

## Adding Value to the Motor Operated Valve: Part 2

The **valve control** market faces increasing pressure from commoditisation of its products. Here's how to avoid a race to the bottom.

n the second of four Masterclass articles we continue to look at how AUMA Actuators Ltd addresses the challenges of commoditisation in valve applications. The series aims to show how modern electric actuators create value as they are specified, installed, used and maintained. Each article focuses on a different stage of the product's life cycle:

- Control system design and actuator specification
- Plant installation and commissioning

- Plant operation
- Maintenance and asset management.

Each stage involves different teams with diverse requirements. Together, the four articles consider how an integrated control and actuator solution better satisfies customer needs and adds real customer value.

#### **Design and specification recap**

In the first article (Valve User, winter 2015 p52) we saw how the powerful control features of modern actuators bring



Figure 1: AUMA's modular actuator concept allows key components to remain separate right up to the installation phase – with significant savings in project time.

benefits at the design stage. For example, analogue-to-digital (A/D) converters built into AUMA actuators can simplify control system design by avoiding the need for flow and level sensors to have their own fieldbus A/D converters.

In addition, variable-speed operation as found in the SIPOS actuator series can eliminate water hammer, reduce valve seat wear, improve emergency shutdown performance, and provide near-linear performance from lower-cost non-linear valves. The built-in inverter for the drive motor can cut cabling costs without sacrificing torque, and even allow solarpowered operation in remote locations.

In this second article we move on to show how actuator design features affect the ordering, installation and commissioning phases.

#### Modularity saves critical weeks during the supply phase

Modular design of products is a popular way to cut costs, speed delivery and increase flexibility. AUMA takes modularity beyond the factory gates by allowing modules to remain separate right up to the installation stage. This can cut weeks from both the delivery schedule and the time needed for site work.

From the user's point of view an AUMA actuator has three basic components: the electrical connector, which takes the form of a large plug and socket; the control unit; and the main body, incorporating the valve mounting, gearbox, motor and hand wheel (Figure 1).

On-site modularity allows each of these components to be routed to the appropriate subcontractor. The valve mounting, motor and gearbox can go straight to the valve supplier or pipework contractor as soon as they are ready, without waiting for the control specialists. The control unit can go to the control subcontractor, and the electrical connector to the electrical

Project plan using convention	nal	haro	l-wi	red	actu	ato	rs											
Week number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Actuator order / build																		
Electrical termination / test																		
System commissioning																		
Total project time																		
Ductors along uning ALINGA and						le le					-							
Project plan using AUMA act	tuat	ors v					elec						17	14	15	16	17	10
Week number	tuat 1	ors 2	with 3	ren 4	nova 5	able 6	eleo 7	trica 8	al co 9	onne 10	ctio 11	n 12	13	14	15	16	17	18
, , , ,	tuat 1	ors 2					eleo 7						13	14	15	16	17	18
Week number	tuat 1	ors 2					elec 7						13	14	15	16	17	18
Week number Actuator order / build	tuat 1	2					eleo 7						13	14	15	16	17	18
Week number Actuator order / build Electrical termination / test	tuat 1	2					elec 7						13	14	15	16	17	18



Figure 4: "Plug-and-play" components greatly reduce the amount of site work needed to install and commission motor operated valves.

Figure 2: By allowing key phases to overlap, on-site modularity can cut weeks from the schedule.

subcontractor. Allowing the wiring, programming and commissioning to overlap can save many weeks on tight project timescales (Figure 2).

#### Lower costs for power and data cabling

Although the main electrical connector is a relatively simple and low-cost component, it is key to the time savings shown in Figure 2. As well as power, the connector incorporates Profibus terminals as required. This means that the electrical contractor can install and test both power and control cabling in advance. As soon as the pre-commissioned control unit arrives on site, connecting it up is then a simple "plug-and-play" operation that does not even necessarily require an electrician.

In some cases, use of variable-speed actuators such as the SIPOS series can

reduce the cost of power cabling and standby power supplies. With its built-in inverter drive, the SIPOS actuator develops full torque at low speed and without the high inrush currents typical of standard motors. As a result, cable diameters can be smaller.

Savings in data cabling, meanwhile, can result from the external I/O facilities built into AUMA actuators. With each actuator able to provide two 4–20 mA analogue and 4 digital inputs, 12 digital outputs and a 24V power supply, many field sensors can be connected to actuators rather than requiring their own Profibus cables, segment couplers and PLC I/O modules.

#### Installation and commissioning are quicker and safer

Modular design eases applications in confined spaces – and helps contractors work around any unforeseen problems –

because each of the major components can be installed in any of four rotational positions, giving a total of 64 configurations (Figure 1). Where space is really tight or where harsh environmental conditions such as high levels of heat or vibration exist, a pre-wired umbilical cable allows the control unit to be positioned up to 100m from the valve (Figure 3).

The ability to test and pre-commission before the equipment arrives on site makes site work easier, quicker and safer. For instance, the motor operated valve can now arrive with the pipework, pretested and stroked, and with end stops and torque limits set. Cabling can be delivered as complete looms cut to length, assembled and tested.

As a result, final assembly and testing requires fewer contractors and less site work, including in potentially hazardous situations such as working at height or in confined spaces. Plugging in the electrical connector is a simple operation, and subsequent final commissioning is easier because shop-based pre-commissioning has largely eliminated the risk of errors appearing at the last minute (Figure 4).

In this second article we have seen how site modularity can cut weeks from the supply phase and simplify site work during installation. In the next one we will look at how choosing the right actuator can benefit day-to-day plant operation in terms of energy efficiency, ergonomics and controllability.



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#### and commission motor operated valves. because each of the major components can be installed in any of four rotational

### Small Yet Mighty, **Johnson Valves** Launches a New Range of Electric Actuators

**Johnson Valves** have celebrated their 60th Anniversary by investing in a new in-house actuation department.

This third generation family company has formed partnerships with a number of UK suppliers, introduced a new specialist actuator assembly and technical sales team, plus introduced a new range of electric actuators to the UK market.

Johnson Valves' new electric actuator range is more powerful, smaller and



lighter than other standard models on the market. Developed in South Korea the new range from Johnson Valves has excellent torque outputs that enable users to select an actuator that is more compact and lighter than they might normally have to choose. The actuator's compact design, robust construction and simple connection interface make it ideal for a wide variety of industrial and building services applications. The actuator is manufactured in an ISO9001 Quality approved facility and is certified with CE and SIL. The unit is IP67 rated as standard.

Johnson Valves' new range of electric actuator packs a powerful punch yet is significantly smaller and lighter than the current industry standard.

The new actuator offers impressive torque per £, enabling users to make significant savings against budget when specifying as they are able to use this small unit for much larger valves than the competition. In addition the high torque per kilo rate facilitates weight and space reduction with no loss of power.





#### The new catalogue showcases Johnson Valves full range of valve actuation products

By adding this new actuator to their offering, Johnson Valves have enhanced their already extensive product range. With a reputation for expert sales advice, comprehensive stock and excellent customer service Johnson Valves supply to all types of industry and for a broad range of applications. As well as their pneumatic and electric actuators, Johnson Valves stock all types of valves including complete ranges of marine, steam, industrial and process valves plus pressure gauges and other ancillary fittings.

Managing Director, Stuart Robertson said, "Rather than reflecting on the last 60 years, Johnson Valves have spent their anniversary year developing new ranges and technical expertise to enable us to provide our standard, high level of service to a broader range of customers and industry types."

Johnson Valves stock pneumatic and electric actuators with various ball and butterfly valve options along with a large range of actuation accessories at their modern facility in Southampton. Their inhouse design team is also able to specify and supply all other types of actuator package. The company has launched a new catalogue that showcases their full range.

#### JOHNSON valves

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### Parker Bestobell Marine Launches New Compact Valve for Marine Sector

**Parker Bestobell Marine**, a world leading supplier of cryogenic valves for ships, has launched a new compact version of its innovative Float Isolation Valve (FLIV).

he compact FLIV, which is 150mm in diameter and just 600mm high, was developed to cater for the use of smaller diameter floats that are now being specified by shipyards for secondary level monitoring systems on LNG carriers

Duncan Gaskin, Sales Director at Parker Bestobell Marine, said: "It is really exciting to be launching our new compact FLIV. Our original FLIV valve has helped us secure a large market share in supplying LNG Carriers and this latest version is set to meet demand going forward."

The patented Parker Bestobell Marine FLIV is installed on top of the cargo tanks of LNG carriers and isolates the gauge and float from the cargo tank. These essential valves prevent boil-off gas from the cargo tanks, which could potentially be extremely dangerous.

Parker Bestobell Marine's original FLIV valve is available in 300mm and 200mm diameters. The first FLIV was supplied to an LNG carrier in 2007 and since then has been fitted to over 120 LNG carriers, making it the preferred choice for the majority of ships built since then.

FLIV was originally designed to work in conjunction with the secondary float system supplied by Whessoe (now Wartsila Tank Systems) and has now been adapted to work with a similar system manufactured by Henri Systems.





The FLIV was designed by Bestobell Valves back in the mid 2000's to eliminate the problems associated with gate valves that were originally used to isolate the secondary float level gauge from the cargo tanks. Unlike gate valves the operation of the valve eliminates the risk of cutting the tape or damaging the float during operation should the valve be closed accidentally, and when the float is still in the tank. This can potentially lead to the float falling back into the cargo tank and having to be retrieved. The FLIV includes an integral inspection chamber from which the float can be serviced, thus eliminating the need for a separate fabricated component. An open/close indication, and lock should ensure that the crew members cannot close the valve when the float is still in the cargo tank.

Parker Bestobell Marine has been a world-leader in the manufacture of cryogenic valves for industrial gas applications for over 50 years and has over 10 years' experience in supplying to the LNG marine markets. Bestobell's valves are widely used on LNG Carriers, and FSRUs (Floating Storage Re-gasification Unit). The company designs and produces valves to meet specific requirements and has supplied to all the major shipyards building LNG Carriers around the world.



Tel: 01142 240 000 Email: sales@bestobellvalves.com Web: www.bestobellvalves.com Saint-Gobain Seals Designs and Manufactures Extraordinary Cryogenic Seal for NASA Space Launch System (SLS) Project, Supporting Efforts to Propel Human Beings Deeper into Space



Saint-Gobain Seals reaches a highperformance mark by producing a cryogenic seal of exceptional size (more than six feet wide) for NASA's "Space Launch System (SLS)" project, which is commissioned for deeper space exploration -- beyond low Earth orbit (LEO) to an asteroid, Mars and other distant destinations.

Ithough this launch system replaced the retired Space Shuttle, it was built using proven hardware from the space shuttle era and previous successful exploration programs as well as cutting-edge tooling and manufacturing technology in order to reduce development time and cost. SLS' first mission, known as



Different Types of Saint-Gobain Seals OmniSeal® Spring-Energized Seals



Saint-Gobain Seals' OmniSeal® RACO™ seal used in cryogenic tanks for rocket propulsion

Exploration Mission 1 (EM-1), will go into space in late 2018 and uses Saint-Gobain Seals' OmniSeal® RACO™ spring-energized seals. Designing and manufacturing large seals of this size continue to be very challenging in cryogenic applications; however, Saint-Gobain Seals' long standing experience of designing sealing solutions for the space industry in various demanding conditions have made the difference to customers who need successful and proven solutions.

This new large seal marks the continuation of Saint-Gobain Seals' sealing and polymer products used in space exploration and their collaboration on NASA projects, starting as far back as the Space Shuttle Program and progressing with the International Space Station, Falcon 9 rocket, Atlas V launch vehicles, Delta IV Heavy rocket, Mars rover Curiosity, and now the SLS project.

Since OmniSeal® seals handle extreme pressure conditions ranging from vacuum to several hundred PSI (a hundred bar) and temperature conditions ranging from cryogenic to many hundreds of degrees, they are ideal for the SLS, the world's most powerful rocket. Since the launch vehicle is designed to be flexible and evolvable, being upgraded over time with more powerful versions, the seals will be able to support future demanding payloads including robotic scientific missions to places such as Mars, Saturn and Jupiter.

The evolved configuration development of the SLS will stand 384 feet tall, weigh 6.5 million pounds and generate 9.2 million pounds of thrust for EM-1 at liftoff. The 22-day EM-1 mission will help confirm the integrated system performance of the SLS launch vehicle and unmanned Orion capsule as it travels a stable orbit beyond the moon and returns to Earth. The mission will break the distance record reached by the most remote Apollo spacecraft, and then 30,000 miles farther out (275,000 total miles). The second SLS flight, Exploration Mission 2 (EM-2), will carry four astronauts beyond low Earth orbit for the first time since the Apollo 17 mission in 1972.

To learn more about Saint-Gobain Seals' OmniSeal® product line, other product lines and its strategic business unit, visit their website, follow their Twitter or connect on LinkedIn.



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## Roto Hammer Chainwheels on the **Rotork Valvekits** Menu

The acquisition of Roto Hammer adds a market leading and comprehensive range of valve chainwheels to the range of valve mounting kit and associated services provided by **Rotork Valvekits** 

he well-established Roto Hammer range of chainwheel products enables hard to reach and stubborn manually operated valves to be safely operated without risk of injury. During the company's 50 year history its range of products has grown to now include valve extensions, floor stands, gear operators and customised solutions.

Rotork Valvekits supplies a vast array of valve and actuator related products, including mounting kits, extension stems, locking devices, worm gears, bevel gears, accessory mounting brackets, linkages and panels for the fitting of filter regulators, positioners and solenoids.

At Valvekits factories in the UK and USA, products are created in-house by highly

trained design teams and manufacturing is performed with the latest CNC machinery and lathes. Mounting kits, in mild and stainless steel, are designed and manufactured to the exacting standards of ISO 9001 and can be supported with stress calculations and final-element analysis for customer peace of mind.

Swift delivery is another Valvekits service benchmark; customers can obtain a sameday quotation in many cases, often enabling delivery to be achieved within 48 hours.

The addition of Roto Hammer complements these products and services, further strengthening Rotork Valvekits' capabilities as a supplier to the global valve manufacturing industry.



#### **rotork** Valvekits

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## **AV Actuators** Introduce Compact Smart Electric Actuators



New to the European market, the **AVA electric valve actuator** brings a wealth of features, including a 1 second working time, in a housing the size of a drinks can.

he new AVA range of electric valve actuators, available from the exclusive UK distributor AV Actuators Ltd, brings a new dawn to the electric actuator market. Its most popular model, covering 20Nm, is smaller than



a soft drink can, making it a far more suitable size match to the volume 1/2" to 2" market, ideal for brass, plastic and stainless steel ball valves.

IP67 AVA electric actuators offer a base model that covers on-off applications where only position indication and a mechanical manual override is needed. Keeping the feature set low reduces manufacturing costs and a very competitively priced actuator is the result.

The smart AVA actuator goes to the other end of the spectrum and offers a truly impressive standard feature set, bringing a local control feature which uses external push buttons and a bright OLED screen to run through options and their associated parameters.

As standard the smart versions use a digital position sensor, push button manual override and mechanical override, a local visual position indicator, remote end of travel confirmation, 2 types of speed control, push button end of travel adjustment and 3 position configuration. Mounting conforms to the industry standard ISO5211 and a female octagonal drive.

Impressive as this standard feature set is, the AVA actuator comes into its own when its options are considered, and confirm that the AVA actuator fully deserves its smart actuator tag line.

The AVA's failsafe function does not use batteries and solves the age old anxiety of battery reliability. Digital position sensing and monitoring brings high accuracy to the modulating function, the modulating function even monitors the positioning accuracy and auto adjusts to ensure a minimum of 1% is achieved.

Other options include bus communication using either Modbus, or Canbus, wireless function including Modbus, timer function, and alarm outputs. Smart.



Tel: 01386 552 369 Email: sales@avactuators.co.uk

## **Orseal Valves** Utilised in BP's £3bn Quad 204 Offshore Project



Quad 204 is the £3bn redevelopment of the Schiehallion and Loyal fields, located 175 km west of Shetland in Blocks 204 and 205 of the UK Continental Shelf, at water depths of 300m to 550m.

he project is one of the most significant engineering challenges BP and its partners have ever undertaken, to include a new state-of-the-art floating production storage and offloading (FPSO) vessel, the renewal of much of the subsea infrastructure network, and an extensive drilling programme.

Winning the BP contract from a UK process company, Orseal needed to supply valves suitable for this harsh offshore climate, where full documentation and traceability were of paramount importance, with all European-sourced raw materials used in the valves having full Qualification Test Records (QTR) from the foundry. The project is completed to NORSOK Standards M630 and M650, the Standards developed by the Norwegian petroleum industry that build on over forty years' experience from the Norwegian Continental Shelf.

For the Quad 204 project, Orseal supplied a range of valves from 1/2" to 3", both manual and actuated, and manufactured in super

titanium B348 Gr2, extended lever operated & locking

duplex stainless steel for use in vacuum pump skids. Orseal provided super duplex stainless steel due to its specific benefits as compared to either austenitic or ferritic steels, which make it most suitable for the offshore environment of the North Sea. The greater strength of super duplex offers a weight reduction that can lead to significant transportation and assembly cost savings, with an associated reduction in environmental impact. Super duplex stainless steel's corrosive resistance and its ability to withstand the damaging effects of crevice corrosion offer a longer lifespan than standard steels - ideal in an offshore environment.

Installation of the Quad 204 subsea pipelines began in 2015 and this year will see the installation of all the new pipelines and the new FPSO, the Glen Lyon, complete with Orseal-supplied special products.

For more information on this project, and to find out more about Orseal's range and consultancy services, please contact us.



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## Flow Technology for Fish Ladder

1600mm DeZurik Eccentric Plug Valve Accurately Controls Flow For **Fish Ladder** Attraction Pool

USA West Coast engineering firm has designing a fish ladder as part of a water supply project for a public utility district.

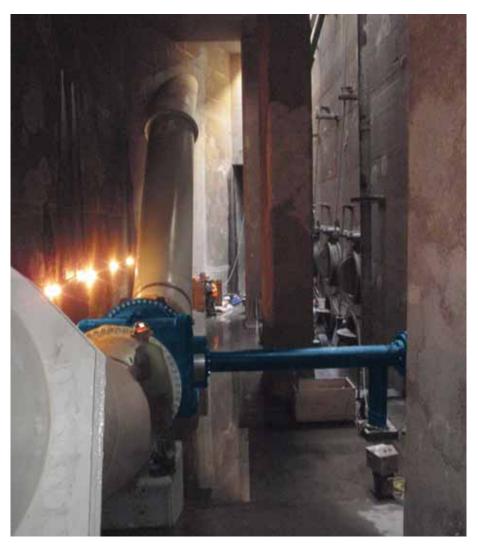
A fish ladder, constructed beside a dam, allows migratory salmon to bypass the dam and safely reach their spawning grounds upstream. The fish ladder creates a series of ascending pools that allow the fish to swim from pool to pool until they reach the river above the dam. Water flow at the proper velocity at the entrance pool of the fish ladder is critical to attracting fish to enter the fish ladder.

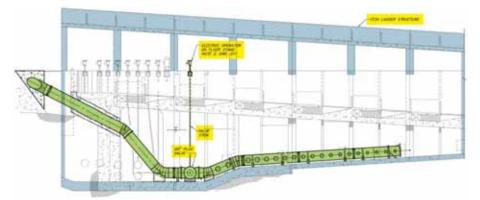
The client needed a control valve that would provide high flow capacity and handle the high velocity required by this application. The attraction water supply for the fish ladder design included a 66"diameter pipeline with a control valve and separate isolation valve. The control valve was required to provide level control for the fish ladder supply pool water. The client maintains a six foot elevation head differential with the control valve to provide proper flow velocity across the fish ladder "steps" for the fish to swim up and over the ladder steps.

The DeZurik Eccentric Plug Valve was found to be an ideal control valve choice due to the high velocity and potential cavitation in this application. The maximum velocity at high flow was 38 feet / second with head pressure of 4 bar; because the eccentric plug valve features low dynamic torque and cavitation resistance, it could handle the velocity of the pipeline.

A butterfly valve was considered for the valve application, but was rejected due to the high velocity. All other valve designs the engineers considered required much more costly piping design to accommodate the high velocity and pressure drop.

A 66" DeZurik Eccentric Plug Valve with a gear unit and a modulating electric motor actuator with manual override was installed. The actuator was mounted on a floor stand connected by a 55 foot extension to the valve in the pipeline below the fish ladder.





The valve was installed per DeZurik's recommendation with the plug shaft horizontal and seat downstream, flow-to-close. This orientation was based on flow modelling to offer the longest valve service life. The 66" DeZurik Plug Valve met the customer's complete list of goals by providing a reliable control valve solution that will endure the test of time

For more information on the DeZurik plug valve contact the sales team at Flow Technology services.



Tel: 02890 841 004 Email: info@flowtechnologyservices.com Web: www.flowtechnologyservices.co.uk

#### **SMC** Releases Easy to Wire Pressure Sensor with M12 Connector for General Fluids



**SMC** has launched the PSE570 Series to meet increasing demand for a general fluid pressure sensor that is easy to connect and robust enough to withstand high proof pressure and withstand abrupt surges.

SMC, the worldwide leading expert in pneumatics, has designed an easy to install pressure sensor for noncorrosive gas or liquids that reduces operating costs.

The PSE570 is suitable for a wide range of applications such as liquid coolant pressure control, discharge pressure control for compressors and suction verification of work pieces containing moisture.

It has been designed with efficiency in mind and is very quick and simple to wire thanks to its M12 connector. Able to withstand unexpected surges in pressure, up to three times greater than the rated pressure, the PSE570 is also able to cope with sudden voltages as high as 500 V AC, reducing the risk of damage and extending its operating life.

A spokesman for SMC said: "By listening to our customers, we've been able to develop an easy-to-use pressure sensor for general purpose fluids. The PSE570 lasts longer than other sensors of its kind and is simple to connect, making it a very versatile product and a great addition to our existing sensor range."

SMC's extensive pressure sensor range includes compact and lightweight solutions for pneumatic applications and general purpose sensors applicable for a variety of gas and fluids. All of these can be controlled from a remote location thanks to SMC's range of controllers.

SMC added: "The addition of the PSE570 Series completes the cycle of sensor options for our customers. Whatever their requirement - whether it's working with highly corrosive fluids or just air - SMC has a sensor to meet our customers' needs."

For more information on the PSE570 pressure sensor, visit the SMC 'new products' page on their website.



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## **SIPOS' USB Interface Initiative**



SIPOS Aktorik R&D Manager Michael Molle pictured with a SIPOS SEVEN USB.

A USB interface for the new **SIPOS SEVEN** actuator offers a number of advantages for electric actuation processes. Benefits reported by SIPOS Aktorik include enhanced data collection and set-up flexibility.

ffering simplified data collection and a storage device for documentation, the USB capability supports simplified plant management activity. The ability to manage process control set-up using either a laptop or USB battery enables the programming of actuator parameters without mains supply. Rapid, straightforward cloning of actuator settings is achieved via easy upload/download capabilities and time stamped event logging supports process optimisation.

Commenting on the introduction of a USB interface to SIPOS Aktorik's stable of electric actuation solutions, R&D Manager Michael Molle said:

"The idea of communicating with the actuator using a standard interface was important to me from the inception of the SIPOS SEVEN project. I am delighted to report that our USB interface has proved to be a real winner in a variety of situations. From commissioning through to operator handover, it is a valuable feature that supports the actuation industry, in particular the work of the contractor."

The SIPOS SEVEN actuator offers a number of features including the USB interface to provide a product that enables designers, valve manufacturers and power plant operators to work more efficiently. The SIPOS 5 actuator continues to be supplied and supported.



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### Russian Refinery Adopts New **AUMA Actuation** Technology



The JSC TANECO Oil Refining and Petrochemical complex located in Nizhnekamsk, Russia has purchased **AUMA's** new actuation solution for lift plug valves.

The established supplier of modular, electric actuation technology supplied actuators for 28 lift plug valves to SchuF, an international industrial valve company. Commissioning is scheduled for the end of 2015.

With a five decade history, and over 40 years supplying the oil and gas sector, AUMA has strong credentials providing actuation products for the petrochem industry. The contract was fulfilled by local subsidiary, AUMA PRIWODY. Earlier this year, the company announced its new approach for lift plug valve automation that combines two actuators to simplify operation and significantly reduce wear.

As part of the JSC TANECO order, 28 SAEx .2 multi-turn actuators, combined with GK multi-turn gearboxes were supplied along with 28 SAEx .2 actuators paired with GS part-turn gearboxes.

JSC TANECO is part of the Tatneft group, one of Russia's largest oil and gas companies. Construction of the refinery complex commenced in 2005. The scheme is one of Tatneft's largest recent projects.



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## **Flowstar** Now Carry £500k of Nabic with Online Visibility of Stock



Flowstar Ltd, the Hull based stockist of safety, relief and reducing valves. Has increased its stock holding of Nabic Safety, Relief and Plant Room Valves.

lowstar have increased their stock holding of Nabic Safety, Relief and Plant Room valves with approximately £500K now on stock. Flowstar also make it easy to buy with live online visibility of stock levels (contact us for access), pricing and datasheets. Orders received before 5:00pm will be despatched the same day, altogether making your purchasing easier and quicker.

Nabic are one of the UK's leading manufacturers of gunmetal safety valves and relief valves. NABIC have long been recognised as the industry standard for

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#### NABIC 542

Part Code	Body Marking	Size & Connections	Quantity on Stock	Nabic List (Ex-Vat)	List less 15% (Ex:Vat)
N-542-015	DN15	1/2" IISPP Female Inlet x 1/2" ISPP Female Outlet	67	6109.95	£93.45
N-542-020	DN20	3/4" BSPP Female Inlet x 3/4" BSPP Female Outlet	33	£126.20	\$107.27
N-542-025	DN25	1" 8SPP Female Inlet x 1" 8SPP Female Outlet	88	6105.81	\$141.79
N-542-032	DN32	1.1/4" BSPP Female Inlet x 1.1/4" BSPP Female Outlet	66	6232.13	\$197.31
N-542-040	DN40	1.1/2" #SPP Female Inlet x 1.1/2" #SPP Female Outlet	42	6310.96	6264.32
N-542-050	DN/50	2" BSPP Female Inlet x 2" BSPP Female Outlet	47	£392.40	6333.54
N-542-065	DN65	2.1/2" #SPP Female Inlet x 2.1/2" #SPP Female Outlet	31	6351.00	£468.40
N-542-000	DN80	3" 85PP Female Inlet x 3" 85PP Female Outlet	17	6788.92	£670.50
N-542-080	DNSD	"" Use set them to the pressure you require in hou			£670.58

commercial and industrial safety and relief valves for hot water and steam applications.

#### **Online Visibility of Stock**

You can now view live stock levels of Nabic valves online along with the official list price, your price (with discount applied) and datasheets. This allows you to instantly check stocks and order with confidence.



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## Saunders®IDV Presents an Updated Image

**Saunders**<sup>®</sup>, part of **Crane ChemPharma & Energy** and an international leader in the design, development and manufacture of diaphragm valves, has embarked on a number of initiatives over the past year to update their brand image.

Superior Sealing Solution for Chemical and Abrasive Processing Applications.

#### Key features include:

- The Science Inside<sup>®</sup>: Proprietary diaphragm technology provides unique sealing solution and complete emissions control.
- Unmatched Expertise & Innovation: Comprehensive selection of polymers delivers superior corrosion and abrasion resistance for a wide range of demanding applications, since 1928.
- Efficient Operation: Top entry design enables in-line maintenance capability to reduce plant down-time.



#### Saunders®IDV Key Features and Benefits

#### **Key Features and Benefits**

In an effort to ensure a consistent message is being delivered to their global customers, Saunders<sup>®</sup> has defined three key features and benefits highlighting the vast experience and knowledge of the company and the main advantages of their valve design. These key features and benefits serve to differentiate Saunders<sup>®</sup> both from other diaphragm valve manufacturers, as well as competitor valve types, and are used to communicate to potential, as well as existing, customers. Accordingly, a dedicated two page flyer detailing the key feature and benefits, along with a high level summary of the Saunders®IDV product range has been issued.

#### Animations

Working with local, UK based engineering animators, Saunders<sup>®</sup> have developed a number of animations highlighting the subjects detailed in the three key features and benefits, as well as depicting the use of the Saunders<sup>®</sup> industrial diaphragm valves in service.

In addition, a diaphragm replacement procedure animation has been produced

to aid maintenance personnel and ensure this vital task is completed correctly, maximising the service life of the newly installed diaphragm.

Supported by real-time commentary, these animations serve as valuable tools to help visualise the operation and concept of the industrial diaphragm valve, and explain the content of the three key features and benefits.

#### Literature

In addition, Saunders  $^{\ensuremath{\mathbb{B}}}$  has also refreshed their existing literature offering. Their



#### Saunders®IDV Product Overview Brochure (left) and Technical Catalogue (right)

product overview brochure, primarily aimed at end users/customers, has been updated to reflect current product offerings, and was extended to 24 pages to accommodate valve and component ordering information. This brochure is also available in the following languages: Spanish, German, French, Russian and Chinese.

A new 60 page technical catalogue has been created; this catalogue includes additional engineering details with respect to the 24 page brochure, and its primary purpose is to aid sales persons when dealing with technical customer requests.

#### Paint Upgrade

For orders placed from 1st March 2016, the Saunders®IDV team are launching their new look range of ES Modular actuators. The new blue colour (RAL 5002) with matt finish serves to update our image, clearly distinguishing the Saunders® brand from our competition, and is the first step in the general upgrading of Saunders® valves paint specifications.

In addition, this new coating offers improved corrosion resistance in comparison to our existing standard coating. This ensures further enhanced performance in the types of corrosive services which have become synonymous with the Saunders®Industrial Diaphragm Valve. Further details regarding this coating change can be found on the Crane Partner Portal.



Tel: 01633 486 666 Email: news@cranechempharma.com Web: www.cranecpe.com

#### **IMI SSF** Celebrates 50 Years of Fastener Manufacturing Excellence



In 2015 **IMI SSF** (Stainless Steel Fasteners Ltd) celebrated a great accomplishment, reaching its 50 year anniversary. A huge milestone, this achievement shows what can be done when a business focuses on exceptional quality, customer service and honesty.

ounded in 1965, IMI SSF (Stainless Steel Fasteners Ltd) has developed from being a supplier of Special and High Integrity Fasteners produced from variations of Stainless Steel to one that now encompasses a wide range of material types to support exacting and changing Industry needs. The business is situated in Chesterfield in Derbyshire and is close to the UK home of Steel - Sheffield. IMI SSF also became the first fastener manufacturer to achieve NORSOK accreditation by Statoil.

IMI SSF are a global supplier and some of the market sectors supplied include, Oil & Gas, Energy, Defence, Marine, Valves and Pumps and other Industries where Quality, Integrity, Reliable Service, Full Traceability & Certification are the clients demands and expectations. There are a number of projects that IMI SSF are currently supplying to, most notably, the Johan Sverdrup project.

Being part of IMI Plc only increases our strength, and the business looks forward to the times ahead. Whilst there are many challenges in the industry, there are also many opportunities. IMI SSF operates with an open door policy and always gives a warm welcome visitors.

If you are ever in the area, or want more information on the products IMI SSF manufacture, then do not hesitate to get in touch. If you are working on any projects such as the Johan Sverdrup, IMI SSF can certainly help.



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#### www.rotork.com

## Leengate Valves Further Cement Ties with Valbia, Italy

### Leengate Valves & ValBia

**Leengate Valves**, the UK's leading valve wholesaler, are proud to bring to the market the brand new Valbia electric actuator with aluminium polyester powder coated housing.

#### Designed & manufactured in Italy, these actuators offer:

- IP67 rated enclosure
- Manual override
- Visual position beacon indicator
- 4 limit switches (2 motor & 2 auxiliary)
- Auto/Manual changeover switch
- Captive cover bolts
- Internal anti-condensation heater.

These actuators have a torque range of 30nm to 350nm in on/off design, battery backup fail safe, modulating positioner 4-20ma/0-10v, battery backup fail safe with positioner, on/off with potentiometer, all with 90, 180 & 270 degree operation options.

Leengate Valves have had great success over the past 3 years with the valbia techno polymer housed electric actuators and envisage the ALUMINIUM actuators will further cement the relationship between the two companies.

In addition to the offering of these new valbia aluminium electric actuators, Leengate Valves also have a highly experienced in-house actuation team; equipped with facilities needed to offer fully assembled and tested actuated packages with exceptional efficiency and value. The vast range of actuated packages available include ATEX Rated and Firesafe Certified carbon steel and stainless steel two way ball valves; flanged PN16 and ANSI 150, ATEX rated carbon steel and stainless steel ball valves in three way configuration; flanged PN16, carbon steel and stainless steel three piece, full bore, ATEX rated ball valves, screwed BSPP, NPT and socket weld.

Leengate Valves also exclusively bring to the UK market the full range of Ghibson double offset high performance butterfly valves in carbon and stainless steel materials with RTFE & Inconel seating options, which include ATEX rated and Firesafe Certified wafer pattern and fully lugged PN16 and ANSI 150 options.



Tel: 01773 521 555 Email: info@leengatevalves.co.uk Web: www.leengatevalves.co.uk

## New Product: New Flange Isolation Standards



A new Shell TAT approved product from **James Walker** is set to bring new standards of flange isolation to critical applications in the oil, gas and other processing industries.

#### No compromise

Isolation gaskets are by their very nature a compromised product as they try to fulfil both sealing and isolating roles at a wide range of pressures and temperatures. However, by successfully optimising each component of its InsoLion<sup>®</sup> flange isolation kit, James Walker has produced an isolation gasket with the widest possible performance envelope.

Using the best possible materials and optimising component design plus careful consideration of the positioning of the sealing element allows a single gasket design to be specified for plantwide use across the majority of flange specifications including ANSI, API, ASME, EN, BS, ISO and DIN, saving on inventory costs and simplifying maintenance regimes.

The design of the InsoLion<sup>®</sup> gasket and location of the springenergised sealing element ensures that the product will seal all major flange types including RTJ (ring type joint), raised face and even instances where mismatched flanges occur.

#### **Ultra-low fugitive emissions**

In pre-launch testing on an Amtec TEMES fl.ai1 test rig, InsoLion® achieved outstanding fugitive emissions levels of just 4.3 E -13 Pa.m³/s/mm, significantly lower than the parameters of Shell Tightness Class A.

#### Shell MESC standard

Specifically designed from the outset to meet the industry's most stringent requirements, InsoLion® has been tested and obtained Shell TAT approval to the requirements of both MESC. SPE. 85/300 3.3.2 Sep 2012 Class A for fugitive emissions and MESC SPE 85/300 3.3.5 requirements under the Hot Operational Tightness test (HOTT).

#### Improved sealing

InsoLion<sup>®</sup> incorporates a U-shaped PTFE sealing element that has been optimised using finite element analysis (FEA) and is energised by a Phynox<sup>®</sup> spring. This combination provides almost unlimited media compatibility for critical and very critical service applications.

#### Improved isolation

InsoLion<sup>®</sup> is more than a gasket, it is a complete flange isolation kit, including bolt sleeves and isolation washers. The gasket faces, bolt sleeves and washers are supplied in high performance G11 glass reinforced epoxy as standard, specifically chosen because it retains its physical properties more effectively at elevated temperatures compared with G10 GRE alternatives.

Full details of InsoLion<sup>®</sup> construction and the results of product testing can be obtained through your local James Walker Company or found on the company website.

#### **James Walker**

Tel: 01270 536 000 Email: sales@jameswalker.biz Web: www.jameswalker.biz

## Pneumatrol Unveils New Website



**Pneumatrol Limited**, the Lancashire-based specialist manufacturer of pneumatic control products for use within both hazardous and safe area environments, is pleased to announce the launch of its brand new website.

his new, greatly enhanced website provides product, technical and application information on the extensive Pneumatrol product range, as well as a comprehensive overview of the company.

The site deploys a responsive design which enables it automatically adapt to different types of devices, including desktops, smart phones and computer tablets.

The new website provides detailed information on the company's full range of

products, including solenoid valves, linear valve actuators, and rail products. Thanks to its clear structure, customers will find it easy to navigate the site and locate the exact products they want with minimal effort.

There is a comprehensive resources download section - a hub of product datasheets, instruction manuals and certifications that can be downloaded to the customers' devices. Also it features a dedicated media centre where customers can find all the latest news about the company.



Tel: 01254 872 277 Email: marketing@pneumatrol.com Web: www.pneumatrol.com

# **ISIS** Oil and Gas Buck the Trend in 2015





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**ISIS Fluid Control** is well known for its experience in several different industries; Hydraulic, Process, Steam and Oil and Gas.

n 2015 Isis Oil and Gas bucked the trend and saw excellent growth in valve supply to the Oil and Gas industry with major project awards for end users such as Total, Statoil, BP, Petrobras and TCO.

ISIS Oil and Gas' ability to assist with specifications, actively manage projects and absorb client changes with minimal delivery and cost impact has ensured a healthy amount of repeat business from clients who understand the level of commitment ISIS put into every project.

In 2015 ISIS Oil and Gas were able to work with its customers to offer cost and delivery savings to several different projects by utilising intimate specification and manufacturing knowledge. ISIS also doubled the size of its warehouse, including the addition of in house hydro test, PMI and an expanded assembly area.

If you have any project valve requirements that ISIS Oil and Gas can help with please get in contact with their specialists.



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## **Allvalves** Become an **SMC** Systems Integrator to Provide Complete Valve Actuation Packages



Following an exploratory meeting at the Allvalves BVAA sponsored stand at Valve World in 2014 and a year of behind the scenes discussions, a partnership has been reached between the global pneumatics giant SMC Pneumatics and Allvalves, whereby **Allvalves becomes an SMC system integrator** providing valve and pneumatic actuator packages, controlled by SMC products.

Ilvalves are a fast growing valve actuation specialist with experience in the specifying, assembling and testing of actuated valve packages and systems to the process valve market. SMC offer pretty well everything except the valve and actuator assemblies, so integrating the two will provide customers with a complete actuated process valve solution. Process control products used by Allvalves will be from SMC wherever possible, covering pneumatic and electropneumatic positioners, volume boosters, namur solenoids and all tubing and fittings.

As Allvalves's product range is far wider than just actuated valves, it will also expand the portfolio of SMC products it offers to include 2 and 3 way solenoid valves, piston valves, ATEX rated pumps, process sensor products and many others. Work on adding these products to the Allvalves web site started in the New Year and will coincide with a facelift to the web site.

SMC are supporting Allvalves with product training both at the SMC European Technical Facility in Milton Keynes and on site at Allvalves' works in Pershore, Worcestershire.

Allvalves have already taken advantage of the wide SMC product range and expertise of their technical engineers to secure a significant order for a pneumatic system solution which included a specialised 300 valve manifold. The first system has been successfully trialled and is due to be replicated a number of times over the next 24 months by the highly satisfied OEM customer.

Joint customer visits where SMC have introduced Allvalves have created immediate interest as the customer's complete actuated valve requirements, using SMC process control products, are now sourced through SMC's system integrator, saving the customers the time taken to outsource the actuated valves.

Adam Chapman, Managing Director of Allvalves Online Ltd explained what the partnership means to Allvalves: "We are very fortunate for a young company to be working with such recognisable names from our industry - Sun Yeh, Adler, Genebre, Hidroten, EBRO and now SMC. The whole SMC package from the technical knowledge and experience of their staff, to the facilities they provide such as; engineering drawings, specialist bespoke solutions and of course their huge range, make working with them a pleasure. We are very excited with the opportunity to work with them as their systems integrator and we are sure that both Allvalves's, and SMC's customers will see the benefit of high quality, technically sound, complete actuated valve packages."

Keep an eye out for the SMC product launch coming soon on our website.



Tel: 01386 553 190 Email: sales@allvalves.co.uk Web: www.allvalves.co.uk

## Smith Flow Control Names New Managing Director, Tracey Goldsmith



Safety interlock and valve management systems expert **Smith Flow Control** has appointed Tracey Goldsmith as its new managing director. In her new role, Goldsmith is responsible for the company's strategic development and the performance of its global operations.

he appointment follows the move of long-time Smith Flow Control managing director Mike D'Anzieri to take the role of president at sister Halma company Rohrback Cosasco Systems.

Tracey has over 25 years of experience in accounting, finance and management roles. She joined Smith Flow Control in 2012 as Finance Director from manufacturer Elma Electronic U.K. Ltd. (Bedford, U.K.). Tracey is a member of the Chartered Institute of Management Accountants.



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**Keeping the World Flowing** 

## Don't Judge a Valve by its Cv

**Cv (or Kv) flow factors** are published by valve manufacturers to enable flow or pressure drop calculations to be performed without having to analyse the individual design from first principles.

These figures are calculated from experimental data based on water flow at a set pressure drop across the valve. For other liquids, conversion factors can be applied to produce a revised factor for that media.

Control valve manufacturers have a wealth of data regarding valve and trim characteristics for a given media and condition, they are able to tailor a valve to suit the application. For simpler or less critical valves such as PRV's, solenoid valves or filter-regulators, we may have graphs of flow curves to work from but more often only a Cv or Kv figure.

#### What's the difference?

Cv is the American unit based on 1psi pressure drop and flow in US gallons per minute but can also be given in Imperial gallons which if not recognised can cause errors in subsequent calculations. Kv is based on metric units of 1bar pressure drop and flow in litres /min or m<sup>3</sup>/h. Conversions can be made between these factors quite simply to make it easier working with your normal units.

#### What about gases?

If working on a design for air or gas, water based flow factors have to be adjusted to deal with a compressible medium and the issues of critical flow where the velocity will not increase above the speed of sound regardless of pressure drop. This is highly complex and should result in a separate flow factor for critical and sub-critical flows but most valves only have one Cv published. Knowing whether it is a water based figure, based on a specific gas flow test or from a gas flow test and then converted back to the equivalent base water figure is a minefield of potential errors.



This can be sufficient when working with on/ off valves, but any kind of regulating valve is very difficult to equate the valve position with a single flow factor figure to produce a reliable expectation of practical flow performance, or compare directly with a similar valve from a different manufacturer.

Some manufacturers qualify their flow factors with a statement that the factor is based on a particular inlet and outlet pressure setting and pressure drop. This is fine if the pressures match your needs but not if you want to compare with another manufacturer that uses different pressures for their factors and therefore it is not possible to make a direct comparison.

#### Why isn't there a standard?

There are standards that dictate how to measure water or air flow and determine flow factors but as yet there is no standard or regulation that dictates how the information is portrayed. How the published flow factor is determined is down to the individual manufacturer and will most likely be a selected average figure which is not representative of performance of the valve across its full operational stroke.

Manufacturers marketing departments may want to offer valves with the highest flow factor possible to suggest that their valve is more efficient than a competitor and unless they publish exactly how the figures were determined, it makes it very difficult to compare like for like.

All manufacturers have procedures that they follow but until a standard is published to tie the methods together and produce consistent figures, we have to interpret the valve figures as best we can.

### Is there a better way to get accurate figures?

Yes, if you or the manufacturer has the capability of performing CFD (Computational Fluid Dynamics) analysis for a specific valve given your media and performance requirements; but even if you had this accurate information, will you have the same level of detail for all the components in the system to reasonably expect a repeatable result in practice?

If you can get copies of flow curves from the manufacturer or third party test house



for each of your valve choices it will be easier to estimate likely performance than relying on a Cv or Kv figure and converting for your media.

Many application specifications call for minimum pressure drop based on design figures for the installation. In practice, the pressures and flow rates can deviate from this just by the pipeline design and how it has been installed, without considering the performance implications of all the other elements in the system. The inevitable result is that the engineer needs to allow a bigger safety margin "just in case" which can lead to over-sizing of valves or piping and subsequent problems of maintaining media velocity.

When valve performance is critical and the available data is limited, the best way of understanding the suitability for a given media or system, is to get one and run a practical test. The result will either confirm or deny capability but at least you have some real world figures to work from if you need to look for an alternative. It may even be that the best one for your application is not the one with the highest published Cv for its size.



Tel: 01443 772 500 Email: sales@reddragonvalves.co.uk Web: www.reddragonvalves.co.uk

## **Curtiss-Wright** Industrial Division Expands Network in the UK

**Curtiss-Wright's** Industrial Division today announced that its Farris Engineering business has entered into an agreement with Furmanite in the UK.

urmanite will represent the Farris line of spring loaded and pilot operated pressure relief valves in England and Scotland. They will act as a single point of contact for new pressure relief valve sales and aftermarket support as a Farris Authorized Service Team "FAST" center.

Furmanite, one of the largest valve repair companies in the world, is a key addition to the global network of Farris aftermarket service and support. They offer complete shop and field service capabilities for relief valves, including Trevitest® on-line PSV testing. Furmanite's valve repair solutions include teams of factory trained and highly skilled technicians that provide onsite, emergency and scheduled repair services as well as scheduled or routine shop repair. Complete documentation of valve repairs are tracked through their asset management tool, ValveOne. Curtiss-Wright, through Farris Engineering, has been a global leader in the design and production of pressure relief valves servicing the oil and gas, hydrocarbon processing and power generation markets. Farris relief valves are known for their superior performance and inherent convertibility features that optimize the life cycle and cost of ownership benefits. Farris' headquarters are in Brecksville, OH, with manufacturing and sales facilities located in Canada, China, U.K., and India. These facilities support a global network of Representatives and FAST centers that offer local sales, ASME certified inventory, service, repair and asset management solutions.

#### About Furmanite Corporation

Furmanite Corporation (NYSE:FRM), founded in 1920, is one of the world's largest specialty industrial services companies with more than 85 offices on six continents. Furmanite monitors, maintains and renews energy, industrial and municipal infrastructures through a wide portfolio of inspection, specialty mechanical and engineering products and services. The company serves a broad range of industry sectors, including refining, offshore, sub-sea, pipeline, power generation, chemical, petrochemical, pulp and paper, water utilities, automotive, mining, marine and steel manufacturing. Headquarters and global support operations are located in Houston, Texas; Rotterdam, Netherlands; Kendal, United Kingdom; and Melbourne, Australia.

#### About Curtiss-Wright Corporation

Curtiss-Wright Corporation is a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships. The company employs approximately 9,000 people worldwide.



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## The **Alco Valves Group**, which now Forms Part of GRACO Inc's Oil and Natural Gas Division Announces the Opening of its' New Office in Dubai

The Alco Valves Group, a global leader in designing and manufacturing Instrumentation Manifolds, Double Block & Bleed valves and piping interface solutions expands global operations into the Middle East with a regional office located in the Dubai World Central economic zone. This facility will allow The Alco Valves Group to quickly respond to the needs of local and regional customers and distribution partners.

Alco Valves Group is one of the most respected names in the manufacture and application of instrumentation and Double Block and Bleed valves. Renowned for the quality of its products and application expertise, Alco Valves Group's range of valves and ancillary equipment has for over 37 years, been used successfully in oil and gas, marine, refinery and chemical applications.

The new facility is part of Alco Valves' strategy to expand its connectivity with the Oil & Gas community throughout the Middle East region.



Tel: 01484 710 511 Email: uk@alco-valves.com Web: www.alco-valves.com



## **Flowserve** Introduces Valtek<sup>®</sup> DiamondBack Cavitation Elimination Technology

**DiamondBack** Is the Control Valve Industry's Most Advanced Design for Cavitating Applications

lowserve Corporation, a leading provider of flow control products and services for the global infrastructure markets, has announced that the introduction of the Valtek DiamondBack, the control valve industry's most technologically advanced anti-cavitation trim design to date for severe service applications.

DiamondBack enables control valve users to eliminate high-pressure drop cavitation damage and the associated noise. In addition, the DiamondBack design can be produced in a range of materials, including tungsten carbide, effectively mitigating the effects of erosion. Providing improved reliability and uptime with reduced operating and maintenance costs, DiamondBack also delivers up to 30 percent higher flow than comparable multi-stage valve trim with the same pressure drop. In some applications, this results in a smaller and lighter package than other designs.

DiamondBack cavitation elimination technology is available for installation in all

new or existing Valtek Mark Series control valve body sizes.

According to Flowserve Severe Service Products Marketing Manager Bradford Haines, "Combining the proven and preferred Flowserve Valtek Mark Series control valve with DiamondBack severe service trim provides users with maximum cavitation protection. With the purposeful selection of available materials of construction, DiamondBack further offers excellent corrosion resistance. As a result, DiamondBack is uniquely capable of delivering comprehensive protection from both cavitation and erosion damage."

DiamondBack is customizable for the most rigorous application requirements in the oil and gas, chemical processing, power generation, and general industries, and is able to pass slurries and entrained solids to 15 mm (0.5 in) without plugging. It is available in all commonly specified materials, including 300 and 400 Series stainless steels and high-nickel alloys, as well as exotic alloys and tungsten carbide.





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### **Emerson** Introduces Actuator Asset Control and Monitoring Software to Manage Electric Actuator Assets in the Field

**DCMlink** enhances plant productivity by unifying all electric actuators on a common platform while allowing plant operators to gain deep insights into asset status and performance.

merson Process Management has introduced DCMlink™ Software, a unified electric actuator control, monitoring and diagnostics platform.

The DCMlink platform will allow, for the first time, Emerson customers to diagnose, configure, and monitor all electric actuators from a central location independent of protocol, actuator or host system. The software extends the useful life of field assets by providing actuator data gathering, condition monitoring, events log and prioritisation of actuator alarms in a unified and consistent user interface.

Actuator configuration includes custom characterisation, as well as the ability to import and export historical configuration profiles.

Whether it is viewing value torque profile, live trending data or actionable alarms straight from the actuator, plant operators will be able to access detailed monitoring and diagnostics data, allowing them to take action before a fault occurs.

DCMlink offers advanced control and diagnostics, including torque profile curves, initiating partial stroke test or emergency shut down and alarms in NE-107 format. Current communications support included Modbus, TCP-IP, and Bluetooth.



Tel: 0191 518 0020 Email: infocentral@emersonprocess.com Web: www.emersonprocess.com

## Scottish Water Selects Rotork for New Valve Actuation Framework Contract

Following a formal tender process, Scottish Water has awarded the framework agreement for new valve actuators to Rotork UK. The agreement appoints Rotork as the sole supplier of new actuators to Scottish Water and its business partners, valvemakers and appointed contractors for the AMP 6 cycle.

he new framework complements an existing agreement that provides servicing and spares for the several thousand Rotork actuators installed throughout the Scottish mainland and islands, encompassing on-site and workshop support as well as mechanical and electrical capabilities for system integration into client infrastructure.

Strategic to both frameworks' success is Rotork UK's recently opened Glasgow office, which offers Scottish Water a local centre for enhanced, faster and more economical support. Comprehensive workshop facilities provide repair and overhaul services, stocks of spare parts and a valve automation centre for manual valve automation, actuator replacement and the provision of new actuated valves.

Scottish Water manages over £58 billion of assets to provide 2.5 million customers with water and effluent treatment services. Around £10 billion of these assets are treatment works and pumping stations, of which about 50% have been built in the last 20 years. Many of the processes in these facilities utilise Rotork IQ intelligent multi-turn and part-turn valve actuators and Profibus control networks to assist with high levels of automation and provide diagnostic and preventative maintenance functions.

Many Scottish Water processes utilise Rotork IQ intelligent valve actuators and Profibus control networks to assist with high levels of automation and provide diagnostic and preventative

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maintenance functions.

### **ISOLATING VALVES FOR LOW-TEMPERATURE APPLICATIONS** PART 2: TYPE TESTING NEW STANDARD BS ISO 28921-2:2015

#### What is it?:

This part of ISO 28921 specifies requirements for the type testing of isolating valves for low-temperature applications to verify the performance of valves at a low temperature from – 50 °C down to – 196 °C.

#### Why is it important?:

This is a new standard. The ISO working group responsible for this standard was led by a representative of Canada. It appears to have strong support from South Korea and the USA. There is no API equivalent specification. Those supplying valves for LNG and other low temperature fluid service should investigate the applications of this standard to their products as it is anticipated that in certain market areas this standard will be specified. It will be a competitor standard to BS EN 12567:2000.

#### **Supersedes:**

New standard. Nothing to supersede This standard is available from BSi Publications at a price of £152.00 (members price £76.00). Those people that are members of PSE/18 or PSE/18/1 committees are able to download the standard for free.



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## Whenever you have a conversation about standards, you will inevitably hear 'They' mentioned...

- 'They wrote this standard...'
- 'They tested and decided...'
- 'They met recently and discussed...'

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### If you would like to participate in standards making, just contact the BVAA.



#### **British Valve & Actuator Association**

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### Contact BVAA Members at www.bvaa.org.uk/member\_list.asp





Following on from the initial launch in November 2015 sales for the stainless steel spring return handle have gone through the roof and Quickits can now offer a selection of lever & cap colours to complement your own products or company logos.

Commenting on this Sales Manager, Mick Durkin says "we are amazed at the speed at which this product has taken off, being able to pitch this product at a price level equal to or cheaper than the aluminium alternative has definitely accelerated sales. Investments in both research and development allows our team to focus on enhancing existing products and we have plans in place to launch other exciting products and ideas in the near future".

### www.quickits-online.co.uk

Visit www.quickits-online.co.uk for data sheets and more information





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#### **Quickits Limited**

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