

# Vaveuse Magazine

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### **BVAA:** Championing **British Excellence** at Valve World 2014

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Peter Churm 1940 - 2014

Acquisition hails new era for Alco Page: 21



Crane Launches New Xomox Ball Valve

AVS helps UK CCGT power station save £200,000 p/a

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**Cover:** Valves for a UK Nuclear Power Station refurbished by eTec Engineering Services Ltd.



### Comment

by BVAA Director, **Rob Bartlett** 

### **Triumph & Tragedy**

It has been an extraordinary few months for the **British Valve & Actuator Association** in the short period between this and the autumn issue of Valve User magazine, incorporating a wide spectrum of major developments, and indeed emotions.

**O** ur '*Triumph*' has to be the very successful move on 1st September 2014 to our new headquarters in Banbury (UK). There is a full report on this on page 9. The BVAA Board's bold decision to equip the Secretariat with a much bigger premises fits perfectly with the Association's sustained expansion and appetite for further growth, coupled with the fast-track development of the valve professionals of the future. The new BVAA HQ is twice the size of its predecessor, and already we have hosted a whole series of Training courses and multiple meetings on site.

Our 'Tragedy' however was the swift and incredibly sad passing our beloved Technical Consultant, Peter Churm on 1st October, after a short illness. There is an obituary on page 7 of this issue. Peter was a very close friend as well as a colleague, and was a guiding light in the valve industry, both nationally and internationally. It is hugely fitting therefore that the vastly-improved training facility at the new BVAA HQ will bear Peter's name. He will be sadly missed.

Developments at BVAA continue apace however, and the BVAA Secretariat is delighted to announce it has expanded its staff again with the recent addition of Isobel Goldthorpe, who will assist with both the Marketing and Administration activities. As I write, we're also gearing up for the PILOT Share Fair in Aberdeen, the BVAA Annual Meetings in County Durham and of course the biennial gathering of Valve industry experts, suppliers and customers that is 'Valve World' in Dusseldorf. Do call in to the BVAA Group Stand in Hall 4 if you get the chance (4C21) or indeed the 'British Reception' being held at 4D23 on the evening of 2nd December.

You might have noticed too that the magazine has had a design refresh – we hope you like it!

Finally let me take this opportunity to wish all our members, customers and readers a wonderful winter holidays and a very happy and prosperous New Year!

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### For full details on each course, visit www.bvaa.org.uk/training\_courses.asp

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# Peter Churm Obituary

### by BVAA Director Rob Bartlett

eter Richard Churm was born in December 1940, the eldest of 5 children. In his youth, Peter had been a superb athlete, holding for several years a youth record for the long jump. He was also an accomplished footballer, once having had a trial with Nottingham Forrest.

However like a lot of young men, Peter looked to the stability of Engineering and served a Technical Apprenticeship with a local valve company - *Serck Audco Valves*. This led on to a distinguished valve industry career which lasted nearly 60 years!

Peter excelled in valve design, manufacture and quality systems. Rising through the 'Audco' drawing office hierarchy he eventually became Engineering Manager. Such were his talents he was then headhunted and became Engineering Director at Truflo Valves in Birmingham. Thereafter he was seconded to a similar role at Thompson Valves in Dorset. His career culminated, or so it was thought, by being appointed Engineering Director at the group's holding company, 'FCX.'

Peter officially *'retired'* in December 2002, but he was asked to take on several special part-time projects thereafter, as he was just too valuable to let go of completely.

In the summer of 2003, Peter started another glittering career, this time as the BVAA's *'Technical Consultant.'* 

The timing of his new job meant Peter and I started at BVAA within weeks of each other. We got on famously, and soon struck up a very firm friendship and formed a great partnership. BVAA was undergoing a major transition at the time and Peter's presence and guidance became invaluable to me and others throughout the organisation.

His role with BVAA was vitally important. He was ultimately responsible for *all* of the British valve industry's technical standards, which in effect meant he was in charge of ensuring every technical document was not only pin-point accurate but also worked seamlessly with an intricate lattice of other standards.

"BVAA's Technical Consultant Peter Churm passed away at home on 1<sup>st</sup> October 2014 after a short illness."

He was also Chairman of the British Standards Institution's PSE/18 Industrial Valves Committee, which meant he adjudicated upon the many, often very complicated comments these standards generated.

This was incredibly detailed work, which to the uninitiated, could be quite baffling. Peter's great skill was in knowing the content of these documents intimately, but also understanding the intent and practicalities behind each one.

The safety and prosperity of many in the industry relied on these standards, and thus relied on Peter and his huge knowledge.

Once done, Peter oversaw these documents going on to become European (EN) and often International (ISO) standards, where he was described to me recently as being 'a guiding light.' As America was hugely influential in our industry - Peter often worked with their standards committees too, such as API, ASME, etc. where he was hugely respected.

He took on almost every possible technical task for our industry. He chaired committees and working groups at home and abroad, and became the industry's roving ambassador, going anywhere and everywhere he was asked. China, America, nowhere was too far, or too much trouble.

For several years Peter also chaired the BVAA Valve Repair working group, where with a combination of charm, tact and diplomacy – backed up by unrivalled knowledge - he brought together some fairly disparate views and eventually moulded them into an unprecedented industry '*Code of Practice*' for repair. He was also our industry's early warning system, keeping any eye out for legislation that might impact on members' businesses. He alerted us at the earliest possible opportunity through his 'Hot Spots,' and was usually able at the same time to provide sound advice on how to avoid any resultant issues.

Peter was particularly expert in the Pressure Equipment Directive (PED). Sensing a lack of understanding in industry, he was very soon preparing a training course on the subject, and thereafter travelled the country educating groups of engineers. Courses on other topics followed, as did his famous *Industry Guidelines booklets.* 

An expert in so many fields, his measured, genial but unquestionable authority won him many friends. I never ceased to be amazed at the number of foreign visitors at exhibitions that would rush up and greet him so warmly - behaving as if they'd been friends for life.

I came to understand with Peter that this inherent friendliness was true for all he came into contact with. Indeed *'friend to everyone'* was how one BVAA Board member described him. Not just because he held the keys to the proverbial knowledge cupboard, simply because that was his character.

"The BVAA Board agreed that our impressive new Training Suite should be named in his honour. The Peter Churm Technical Centre"



He was always great company – particularly so at exhibitions and could turn any chore into a fun activity, no matter how tiring the event.

Peter made himself 'always available,' helping members and non-members alike. Government offices, HSE etc. all sought him out for advice too. He was hugely generous with his time, knowledge and patience.

And on the very rare occasion he didn't know the answer you sought, he didn't theorise as some might. He just kept solidly to facts, and – almost inevitably – *did* happen to know the person or organisation who could answer your question. Usually more *'friends.'* 

Wherever we were, no matter how stressful the event, the sight of Peter ambling up with his cheery grin immediately gave you



a tremendous sense of calm and reassurance. His was a very paternal presence; a sort of industry *'comfort blanket.'* 

And he was always there – for me, for BVAA, and the industry. Indeed, BVAA endlessly use a photograph of me in our PR materials but in the original, uncropped image, you can see Peter is in it too, standing shoulder-to-shoulder with me, as ever, broadly smiling and in close full-support. For me it is a very symbolic picture, one that hangs in my office.

In 2009, BVAA resurrected its 'Man of the Year' award for outstanding contribution to the valve industry. There wasn't much debate - or surprise - about the eventual winner. When I visited him at home, Peter's award was still on display and his pride in it was still very apparent.

At the same time as Peter fell ill, BVAA moved to a new facility. As a mark of the deep respect we all had for Peter, the BVAA Board agreed that our impressive new Training Suite should be named in his honour. **'The Peter Churm Technical Centre'** will henceforth be where our industry will be trained and gain knowledge – indeed much of the training material delivered will be Peter's own work.

Peter Churm was a great friend – to me and to the industry. He was also a great mentor, as many of his protégés on BVAA committees will testify. And he was also a great engineer whose knowledge and support was key in the work that he and others accomplished. He was also a thoroughly decent, modest, professional yet gentle man, with unsurpassed knowledge and experience, and the respect he garnered from colleagues around the world was enormous and effortless on his part.

Peter Churm was a cornerstone of the BVAA and will be sorely missed.

He is survived by his wife of 50 years Ann, his children Stephen and Alison and his three grandchildren Lauren, Caitlin and Leo.

### **BVAA**° NEWS

# BVAA's New HQ

The **BVAA** has recently moved to new headquarters. Still in Banbury (UK), the new facility is twice the size of the previous unit at 3000 sq. ft.

**B** VAA's Rob Bartlett commented, 'The BVAA has outgrown two homes in the last few years. Rapid growth, a larger staff and significant expansion of our Training function have all contributed to an ever pressing need for more space. Having evaluated the options, the BVAA Board took a bold and opportune decision in the summer to purchase – at a very competitive price - a property that accommodates both our current and foreseeable needs.'

The new building incorporates additional meeting rooms for members' use, and a much larger, better equipped training suite which the association has named '**The Peter Churm Technical Centre.**'



BVAA's new address is:-

1a Banbury Office Village, Noral Way, Banbury, Oxon OX16 2SB (UK) New Fax No. 01295 258893 – all telephone and emails remain the same.

# **New BVAA** Staff Member

e said a fond farewell to our *'gappie'* Ellie Davies in the summer, who has now gone off to study Event Management at Gloucester University.

A new recruit to the BVAA Secretariat team therefore is Isobel Goldthorpe. Isobel has previous Marketing experience in the medical industry and will support both the Administration and Marketing functions at the BVAA.

Isobel will be attending Valve World in Dusseldorf, December 2-4 as part of the BVAA team manning the group stand: C21 in Hall 4.



# **Actuator** Flurry

There's been a recent flurry of activity in Actuator standardisation, resulting in two meetings of the **BVAA Actuator Working Group**, which holds combined meetings with BSI counterparts, PSE/18/5.

n late July the WG met at BVAA's old HQ to discuss a number of issues but primarily focussed on the two Actuator mounting standards ISO 5210 and 5211, both of which are now moving into a drafting phase once again. In October the combined working groups met again at the new BVAA HQ to complete their work and undertake a briefing, in readiness for a meeting of ISO WG concerned with re-writing the standards.

Further imminent work will be a review of the EN 15714 series of European actuator standards, to establish the extent of perceived overlap / discrepancy with ISO 12490 'Mechanical integrity and sizing of actuators and mounting kits for pipeline valves.'

CEN/TC69/WG1/SG10 'Actuators' will now be reactivated to deal with the issue and several BVAA/UK experts have been nominated to participate.

If these standards significantly affect you – and that will include many members – we strongly suggest attending future meetings of the WG.



# **BVAA Training** Shifts Gear

ctober was a busy time for BVAA's Training strand, offering more courses than ever before at the newly-titled 'Peter Churm Technical Centre.' It was standing-room only at the sold-out Introduction to Valves course, delivered this term by BVAA Board member Glyn Williams (Valve Solutions).

Indeed all the other subjects saw good attendances and once again there was excellent feedback generally on the course materials, lecturers and venue. New courses on offer this term include an 'ISO 9000: 2015 Workshop', 'Introduction to Hydraulics' and 'Combatting Corrosion.'

BVAA also delivers bespoke and in-house courses for major users and customers of valves – for a full course programme see www. bvaa.org.uk/training\_courses



All 32 seats filled at BVAA's autumn 2015 Introduction to Valves course

# Valve WG Takes High Road

n 23rd September the BVAA Valve WG experts assembled for a convivial dinner, prior to holding their autumn meeting the next day at Score Europe's Glenrothes facility. The full agenda included an update report on wide ranging changes to API 622 Fugitive Emissions testing, provided by James Walker's Mark Richardson, plus a range of other relevant API projects. Steps are being put in place for greater BVAA involvement in these important API standards.

After the meeting members were treated to a tour of Score Europe's nearby Cowdenbeath facility, with a strong focus on the testing capability there, and an excellent demonstration of the organisation's portfolio of valve condition monitoring solutions.

The Valve WG will meet again on 11th March 2015, venue TBC.





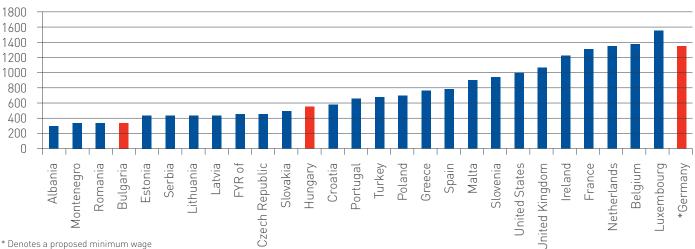


# The European Economy is not a Level Playing Field

The economic climate is not uniform across Europe, and allocating resources toward areas of growth will help you outperform the general economy. Annual Industrial Production for Europe as a whole is on the rise, and the economy is expected to mildly expand through 2015. However, annual Western Europe Industrial Production is on the verge of a mild recession that will persist through the first half of 2015.



By Jackie Greene



#### **Monthly Minimum Wages Across Europe**

he economic climate is not uniform across Europe, and allocating resources toward areas of growth will help you outperform the general economy. Annual Industrial Production for Europe as a whole is on the rise, and the economy is expected to mildly expand through 2015. However, annual Western Europe Industrial Production is on the verge of a mild recession that will persist through the first half of 2015.

In contrast, economic activity in Eastern Europe is not expected to fall into recession this year but will instead expand through at least 2015. Annual Eastern Europe Industrial Production accelerated in July to a new record-high level. Production will rise into at least 2016, albeit at a slower pace in 2015. Despite recent turmoil in Ukraine, Eastern Europe has some key advantages that are making it an appealing choice to do business.

Wages in Eastern Europe are typically lower than in Western Europe. Hourly labor costs in Germany can range from €40 to €52, but this cost drops to €13 per hour in Hungary and below €5 in Bulgaria and Romania. As labor costs can be one of the more expensive pieces of production and harder to control, Eastern Europe's skilled labor force has a significant cost advantage over Western Europe. This has been particularly true of the auto sector. Volkswagen and Daimler have been expanding into Eastern and Central Europe to benefit from the low cost structure and to capture sales in a new market. As local employees have benefited from the new jobs in the region, they have increased their disposable income and are able to support additional industries in the region.

Eastern Europe's proximity to Western Europe also gives it an advantage over Asian low-cost production centers. This significantly reduces transportation costs and cuts down on lead-in and delivery times for goods. Eastern Europe's proximity also helps to reduce language and cultural differences that can be costly for businesses. Consider whether now is the right time for you to develop production facilities or seek out new customers and suppliers in Eastern Europe.

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### **BVAA** @ ONS Stavanger

B VAA took a booth as part of the UK pavilion at ONS Stavanger Exhibition in Norway in August. The oil and gas exhibition was attended by over 80,000 people across four days. This was a perfect platform to promote the oil and gas special issue of *Valve User Magazine*, the BVAA product sourcing tool, and our *Valve Users' Manual*.

The product sourcing tool, and Valve Users' Manual created particular interest, with several large contractors and OEM's returning to the stand to collect extra copies.

Remember, production has started on the 2015 edition of this perennially popular and well thumbed reference book. Advertising opportunities are available.



### Valve Solutions Win BVAA Aberdeen Golf Day

he BVAA Scottish Golf Day is a fantastic chance for members to entertain their customers in the Aberdeen area. September's event was no exception, as a range of members attended the event. The course at Craibstone was bathed in sunshine the entire day.

The winners on the day were Valve Solutions, with some help from Enermech, who amassed 97 points - a very large score with only two players from four scoring. Second was Cameron with 93 and third Kent Introl with 92. There was a 12 point gap to the next team, so the standard of the 'podium finishers' was very high.

It was a great day, played in a good spirit on a lovely course - thanks to BEL Valves' Peter Robertshaw for the invitation.



### NOF Networking Lunch with BP

**B** VAA attended a very interesting NOF Energy Networking Lunch at Wynyard Hall, Co. Durham in September. The key note speech was delivered by Andrew Ledbetter, who is the supply chain Director based at the Aberdeen office. It was one of several excellent events hosted by NOF this quarter. Other hosts included Maersk Oil, Bibby Offshore Services and Technip.

BP is looking to work with valve suppliers who can supply quality products and who also have robust, traceable QMS systems and good consistency in their processes.

As always there was excellent associated networking at the event, with many BVAA members in attendance.



# View from the **other side**

This issue we have two submissions to our regular opinion section provided from the 'other' side of the Atlantic. **Karen Mackey** was secretary of ISO/TC 131, the technical committee that develops International Standards for hydraulic and pneumatic components and systems, for 28 years until 2014. She is now a writer and standards consultant, based in Michigan.

Regular contributor **Chris Warnett**, is the President of CPLloyd Consulting Inc. Rochester NY, providing marketing and applications expertise for the valve and automation industry.

# Automated valves and security

By Chris Warnett

n todays environment of security awareness there is a heightened concern over maintaining the integrity of plant operations.

The causes of undesired interference with plant and industrial installations ranges from plant operator ignorance or error to vandalism and then the ultimate concern, terrorism.

Equipment behind a plant's security fence is less vulnerable than equipment on a remote installation, like an unmanned pump station for example. However, the desire to reduce interference from all causes, warrants consideration of all potentially vulnerable devices.

The valves used in a plant are particularly important devices. Opening or closing a valve at the wrong time could cause a catastrophic leak, contamination or hazardous situation that may put personnel and equipment at risk.

Valves fall into two broad categories, manually operated and automated. The manual valve, if critical, will usually have some mechanical key operated lock out system that prevents plant personnel from inadvertently moving the valve unless a security or safety process is adhered to.

Automated valves are a little more complicated. Certainly many automated valves have local manual controls and hand wheels that can be used to move the valve. These can be mechanically locked in a similar way to a manually operated valve. The complication comes with the remote controls of the valve that are located in a control room at some distance from the valve itself. Furthermore, many modern valve actuators have wireless or other non-intrusive set up communications methods that also need to be secure from unauthorized tampering. A possible unintended or unauthorized movement of an automated valve could come from two main sources, regardless of whether the valve actuator type is electric, pneumatic, hydraulic or any other.

- **1)** An equipment malfunction in the control system, field instrumentation or valve actuator itself.
- **2)** An unauthorized movement deliberately caused by an external actor

With regard to equipment malfunctions, there are methods of mitigating the possibility of failure, this is quantified in a critical safety instrument system (SIS). The safety Integrity level (SIL) of an installation can be assessed using standards defined by the international Electro-technical Commission (IEC). Some valve actuators have been tested by third party testing establishments to operate at certain SIL levels. These actuators offer the ability to increase the integrity of the process by monitoring the actuator output as well as the control signal integrity.

For critical automated processes many systems use a triple redundant control system to ensure the integrity of signals sent process equipment including the automated valves.

A more recent area of concern in control systems is the guarding against cyber-attack. Major suppliers now incorporate substantial safeguards to counter this possibility.

Most valve actuators have a selector to choose either "local" (at the valve) or "remote" (control room) operation. When the "local" position is selected the valve can be moved by pushbutton controls on the actuator or on a local control station, if present. However these local controls are disabled if "Remote" is selected.

### A more recent area of concern in control systems is the guarding against cyber-attack. Major suppliers now incorporate substantial safeguards to counter this possibility.

The remote position places the control exclusively with the remote control system. To prevent tampering the selector can be padlocked in the *"remote"* mode. To further prevent tampering a *"vandal proof"* cover can be padlocked to cover the entire selector assembly. In some extreme circumstances the local selector and pushbuttons can be removed entirely, but alternative means of local control then need to be provided. This is possible with some non-intrusive set up devices.

Valve actuator hand wheels invariably have a provision for padlocking to prevent manual engagement.

The other mode of intervention could be through the non-intrusive set up arrangement. There are a variety of these set up methods. Some use the actuator pushbuttons, some use an infrared link (IrDA) but an increasing number use a standard Bluetooth connection.

There are some simple methods of preventing unauthorized tampering with these set up modes.

The pushbutton setup method can be padlocked to prevent interference.

The Infrared setup method is usually only active when the actuator is in the *"local"* mode. This means it can have the added protection of the padlocked selector. Further protection can be provided by the use of password protection. Some manufacturers also utilize a dedicated set up tool to ensure a further level of protection.

The Bluetooth method of communication typically uses a mobile Bluetooth device to communicate with the actuator. Proprietary communication software is usually freely available on most manufacturers' websites. There are several layers of protection on most valve actuators to prevent unauthorized interference.



In order for the actuator to be visible to the Bluetooth device, the control selector would need to be in the *"local"* position, so direct access to the actuator is necessary. This selector may be padlocked to further prevent unauthorized movement. The Bluetooth device would then need to enter the correct password to communicate with the actuator. So three levels protection are available.

Despite these protective precautions, some sensitive end users have banned all wireless instrument communications. In these circumstances some manufacturers have the ability to deactivate their Bluetooth communications after actuator set up.

The tampering prevention on pneumatic actuators is similar to that of an electric actuator. A manual override is not always standard on a fluid powered actuator, but when supplied, it also can be padlocked to prevent tampering. The controls in some cases have similar *"local/remote"* selection and can be made tamperproof by the manufacturer, if requested by the user.

There is an important advantage of the automated valve when considering the problem of security and safety. That is, the monitoring capability that comes with the integral position sensors on the automated valve. Control systems have the ability to raise an alarm should there be any unauthorized movement of the valve or the local actuator controls. This monitoring is constant and continuous and would alert control room personnel to any problems in the field. In addition, a time stamped record of all events can be logged by the control system or actuator data loggers.

### The value of standards

### By Karen Mackey

rom quality systems to freight containers to screw threads, standardization has made much of our modern economy and global markets possible. As valuable as many existing standards are, new and updated standards are always needed to keep business humming along. Having spent the last 28 years helping the hydraulics and pneumatics industry write International Standards, I have had a front-row seat to observe how the industry, the companies that produce and use these products, and the individuals who participate have benefitted from standards and standards development.

### Industry

An industry that takes standardization seriously demonstrates its concern for the development and dissemination of the technology it sells. Well-conceived and well-drafted standards make it possible for customers to apply your technology – and by extension, your company's products -- more easily, safely and effectively, and at a lower cost. In the European Union, standards are being used to implement laws like the Pressure Equipment Directive; in these cases, industry-organized standards work ensures that the expertise of those who make and use products covered by the directive is incorporated into the rules.

#### **Producers**

Standards can help reduce unnecessary variety, leading to lower design costs and greater economies of scale for those who manufacture. Standards can also provide a shorthand way of communicating product features to customers; by producing a valve that conforms to a standard, the manufacturer can take advantage of the information embedded in the standard to help his customer identify what he needs.

### DEWS NEWS

ISO 6162-1 split flanges and ISO



#### Users

Standards provide users with lower prices (due to those previouslymentioned economies of scale) and information about a product before going to the marketplace to find a supplier. Product testing standards allow users to compare various manufacturers' products on a level playing field. The development of some of these testing standards is straightforward, but others involve significant testing programs to verify the procedure. For example, the pneumatics industry has developed standards for assessing the reliability of its components and, in response to market needs, continues to conduct testing to improve the standards, leading to more accurate reliability data for users of pneumatic components.



Connector block to the ISO 6162-1 standard for hydraulic flanges (photo: Main Manufacturing Products Inc.)

#### Large vs. small enterprises

Many people believe that standardization automatically benefits larger companies, but standardization is one area where a smaller company can "punch above its weight" in the marketplace. A company that develops an effective strategy and devotes the necessary time, expertise and attention can have a significant impact on even international standards. One smaller U.S. company I know makes it a priority to work on the standards that have the most impact on its business and leads by actually doing the technical research for and writing of these standards. As a result, this company can share additional insight with its customers and has advance notice of, and influence on, changes that affect its products.

#### Individuals

While the main benefits of standardization belong to industry and companies, the people who actually do the work of developing standards also benefit. Standards committees are places where you can interact with your peers in the industry and develop and put into practice teamwork and leadership skills that you can use back at your company. Your participation in standards work can provide you with product and market intelligence that is not available anywhere else, whether it be the history of a particular product, or application problems that others bring to the committee to solve via a standard.

The bottom line - If your company's products are affected by standards, you need to be involved. It's easy to do; your BVAA and the British Standards Institution (www.bsigroup.com) have information on which groups are working on standards for your company's products and how you can join them. Before you get involved, be sure to consider what return you want from your investment of time and expertise so that, after you get involved, you can evaluate your experience. Remember that standards committees are most effective when participants and the industry and its customers find value in the standards produced.

## **BVAA's** Mad Hatters

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

### Competition

John Hancill of BVAA Members Emerson Process Management certainly looks the part here; but where is he? If you are the first to identify the venue at which John is proudly wearing his BVAA hat we will donate £50 to a charity of your choice.

Answers via email to jimmy@bvaa.org.uk



## **Charity** Hatters

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. Below are a selection of this quarter's donations.

#### **Bike Ride**

Les Littlewood (Albion Valves) and pals cycled from Lands End to John O'Groats for First Point, a children and young adult's charity.

#### **Charity Scarecrows**

'Mary Poppins and Bert' are charity scarecrows sent to us by the team at Valve Solutions Ltd.





#### Ice Bucket challenge

Alun Hobbs keeps the cold off during an Ice Bucket challenge. Gary Phillips (right) braved the cold for motor neurones disease.



### Trans Pennine Challenge for Cancer Research UK & Alzheimer's Society

Sarah Edgington and friends completed the 'Trans Pennine Challenge for Cancer Research UK & Alzheimer's Society.



## **NOF Energy National Conference & Exhibition** to move to the Sage Gateshead

**NOF Energy**, the business development organisation for oil, gas, nuclear, offshore renewables sectors, has announced its 2015 national conference, *'Energy: A Balanced Future'*, will take place at Sage Gateshead to meet growing interest in the event.

Taking place on 10 and 11 March 2015, the fifth-annual conference and exhibition will also include, for the first time, sessions on a number of new energy resources and the opportunities they will present for supply chain companies.

*Energy: A Balanced Future* attracts speakers, exhibitors and delegates from across the UK, Europe and around the world to discuss the future of the energy sectors served by a multi-skilled, adaptable, integrated supply chain.

The 2014 conference, which was held at the Hilton Newcastle-Gateshead, attracted in excess of 400 delegates and NOF Energy expects a higher number of attendees in 2015 based on pre-registrations of interest.

Alongside the conference will be an exhibition that will double in size in comparison to previous years. The exhibition will feature members of the supply chain showcasing the skills, products and services offered to the energy sector and will offer an ideal location for networking.

*Energy: A Balanced Future* has become an established national event on the energy sector calendar. It provides information and the opportunity to debate



developments in the oil, gas nuclear and offshore renewables sectors not only in the UK but also internationally. After making its debut on the conference agenda in 2014, Shale Gas will continue to be a key element of the event. There will also be a forward looking element with leading individuals from Durham Energy Institute providing an insight to emerging energy sources such as deep geo-thermal and solar.

George Rafferty, Chief Executive of NOF Energy, said: 'The interest Energy: A Balanced Future has generated across the industry in the past five years has been phenomenal.

We are really looking forward to hosting the event at Sage Gateshead, which has become one of the UK's most iconic venues. While it is sad to move the conference from the Newcastle-Gateshead Hilton, which has been really supportive in helping to establish the conference, this new setting represents the importance of this event to the energy industry.

We have seen, year on year, an increase in delegates and exhibitors for the conference, which reflects the role NOF Energy plays in supporting the industry and the aspirations of supply chain companies keen to secure a proportion of the opportunities being created by the investments being made in the energy sector.' Anthony Sargent, General Director of Sage Gateshead, said: 'We are delighted this important conference is moving to Sage Gateshead given our intense focus on the way we manage our own energy needs. The North East of England has won a reputation around the world for its pioneering engagement in the international energy industry and we are greatly looking forward to welcoming the delegates to what I'm sure will be an important and very timely conference.'

Paul Szomoru, Head of Business Tourism NewcastleGateshead Convention at Bureau, said: 'We are delighted to have supported NOF Energy to keep the conference in the North East region. Being able to host such an important conference in the Energy sector's events diary, right here in NewcastleGateshead for the fifth consecutive year. is testament to the area's reputation for excellence and innovation in the marine and offshore sector. It also reinforces the message that the destination is a fantastic place to stage events of this calibre, adding to an impressive track record of hosting all three major political party conferences and international association events.

To register as a delegate for **Energy:** A Balanced Future 2015 or to book exhibition space, please contact Jennifer Smith +44 (0) 191 384 6464 or email jsmith@ nofenergy.co.uk

# **Drop Forging Specialist** Shows its Commitment to the Valve Industry

W H Tildesley Ltd, a specialist drop forging manufacturer, has joined BVAA. For over 130 years the company has manufactured forgings on its site in the West Midlands. The company specialises in producing closed die drop forgings in a wide range of materials.

'We already serve many customers that are included on the BVAA members list. We see joining as a good way to communicate with these existing customers and with companies that don't yet know us' says Sales and Marketing Manager Phil Hobley.

'Hopefully, we can use our membership to talk about the product performance and economic benefits offered by the forging process in general, as well as to promote the specific benefits of coming to W H Tildesley to fulfil any existing forging requirements that companies may have.'

W H Tildesley is ISO9001 accredited and holds several NORSOK approvals. It produces forgings in ferrous and nonferrous materials including carbon steel,



stainless steels, duplex and super duplex, nickel alloy and aluminium, amongst others.

*We continually invest in our operation – people, processes and plant* continued Phil Hobley.

'A recent £1.3M upgrade to our plant makes ours one of the most modern drop forging facilities in the UK. We follow the LEAN manufacturing path to ensure we compete on cost as well as quality.'

W H Tildesley's Oil & Gas sector customers include large multi-national organisations as well as smaller independent operators. It can support long or short run orders with no minimum order quantity requirement.



WH Tildesley boast one of the most modern drop forging facilities in the UK

A wide product range includes forged flanges, elbows, tees, bonnets, yokes and valve bodies.

Phil Hobley concludes 'We pride ourselves on providing excellent customer service, short lead-times and on-time delivery. We offer product design support and process simulation to optimise the forged product for weight and ease of manufacture. We have an in-house machine shop for proof or finish machining, if required. All this enables us to provide our customers with a complete forging solution from initial enquiry through to finished parts production.'

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WH Tildesley Ltd Forgings Tel: 01902 366440 www.whtildesley.com



valveuser WINTER 2014 | 19

# MCE Group plc: a profile

### **MCE** is a Fisher Control Valve Authorized Service & Repair Centre

MCE Group plc is a wholly-owned subsidiary of ValvTechnologies, Inc., and provides a complete range of valve services and supply to the Power Generation, Process, Chemical and Refinery Industries. We serve Clients 24-7 in many countries around the world, with primary focus in Europe, Middle East, and Africa. The association with ValvTechnologies expands our reach to OEM field services for major ValvTechnologies' product installations worldwide.

MCE is also a Fisher Control Valve Authorized Service & Repair Centre and performs in-line diagnostics through to complete OEM repair services. MCE has attained API 6D and PED accreditation for assembly/refurbishment and testing of high performance, zero leakage, metal seated ball valves along with control valve, safety relief and manual valve repair and outage services.

We have recently refurbished our workshop in Stockton-on-Tees, installing a full range of state of the art METRUS test equipment, the software for which has been linked to our Valve Management Database (VMD) which controls the work as it proceeds through the various phases of inspection, refurbishment, testing and certification. The VMD is a Web based system with remote access facility, which allows the Client's Engineer (using a unique ID and Password) to gain access to the VMD and check the status of his/ her valves in real time.

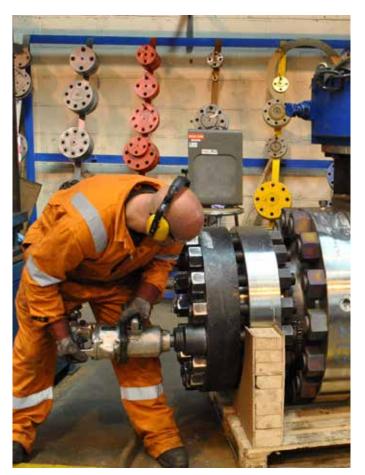
In addition, we have installed two overhead cranes and a dedicated lapping facility, fitted out with new KEMET lapping equipment.

We are constantly striving to improve our services in order to meet and where possible, exceed Customer expectations.

As well as our ISO 9001 and OHSAS 18001 accreditations, MCE is committed to achieving ISO 14001 during February 2015. We also have a raft of approvals from Customers and Compliance Bodies alike. The list is available for review on the Accreditations page of our Website: **www.mceplc.com** 



MCE's workshop includes a full range of state of the art METRUS test equipment



### About ValvTechnologies (Our Parent Company)

Founded in 1987 and headquartered in Houston, Texas. ValvTechnologies is the leading manufacturer of zeroleakage, severe service isolation valve solutions. Employing more than 500 people worldwide, their offices are located in the United Kingdom, Mainland Europe, China, Middle East, India, Australia and South America. In addition, ValvTechnologies partners with stocking distributors and independent representatives to service customers around the world. To find out more about the products and services offered or to locate a representative, visit their website at **www.valv.com.** 



MCE GROUP PLC Tel: 01642 882211 Email: mce@mceplc.com

# Alco Valves Group announces acquisition by Graco Inc

**Yorkshire based Valve Manufacturer** is pleased to begin work with Graco, a leading manufacturer of fluid handling equipment. The Company will maintain its manufacturing and engineering base in the UK

Loo Valves Group, the West Yorkshire based valve manufacturer is pleased to announce that on Oct. 1, 2014 the well-known Multi-National Business called Graco Inc a leading manufacturer of fluid handling equipment, acquired the Alco Valves Group. Graco is registered on the New York Stock Exchange under the ticker symbol GGG.

Established nearly four decades ago the Alco Valves Group has consistently designed and manufactured a wide range of high quality valve products for various applications. Alco was recently the recipient of the esteemed Queens Award for Enterprise and recognised as one of the top 10 Small to Medium Enterprises (SME's) in Yorkshire (through the Yorkshire Post Awards). The Group offers a portfolio of known brands, including Alco Hi-Tek, Alco Valves, Alco Sub-Tek, Alco Components and Alco Process. Through these five companies which will carry on trading as normal are able to provide an extensive range of high performance isolation valves, double block and bleed valves (DBB's), a large range of manifold valves for varied applications including topside, subsea, critical service, severe service, low temperature, high and super high pressures as well as low, medium and high pressure instrumentation valves and pipeline interface solutions. Throughout the years Alco has developed global business relationships with Oil & Natural Gas industry customers who are well known and recognized as market leaders in their industries. It is this extensive industry experience and quality of products that was key to Graco's interest in purchasing the Alco Group. Graco identified it as a logical extension and a strategically important initiative that will support its long-term sales and profit goals by expanding into the Oil & Natural Gas industry.

Graco, believes that the Alco Valves Group, and its comprehensive range of technically advanced high integrity valve products, to be a strong fit with the company's core competencies of designing and manufacturing advanced flow control technologies. The oil and natural gas industry's growth trends are positive and Graco believes that enhancing its position in this industry will pave the way for future growth opportunities. These opportunities will also benefit





Graco's Worldwide Headquarters are based in Minneapolis, USA

the local communities in West Yorkshire by creating more jobs. Alco has always worked to enrich the local community and feels this is part of its corporate social responsibility. This theme will continue with Graco now taking the Group forward, Alco's core values of maintaining high levels of customer service, delivering quality products and investing and developing people will stay the same.

Alco will still maintain its manufacturing and engineering base in the United Kingdom operating from its facilities in Brighouse and Manchester along with its warehousing and sales operations in Houston, Texas, Toronto, Canada, and Singapore.

'This is a terrific opportunity for Alco and our employees,' said Stuart Lomax, Alco Managing Director. 'Graco has the financial resources to invest in and grow the business, and I am confident that this is the right move at the right time to take our company to the next level of global competition.'



Alco Valves Tel (UK): 01484 710511 www.alco-valves.com

# Denholm Valvecare Ltd in new European Partnership

Agreement with **Ringo Valvulas** will see the high quality, European manufactured valve range gain greater market traction in the UK.

**Denholm Valvecare Ltd (DVL)**, the Aberdeen, Lincoln and Great Yarmouth based valve service and supply specialists have signed a new strategic partnership with Spanish manufacturer Ringo Valvulas. The agreement is a result of DVL's increased focus on European Standards and plans for continued growth.

DVL, founded in Lincolnshire in the 1970s, has four decades of experience in valve solutions, including system design, maintenance and repair. In recent years the company has returned impressive growth figures, and the agreement with Ringo is a result of a continued drive for improvement.

'Ringo products offer our clients quality valves using materials sourced purely within Europe. As European materials have been subject to many stringent criteria over the years, the quality of Ringo Valvulas is some of the best in the world' says DVL MD Roy Wood.

'Clearly China is the most influential in terms of global supply, and quality can be achieved with these products but only in certain areas, from certain foundries.

'It is very difficult to gauge the origination of products from the Far East, which means the quality becomes hard to vouch for. This is why more and more UK companies are highlighting 'full EU materials' as a requirement on their specification.'



20" 900 psi control valves from Ringo



Left:José Manuel Garcia Monclus, MD of Ringo Valvulas and Roy Wood MD of DVL shake hands on their partnership Top Right: A 36'' 1500 psi valve from Ringo Bottom Right: Nuclear forged gate and check valves

#### 'quality products'

DVL and Ringo's exclusive agreement will see products and services offered in both directions. The combination of a complete range of high quality valves and a strong history of service and supply in the North Sea has already reaped rewards. The win of a five-year framework agreement to supply and service two sites for SSE Hornsea at Atwick and Aldborourgh, did not come as a surprise to José Manuel Garcia Monclus, MD of Ringo Valvulas, who believes the alliance was crucial to securing the deal.

#### 'Ringo products offer our clients quality valves using materials sourced purely within Europe'

'It was clear that SSE wanted a service company to provide all the valves from the same manufacturer,' he says.

'This appears to have been a critical point with them. They came to our plant, saw and touched the quality of the products, saw that we supply to nuclear, as well as oil & gas operators and felt confident that we will supply a quality product with the precise after sales care they require.'

Roy Wood is confident that DVL will be supplying Ringo's range of ball, gate, globe, check, plug, control, choke and butterfly valves to many future projects.

'The framework agreement pushes our offering to a new level. The performance of both DVL and Ringo Valvulas is now quantifiable on the largest scale, giving our clients extensive data by which to measure our products and service. It shows we are a cost-effective, secure option that they can trust with any contract or framework agreements and that these are all handled with the uppermost professional capabilities.'



DENHOLM VALVECARE LIMITED

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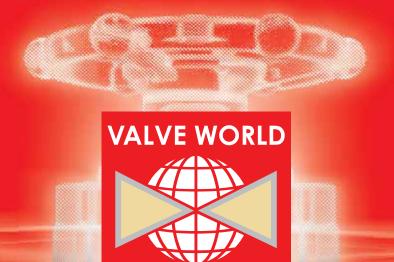


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### 9th Biennial Valve World Conference & Exhibition Düsseldorf, Germany, 2–4 December 2014

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## SIPOS SEVEN actuator to be launched at Valve World Expo

A new electric actuator range will be launched by SIPOS Aktorik at the Valve World Expo.

he SIPOS SEVEN series features a number of breakthrough innovations to enhance the flexibility and functionality of actuation technology. Pioneering advancements include large color display, simple 'joystick' control and USB interface. SIPOS SEVEN products include the Ecotron, Profitron and high precision HiMod.

#### **Full Colour Display**

SIPOS SEVEN's large, full color display is a first for an electric actuator. Designed to be easy to read, all essential information is visible and is configurable by the user in a variety of different languages. Simple animations provide step-by-step instructions for actuator set-up and operation, reducing the need for instruction manuals on-site.

#### **Complete Control**

A Drive Controller is also a pioneering feature enabling easy, intuitive actuator operation: controls are managed with a single, multi-functional 'joystick' which has no through-housing connections ensuring leak-tight operation. The Drive Controller simplifies use of the actuator in any orientation and multi-level access passwords ensure tamper free operation.



### **USB** Interface

Another design breakthrough - process control set-up can be carried out without connection to a mains power supply using a laptop or USB battery. Set-up and spare parts management is also simplified using the USB port for cloning.

Commenting on the biggest product news for the company since the SIPOS 5 was introduced in 1999, Dr. Matthias Rebhan, SIPOS Aktorik's General Manager said:

'We have listened to the needs of all parties involved in valve control to produce a device that combines practicality with state-ofthe-art design sophistication. Building on our reputation for German engineered, robust, practical design there are a number of new features that will attract a lot of attention from the international valve control industry, particularly the power market.

'Designers will be impressed by versatile control capability, fieldbus compatibility, long-life and reliability. Operators will particularly appreciate the easy to use, intuitive Drive Controller. OEMs and contractors will also love the fact that, with the Drive Controller, they have complete control from outside the housing."

The product, which is showcased at the Expo, can be ordered from SIPOS from December 2014 for delivery from July 2015. The SIPOS 5, and spare parts for the SIPOS 5, will continue to be available. For more information, visit www.sipos.de

Visit SIPOS Aktorik: Valve World Expo 2nd - 4th December 2014 - Hall 3 Booth D36



is launched at the Valve World Expo



Sipos Aktorik Tel: 01275 871141 Email: info@sipos.de

### KKI ambassadors support **'Females in Factories'** campaign

ynn Mowbray and Angela Bailey, directors of engineering firm, Koso Kent Introl - www.kentintrol.com - have been appointed ambassadors for the 'Females in Factories' campaign. Run by Women in Manufacturing in partnership with Works Management Magazine, this new initiative aims to inspire the next generation of females in UK manufacturing.

Lynn and Angela, alongside other UK industry representatives from various manufacturing organisations, will visit their local secondary schools in 2014/15. They will become role models and showcase some of the fantastic career opportunities available in the industry.

### Only 22% of employees in the advanced manufacturing and engineering sector are female; 9% are engineers and only 5% are in management.

**Lynn Mowbray** is operations director at KKI and has worked her way through the industry ranks, through sheer hard work and determination. She left school at the age of 16 and started her career in purchasing, before progressing to management. She values education and achieved a Master's Degree, whilst working and studying. At KKI, Lynn manages over 80 people and is responsible for the execution of orders, from sales right through to shipment to the customer, including purchasing, planning, projects and manufacturing. She comments:

'Before choosing their GCSEs, I would urge teenage girls to explore the diverse opportunities that the sector offers. For example, an engineering apprenticeship offers the opportunity to go into any industry and gain the right experience and life skills; not forgetting the financial rewards that can be achieved in this highly regarded sector.'





Angela Bailey (left) and Lynn Mowbray

**Angela Bailey** is KKI's health, safety, quality and environment (HSQE) director. She was always keen on science from an early age and achieved a Chemistry degree and a PhD. Angela started at KKI as a temp and progressed through the business, excelling in buying, quality and special project roles, before being appointed to the board of directors. She is keen for more senior businesswomen to step forward so that young females have someone to aspire to.

Angela comments:

'There are so many interesting manufacturing roles out there. It doesn't mean you are going to be working on a machine. You could be an engineer, go into design, IT, purchasing or quality. The opportunities are endless. Young women need to take inspiration from those females already working in manufacturing, who can address those common misconceptions of manufacturing being just for men.'

Only 22% of employees in the advanced manufacturing and engineering sector are female; 9% are engineers and only 5% are in management.

Women in Manufacturing – www.womeninmanufacturing.co.uk is a not-for-profit organisation set up to support, attract and retain women in the UK manufacturing sector. By forging links and promoting the activities of industry partners, schools and educational organisations across the UK, the organisation is striving to attain substantial growth and increased breadth of skills and knowledge in the manufacturing talent pool, by actively encouraging diversity.

## **kent**introl

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- Norsok M-630 material standard; ASTM A995 Grades; 4A, 5A & 6A
- Norsok M-650 qualified supply chain

🕝 Shipham Valves

From first concept in early 2013 the full duplex development programme has taken approximately 2 years. The dedicated project team have created new designs, developed a high quality, robust supply chain and built & validated the valves through a complex testing regime to ensure compliance with the strictest industry standards. Read more at www.shipham-valves.com

Come and meet our valve experts at the Valve World Expo & Conference in Düsseldorf, 2-4 December 2014 - Hall 3, stand no. B51





WÄRTSILÄ: YOUR SHORTER ROUTE

### Persta Stop Check Valve Protects Pulrose Power Station From £1m Repair

Two Shift Working at Pulrose Power Station on the Isle of Man gains through **AVS Expertise** 

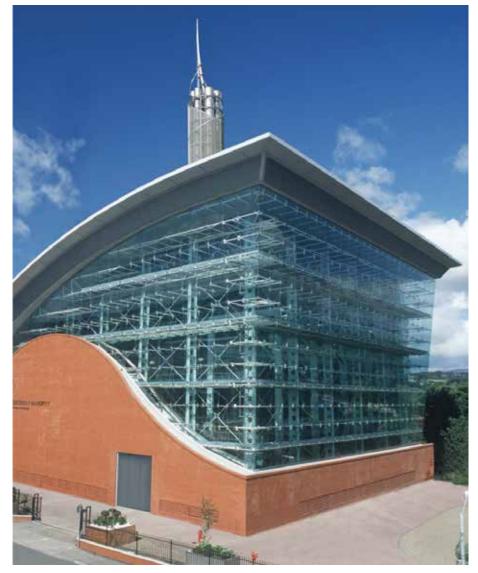
#### The problem

In common with many power stations built in the early 2000s, Pulrose CCGT plant was designed as a base load plant. Subsequently the commercial environment forced the operations team to two shift half the plant. Whilst there were a number of engineering problems that had to be addressed initially, some problems emerged after many years of operating the plant in two shifted mode. One of these problems was that the main steam stop valve and non-return steam valves were wearing and leaking allowing steam to leak into the off line boiler, causing condensation and stress corrosion cracking. This damage to the boiler resulted in a £1M repair.

### The solution

Manx Utilities decided to use Persta valves to replace a leaking non-return valve on their HP steam lines.\*





- A high integrity non-return/stop valve that could be driven closed to give a positive seal was needed.
- Also needed was a valve that could be manufactured within the 6 month window.

Advanced Valve Solutions (AVS) came to Manx Utilities assistance, helping to specify the correct valve and actuator arrangement, getting technical assistance from Persta valves, who signed up to the technical and time constraints.

The valves, spares and documentation were manufactured and delivered to schedule and the technical support on the valves has been second to none. In service the valves have been problem free and have eliminated the problem of steam leaking back. They were also stripped and inspected by Persta after 1 year of operation and found to be in excellent condition. AVS and Persta provide a valve which reliably seals after each operation, can be delivered in a quick timescale and have excellent aftersales technical and spares support.

\*Information with kind permission of Mike Newby MSc CEng MIET, Plant Engineering Manager Generation Division, Pulrose.

For a full list of technical papers including stop check valves visit the AVS website



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### EMERSON. CONSIDER IT SOLVED.

## **Open Day celebrates official opening** of new Rotork manufacturing facility in Leeds

An Open Day for customers and suppliers on 19th September celebrated the opening of the new 7,450 m<sup>2</sup> manufacturing and operation centre for **Rotork UK in Leeds**. The new £8 million facility was officially opened by Rotork Chief Executive Peter France and Chairman Roger Lockwood.

Guests enjoyed a buffet lunch, followed by the official 'Ribbon Cutting' and factory tours encompassing the Demo/Training Room, showcasing the entire Rotork product range. On the shop floor were Gears, Fluid Systems and Skilmatic stations, showcasing products manufactured at Leeds, and the Rotork UK station, showcasing Rotork UK capabilities.

Rotork UK is active in all industry sectors including the power, water and chemical industries. The Leeds facility supplies actuation solutions and service support to companies throughout the UK and Ireland, providing sales and customer support operations for Rotork Controls, Rotork Gears and Rotork Fluid Systems. The centre also houses Rotork Site Services, providing 24/7 support of companies and industries throughout the UK.

As a Rotork Centre of Excellence (providing best practices, research, support and training), the Leeds facility offers complete valve solutions. The dedicated team is trained and qualified to serve customers with custom-engineered solutions and complete project management – from contract award through assembly, test and inspection, to installation, commissioning and finally service, preventative maintenance and life of plant support.



As a Rotork Centre of Excellence, the Leeds facility offers complete valve solutions



**Top:** Rotork's new £8 million manufacturing facility in Brown Lane West, Leeds **Bottom:** Assisted by Rotork Chairman Roger Lockwood, Rotork Chief Executive Peter France addressed employees and guests and performed the ribbon-cutting ceremony marking the official opening of the new Rotork manufacturing facility at Leeds.



#### ROTORK UK Email: information@rotork.com www.rotork.com

# **New elastomer** tested to simulated 40-year life in nuclear environment



**Shieldseal® 663** is the latest elastomer developed by James Walker for long-term applications in ionising radiation — as experienced in nuclear power plants, and nuclear waste transportation and storage facilities.

Based on an ethylene-propylene terpolymer (EPDM), Shieldseal 663 is a specially formulated material of 80 IRHD that can offer a service life of 40+ years in ionising radiation as a fluid seal or elastomeric component. In a power plant it will work efficiently in contact with air, water, or steam at up to 150°C constant.

It is also recommended for long-term contact with a variety of media associated with nuclear waste, such as dilute acids and alkalis, ketones, lower alcohols and silicone oils and greases.

One of its main benefits is it contains very low levels of the sulphate and chloride ions that can contribute to corrosion in metalwork. The levels are less than 3ppm — the exact figure being below the measuring capability of the laboratory equipment used.

#### **Third-party testing**

Shieldseal 663 has been subjected to rigorous environmental qualification (EQ), at AMEC's Cobalt-60 facility, to demonstrate that it can function efficiently as a fluid sealing material throughout the 40-year working life of a nuclear plant.

International standards IEEE 383 and IEC 60780, and the French standard RCC-E, were used as bench marks for the thermal and radiation ageing investigations.

Radiation dosages up to 1000kGy were applied to the material at 23°C and 70°C to simulate normal long-term usage in a nuclear plant. A further 600kGy was applied to simulate additional radiation that could result from a loss of coolant accident at a plant.

The results show that the material's endof-life conditions, for both elongation at break and compression set, were both reached at 1600kGy. Thermal pre-ageing of the samples did not significantly alter the end-of-life ageing characteristics.

The testing regime and environmental qualification process for this new material were the subject of an exhibitor workshop presentation by John Rogers - a senior materials technologist from James Walker -at the inaugural World Nuclear Exhibition and Conference in Paris in October of this year. James Walker

onieldseal<sup>®</sup> 663 radiation resistant elastome



**Top:** The Institut Laue – Langevin international research centre which operates at the leading edge of neutron science and technology is one of the first sites to use components manufactured in the new James Walker Shieldseal 663 material

**Bottom:** A new publication covering the capabilities of Shieldseal 663 is now available from James Walker offices or on the company's website www.jameswalker.biz



James Walker Tel: 01270 536000 www.jameswalker.biz

# Continued Success for Heap & Partners **PHASE Ball Valves**

**API 6D Trunnion** mounted ball valves proving popular for oil and gas and nuclear applications

**Heap & Partners Ltd** launched its PHASE brand of API 6D Trunnion mounted ball valves in mid 2011. The company has now now developed the range to cover 1.1/2" through 12" #600 through 2500. These valves have been covered by a comprehensive fire testing programme which recently resulted in a fire test (ISO 10497) being undertaken on a 12" #1500 valve to cover the top end of this range.

Heaps has recently supplied its biggest valve to date; this is pictured (right) along with the respective fire test valve used to cover this application. The valve pictured is a 12" ASME 1500 with application specific hubbed ends and double piston effect seats. The valve was extensively tested passing; in house testing in accordance with API 6D, it was then further tested on ambient HP gas (shell and seats) before being stripped, inspected and rebuilt for the required low temperature high pressure gas testing on shell and seats at -46 Degree Celsius.

Heap & Partners has also recently completed a 3-off 3" #600 Top Entry Shut Down valve (fully in-line maintainable) for a Nuclear Application in the UK and also delivered its first temporary submersible valves for a PRT (pipeline retrieval application), again for a UK client.

The valves have been developed using a NORSOK driven Supply Chain, focused mainly on UK (or Western European) suppliers. The valves are manufactured to our clients' very prescriptive





Partners, with fire tested valve in the back ground

specifications in respect of Material Chemistry, NDE / NDT and many other exacting pressure testing requirements.

The client base now includes the majority of UKCNS Operators and Heaps are now looking to extend the into overseas Markets and sectors other than Oil & Gas, this is borne out by the recent Nuclear application referenced above.

The Phase range of valves is available in a number of standard and exotic materials, with Single and Double Piston Effect seating which again can be supplied with either soft or metal to metal seats. Side entry, top entry and Double Block & Bleed versions are all available on short lead times.

If this range of valves is of interest, please contact Heap & Partners to discuss this further.



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## **Pneumatrol** offers 4-week lead time on Namur valves

Pneumatrol Limited, the Lancashire-based specialist manufacturer of pneumatic control products for use within both hazardous and safe area environments. has recently announced an improved 4-week lead time for some of its standard Namur valves.

he most popular variants of C15 and Reflex product ranges of Namur standard solenoid valves are now available on a 4 week lead time for small and medium quantities. Both ranges are designed for direct mounting onto 1/4 turn pneumatically operated valve actuators meeting 'Namur' standard fixing dimensions.

Namur standard solenoid valves are now available on a 4 week lead time



C15 Series Solenoid Valves

The C15 range is well known for its durability and long life expectancy, also it's suitable for most weather conditions including low temperature down to - 40°C. The coil options (with standard voltage) available on this improved lead time include: Safe Area. Exd and Exia.

The Reflex valve is value engineered for single-operator, safe area applications, with long life expectancy.

It is our intention to continue to expand the product ranges available on improved



Reflex Solenoid Valves

lead times in the coming months. Please feel free to contact our sales office on 01254 872277 to discuss your specific requirements.

### pneumatrol

Pneumatrol Ltd Tel: 01254 872277 www.pneumatrol.com





### **RECAST PRESSURE EQUIPMENT DIRECTIVE 2014/68/EU**

#### The recast PED was published on 27 June 2014 to replace 97/23/EC.

Member States have until 28 February 2015 to implement Article 13 (Classification of equipment – alignment with Regulation 1272/2008/EC on CLP) which will apply from 1 June 2015 and the rest of the Directive is to be implemented by 18 July 2016, and will apply from the following day.

The Essential Safety Requirements are unchanged but changes do include new requirements for importers and distributers and the new number of the directive will require changes to certificates and declaration of conformity.

More detailed information will be issued when they become more readily available.

The recast (revised) PED can be located on the website shown below

http://www.parlament.gv.at/PAKT/EU/XXV/EU/02/58/EU\_25824/imfname\_10467767.pdf





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Certificate No: 7835

# Valve Materials: Do you know all of your options?

Advances in **thermoplastic technology** may mean that a plastic valve is a better solution than the traditionally considered metal, lined metal & alloy option.

Ver the last 50 years there have been great advances in the materials available for the manufacture of valves. New processes and a greater understanding of the way that materials behave when being formed and machined coupled with advances in computer modelling have led to a whole new range of materials being available to meet the demands of todays' industrial processes. Processes that require valves to handle higher pressures and temperatures, aggressive service conditions, corrosive mediums, be lighter/stronger and last for many years without maintenance; can all benefit from the use of alternative materials.

### Is Metal Always the Right Option?

High performance valves have traditionally been made from various metals and alloys, and in many cases this has been a successful process. There has indeed been a growth in the use of the term *'fit and forget'*. Valves and process equipment which are expected to give longevity and reliability to perform in corrosive environments are often given special surface coatings as a means of superficial protection. While in some cases this is a successful process, there are times when it is not the ideal, and corrosion does occur. The natural passivation layer found on Stainless Steels and similar materials can often be quickly eroded/corroded during process conditions leaving the base metal exposed. The same can be said for valves with special linings (often plastic) as when damaged, the valve can quickly fail and be expensive (time & cost) to repair.

Plastic valves are now used in a wide range of applications; metal, plastic or GRP pipework systems



CORROSION: Weir type PTFE lined diaphragm valve on a Sulphuric Acid duty



STRONG: Switching to a plastic valve does not mean a compromise on strength



Plastic valves are now used in a wide range of applications; metal, plastic or GRP pipework systems



HCL PROCESS: Often lined valves are specified for use on high concentrated acids. GRPP valves offer an effective solution

#### Plastic Valves – a wide range of benefits

During the same period of time SAFI (est. 1963) have also made great advances in their knowledge and development of Thermoplastics and their use in the manufacture of valves. The original materials used for the manufacture of plastic valves did (and still do) have limitations in their use, so new materials have been developed that offer better resistance to corrosion than many of the traditional metals and super alloys. As well as being inert to the corrosive media and environments expected in industrialised process conditions such as Oil & Gas, SAFI developed their products with special additives to protect from harmful Ultra Violet Light, Glass Fibre for improved mechanical strength and dimensional stability as well as resistance to temperatures up to 100deg C.

Furthermore Thermoplastic valves are significantly lighter than their metal counter parts, the opportunity to save weight in a system is usually very welcome indeed! All of these features allow design engineers to give serious consideration to where Thermoplastic valves can be used to complement or replace metal valves and therefore give reliable cost effective solutions to their clients!

#### **Plastic Valves and ATEX Requirements**

Several years ago SAFI pioneered the development of Anti-static plastics containing carbon powder & carbon fibre with a surface resistivity of less than 109 ohms a requirement of EN 50014. They manufacture full bore full faced ball valves (DN15-150) which qualify to ATEX zones 1 and 2.

SAFI offer valves manufactured from various Thermoplastics: PVC-U/C, ABS, PPH, GRPP (20% glass fibre), PVDF and Anti-static materials.

#### Successful use in Industry

Some of the most common applications of thermoplastic valves relating to the oil and gas industry include:

- Electro-chlorination: Hydrochloric Acid, Sodium Hypochlorite, Chlorine; GRPP/UPVC & PVDF
- Water Treatment & Demineralization: Caustic, Sulphuric & Hydrochloric Acid; GRPP & PVDF
- All forms of Chemical Dosing: GRPP, PVC-U/C, PPH, PVDF
- Not forgetting utility type applications for the supply and drain of water & wastewater

#### **DID YOU KNOW?**

- DN 150 (6") Stainless steel ball valve is on average 5 times heavier than a GRPP ball valve
- DN 150 (6") Stainless steel ball valve is on average 3 times more expensive than a GRPP ball valve
- PVDF is 10 times more resistant to abrasion (TABER test) than 304 Stainless steel.



Thermoplastic Valve Solutions

SAFI Ltd Tel: 01202 624618 Email: sales@safi-valves.com

## Pressure Tech shortlisted for prestigious supply chain award

**Pressure Tech** is extremely pleased and proud to have been shortlisted for a prestigious industry award. The company is one of just seven to have been selected as a finalist for the EIC Award for Supply Chain Excellence 2014.

The EIC (Energy Industries Council) is the leading trade association for UK businesses supplying goods and services to energy industries around the globe. It launched the award in 2013 to identify and celebrate a member organisation that 'has demonstrated a superior level of supply chain performance'. Now in its second year, with entries up by 20 percent, the accolade is highly prized as recognition of exceptional delivery within the sector.

#### **Fierce competition**

Established in 1943, the EIC now has three UK offices and bases in four continents worldwide. Collectively, its membership employs more than a million people and generates over £100 billion in revenues, operating across the oil and gas, petrochemical, pipeline, power, nuclear and renewable industries. Given the scale and standard of the competition for the Award for Supply Chain Excellence, Pressure Tech is delighted to see the results of its team's expertise, insight and dedication picked out by the independent judging panel.

The heavyweight panel contained representatives from some of the world's most influential energy operators and contractors, including BP, SSE Power Distribution, Centrica, EDF Energy and Sasol, all looking for that stand-out engineered solution.

#### **Exceptional product**

Pressure Tech has been specifically recognised for the design, manufacture and introduction to market of the LF-690 Hydraulic Pressure Regulator. Created to improve the reliability and repeatability of pressure control to subsea systems, the LF-690 is resistant to shock loads and unstable resonating, utilises ceramic seating to resist cavitation and features a lower access plug to make servicing easier. The subsea valve actuator has been adapted into a version for use down to 3,000 metres.

Charlotte Hust, UK Regional Manager (Southern) at the EIC, said: 'All of the shortlisted entries clearly display a new or improved product, service or initiative that is commercially available and has offered proven tangible benefits to clients. With more entries this year, the judging panel had a difficult task to agree on a shortlist, but they have unanimously agreed upon these seven exceptional entries.'

The Pressure Tech team must now wait until 16th October, when the winner of the award will be announced in a short presentation ceremony at the EIC National Dinner, to be held in the Central Hall at the Natural History Museum and attended by representatives from across the industry.





Pressure Tech Ltd Tel: 01457 899307 Email: info@pressure-tech.com



### DRAFT BS EN ISO 4126-11

#### Draft BS EN ISO 4126-11 "Safety devices for protection against excessive pressure Part 11: Performance testing" has been issued for public comment.

BVAA's Technical Hot Spot

This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication.

The purpose of this International Standard is to define the testing procedures to be applied for carrying out performance tests on closing, non-reclosing and combined safety devices for protection against excessive pressure as specified in ISO 4126 Parts 1, to 7, with particular reference to type testing.

The objective of this standard is to provide test procedures to determine the performance of the safety device under test in such a way that the test rig has no influence on the results.

Your comments on this draft are invited and will assist in the preparation of the consequent standard. Comments submitted will be reviewed by the relevant

BSI committee before sending the consensus UK vote and comments to the international secretariat, which will then decide appropriate action on the draft and the comments received.

Comments should be issued to BVAA by 30 November 2014 for onward submission to BSI



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### Crane ChemPharma & Energy Advances Fugitive Emissions Technology with the New Xomox<sup>®</sup>FK Ball Valve

Delivering superior fugitive emissions protection and a unique dual-material body gasket, the new **Xomox®FK Ball Valve** from Crane ChemPharma & Energy combines all of the critical safety and performance features required for demanding applications in the chemical process industry.

ngineered to address the inherent dangers within volatile chemical applications, the **Xomox®FK** adheres to the industry's most stringent standards and combats the harmful effects of temperature and pressure fluctuation with a combination of innovative features:

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**Image:** Self-relieving seats relieve excess pressure to protect the integrity of the valve while maintaining bidirectional operation

- Self-relieving seats relieve excess pressure to protect the integrity of the valve while maintaining bidirectional operation.
- The patented SX ball stem design provides high maximum stem torque capability and built-in side load resistance, which extends valve life under severe conditions including thermal cycling.
- A dual-material, spiral-wound body gasket with a chemically-inert PTFE inner seal and a secondary graphite outer seal provide a fire-tested design on every valve.

With triple-stem sealing and a spiral-wound body gasket, the new Xomox®FK ball valve enables our customers to achieve a level of fugitive emissions protection required more and more within the industry,' said Mike Truby, Global Business Manager for Crane ChemPharma & Energy. 'Self-relieving seats and a larger stem improve the life of the valve, ensuring that our customers achieve the best possible safety performance with the lowest lifetime cost of ownership.'

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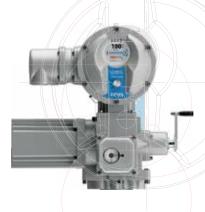
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# A Global Company with a 'Glocal' approach

**Bray** may be a global company but they have recognised the importance of modifying their valves to fulfil European market requirements. As one of the world leaders in butterfly valves, Bray continues to implement improvements in the design of existing products and as a result of continual analysis of the market place introduce new products to an already comprehensive portfolio.



Paul Tanner, Bray's National Sales Manager said 'Bray's strength is working closely with our customer's to ensure their operations run smoothly and safely with minimal disruption.'

Bray UK has adopted a proactive customer focused approach, increasing awareness of their customers' specific needs and being more intuitive to their Industry demands. It is this consummate level of service that has installed complete confidence in the total reliability of Bray.

Flow-tek, a wholly owned subsidiary of Bray has recently included the S19 segmented Ball valve to their range and a severe service valve for arduous duty in the power and oil and gas industries.

#### The Bray HPBV has been a market leader in Europe for many years

In addition to these new developments the series F15- 30 valves have been upgraded in design - conforming to EN 17292 - and are available in both full and reduced bore in PN 10 through PN 40 in EN approved material. With due consideration for the environment and the promotion of energy efficiencies the valves are compliant with EN 15848.

The Bray HPBV has been a market leader in Europe for many years. The unique design of sealing affords this valve suitability for a full range of service conditions across many industries. The valve is certified fire safe (EN 10497) and is extensively used in the oil and gas industry where low torques and high pressure (up to 100 bar) but above all high integrity are demanded.

The Bray HPBV continues to evolve and is now offered with a metal seat and for ultralow temperatures - the polar seat, but the most exciting development is the addition of a brand new envelope that is 100% DIN compatible in respect of the design (EN 593) and materials (all EN approved) the re- design allows significant weight reductions and some imaginative features,



Bray's new S98 Scotch Yoke Actuator

for example – external adjustment re travel – new wedge driven shaft / disc retention that allows flexibility of drive shafts – long neck length to allow for pipe / valve installation . The DIN – HPBV is offered PN 10/ 16/ 25/40 flange compatible and is 100% zero leakage (soft seat).

This product will give Bray a platform for major growth in Europe where full EN / DIN compliance is mandatory whilst **Bray UK** has adopted a proactive customer focused approach, increasing awareness of their customers' specific needs and being more intuitive to their Industry demands.

the existing valve (compliant with ANSI – ASTM standard) will consolidate together with the triple offset valve Bray's position in the oil and gas market.

Bray offer these valves both butterfly and ball to market with one of the most extensive ranges of quarter turn ranges of automation covering on / off and control valves. The valves are assembled and fully tested in dedicated ISO certified centres in Europe (Germany and the UK) thus ensuring when packages arrive on site they have simply to be installed and commissioned by site personnel.

The introduction of the new S98 Scotch Yoke Actuator adds another dimension to the Bray catalogue. It is a truly modular design with separate Torque, Pressure and Spring modules which affords optimum actuator selection. The actuator is SIL 3 capable and comes with PED and ATEX certification. With direct mount capability Bray can offer complete valve actuation packages, set and tested up to and including size DN 1200, along with Bray's complete line of positioners, status monitors and solenoids.



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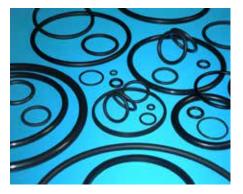
### **High Performance** Sealing Solutions in the Valve Industry

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Precision Polymer Engineering (PPE) is a leading designer, developer and manufacturer of high performance moulded elastomer O-rings, seals, gaskets and other components for various industries around the world. PPE's elastomer materials are specifically engineered to perform in the most demanding environments, including extreme temperatures and chemically aggressive applications.

With increasingly complex challenges faced by the oil and gas industry, it is important that the correct valves and the corresponding seals are employed, to avoid experiencing equipment failure and consequently system downtime. This has become an even more significant requirement since the increasing emergence of sour gas (hydrogen sulphide) during the extraction operations, notably in the search for new oil and gas reserves. Sour gas is a highly corrosive and poisonous substance to both humans and animals. In order to extract hydrocarbons safely and efficiently, it is necessary to use valve seals that are able to resist the aggressive nature of sour gas.

As specialists in oil and gas sealing solutions, PPE offers an extensive range of reliable elastomer O-rings, specifically developed to perform in such harsh environments and extreme conditions including sour gas.



PPE will be displaying its latest products at Valve World Expo, in Dusseldorf, Germany 2-4 December 2014



PPE will be displaying its latest products at Valve World Expo, in Dusseldorf, Germany 2-4 December 2014. Visit stand A63 in Hall 03 to discover how PPE's high performance seals can benefit your business.

For subsea operations, elastomer O-rings must be able to perform under extreme pressures, usually several thousand psi, while also at very low temperatures of between 32-37°F (0-3°C). This particular environment requires elastomers with low glass transition temperatures to ensure a bubble tight seal.

At the other end of the spectrum PPE also offers elastomer seals that can cope with extremely high temperatures found in oil and gas extraction operations. These high grade materials can not only cope with temperatures exceeding 572°F (300°C), they can also resist the corrosive effects of volatile and aggressive fluids, including sour gas.

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### Smith Flow Control Exhibiting at Valve World 2014



**Smith Flow Control (SFC)**, global leader in the design and manufacture of mechanical interlocks and valve management systems, is exhibiting at Valve World Expo, taking place in Düsseldorf from 2-4 December.

van Den Bos, our European Regional Business Manager, and Ben Townsend, our Business Development Manager. We will also be joined by representatives from our European distribution network, including Chemie-u. Energie. Armaturen GmbH (CEA) from Germany and PNE Technik from Denmark.

Our products greatly enhance safety and efficiency and are specified by the world's biggest oil, gas and petrochemical

Our products greatly enhance safety and efficiency and are specified by the world's biggest oil, gas and petrochemical companies. companies. Valve World attracts visitors from across the globe and offers the perfect framework to meet and discuss our clients' valve operating problems.

On display will be our comprehensive range of process safety products, which reduce the scope for operator error and ensure safe continuous plant operation. Our comprehensive range of key operated interlocks can also be customized to implement a safe sequence of events in any process activity.

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# 40% growth and team expansion for Advanced Actuators

Hydraulic actuator engineering firm **Advanced Actuators** is set to achieve 40% growth this financial year and has recruited a new general manager in the Middle East to manage its growth in bespoke customer projects.

he UK-based business which supplies oil, gas and power generation industries across the globe has announced a £2m turnover in just two months signalling it is on target to secure record breaking growth in over two decades with an £4.5m turnover for 2014/15.

Attributing the boost in business to an increase in exports and new projects in the Middle East and Brazil, Managing Director Chris Woodhead said the latest success indicates a long term growth plan based on clear customer targeting, exemplary

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service and a clear focus on the cost and quality benefits of applying hydraulic actuator solutions in bespoke projects.

'Our success is not a short term blip but the result of consistent work targeting key markets with our product benefits and problem solving solutions,' he explained. 'Advanced Actuators not only specialises in hydraulic actuator manufacture and supply but we take the time to train, educate and support our customers long after a contract has been secured.'

To strengthen the company's offering, Advanced Actuators has recently appointed General Manager Alistair Carson in its Dubai office to oversee oil and gas projects, develop new and existing partnerships and provide industry leading after sales services. The first of a series of planned appointments in the Middle East, Alistair has a key focus on developing business in the UAE, KSA and Oman.

'Alistair's role will be customer facing, educating clients on the benefits of hydraulic actuators and how we can deliver bespoke solutions through our early involvement,' Chris continued. 'It is essential that the industry understands the long term, cost and energy saving advantages of hydraulic engineering. The training and support we can offer through Alistair and his growing team will demonstrate our partnership approach which creates a long term working relationship to the benefit of everyone involved.

A former general manager at AVK Gulf and International Sales Director at Radius Systems, Alistair added: 'Advanced Actuators is working on many ground breaking projects in the region and the level of investment planned in the Middle East over the next 10 years makes this an exciting and rewarding place to be.'



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### Metso's automation technology chosen for the new Greatmoor energy-fromwaste facility in Buckinghamshire

With Metso's advanced automation, the new Greatmoor energy-from-waste facility will be able to extract maximum energy value from the thermal treatment of residual waste

### Automation plays a key role in making waste management sustainable

itachi Zosen Inova (HZI) has chosen Metso's automation technology for the new Greatmoor energy-from-waste facility under construction in Calvert, Edgcott, Aylesbury, Buckinghamshire, UK. HZI will act as the turnkey EPC contractor for the project. With Metso's advanced automation solutions, the facility will be able to reach high process availability and extract maximum energy value from the thermal treatment of residual waste.

'Metso was chosen as the automation system supplier for the project because of its good project execution know-how and long track record with seven earlier projects for HZI,' says Rene Neubert, Sales Director, EPS, Central and Eastern Europe, Automation, Metso. The earlier deliveries have been to energyfrom-waste facilities in Zistersdorf, Austria; Bergen, Norway; Riverside, Newhaven, STV 4&5 and Ferrybridge, UK; and Vaasa, Finland. The delivery to Greatmoor will be the eighth in total.

#### 'local service'

The energy-from-waste facility will be operated by FCC Environment and Buckinghamshire County Council. 'FCC owns the Zistersdorf energy-from-waste facility in Austria to which we delivered our first order from HZI in 2008. The plant has been very satisfied with our Metso DNA system as well as our local service,' Neubert adds.

The single-line facility with a thermal capacity of 102 MW reduces the volume of landfill waste and also meets the UK government's

climate protection requirements in full. It will have a capacity to treat 300,000 tons of waste per year, generating 22 MW of electricity for some 36,000 homes. Handover to the operators is planned for 2016.

Metso's delivery scope to the plant will consist of a Metso DNA automation system, a Metso DNA information management system and a safety system. Engineering, commissioning support, startup support und customer training are also included. Metso's solutions will be delivered in December 2014. The order is included in the second quarter orders received by Metso's Automation segment.

Metso's process automation solutions are designed to maximize the profitability of our customers' businesses by improving their production performance and their cost, material and energy efficiency. Our extensive range of process automation solutions and services is supported by a worldwide network of automation experts. The Process Automation business serves customers in pulp and paper and other process industries, power generation, marine, and oil & gas.



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### **Bestobell Marine** Secures First Major High Pressure Gas Fuel Valve Contract

**Bestobell Marine** has recently secured its first order to supply its brand new range of cryogenic high pressure Globe valves to DSME (Daewoo Shipbuilding & Marine Engineering Co Ltd) in South Korea

he innovative new valves have been developed over the past two years, in conjunction with DSME, to meet the exacting standards required for the valves in the new fuel gas systems, which includes withstanding extremely high pressures. The valves are designed to stand a maximum pressure of 370 Bar and will be fitted in the gas phase piping of the fuel gas system. Here the LNG is injected into the engine at around 300bar pressure, with the valve and piping system designed to withstand these pressures. The valves are due for delivery at the end of 2014.





Bestobell Marine is currently the only manufacturer of high pressure cryogenic Globe valves for use in ships' gas fuelled engines with the necessary Class Approvals, certification and 3.2 traceability on all components.

The valves will be installed on the five 174K LNGC (Liquefied Natural Gas Carriers) being built by DSME on behalf of Teekay LNG Partners LP of Canada.

Teekay LNG Partners selected new MAN B&W, 2-stroke 5G70ME-GI gas injection engines to power the vessels in an industry first for DSME. The ME-GI engine uses high-pressure gas injection to allow it to provide a more environmentally friendly option to the marine industry, due to less CO2 emissions.

Bestobell Marine is already developing another range of valves that can operate up to a maximum pressure of 500Bar to meet marine industry demands.

Duncan Gaskin, Sales Director for Bestobell, said: 'It is very exciting to be supplying our new high pressure Globe valves for the first time for a gas fuelled engine application. DSME chose to work with us on this high profile project because of our experience and understanding of regulations in the marine industry and in dealing with the Class Societies. There is huge potential for our high pressure Globe valves and we are currently in advanced discussions to supply these valves for several other international gas fuel projects.'



Bestobell Marine is currently the only manufacturer of high pressure cryogenic Globe valves for use in ships' gas fuelled engines

Bestobell Valves has been a world-leader in the manufacture of cryogenic valves for industrial gas applications for over 50 years and has 15 years' experience in supplying to the LNG marine markets. Bestobell's Valves are widely used on LNG Carriers, FLNG (Floating Production & Storage Units) and FSRUs (Floating, Storage & Re-gasification Units). Bestobell's Marine division designs and produces valves to meet specific requirements in the marine sector and has supplied cryogenic valves to a majority of the major shipyards building LNG Carriers.



Bestobell Valves Tel: +44 (0) 1142 240000 www.bestobellvalves.com



# **Quickits**



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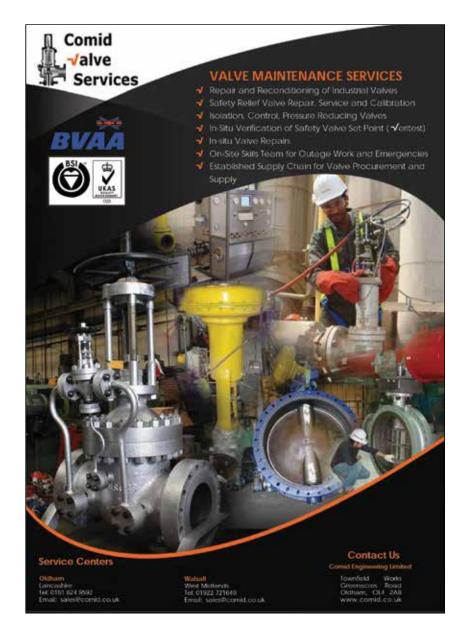
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### Severn Glocon manufactures 'biggest ever' control valves

**Severn Glocon** recently designed and manufactured the largest control valves in its 53 year history, at 42<sup>"</sup> bore and 21 tonnes in weight

ver the next six months four valves of this scale will have been despatched from the Gloucester factory. Two are for the Ichthys LNG project in Australia and the others are destined for a Middle East oilfield.

Successful completion of these technically challenging valves will underline the calibre of Severn Glocon's intelligence-led engineering and its in-house capabilities. Coping with their size and weight alone requires extensive logistics planning. This is particularly complex for the LNG valves which need to undergo cryogenic testing to prove they can operate reliably at temperatures as low as -160°c.





### 'developing innovative solutions'

Future developments in the oil and gas industry will see valves of this size becoming a more regular feature. Severn Glocon has invested in technical expertise, facilities and infrastructure to meet the challenge.

Rob Green, Director of Operations at Severn Glocon, explains: 'As a control valve engineering specialist, we're used to developing innovative solutions for difficult applications. However, valves of this size and scale bring a whole host of additional complexities. We extended the capacity of our in-house cryogenic testing facilities and developed robust operating procedures to ensure that the valves progress through production safely and efficiently. Manoeuvring valves of this size safely requires the co-ordinated operation of two cranes, so we needed to plan well and work closely with our sub-contractors.'

Severn Glocon Group employs 429 people in the UK and 800 worldwide. It recently won its second Queen's Award for Enterprise, International Trade.



Severn Glocon Group Plc Tel: 0845 223 2040 Email: sales@severnglocon.co.uk

### Emerson introduces

Rotary Actuators for internal valves in LP-Gas Services

The Fisher P700 rotary style actuator

**Fisher® P700** series rotary actuators for Fisher C series valves help to deliver full valve capacity and reduce maintenance in LP-gas applications

merson Process Management has released the Fisher P700 rotary style actuator for use with Fisher C series internal valves in LP-Gas services. These actuators offer a reliable method to remotely operate internal valves on storage tanks, delivery trucks, and bulk transports.

The P700 series actuators assure efficient performance of both the actuator and the Fisher C series internal valve to deliver full valve capacity. It is designed to precisely actuate Fisher internal valves and eliminate side-load wear. The P700 series minimises actuator air consumption, while maximising service life. The rotary actuators provide easy installation, durable construction, and reliable performance.

More information about Emerson Process Management and Fisher LP Gas may be found at www.fisherregulators.com The P700 series actuators are compatible with air, nitrogen, or propane vapour. They include a  $\frac{1}{4}$  (6.35mm) UL<sup>®</sup> approved thermal fuse plug to provide shut-off in the event of an emergency situation and feature a maximum allowable inlet pressure of 8.6 bar (125 PSIG).



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Emerson Process Management Ltd Tel: 0870 240 1978 Email: uksales@emersonprocess.com

### Steam Plant Engineering – one number to call

ny business that relies on steam for processing – whether it's a chemical plant, a recycling company, a laundry, a food manufacturer or a hospital – needs its boiler system to operate reliably and efficiently, every single working day of the year. If a boiler goes down, so does the manufacturing process. One faulty valve can stop a line and even operations that use steam solely for heating can't afford a breakdown in the middle of winter.

So avoiding unplanned downtime is paramount. When insurance inspections and repairs are needed, it's critical that any work on boilers, pressure vessels and valves is carried out quickly, to the highest standards and right first time and that is where Steam Plant Engineering's multi-skilled engineers come in.

The customers SPE work for like Müller, Smurfit Kappa and Sunlight, as well as FM companies such as Skanska and Norland, appreciate the fact that a repair to a valve can be done alongside an annual service by the same engineer at the same time, It avoids two separate visits, gets the job done fast all in one go, and makes things cost-effective.

### 'engineers who talk to customers in their own language'

Technical knowledge is just as important, and runs deep in the company. We don't employ sales people in suits, just engineers who can talk to customers in their own language, give advice, carry out work on the spot, and in most cases are very familiar with sites and individual boilers. Everyone from our MD Dan Garbett downwards is an engineer – recruited, trained and employed by us. We never charge to go out to site and give advice, or hide it in the bill. Helping customers to find a better alternative or save money long term is all part of the service. All that of course comes from industry knowledge – and our management team alone has a total of 75 years.

Steam Plant Engineering, based in purpose-built new premises in the heart of the West Midlands, is a true one stop shop for boiler repair, installation, troubleshooting and inspection – everything from a passing valve to a complete turnkey boiler house installation.

To fit in with planned plant shutdowns, valve overhaul and refurbishing is normally carried out at the company's purposedesigned, well equipped modern workshop - a clean environment where customers are always welcome. Alternatively, to fit in with inspections without a shutdown, the same work can be done on site. As a Zurich accredited and regularly audited service centre, the company's repair services are approved to Zurich Risk Services quality procedures. Tested on advanced hydraulic and nitrogen rigs, almost any make of valve can be serviced from 15mm to 500mm, and any type from parallel slide, gate, globe and check valves to safety relief, pressure reducing and control valves.

Steam Plant Engineering also carries out all the preparation that's needed for annual and SBG 1 / 2 five year ultrasonic testing (as required by the Pressure System Safety Regulations 2000) – including liaising with insurance companies to keep any downtime



Steam Plant Engineering's purpose-built new premises in the heart of the West Midlands

to a minimum, and providing 24 hour turnround on inspections if time is critical. Services in this area also include refractory replacement and repair, and burner servicing and breakdowns.

Boiler and coded welding repairs are yet another area of speciality - whether it's a case of J prepping, plugging leaks, replacing a single tube or carrying out more extensive repairs to tube plate, shells and furnaces.

Founded in May 2001 Steam Plant Engineering's reach stretches overseas too, with regular recent work at a Guinness distillery in Ghana, and assignments in Ireland, Greece and the Netherlands.

SPE's emphasis on quality and the environment has been recently reflected in ISO14001 certification, along with ISO9001 accreditation for the company's management systems.

Whatever our customers need to keep their boiler systems working at optimum efficiency, we're there. From valve and boiler repairs to annual inspections, from pipework systems to special fabrications like chimneys, feed tanks, skid units, container-house boiler units and storage tanks, and for next day delivery of stocked items including Topog-E<sup>®</sup> moulded rubber gaskets, there's only one number to call.



Steam Plant Engineering Ltd Tel: 01384 294936 Email: sales@steamplant.net



### 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...'

### But just who are 'They'?

It's us! BVAA Members have thousands of years of collective experience of standardisation, and we regularly participate in over 50 technical and standards committees around the world. For every standard being developed, you can be sure there is a BVAA group monitoring and contributing to the work.

### Faceless people? Not us!



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



British Valve & Actuator Association 1A Banbury Business Village Noral Way, Banbury, OX16 2SB (UK) Tel: +44 (0) 1295 221 270 Fax: +44 (0) 1295 258 893 Email: enquiry@bvaa.org.uk www.bvaa.org.uk

## Valve Condition Monitoring Enters a New Era

MIDAS<sup>®</sup> Diagnostics Presentation to Apprentice Engineers

### Score Group's Innovative V-MAP<sup>®</sup> G3

Successfully Launched at ONS 2014

n issue 30 of *Valve User Magazine*, we mentioned that Score Diagnostics limited was launching a new valve condition and performance monitoring system for critical process valves : V-MAP<sup>®</sup> G3.

It was quite a launch, with the new kit being presented from the back of a boat in Stavanger Harbour during the busy and successful ONS Stavanger Exhibition, August 2014.



MIDAS<sup>®</sup> Diagnostics Demonstrations Area

As a supplier of valve condition monitoring solutions, Score Diagnostics recognise the importance of having reliable, high integrity products. The Safety Integrity Level (SIL), which defines the target level of risk reduction required for a Safety Instrumented System (SIS), is an important characteristic which must be complied with. As functional safety requirements are becoming ever more important, Score Diagnostics appreciate the importance of SIL compliance with both the manufacturers and end users.

To ensure compliance with customer requirements, Score Diagnostics act in accordance with the international functional safety standards, IEC61508 and IEC61511. IEC61508 covers all electronic, electrical and programmable electronic systems, the forefront of Score Diagnostics business. Although it is not compulsory, Score use this standard as a guideline for best engineering practice.

#### The Need

The monitoring of the condition of Emergency Shutdown Valves (ESDVs), on both onshore and offshore oil and gas installations, is an essential part of ensuring the safety of personnel, protection of the environment and capital assets. The failure of an ESDV to operate on demand, or fail to provide a shut off, will have a major impact.

To demonstrate that an ESDV's performance meets the installation's safety criteria, it is normally subjected to routines involving inspection, partial closure, full closure, and leakage tests. These routines often require special test equipment and trained personnel, and will involve a planned shutdown, thereby interrupting production.

#### The Solution

This need to continuously demonstrate performance is met by Score's V-MAP<sup>®</sup> systems development. V-MAP<sup>®</sup> G3 is an on-line system that continuously monitors ESDV condition and the process duty under which it is operating. Data is acquired remotely, without the need for personnel to be in attendance to monitor specific ESDV tests. V-MAP<sup>®</sup> G3 will also acquire data for every valve operation, including unplanned ESDV operation events, so building up a history of performance that can be used in-lieu of a planned shutdown test, thereby avoiding the need to interrupt production. The valve and actuator performance trends can then be used to establish a maintenance programme based on actual and specific valve and actuator condition.

Score's new V-MAP  $^{\otimes}$  G3 system is the market's best available technology for assuring the required in-service performance and integrity of critical valves. It gives process and plant owners, integrity and safety assurance engineers as well as maintenance personnel enhanced visibility of all developing failure modes in valves and their operators and further extends the Score range of diagnostic equipment available to monitor in-service performance over time.

#### **The Development**

V-MAP<sup>®</sup> G3 has been developed, based on Score's long term experience in valve and actuator design, diagnostics, data acquisition, and system design and construction. The basic monitoring techniques and principles have been well developed in the past. It is the hardware and software developments of recent years that have enabled those techniques and principles to be implemented in a cost effective modular system design: One that can be tailored to the specific monitoring requirements, communications and protocols of the installation's automation system.

#### The System

V-MAP® G3 dedicated sensors are located on the valve, actuator and on the adjacent piping. The sensor types typically selected are:

- Acoustic Emission leak detection sensors
- Strain gauges to measure the torque or force required by the valve
- Pressure transmitters to monitor the actuator fluid power requirement
- Position transmitter to measure the valve stroke

#### Clockwise from left: MIDAS® DAU (Data Acquisition Unit), MIDAS® DAU Junction Box and MIDAS<sup>®</sup> SPU (Signal Processing Unit)





#### Instrumentation Set-up

The V-MAP<sup>®</sup> G3 sensors are continuously logged by bespoke data acquisition units (MIDAS® DAUs). On detection of a valve operation, the V-MAP<sup>®</sup> G3 server downloads the information from the MIDAS® DAU and typically requests the following input from the installation's automation databases:

- Process pressures and temperatures
- Actuator limit switch and solenoid status and timestamps
- ESDV event timestamps

Once the server has collected the raw data from the various sources, it is processed in the Score bespoke Signal Processing Unit (MIDAS® SPU) and stored. The following functions can then be performed to transform the data in to information:

- Manipulation to obtain derived data
- The derived data is then analysed by use of proprietary V-MAPS software, with algorithms for:
- Raising of alerts if performance characteristics exceed preset alarm or notification levels
- Comparison and trending with previous readings, benchmarks and design calculations
- Comparison of sensor outputs to detect sensor drift or malfunction
- Provision of summary reports

Benefits of using V-MAP® G3:

- Remote monitoring of all valve operations •
- Reduces site exposure for personnel
- Automatic alerts and warnings of deterioration
- Measures compliance with acceptable criteria
- Focuses maintenance activity
- Therefore, maximises plant safety and availability and reduces costs

The third generation of V-MAP® G3 has all the benefits of the previous system but also benefits from being easier to install (in both Brownfield and Greenfield Sites), reduced weight and space requirements and reduced installation costs.



Score (Europe) Ltd Tel: 01779 480000 www.score-group.com

# **Pentair Hosts Training Sessions** To Better Serve Asia-Pacific Customers

**Pentair** has conducted focused educational seminars for the company's partners of its Westlock Controls brand, part of the Actuation & Controls (A&C) platform, in the Asia-Pacific region. Over 160 channel partners and Pentair A&C sales and service members attended the two training sessions recently held in Pattaya, Thailand.

ocused on delivering customer value, the training sessions were structured to enrich attendees' knowledge base of Pentair's products. They provided an opportunity to educate participants to focus on integrated actuation and control solutions, enabling them to better serve end users. Attendees were also trained to effectively communicate the features and benefits of Pentair's offering and, by improving knowledge and product expertise, were empowered to help address customers' needs.





The training received positive feedback from its attendees

The training was a successful event which received positive feedback from its attendees. The sessions provided in-depth information to enhance my knowledge of the total offering from the A&C platform and understand how the portfolio is advantageous in this competitive market, commented one partner.

'We're committed to supporting our channel partners and enhancing their knowledge in order to provide the best quality of service to customers,' says lan Barber, General Manager, Westlock UK. 'Investing in training seminars like these reinforces our position as a leader in our field and enables us to bring together our global capabilities at a local level.'



Pentair plc Tel: 01858 467 281 www.valves.pentair.com/valves

### **Sunday Times award** spotlights Severn Glocon's manufacturing excellence

Roger Spiers (centre) and Rob Harris (right) of Severn Glocon receive the award from The Sunday Times deputy business editor Simon Duke



alve engineering specialist Severn Glocon Group received special recognition for manufacturing excellence at the 2014 Sunday Times HSBC International Track 200 awards ceremony.

The annual International Track 200 lists the UK's private companies with the fastest growing overseas sales. This year, special awards were presented to four of the 200 organisations. Categories included manufacturing excellence, transformational growth, emerging international brand and fastest-growing company.

Severn Glocon Group was singled out for the manufacturing excellence category following exceptional export growth which has seen international sales double in two years. The Sunday Times' deputy business editor Simon Duke presented the award.

Roger Spiers (centre) and Rob Harris (right) of Severn Glocon receive the award from The Sunday Times deputy business editor Simon Duke

Maurice Critchley, CEO of Gloucestershire-based Severn Glocon Group, says: 'Export activity now represents the majority of our turnover, thanks to strategic foundations laid over the past 15 years. Our combination of British engineering expertise and progressive technologies coupled with a robust international footprint sets us apart on the global stage. It's an honour to be singled out from the International Track 200 for the manufacturing excellence award. And it is testament to the dedicated skills and expertise of all our staff in the UK and overseas.'

This is the fifth consecutive year that Severn Glocon Group has been listed in the Sunday Times HSBC International Track 200. Earlier this year, the Group won its second Queen's Award for Enterprise in International Trade. It has also reached the final round of judging for The Manufacturer Awards, in the export category.



#### Severn Glocon Group Plc

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### Denholm Valvecare Designs Unique Alternative to Bursting Disks

**The Buckle Pin** pressure relief valve offers a number of benefits over the alternatives when selecting a valve for over-pressure protection. The fast acting, safe and easy to replace valves offer a cost effective solution to a number of applications where safety relief valves are used.



he Denholm Valvecare Buckle Pin Valves are a unique range of Safety Relief Valves for over-pressure protection, predominantly sold and installed on FPSO & Flare systems – worldwide. The valve operates as the name suggests; a pin forces the valve closed, with a gas tight seal. When the set pressure is exceeded, the pin buckles and the valve safely releases the pressure, with a clean lift producing no metal shards. The valves can be reset in minutes. Other buckle pin valve applications include:

- Petrochemical Processing
- Oil & Gas exploration
- Food processing
- Pharmaceutical
- Reactor protection
- By-pass on flare staging valve
- Pump protection
- Vacuum protection
- Primary relief
- Secondary relief

They are a cost effective replacement for bursting disc applications, the technology being based on Euler's law of compressed columns.

#### Design

The pin provides a clear indication of the valves "state" open or closed as the design only has two stable states straight or buckled, with the additional advantage of the mechanism being external to the process and being easy to replace. The proximity switch provides the operator with option of connecting the valve to their systems to provide a signal alerting to the valves operation.

#### Manufacture

By the very nature of the buckle pin design and the customer's individual process requirements, these valves are made to order. During the design and manufacture of the BPRV stringent QA/QC procedures and processes are followed to ensure compliance with both the Customers and Denholm Valvecare requirements

#### **Codes & Standards**

The Buckling Pin Relief Valve is recognised by several International Standards, these include ASME and TUV along with the European Pressure Equipment Directive (PED)

#### Maintenance

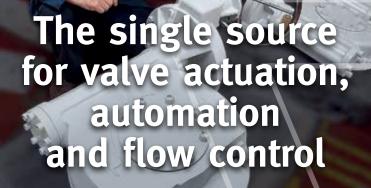
The replacement of the Pin is a relatively simple task and replacement of the elastomer seals/piston seals can be accomplished is a relatively short time period.



DENHOLM VALVECARE LIMITED

**Denholm Valvecare Limited** 

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### Zoedale Introduce EZ Logic from Bernard Controls



Zoedale Plc is the UK Partner of Bernard Controls who is well known for manufacturing high end electric actuators for oil and gas, water and power applications. In order to expand their product portfolio and service manufacturing and low risk industry applications Bernard Controls has launched a range of actuators that are priced to sell. The strap line for the EZ range is *'Simple and Sturdy'*. Bernard Controls have used their 70+ years of actuator know how and designed a quality actuator that is ideal for moderate environmental and operational conditions.

'We are very pleased to now be offering the EZ range from Bernard Controls.



Their actuators are top quality but for some applications the premium range can be price prohibitive. The EZ range is designed for users who don't need a Rolls Royce where a Volkswagen will suffice' Says Tim Guest, Director at Zoedale.

The EZ range is available in IP67 / NEMA 4, with or without local controls, on / off or positioning and in torques from 45Nm to 10,000Nm. Due to the simple design these actuators are available on a 1 - 2 week lead time and Zoedale do hold UK based stock.

For enquiries call Nikki Dickinson at Zoedale on 01234 832832



Left: The strap line for the EZ range is 'Simple and Sturdy' and (right) the actuators are ideal for moderate environmental and operational conditions



Zoedale Plc Tel: 01234 832832 Email: enquiries@zoedale.co.uk



# The art of the ball valve

Understated and discreet, the humble **ball valve** is one of the vital cogs in the machinery that drives the modern world. There are few utility systems in our homes, offices, schools, hospitals and factories that don't rely on a ball valve as a key component facilitating our water works, plumbing, heating, power supplies and operating machinery. Indeed if removed, could wreak havoc on the support systems that we take for granted in everyday living.

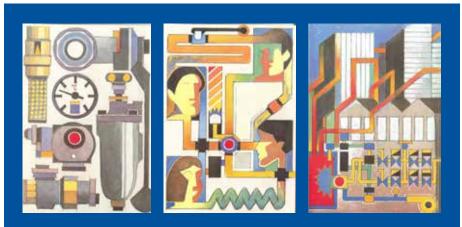
o Barnsley based Albion Valves (UK) Ltd however, the ball valve has never been something to be taken for granted, and since opening its doors for business in the 1970's has been at the very heart of the firm, and indeed the major protagonist in the story of their growth.

From the early years of business the Albion Group was involved in sourcing innovative European products for use in the manufacture of domestic heating boilers

From the early years of business the Albion Group was involved in sourcing innovative European products for use in the manufacture of domestic heating boilers, whilst at the same time identifying additional potential applications for the products they currently supplied.

One such product was the discovery of ART 45 ball valve, which was to become the basis of how modern Albion came about and the beginning of a multi-million pound market in the UK.

In the 1970's in Italy, as in other European countries, the ball valve was being used in water and gas applications – something that was largely unregulated at the time.



In the 1980s Ralph Freeman, a commercial artist, was commissioned to create a brochure for Albion. His project entitled Man, Spirit, Energy depicts Albion as a red dot in engineering systems, the red dot symbol which is still used on the company's logo and marketing materials today.

Although art and industry are an unlikely marriage and art is open to interpretation, Freeman has perhaps inadvertently captured the ball valve as being as central to Albion as it is to modern energy systems as a whole today.

However, seeing the enormous potential in the design and mechanics of the valve when it landed on the desk of Albion's MD in 1978, Albion took the ball valve to British Gas in an attempt to have it certified for use with gas, a regulated application in the UK.

The Albion team worked extensively with British Gas to develop and draw up their approval standard for the ball valve in gas applications. After several attempts the ART45 officially became the first ball valve approved for the gas industry, developed with Albion engineering.

Complete with this new stamp of approval, Albion appointed their first UK Sales Rep and rapidly began signing up distributors and by 1984 the ball valve stockists' turnover exceeded £100,000.

Ball valves were rapidly adopted by both the building services and process industries. Until that point the majority of industrial and domestic systems relied on the gate valve. Today, while there is still a place in the market for the traditional gate valve in many applications, in the early eighties the ball valve soon became the preferred engineering option, offering much better performance, *'bubble tight*' shut off and ease of use.

In industry, ball valves have been extensively adopted because they are easy to operate, they are versatile, and able to support pressures of up to 1000 bar and temperatures up to 752°F (500°C) depending on the ball valve design and material.

Since the early eighties the ball valve has been Albion's flagship product and a catalyst for the growth of the business as a whole. Sales and Marketing Director, Les Littlewood commented:

'If you ask any UK contractor what Albion stands for they will say the ball valve, and rightly so. Today, the ball valve with all its humble beginnings accounts for approximately one third of our overall business. Our team sells tens of thousand of units every year, 95% of which go into installations within commercial buildings and industrial processing.'

By 2000, the ball valve had become the norm in both UK industrial processing and in domestic and commercial plumbing, replacing gate valves with primary reasons being that the ball valve offers greater longevity, ease of use, tighter shut off and better long-term value for money.

### **NH BC** 12

Albion Valves UK Itd Tel: 01226 72 99 00 www.albionvalvesuk.com

# No, more Namur!



ommonly used on pneumatically actuated ball and butterfly valves, the Namur mount solenoid valve has long been accepted as a cost effective solution in a competitive actuation market. For some applications though, we have been told by customers that they have to use inline valves for their instrument assemblies because they need manual reset operation or 5/3 with ATEX certification and their only choice was therefore to hard pipe an inline solenoid valve.

For actuation requirements with one solenoid valve, it would be better to remove the need to mount and hard pipe any pilot valve specification. This would make you more effective against your competition by reducing your costs; increase throughput in your workshop by reducing assembly time; simplify maintenance requirements for your client; and reduce the number of potential air leak paths to improve plant air consumption.

Namur mounted valves are ideal to achieve this but many manufacturers have a limited range and a particular specification or certification may not be available with the following types of operation needed for common applications:

- Single acting actuators: 3/2 normally closed; 3/2 normally open; 3/2 manual reset; 3/2 manual latch electrical trip; 3/2 dual coil bistable.
- Double acting actuators: 5/2 monostable; 5/2 dual coil bistable;
  5/2 manual reset; 5/2 manual latch electrical trip, 5/3 all ports blocked; 5/3 all ports to exhaust.

Shows D50 series valves with seal configuration left to right as 5/2, 3/2 NC and 3/2 NO functions

There is now a simple solution to this. All the above operations can be achieved with only six Namur valve models manufactured by Nadi Srl in Italy:

 D50 – configurable to 3/2 normally open, 3/2 normally closed or 5/2 operation. **Right:** Namur mount manual reset solenoid valve. Configurable to 3/2 or 5/2 operation through face seal orientation

Left: Shows D50 series valves with seal configuration left to right as 5/2, 3/2 NC and 3/2 NO functions

- D51 dual coil version of D50 configurable as 3/2 bistable or 5/2 bistable.
- D52 5/3 all ports blocked Namur mounted solenoid valve.
- D53 5/3 all ports to exhaust Namur mounted solenoid valve.
- G50 configurable as 3/2 manual reset or 5/2 manual reset operation.
- G73 configurable as 3/2 manual latch with electrical trip or 5/2 manual latch with electrical trip.

These values are available in brass or 316 stainless steel with ATEX or GOST certification and options for operation at ambient temperatures down to  $-60^{\circ}$ C. Value configuration is user selectable by means of the Namur face seal orientation and full size exhaust ports allow the easy fitting of flow regulators for actuator speed control. Manual operators are also optional on the D series values for manual value cycling.

Nadi Namur solenoid valves- a complete range of solutions for actuator pilot applications.



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### **MD of British industrial manufacturer** appointed to Japanese Corporation's Board



Steve Bangs, Managing Director of SMC Pneumatics UK Ltd and Director of SMC Corporation Japan

Steve Bangs, Managing Director of SMC Pneumatics (UK) Ltd, has been appointed a Director on the main Board of the Japanese multi-national, SMC Corporation with responsibility for the management of SMC's European zone.

One of only three non-Japanese Directors, Steve's recent appointment recognises his contribution to the company, his role in Europe and his commitment to SMC Pneumatics (UK) Ltd over the past 30 years.

Steve joined SMC UK as Sales Manager in 1984 having previously worked for Norgren. He was made managing director of SMC UK in 1998, and under his strong leadership the UK operation has continued to grow. Located in Milton Keynes, the company's 24,000 square metre state-of-the-art production, warehousing and office facility bears testament to the success of his efforts.

On receiving the news of his Japanese Directorship Steve said, 'It's a real honour to be made a Board Director of the SMC Corporation and, in terms of my career, it's the icing on the cake. Over the past 30 years I've witnessed the Corporation's commitment to product development and continued investment in both people and facilities which has now made SMC the world leaders in our field'.

'From a UK perspective, I believe my appointment also reflects on the great performance and commitment from all our UK employees, many of whom have been with me for many years'.



SMC Pneumatics (UK) Ltd Tel: 01908 563888 Email: sales@smcpneumatics.co.uk

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# **Albion** Strikes The Right Balance This Winter

As temperatures start to plummet and central heating systems kick in, the winter months often prove the most challenging time of year for heating engineers to maintain a **comfortable and healthy climate** for people to live and work in

Ibion Valves, who has been serving the building services and heating industries for thirty years, suggest that correct design and accurate implementation of central heating and CHW systems, will provide the right balance for optimum comfort levels and effective temperature control all year round.

Heating systems in public spaces such as office blocks, retail outlets, hotels, hospitals and schools come under much stress, with multiple variants potentially compromising the smooth running of a system.

Heating systems in commercial buildings must be designed to accommodate the movement of people, the use of electronic appliances, open windows and doors, and potentially individuals tampering with thermostatic controls.

A combination of all these factors contributes to an environment, which can be either too hot or too cold, and often with not enough ventilation, as well as causing huge inefficiencies in the heating system.

Albion advises the focus for heating engineers should be on balance and control



In a work environment poor temperature control can have the knock-on effect of poor performance, and both overzealous use of heating as well as icy blasts from CHW units can be equally troublesome and uncomfortable for a workforce.

In order to promote a comfortable environment and individual's wellbeing, Albion advises the focus for heating engineers should be on balance and control. Albion Valves, Technical Specifications Manager, Paul Wightman commented:

'In engineering terms 'T set' is the desired room temperature we wish to be controlled exactly and perfectly at all times of year and throughout the day.

With poor balance and control the system swings become too great, which causes extreme temperatures in our environment and energy wastage.

A properly balanced variable volume system can only be achieved with the correct set of dynamic balancing and control valves, these subsequently ensure the correct distribution of flow throughout the whole system irrespective of any pressure changes or the partial system load that will inevitably occur for the vast majority of the building's operational life.

If the correct balancing of the system is not established, this will result in unequal distribution of the flow so that there will be a surplus effect in some of the terminals, while not enough in others consequently lowering the quality or comfort control.

The result of this will be that the desired heating or cooling will not be ensured in all parts of the installation.'

Albion recommend one solution is the use of Differential Pressure Control Valves (DP-CVs) which has proved to be extremely efficient in helping to stabilize the temperature in heating systems.



In a work environment poor temperature control can have the knock-on effect of poor performance

The DPCV is set to maintain a steady differential pressure, under dynamic balancing conditions, which ensures flow cannot exceed a desired rate. It therefore helps reduce both energy consumption and the risk of noisy vibrating pipes, while simplifying the commissioning process.

In addition, Thermostatic Radiator Valves (TRVs) are self-regulating and control the water that enters a radiator and ultimately able to help maintain a desired room temperature, TRVs come with lockable tamper proof temperature settings ideal for commercial environments.

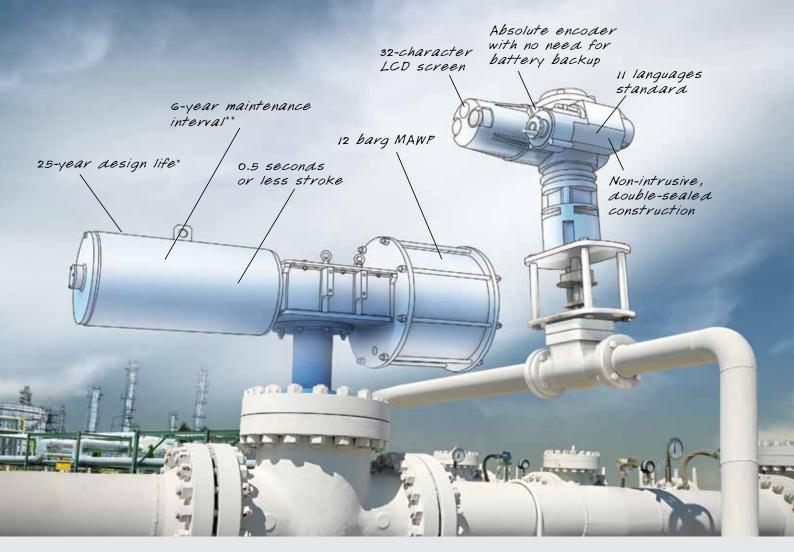
Similarly in installations that require balance to be controlled in a specific location, e.g. one point of delivery to a room Pressure Independent Control Balancing Valves (PICV) can be used. These are particularly effective on 4 pipe HTG & CHW terminal units e.g. Fan Coil Units (FCUS) and Air Handling Units (AHUs), that can overheat the space or emit chilly blasts when overcirculating chilled water in the system.



Albion Valves UK Ltd Tel: 01226 72 99 00 www.albionvalvesuk.com

### Limitorque<sup>®</sup> Actuators



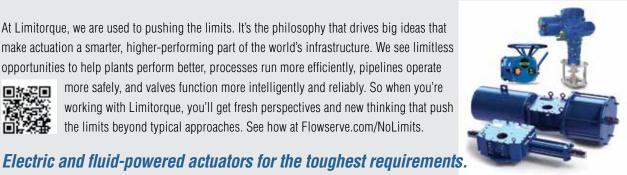


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At Limitorque, we are used to pushing the limits. It's the philosophy that drives big ideas that make actuation a smarter, higher-performing part of the world's infrastructure. We see limitless opportunities to help plants perform better, processes run more efficiently, pipelines operate



more safely, and valves function more intelligently and reliably. So when you're working with Limitorque, you'll get fresh perspectives and new thinking that push the limits beyond typical approaches. See how at Flowserve.com/NoLimits.



\* Depending on service conditions, proper installation, operation and maintenance. \*\* Six-year maintenance interval for LPS, LHS; five-year maintenance interval for LPC. ©2014 Flowserve Corporation.

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# **Rotork Midland** increases Rotork's instrumentation product range



spring return spool valves from Rotork Instruments

Established brands including Midland-ACS, Alcon and Landon Kingsway have been added to Rotork Instruments' product offering with the formation of Rotork Midland.

he ISO9001 certified company, which has been designing and manufacturing stainless steel control equipment for the oil and gas industries for over 60 years, is now part of the Rotork Instruments division. It brings with it an enviable reputation for delivering innovative solutions for a wide range of applications, including control systems for pneumatic and hydraulic control valves, electro-pneumatic and electrohydraulic actuators, local control panels, manifolds and components such as solenoid valves, level controls, gas detection and fire-fighting equipment.

Within the Rotork Instruments division, the Rotork Midland product range complements the high-precision pneumatic control devices and motion control equipment manufactured by Rotork Fairchild, the Soldo range of control accessories for valve automation and the Young Tech Company's market leading range of valve positioners and accessories.

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### www.**rotork**.com

# Pera Technology wins Horizon 2020 EU Grant Funding for The Smart Actuator Company (SACO)

Meeting at the **BVAA Spring Conference** leads to successful funding bid

ne very successful outcome from the BVAA Spring Conference at Celtic Manor in May was the coming together of the leap® team at Pera Technology and The Smart Actuator Company ltd (SACO).

Delegates at the Conference will recall that the first speaker on the program was Tony O'Donnell, the Chairman of SACO, who spoke about their first ultralow energy electric actuator product, the SmartAct®-1, which is based on the patented RIFT Technology motor drive design. He also outlined their plans to introduce both a smaller and a larger actuator, to give them coverage from 20 Nm valves right through to 400 Nm valves on direct mountings.

Next up was Marina Roberts, leap<sup>®</sup> Regional Manager from Pera Technology who spoke about 'Financing Innovation through the world's largest New Product Development





fund'. She gave a presentation on the Horizon 2020 research and innovation EU grant fund of €80 billion and explained how €3.3 billion of this is aimed specifically at small and medium sized enterprises.

Tony and Marina both liked what the other had to say so much that they decided almost there and then that an application would be submitted to the European Union for grant funding.

The leap<sup>®</sup> team at Pera Technology put the Horizon2020 Phase 1 application together and submitted it in June. There were over 2200 applications from companies across Europe. There was then an anxious wait until the news came through in early August that SACO were one of only 155 companies to be successful.

'We were obviously delighted with the news but not completely surprised. The leap® team at Pera Technology were very professional in their approach and their preparation of the application' comments Tony O'Donnell.

They asked all the right questions, even the difficult ones, and their final submission was excellent. I was quietly confident that we would be successful.



Tony O'Donnell speaking at the 2014 BVAA conference



Marina Roberts of the leap team at Pera Technology

We have lived with our RIFT Technology now for almost four years and know how game changing it will be for motor driven systems in general, and of course electric actuators in particular'.

Marina Roberts had previously explained that the Horizon 2020 scheme is grant funding from the European Union and does not have to be match funded by SACO. As the leap<sup>®</sup> team put it 'all that the people at SACO have to do now is keep doing what they have been doing so far; peddling like mad!'

Horizon 2020 provides for individual SME's to receive up to €2.55 million and is based on specific projects by the applicant. In the case of SACO the expansion of their product range and the duplication of their market penetration across the world were at the core of their application.

Tony predicts that this initial success will be the beginning of a long and fruitful relationship between SACO and Pera Technology and thanks the BVAA conference gods for bringing the two together!



The Smart Actuator Co. Ltd Tel: 01684 565709 Email: sales@smartact.co.uk

# **Quickits** launch new website

Quickits Limited, one of Europe's leading suppliers to the valve and actuator industry, is pleased to announce the launch of a new and exciting website.

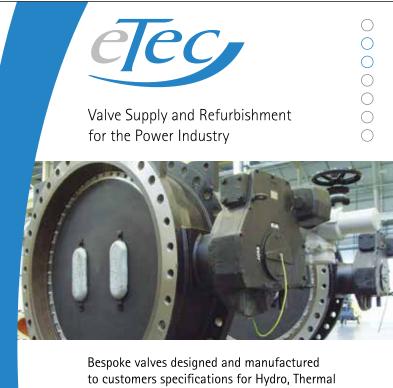
imed to coincide with the December 2014 ValveWorld Exhibition the launch of the new site forms part of a vigorous marketing campaign designed to enhance the business.

The new look logo sits comfortably within Quickits' website which has been completely Overhauled with fresh new images and detailed products pages.

### The new site

As an ISO 9001:2008 approved supplier Quickits' products are designed, manufactured and inspected using the latest state of the art computerised technology ensuring a first class, professional service with complete consistency.

With a decade of continued business growth under the belt Quickits' headquarters based in Mansfield, Nottinghamshire encompass the latest 3D design, CNC & inspection equipment derived from an ongoing investment program already in excess of £2m.



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The New website showcases the vast array of products and services that Quickits are able to offer including mounting kits, extensions, locking devices, worm gears, bevel gears, spring return handles, switchboxes, laser cutting, coded welding, epoxy coating, powder coating and much more.



The new site showcases mounting kits, extensions, locking devices, worm gears, bevel gears, spring return handles, switchboxes, laser cutting, coded welding, epoxy coating, powder coating and much more.

Efficiently driven by Quickits' experienced management team quality and service remain at the forefront within the business resulting in a sustained, average on time delivery performance of 99%.

In addition to the new website providing detailed information relating to Quickits' products and services social networking links have also been added including LinkedIn, Twitter and Facebook.

As an exhibitor for the first time at the Dusseldorf show this year Quickits personnel will be on hand to discuss in more detail the extensive product range and services available.

Why not visit the new site **www.quickits-online.co.uk** and see for yourself what Quickits are able to offer.



www.etec.uk.com

**Quickits Ltd** Tel: 01623 515545 Email: enquiries@quickits-online.co.uk

### Emerson Introduces PROFIBUS-PA Remote-Mount Digital Valve Controller For Hostile Environment Installations

Separation of the **Fisher® FIELDVUE™ DVC6200p** series travel sensing and controller segments helps meet extreme temperature and vibration valve demands while maintaining performance and reliability

merson Process Management has introduced the Fisher<sup>®</sup> FIELDVUE<sup>™</sup> DVC6200p series of digital valve controllers. The DVC6200p series is an ideal solution for applications in which accessibility, extreme temperatures (up to 120°C/250°F), extreme vibration or confined space make integral mounting difficult or impractical.

Industries such as pulp and paper, and metal and mining have typically preferred to isolate valve mounted instruments from harsh environments. With the remote mount version of DVC6200p, only the valve position feedback is mounted on the control valve,



Emerson introduces PROFIBUS-PA remote-mount digital valve controller for hostile environment installations

while the remainder of the digital valve controller can be mounted over 90 metres (300 feet) away in a less severe or more accessible environment.

> The remote valve mounted feedback unit utilises the patented FIELDVUE linkage-less, non-contact feedback technology, in which physical contact has been eliminated between the valve stem and the instrument. With no linkage to wear, loosen, corrode or vibrate, the feedback unit can withstand a plant's operating extremes.

> With over 1.5 million units installed worldwide, FIELDVUE digital valve controllers prove highly suited to difficult process environments where they provide unmatched valve operation.

Utilising the best of PROFIBUS PA, the DVC6200p series provides a wealth of alerts, trends, and diagnostics to allow for visibility and control.

The DVC6200p supports enhanced device description (EDD) files that allow for quick and easy configuration. Quick setup and calibration, including performance tuning, can be performed locally in a matter of minutes. For more extensive parameterisation, leading PROFIBUS configuration tools can be used.

The FIELDVUE DVC6200p digital valve controller is certified to Profile 3.02 for PROFIBUS PA devices by the PROFIBUS Nutzerorganisation a.V (PNO).

The DVC6200p is offered with CSA, IECEx, ATEX and FM hazardous area approvals as well as other certifications/ approvals. It is also listed in the Lloyd's Register for industrial, marine and offshore use.



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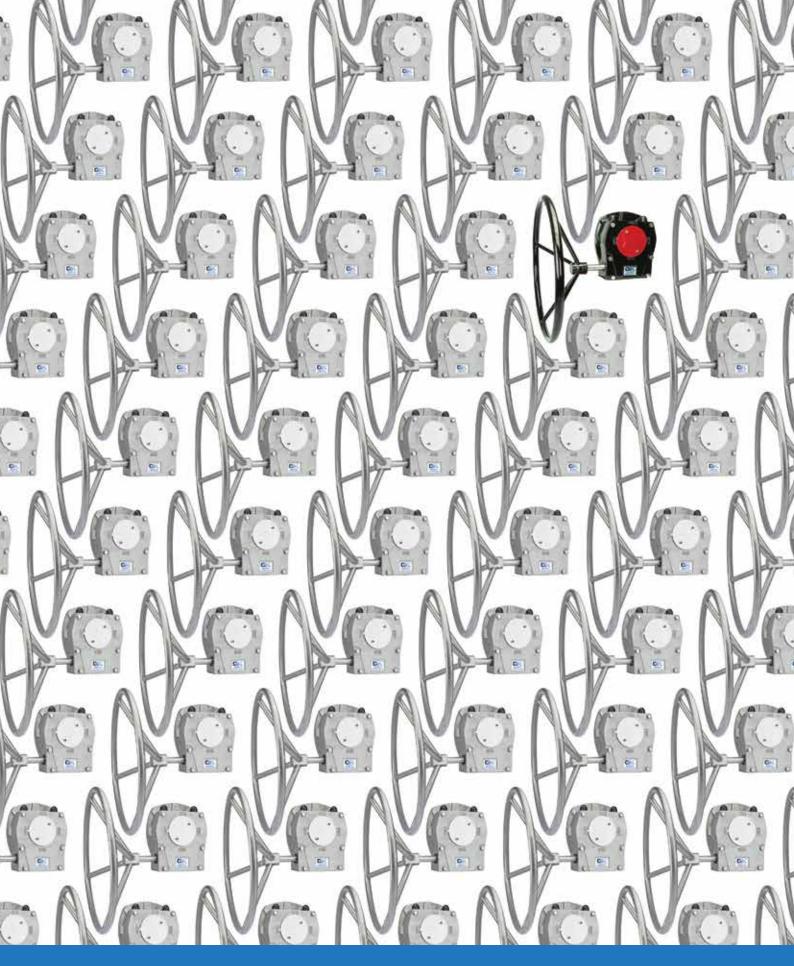
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# **Rotork** adds rack and pinion actuators to its product range



The Rotork GT rack and pinion actuator range has been manufactured and developed since 1963.

he acquisition of the GTA Group, comprising of GT Attuatori Srl, GT Attuatori Europe GmbH and Max Process GmbH, has added an established range of rugged rack and pinion pneumatic valve actuators to Rotork's wide range of flow control product offerings.

The GT Attuatori product range encompasses single and double acting rack and pinion actuators, solenoid valves, switchboxes and mounting accessories, providing packaged valve solutions for flow control applications in many industrial processes. For safety critical duties, the actuators are available with SIL3 certification to IEC international standards 61508 and 61511.

Available with torque outputs up to 15,300 Nm, the compact, anodised aluminium bodied actuators operate from air supply pressures between 2 and 10 Bar in a standard temperature range of -50°C to +70°C. Special seals can increase the temperature range to +200°C.

Standard strokes of 90°, 120° and 180°, with +/-5° positional adjustment, can be increased to  $240^{\circ}$  upon application, whilst customised angles and three position versions are also available.

# **rotork** Valvekits



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Valvekits products include mounting kits, extension stems, locking devices, worm gears, bevel gears, accessory mounting brackets, linkages, panels, positioners and solenoids.

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The latest machinery is used whilst a continuous investment plan keeps the company at the forefront of technology.





Valvekits - the market leader, see our dedicated website at: **www.valvekits.co.uk** 

**rotork** 

www.rotork.com Redefining Flow Control



## Rotork UK

Email: information@rotork.com www.rotork.com

# Metso's control valves prove cost effective at a major chemical installation

**Metso** has successfully delivered more than 70 Neles<sup>®</sup> globe valves for Phase II of the Longyu Coal project in Henan for the production of 400,000 tons of acetic acid/year and 200,000 tons of ethylene glycol/year

The valves have been installed and their operation in extreme conditions has been flawless, proving the safety and reliability of the technology. Top-ofthe-line severe service valves featuring Metso Omega(TM) multistage trim design can tackle even the toughest applications for anti-cavitation and noise reduction purposes, thus lowering operating costs and minimizing the need for valve spare parts and other accessories. This, in turn, means a lower total cost of ownership.

'The cost effectiveness of our products is one of the key reasons the customer chose Metso technology. Our delivery period of less than six months ensured that our client's project could move forward as scheduled. Our client is extremely pleased with this collaboration,' says Lyu Liming, Account Manager, Metso.

Metso has a strong position in control valves for petrochemical, chemical, oil & gas, and power customers through its well-known Neles rotary control valves, globe valves, and intelligent valve controller offering. Neles standard and severe service globe valves represent an important element in Metso's extensive portfolio of control valves. The technology plays a key role in most critical processes that operate at extreme pressures and temperatures.

# 

## "... optimize process performance at the lowest cost."

'Neles globe valves offer an innovative and fundamentally simple construction with excellent operational and maintenance features to optimize process performance at the lowest cost,' says Markus Hauhia, Metso's Director, Globe Valve product line, Automation. 'When paired with our internationally acclaimed Neles ND9000 intelligent valve controllers, these devices provide a very smooth response for exceptional process stability as well as remote diagnostics for highly costeffective predictive maintenance.'

'Neles globe valves are used in wide variety of applications. Metso also offers a specially designed steam conditioning valve. Each of our offerings is available in a variety of seat, seal, trim, and actuation options to make them ideal for a wide range of process conditions.'

Metso has a long track record of delivering engineered performance and reliability to



Neles globe valves are used in wide variety of applications

the oil & gas industry with leading brands Neles<sup>®</sup>, Jamesbury<sup>®</sup> and Mapag<sup>®</sup>. In more than 90 years, Metso has delivered globally millions of valves, control valves and on-off valves, and has become one of the leading suppliers of intelligent valve controllers. Metso's valve technology and services offering helps maximize production efficiency and reduce safety risks throughout the life cycle of a plant, all the way from simplifying valve selection to improving process availability and maximizing production performance.



Metso Automation Ltd Tel: 0870 606 1478 Email: uk.sales@metso.com

# New sales structure supports business growth at **KKI**



David Limb (left) and Stuart Billingham

Engineering firm, **Koso Kent Introl** www.kentintrol.com - has adopted a new sales structure that will support the future global development of the business and focus on customers' evolving needs. Koso Kent Introl is a leading valve company, offering world-class engineering and manufacturing excellence to its UK and international oil and gas customers.

**David Limb** has been appointed KKI's marketing and business development director, from his previous role of sales director. In this new role, David will focus on the planning and implementation of marketing and business development activities that will meet the company's growth and profitability targets.

**Stuart Billingham** has been promoted from within the business to the position of sales director. He has responsibility for creating and implementing sales initiatives that understand and meet customer needs, whilst focusing on client acquisition and retention.

Denis Westcott, KKI's managing director commented: 'This restructure allows us to implement a key account philosophy that better understands our clients' needs and future sector trends. It ensures that we innovate, control and develop products that meet the ongoing valve needs of the oil, gas, refinery and power markets. These latest changes also ensure that clients can access KKI's expertise and product support throughout the whole sales process, from placing orders to after-sales service.'

Earlier this year, KKI scooped the prestigious title of 'Business of the Year' at the Brighouse Echo Business Awards 2014. The award, sponsored by Projex Solutions, recognised KKI's business success, growth and achievement and highlighted the company's innovation, best practice and highest quality standards.

# **kent**introl

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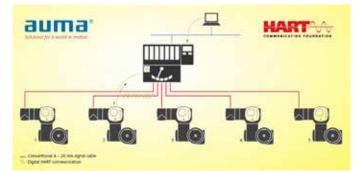
# **HART interface** advancement for AUMA actuators

lectric actuator manufacturer AUMA announces that a HART interface option can be ordered with immediate effect for the company's AC .2 and ACExC .2 controls. The adoption of the popular communication protocol by AUMA strengthens the company's position as a provider of a comprehensive range of leading-edge actuation solutions, with supporting technologies.

In compliance with the IEC 61158 standard, the HART (Highway Addressable Remote Transducer) communication protocol retains the simple and classic 4 – 20 mA standard signal for analogue data transmission, while allowing for digital communication modulated as an additional signal to the analogue signal.

A major advantage according to AUMA, which is a member of HCF (HART Communication Foundation), is that this facilitates reading additional parameters and diagnostic data from field devices, such as actuators, using the existing 4 - 20 mA infrastructure.

Electronic Device Descriptions (EDD) for AC. 2 controls with HART interface will be available shortly from AUMA for integration with Siemens Simatic PDM, Emerson AMS and Emerson 475 Field Communicator. Following device integration in the appropriate interpreter, the actuator and controls' most important parameter and diagnostic information, relating to commissioning, configuration and Asset Management, are available without additional programming.



AUMA adds the popular HART communication protocol to its electric actuation solutions. Illustration shows typical point-to-point wiring in a HART system.



### **AUMA Actuators Ltd**

Tel: 01275 871141 | Email: mail@auma.co.uk





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# What is the difference between T class and T ambient?

Does the "T" class of hazardous area equipment (e.g. T4, T5, T6 for gas hazards or T135°C, T100°C, T85°C for dust hazards) define the maximum temperature of the surrounding environment in which the equipment can be installed? For example in the case of T4, is the maximum ambient temperature 135°C? The answer is "No".



For gas hazards the "T" class is interpreted in one of two ways:

- The maximum surface temperature of the apparatus - In the case of T4 the maximum surface temperature of the apparatus must not exceed 135°C degrees C.
- 2. The auto ignition temperature of a particular gas - The auto ignition temperatures of all the gasses in temperature class T4 will be greater than 1350C and less than 200°C.

### For dust hazards the "T" class is also interpreted in one of two ways:

- The maximum surface temperature of the apparatus - In the case of T135°C the maximum surface temperature of the apparatus must not exceed 135°C degrees C.
- The minimum ignition temperature of a particular dust - The minimum ignition temperatures of all the dusts in temperature class T135°C will be greater than 135°C and less than 200°C.

The contents of the apparatus will increase the surface temperature of the apparatus when power is applied; during both normal operation and under fault conditions. As an allowance needs to be made for this temperature rise, the maximum ambient temperature (T amb) that the apparatus can operate in also needs to be defined.

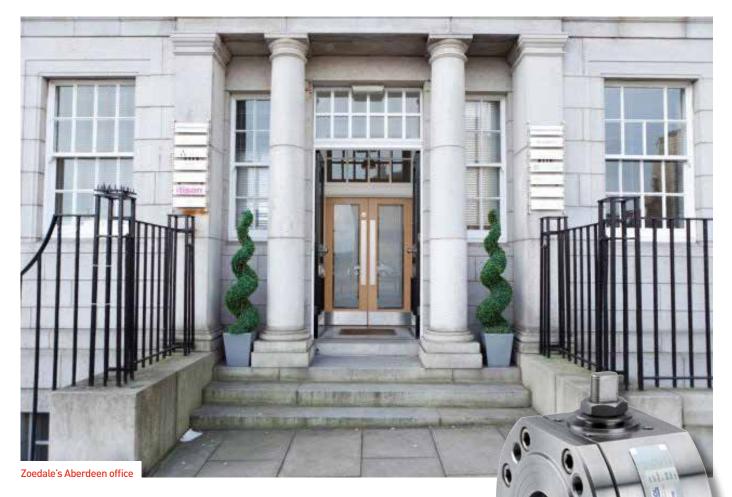
This maximum ambient temperature e.g.+ 40°C or + 80°C, will therefore be lower than the temperature defined by the relevant T class, e.g. 135°C (T4). A given piece of electrical equipment will therefore be approved for a stated range of ambient temperatures in which it is safe to operate. Normally this would be T amb -20°C to +40°C, unless otherwise stated on the product certification.

K Controls can offer certain products with a T amb as low as -60°C or as high as +120°C.

In summary you will need to know the T class and the T amb (maximum and minimum) in order to specify the correct equipment.



# Zoedale expand Aberdeen Market Share



**Zoedale Plc** are value added resellers for a number of flow control products including valves and actuators for many industries including oil and gas, biogas, brewing and water. They have been based in Bedfordshire since 1976.

Recently Zoedale decided to rent some serviced office space in Aberdeen to better serve the local market. Since taking space in The Soap Factory on Gallowgate Zoedale has seen the percentage of revenue from new business in Aberdeenshire grow by 42% in the 12 months.

Most of this growth has been in wafer ball valve & trunnion monted ball valve sales and ATEX electric actuators. These have been used in midstream applications including pipelines and storage tanks and some downstream applications like LPG / CNG and wax. If this trend continues in 2014/15 Zoedale plan to hire an Aberdeen based sales manager.

'The Aberdeen market is important to us and we realise that, if we are to become serious players, we need a local presence and to be able to respond to enquiries quickly' Says Tim Guest, Director at Zoedale.

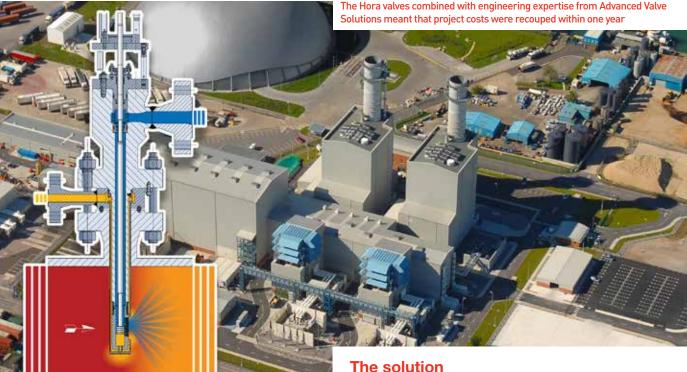
For any enquiries call Tim Guest at Zoedale on 01224 909097

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Zoedale PIc Tel: 01234 832832 Email: enquiries@zoedale.co.uk

# Marchwood CCGT Power Station saves circa £200,000 per year



### Two Shift Operation Power Stations can benefit from Advanced Valve Solutions Expertise

ower stations that were originally designed for base load applications are now increasingly being asked to operate on a two shift, stop/ start regime. This is more commonly known in the industry as dual shifting.

The consequences of the change in plant operation cannot be ignored. If the plant is not operated correctly or, more importantly, modified properly to handle these changes the lifetime of the components within the plant will decrease enormously.

The changing operational requirements of the plant require that the steam coolers, de-superheater valves, drains, feed water control valves, main steam isolation valves and the turbine quick closing valves are reviewed. These critical pieces of equipment have to be specifically designed to take the new dual shifting process requirements into consideration.

Once this has been done the operational performance of the plant can be improved and wear and tear of systems and components can be controlled and significantly reduced.

### The problem

- HRSG final desuperheaters (HP & IP) failing in service
- Life expectancy < 12 months
- Expensive to replace and overhaul
- High cost due to plant unavailability

- High quality, well engineered desuperheaters
- Protected by a steam cooled jacket
- Life expectancy > 12 YEARS!

The problem for James Brown, the Mechanical Engineer at Marchwood Power Station, was that the desuperheater valves installed would fail on average once a year leading to plant unavailability with all the obvious associated costs and some less obvious engineering issues.

James had worked with Advanced Valve Solutions on a previous project so had confidence in our engineers. He'd also had a positive experience of Hora valves elsewhere at Marchwood.

The installed desuperheaters were replaced with Hora cooled desuperheaters each protected by a unique steam cooled jacket.

The inspection cycle for the desuperheaters is now > 6 years and replacement is now > 12 years. Project payback was 1 year.

To understand more about the Marchwood Hora cooled desuperheater project and how the cost savings and payback were calculated call Rik Barry on 0161 242 1355.

For a full list of technical papers including two shift desuperheating visit the AVSwebsite http://www.avsnl.com/news/technical-papers



Advanced Valve Solutions (UK) Ltd

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# **CFP Contract Coup** for SIPOS Aktorik Actuators



Illustration of Opole Power Plant new units No. 5 and 6. (Source: Polska Grupa Energetyczna (PGE))

▶ IPOS Aktorik has secured a prestigious power industry contract for around 1,000 electric actuators to be commissioned at a new ultra-supercritical (USC) coal-fired power plant in Opole, south-west Poland. The contract, which follows an order for around 1,000 actuators for the Kozienice II coal-fired plant in Poland, underscores SIPOS' success in the Polish energy sector. With power sector actuator installations on every continent including over 1,000 power industry projects in China, over 50 in India and over 20 in Indonesia, SIPOS is recognised as a global leader in valve control technology for the energy market.

SIPOS devices, with conventional control and PROFIBUS DP V2 interface for plant engineering and diagnostics, were chosen for the Opole project. Key reasons for the selection were SIPOS' strong credentials in the power industry, advanced actuation, variable speed capabilities and the ability to configure each device to support a wide range of requirements.

With over 100 years' experience of new power plant EPC, Alstom is responsible for overall project management, design and commissioning of units 5 and 6 at the Opole scheme. Unit 5 is due to enter commercial operation in 2018 and unit 6 in 2019.

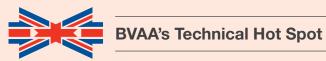
Reporting to Alstom, which has been awarded the contract by Polska Grupa Energetyczna, SIPOS' actuators, supported by the company's local partner AUMA Polska, will be adopted throughout the new Opole plant, which comprises two 900 MW units. The USC will be Poland's largest hard coal-fuelled facility which, when operational, will supply electricity to the equivalent of two million homes.

First deliveries of SIPOS actuators to the Opole plant are planned for Q2, 2015.





**Sipos Aktorik** Tel: 01275 871141 Email: info@sipos.de





# **VALVE ACTUATOR FAMILY OF** STANDARDS EN 15714 -1,-2,-3 AND -4

### Following the completion of the 2014 Systematic Review of the following standards decisions have been taken as shown below:

- EN 15714-1:2009 "Industrial valves Actuators Part 1 : terminology and definitions
- EN 15714-2:2009 "Industrial valves Actuators Part 2 : electric actuators for industrial valves Basic requirements"
- EN 15714-3:2009 "Industrial valves Actuators Part 3 : pneumatic part-turn actuators for industrial valves - Basic requirements"
- EN 15714-4:2009 "Industrial valves Actuators Part 4 : hydraulic part-turn actuators for industrial valves - Basic requirements".

CEN TC69 have agreed that EN 15714-1, EN 157154-3 and EN 15714-4 are confirmed for a further 5 years

However EN 15714-2 will be revised to take into account the comments received during 2014 systematic review (Update of edition of listed standards) and the need to be consistent with EN 1074-2 "Valves for water supply. Fitness for purpose requirements and appropriate verification tests. Isolating valves"

# Bestobell Targets Growth at HHP Summit

**Bestobell Valves**, has linked up with its distribution partner W&O, based in Florida, to exhibit at HHP Summit, North America's largest showcase of natural gas fueling and technology solutions.

The exhibition was held in New Orleans on 6th to 9th October saw Bestobell demonstrating its innovative, lifesize DN100 Globe Valve with pneumatic actuator, alongside its Miniature Needle Globe Valve (MNGV). Bestobell's sales team were also on hand to discuss any product or technical queries relating to valve technology to suit a myriad of different natural gas and LNG applications.

W&O, which is a global supplier of marine pipe, valves and fitting, valve automation, and engineered solutions to the marine and upstream oil and gas industries, will be exhibiting for the first time, after it was recommended by Bestobell to help further develop opportunities for its marine fuel systems business.

Duncan Gaskin, Sales Director for Bestobell Valves, said: *'It is great to be* 



supporting W&O and to be joining forces using our combined expertise to generate new opportunities, in particular for our new high pressure valves. North America is a growing market for our cryogenic valves, particularly in the marine sector, so we are very excited about the opportunity to demonstrate our manufacturing capabilities.'

As well as demonstrating its Miniature Needle Globe Valve, Bestobell also discussed with visitors how the company is currently the only manufacturer of high pressure Globe Valve for use in ships' gas fuelled engines with the necessary Class Approvals, certification and 3.2 traceability on all components. The high pressure valves meet the exacting standards required for the valves in the new fuel gas systems, which includes withstanding extremely high pressures. The Globe Valve is designed to stand a maximum pressure of 370 Bar.

HHP Summit is an annual event of the natural gas for high horsepower applications industry, which is now in its third year. HHP Summit brings together professionals to promote innovation, technical excellence and enhance partnerships across the world, as well as highlighting natural gas opportunities for high horsepower applications that exist along the Gulf Coast.

Bestobell Valves is a world-leader in the manufacture of cryogenic valves, with over 50 years' industrial gas experience and 15 years' successfully supplying to LNG marine markets.

The company's valve technologies are widely used in the processing, storage and transportation of cryogenic fluids. Bestobell also designs and produces valves to meet specific requirements in the marine sector and has supplied cryogenic valves to a majority of the major shipyards building LNG Carriers.



Bestobell's Viking Grace Valve which will be exhibited at HHP Summit



Bestobell Valves Tel: +44 (0) 1142 240000 www.bestobellvalves.com

# Combining Mechanical Interlocks with Process Safety Sensors



# **SmartTrap+** ensures process vessels and pipework are safe to open

n the process industry, mechanical interlocks guarantee strict adherence to procedures and help avoid human error. They are particularly useful for highly dangerous operations such as pigging and valve changeover procedures.

While interlocks ensure extremely high safety levels, they usually function as stand-alone safety systems. New digital technologies are now emerging that enable traditional interlocking to be combined with digital process control and instrumentation systems.

Smith Flow Control is the first company to combine these mutually beneficial technologies in the development of the SmartTrap+, which incorporates signals from sensors into the interlocking sequence.

During a pigging operation certain safety conditions need to be met: the vessel pressure should be at a safe level and all dangerous gases and residue must be removed before opening the pig door. Mechanical interlocking guarantees that all required valve operations are performed, but cannot guarantee the outcomes of these operations.

For example, opening and closing a vent valve does not give real time information

that the vessel pressure has actually reached a safe level; while opening and closing a drain valve does not guarantee that all residue has been removed.

By incorporating signals from other field devices like pressure or H2S/ C02 sensors into the interlocking sequence, the SmartTrap+ ensures interlock keys can only be released if particular process conditions have been met. So, for example, this could mean that the key for opening the vessel closure door will only be released when the pressure inside the vessel is acceptable and no dangerous gasses or residue are detected.

SmartTrap+ incorporates permissive signals and a door lock proximity switch (4-20mA) as standard. The signals can include (but are not limited to) pressure detection, gas detection, flow/ level and pig detection.

pigging incidents include:

Some of the factors contributing to pipeline

- Lack of training or complacency
- Lack of hazard awareness
- False sense of security and reliance only on pressure gauges

SmartTrap+ effectively deals with these factors, making pigging a safer operation and grants full traceability in real time.

The process industry's standard preventive actions include:

- Hazard identification and risk assessment including management of changes
- Awareness, training and competencies of personnel
- Procedures that address normal and upset conditions

SmartTrap+ reinforces these actions and implements genuine physical control on any pigging operation.

For operators needing to ensure higher levels of process safety, the SmartTrap+ is an ideal solution. By incorporating the best of traditional mechanical interlocking with process sensor information to ensure all vessels are safe to access, it will help to reduce accidents and reduce downtime.



Smith Flow Control Ltd Tel: +44 (0)1376 517901 Email: enquiries@smithflowcontrol.com

# KSB Group supplies 6,580 valves for new power station in India

The KSB Group has supplied 2 million Euros worth of valves to a new steam power plant currently being built in Barh, in the Indian State of Bihar.

he complete order comprised 6,580 gate valves, globe valves and check valves as well as other types of valves. About one third of these valves are manufactured at the German KSB site of Pegnitz. A large part of the scope of supply is also made in KSB's valves factory in India.

The Indian National Thermal Power Corporation (NTPC) will build a state-of-the-art coal-fired power station Barh comprising three units each of 660 MW. It is a so-called supercritical steam power plant. This type of plant achieves efficiencies above av-

The order was awarded to the KSB Group as they have previously supplied other Indian power stations with valves and pumps.

erage and places extreme demands on the valves' design and materials due to the high vapour pressure and operating temperatures.



**KSB** Limited Tel: 01509 231872 www.ksb.com



WEATHERING THE STORM



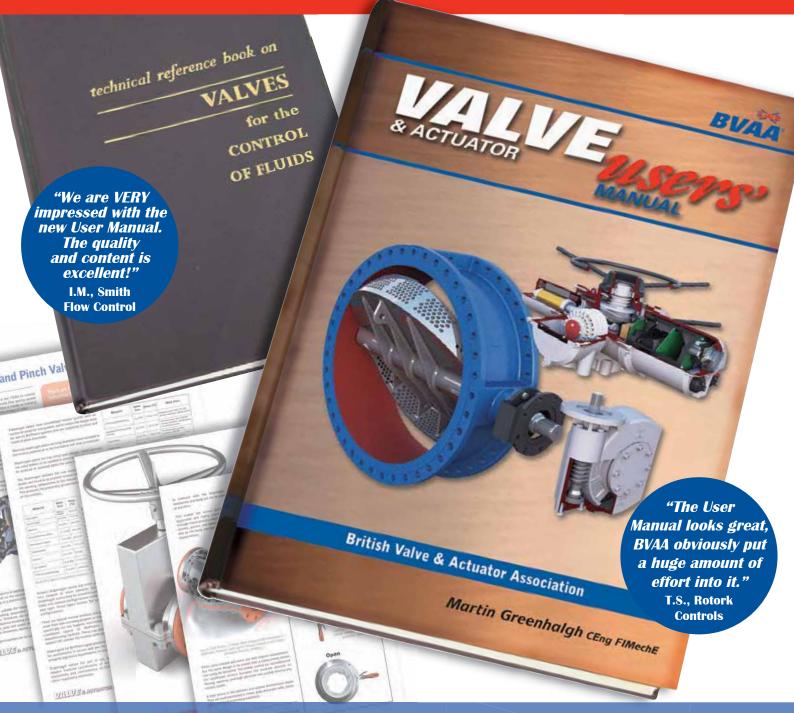
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