SUMMER 2015 | **ISSUE 33**



Vavelse Magazine

Proven track record

New Training Course: Valves. Advanced Level

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1111111

Rotork CMA boosts electric process valve control Page: 22



Pentair integrates Morin and Biffi ranges



New Automation Approach from Metso



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kentintrol



KKI PERFORMANCE RECOGNISED THROUGH LONG-TERM AGREEMENT

KKI have been awarded a new frame agreement contract with Statoil for control valves, choke valves and spare parts until 2020, with the option to extend until 2026. This follows KKI's reliable performance during their previous Statoil agreements.

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Supporting KKI in the execution of the contract is OME, KKI's appointed representative in Norway. OME provides local support and a vital interface between operators and the manufacturer for project and aftermarket activities alike.



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KOSO

Photo Credit: Harald Pettersen - Statoil ASA

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Cover: An STI technician at work, courtesy of Advanced Valve Solutions.



Comment

by BVAA Director, **Rob Bartlett**

Crystal Ball Time

As I write, a General Election looms and the future of our national Governance is far from clear.

By the time this magazine hits doormats, there will be a new UK Government. What it might comprise politically is anyone's guess right now. An outright winner with a 'workable majority' seems unlikely we're told, so alliances are no doubt being negotiated in darkened rooms, while their very possibility is being firmly denied in public. It's a pantomime of sorts and I for one would welcome some clarity and honesty so that I might decide who gets my vote.

While the UK economy in general is thankfully well on the way to recovery and the steps taken thus far are, according to the head of the IMF, *'working*, 'the state of the Oil and Gas market – nationally and internationally - continues to be turbulent, indeed unpredictable.

The steps taken in the recent UK Budget re: the UKCS, although welcome, appear too little, too late and too slow. We can but pray they have some impact.

The international situation however is like something out of Game of Thrones, and I hope it is soon resolved for everyone's sake.

I scour O&G information sources at every opportunity at the moment in search of clarity. Regrettably the news is mixed, the signals confusing. Many BVAA members have invested heavily to cater to the market *'as was*,' they may need to adjust themselves again for it *'as is.'*

If only someone had a crystal ball, to see into the future. The BVAA Conference on 12th May hopes to do just that! We have two speakers from EIF and Douglas Westwood to talk about the World Valve & Actuator Market Prospects and the Global Oil & Gas Market respectively. Ball-gazing is not our speakers' chosen method, and we trust their many years of experience will shed some light onto what we might expect. We also have a veritable feast of technical speakers and it promises to be a great event.

Finally, with this issue we have reached the 8th anniversary of Valve User magazine! Its growth in volume, stature and importance never ceases to amaze, and I hope you find it as interesting as ever.

Did you know?

You can follow Rob on Twitter **@RobBartlettBVAA**



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Introduction to Actuators - Tuesday 23rd June Members Price: £260.00 | Non Members Price: £390.00

Control Valves - Wednesday 24th June Members Price: £260.00 | Non Members Price: £390.00

Safety Valves - Thursday 25th June Members Price: £260.00 | Non Members Price: £390.00

Safety Integrity Levels (SILs) - Friday 26th June Members Price: £260.00 | Non Members Price: £390.00

Advanced Valves - Monday 29th June New Course Members Price: £260.00 | Non Members Price: £390.00

Combatting Corrosion - Tuesday 30th June **Members Price:** £260.00 | **Non Members Price:** £390.00

PED/ATEX Directives - Wednesday 1st July **Members Price:** £260.00 | **Non Members Price:** £390.00

All prices exclude VAT



For full details on each course, visit www.bvaa.org.uk/training_courses.asp

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- Introduction to Valves: Members £260.00, Non Members £390.00 Monday 22nd June
- Introduction to Actuators: Members Price £260.00, Non Members Price £390.00 Tuesday 23rd June
- Control Valves: Members £260.00, Non Members £390.00 Wednesday 24th June
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BVAA Training

April 2015 saw the latest 'term' of training sessions at the 'Peter Churm Technical Centre' at BVAA HQ

B VAA's Director Rob Bartlett writes, 'We deliberately moved the training sessions back a couple of weeks this spring, to take advantage of the new financial year and, we hoped, revitalised training budgets among our clients. This turned out to be a phenomenally successful strategy with record attendances!'

Feedback from students was also very encouraging:- 'Great. Covered everything,' said one Introduction to Valves attendee. Another added 'The [free] Manual is Great!' A third commented 'Exceeded my expectation.'

Later in the week Dave Martin and Glyn Williams (Valve Solutions) delivered the Control Valves course. One student commented, 'Gave a great insight into Control Valves.' Another added, 'It was lot more than I expected. Very pleased with everything.' We even got rave reviews for our catering!

Check out the BVAA website **www.bvaa.org.uk** for the June training dates or for courses at your own venue, contact karen@bvaa.org.uk



BVAA Future Strategy

On 18th March 2015, BVAA's Board met at the Belfry both separately and also with representatives from the Association's newly-named 'Business Development Group.'

Both sessions were led by new Association Chairman David Millar (Heap & Partners). As well as covering the more usual administrative business, the Association's Board reflected on the contrast between an extraordinarily successful year for the Association and the prospect of a very challenging year to come for the industry, due to the turbulent oil and gas market.

A session in conjunction with the BD Group studied a number of proposals to further strengthen the BD offer, continuing a programme of Future Strategy discussions which had commenced in the Board in January.





View from the **other side**



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

The **electric vs fluid power** choice for valve actuators

ver since the early days of valve actuator use, there has been a choice between powering the actuator with electricity or pressurized fluid. Sometimes a user industry has a traditional preference for actuator power and sometimes it's dictated by the circumstances of the application.

Deciding the best power medium for an industrial application depends on many factors. These can be more visceral, such as following what has traditionally been used in the application. But with today's sharp focus on return on investment and environmental impact, the traditional solutions now warrant more closer examination.

For plants that have instrument air systems the choice of actuator power has more flexibility because electric power is usually available to power the instrument air supply. So either fluid or electric powered actuators could be used. But there are many installations where an electric power supply is not available, these are usually confined to remote sites like well heads, pipeline sectioning valves or irrigation systems.

Where both power modes are available then the choice comes down to other criteria.

The traditional choice varies by industry and region.

In the earlier days of the UK power industry many power plants were controlled by instrument air controllers driving spring diaphragm and piston actuators, mainly on the smaller valves. Larger valves such as the main steam stop valves were generally electrically actuated. Modern plants use proportionally many more electric actuators, but pneumatic modulating valves are still used extensively, although they are controlled electronically rather than pneumatically.

The early designs of filter plants in the US water industry used pressurized water as a power medium for piston actuators. These have been superseded by electric actuators in the majority of new plants around the world, but there are some plants being built using pneumatic actuators for filter control.

Oil and gas production has a long history of using pneumatic actuators offshore and onshore. Probably because of the mechanical simplicity of piston operators and their straight forward maintenance. Also, an instrument air supply poses no sparking hazard to the explosive environment on an oil rig, although any solenoid control valves have to be hazardous area rated.



A selection of actuators from BVAA's Valve and Actuator Users' Manual

BVAA NEWS



Some oil and gas companies are using electric actuators offshore for certain valves particularly where there are weight or space restrictions.

The functionality of a fluid powered actuator has an advantage over the electric actuator in its capacity to provide a simple mechanical fail to position function. The cylinder or diaphragm of a fluid power actuator is easily opposed by a spring that can move the valve to an open or closed position on loss of fluid power pressure.

For process shut down or safety shut down, the fluid power actuator is the traditional choice. Particularly when high levels of safety and integrity are required. There are some technologies that can provide integral backup power for electric actuators. These are becoming a viable alternative to the traditional fail to position function for process valves but are limited to smaller valves at present.

Gas pipelines often use the pressurized pipeline gas to power shut off valves for line break sectioning and general shut down. These fluid powered units often use oil as an interface between the pipeline gas and the actuator. However, many countries are restricting the use of gas powered actuators due to the environmental impact of the exhausted gas. One replacement solution is the electrohydraulic actuator which can provide shutdown capability using a spring return hydraulic actuator. For remote areas, these units can be solar powered, using a DC motor powered hydraulic pump to drive the reset stroke after a shut down.

For smaller process control valves, the traditional actuator is the pneumatic spring diaphragm unit. This is a simple but effective device with few moving parts. To make a complete automated valve it is usually coupled to a positioner, often a 'smart' device. Most process control valve makers manufacture their own diaphragm actuators and package them with the valve and positioner as a complete unit.

The relative capital cost of electric actuators when compared to fluid power units of equivalent output is usually greater. The electro-hydraulic designs are the exception as they combine components of electric and fluid power units.

The running cost of actuators does not always figure prominently in evaluations, but for frequently modulating valves this could be significant. Electric actuators look good in these scenarios as they only use energy when moving. Fluid power units using instrument air have a constant energy draw from positioner bleed and system leakage. The carbon footprint is lower for electric units.

Actuator manufacturers of both types of actuator are constantly improving their products. From the control room or maintenance shop, there is the ability to monitor and diagnose issues with actuators so that planning maintenance can be streamlined and plant downtime reduced to a minimum. The smart controls on actuators are available for fluid and electric powered actuators so the actuator power supply is transparent to the control room.

The general trend appears to be an incremental encroachment on the traditional applications for fluid powered actuated valves by electric actuators in certain niche areas. However, there is no doubt that there is a robust and diverse demand for fluid power actuators both now and into the future.

BVAA" NEWS

New Members

The team at BVAA extend a warm welcome to the following companies who have joined the BVAA since the last issue of Valve User Magazine:



National Hyperbaric Centre: Hyperbaric testing experts



PNS Services: Testing and service specialists



ATI Europe: Actuator suppliers



Imtex Controls: Actuator Manufacturers



Assentech: Distributors, service and repairers



Eriks Technology Campus: Sealing manufacturers



Valve and Process Solutions: Distributors and systems experts

Charity 'Mad' Hatters

Some of our members have been raising money for charity whilst wearing their BVAA hats. Do you have an event coming up? We will donate £50 to your cause if you send us a picture of you or your team in a BVAA hat. Hats available on request.





Valve Working Group - New 'TEGs'

The BVAA Valve Working Group - the Association's forum for technical and standardisations issues - met on 11th March 2015. The event was jointly hosted by Hardide Coatings at Bicester, and then later in the 'Peter Churm Technical Centre' at BVAA's Banbury HQ



The VWG meeting at BVAA HQ

he morning featured a tour and highly informative presentation by Hardide on hardness coatings. The afternoon session was given over to discussing predominantly standards matters. One spin-out however was an agreement to form a number of 'Technical Expert Groups.

These will essentially be small, focussed and time-limited groups that will address specific technical topics. Designed to keep the membership up to date and well informed on technical matters, outcomes from these 'TEGs' could include Conference papers, technical 'hot spots,' formal guidelines, possibly even new Training Courses.

The first of these 'TEGs' covering Fire Testing is slated to meet on 22nd April at Score's Brighouse facility. Assuming a successful launch BVAA will then roll out the other TEGs as soon as possible



New Training Course: Valves - Advanced Level

Course Date: Monday 29th June 2015

As BVAA continually strives to improve our training programme we have developed a brand new course, Advanced Valves. This course is entirely valve focused, building on the basic knowledge from the Introduction to Valves course and is suitable for those who wish to achieve a good understanding of the main technical issues for procurement, design, materials, inspection, installation, operation and maintenance of industrial valves.

This course will follow the main topic areas detailed below:

- 1. Valve Basics, Terminology, Pressure Temperature Ratings, End Connections, Marking, Pressure Testing
- Design requirements of pressure envelope, body, bonnet (cover), body bonnet bolting & gasket, gland seal, operating mechanism
- **3.** Materials of construction for pressure envelope, trim, material manufacturing, material certificates
- 4. Corrosion mechanisms and NACE
- **5.** Valve types and their features. Deciding on a valve type for a specific application
- 6. Type testing
- 7. Production testing and inspection
- 8. Installation and operation
- 9. Maintenance and repair

'extensive knowledge'





BVAA's Technical Consultant Martin Greenhalgh delivering 'Introduction to Valves' to another full house

The course is delivered by BVAA technical consultant Martin Greenhalgh. Martin Greenhalgh has a background of over 30 years in the Industrial valve industry. He has wide and extensive knowledge of all processes involved in the design, manufacture and inspection of industrial valves for oil and gas, power and chemical industries.

In 2010 Martin edited the Valve and Actuator Users Manual on behalf of the BVAA and is currently working on a 2015 edition.

Martin is a Fellow of the Institution of Mechanical Engineers and has been an Assessor for the Institution's prestigious Manufacturing Excellence Award Scheme for five years.

How to book

The course forms part of our comprehensive, independent range of valve and actuator courses. For more information please contact the training team on **01295 221270** or visit **www.bvaa.org.uk**

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ATI Europe Ltd. Joins BVAA

Based in central Manchester, ATI Europe Ltd shows its commitment to the expansion of its European and Middle Eastern business development by joining the British Valve & Actuator Association (BVAA) in April 2015.

TI is a fully integrated manufacturing company, starting with raw steel and finishing with completely customized valve automation solutions. Customers in the Oil & Gas, Petrochemical, Power Generation, Mining, and Water Industries have benefitted from ATI solutions for the past 20 years. Through our experience of serving these industries with valve automation solutions, ATI has become a world renowned brand and is currently installed in over half the world's refineries.

Aneil Ali, EMEA Regional Sales Manager commented:

'ATI was formed nearly twenty years ago in the US and we have recently opened our UK facility to better serve our customers in the EMEA region. BVAA membership will give us access to a number of services that will help us in our goal of improving service to our wealth of customers in the region.

For more information on ATI, see the article on page 51.



of BVAA plaque



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Valve and Process Solutions **Delighted to Join BVAA**

Company Director Steve Pearson outlines his desire to build networks among BVAA's technical community after successful decade

hank you for the warm welcome that VALVE and Process Solutions (V&PS) have received from the BVAA

2015 was the ideal time to become members of the industry's foremost professional association, as V&PS celebrate a successful decade; developing established ranges, introducing new and innovative products and expanding into larger premises.

The company has been rewarded for excellence with exclusive distribution and agency contracts by makers of the highest quality process products. These have included the market leading switch box brand Westlock, and Schu $\tilde{\mathsf{F}}$ - one



A typical V&PS control system

of the world's leading custom valve manufacturers.

This continued recognition by global companies continues to add, almost exponentially, to our current offering; making V&PS the preferred choice for customers and manufacturers alike.

The basis of all our relationships is trust - our trust in manufacturers to bring their latest products and innovations to V&PS first and their trust in us to give the right advice to customers first time, every time.

Our Tailor made services utilise our in-depth product knowledge and the manufacturers own resources, allowing V&PS to provide real world solutions in a timely fashion whatever the scenario or depth of support required.

Graduating with a BSc (Hons) in Engineering, MD Steve Pearson worked in the Valve and Process industry for ten years before founding V&PS on the fundamental understanding of the industry's need for more than a simple off-the-shelf 'pick, pack and ship' service. Steve said;

'Advice is our No 1 'bestseller'; customers had experienced costly mistakes elsewhere - wrong parts turning up or worse - finding out too late that a more effective solution could have been installed."

Steve knew through experience that safety and productivity were key concerns, he went on to say;

What was called for was a professional, helpful service, not only matching a customer's individual parts list for specific switch boxes, actuators or valves, but also giving advice on effective alternatives, alongside reliable provision of preassembled combinations - all ready to install.

The time this saves customers more than covers the sometimes small difference



Steve Pearson

between lower priced and better value products. I'm pleased to say that for the past ten years we have achieved what our customers needed.

The V&PS team are hoping, in some small part, to contribute their experience to the BVAA's huge knowledge base. We very much look forward to networking with BVAA members, renewing old acquaintances and building new friendships.



Valve & Process Solutions Ltd

Tel: 01246 220070 Web: www.vandpsolutions.com

Assentech: Making an Impact

Assentech is a rapidly growing provider of specialist products and services to the process industries

distributor of engineered products and services for the fluid process, transfer and storage industries - we are a relatively new company established in 2008 and growing very quickly, despite the tough economic environment. Established by Ewart Cox with many years' industry experience, our main objective is to assist customers with sound technical solutions to complex applications. We have won some very high profile projects already and continue to win confidence and loyalty from partner companies who value technical competence and integrity.

The brands represented by Assentech have been carefully selected to complement each other and are all leaders in their respective industries. The technologies we provide include loading arms, ground verification and overfill protection, storage tank venting, flame and detonation arresters, bursting discs and vapour recovery. The main brands we supply are as follows:



OPW: For a full range of top or bottom loading arms, ground verification and overfill monitors, API couplers, folding stairs and complete platforms.



Groth Corporation: Breather vents, emergency vents, blanketing valves, pilot valves and flame arresters. Assentech is the UK Master distributor with many years' experience in storage tank applications.



CDC: Continental Disc Corporation is a technology leader in the manufacture of bespoke rupture discs for pressure relief protection in the oil, chemical, pharmaceutical, biogas, power and water industries.



BTE: Baillie Tank Equipment is a market leader in geodesic domes, internal floating roofs, internal floating roof seals and floating lines.



KLAW: The global leader in the design and manufacture of Breakaway Couplings (BAC) and Emergency Release Systems (ERS); a vital component for the safe transfer of hazardous and non-hazardous material.

Rapid response and Service Limited

Due to the increase in demand for installation and service work, we have decided to separate Assentech into two companies namely Assentech Rapid Response and Service Limited which concentrates on the maintenance side of the business. Our product supply is carried out through Assentech Sales Limited.

New for 2015 will be our Rapid Despatch facility of Groth breather valves from our onsite workshop to a worldwide market. We intend to go live with this by the end of the year.





Assentech's GARD facility

Assentech Rapid Response and Service Limited provide maintenance and service work for valves and loading arms, as well as producing our own custom fabrications. We are one of only two Groth Approved Repair Dealers (GARD) in Europe, offering servicing, testing and re-certification of valves from Groth and other manufacturers.

Our engineers are fully insured to work on COMAH sites and provide Risk Assessments and Method Statements in advance, as standard.

We have a mobile workshop complete with pressure testing equipment which allows us to pressure test loading systems and valves in situ. We also offer a leakage testing service and a Thermal Pressure Relief testing service.



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TECHNICAL HOTSPOT – PED 2014/68/EU - TIMESCALE FOR INTRODUCTION

If members are asked for compliance to the new PED, they need to be aware of the critical dates. A summary is as follows:



BVAA's PED expert: Ron Strang

The full new directive is to be applicable from 19 July 2016¹. The provisions of Article 13 are applicable from 1 June 2015².

- This affects the classification of fluids (whether in Group 1 or Group 2) which now refers to Directive 1272/20083 (CLP Directive) rather than Directive 67/548.
- The list of substance types in Article 13 classified as Group 1 (Hazardous) is now more extensive. However, it is anticipated that not many substances will change group.

- It is suggested that members ask customers for their fluid classification group to the CLP along with details of the fluid. They are likely to have a good knowledge of the fluids they use.

There are transitional provisions in place:

• Equipment or assemblies that are covered by 97/23/EC which are placed on the market before 1 June 2015 can still be put into service⁴.

 Certificates and decisions issued by conformity assessment bodies under Directive 97/23/EC shall be valid under this Directive⁵.

Interpretation of the above is that:

- Items sold and certified under 97/23/EC before 1 June 2015 are acceptable and do not need additional certification or recertification
- Items sold after 1 June 2015 and before 19 July 2016 must be based on fluids classified in accordance with Article 13 of 2014/68/EU. The rest of 97/23/EC still applies.
- Items sold on 19 July 2016 and after will have to comply with all of 2014/68/EU.

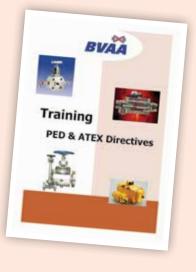
At the time of writing, no new UK legislation is in place. The first part (changes in fluid classification) is expected before the end of February 2015.

Members are reminded of the summary of changes to the PED which was circulated at the end of last year.

A fully updated copy of the PED pamphlet is in preparation and will be issued in due course.

Should there be any queries or questions on the new PED, please do not hesitate to contact the BVAA. Members are also encouraged to share their experiences of the new PED with the BVAA.

¹2014/68/EU Article 49. Item 2 22014/68/EU Article 49, Item 1 ³Classification, Labelling and Packaging Directive, available from http://eur-lex.europa.eu/LexUriServ LexUriServ.do?uri=0J:L:2008:353:0001:1355:en:PDF ⁴2014/68/EU Article 48, Item 2 52014/68/EU Article 48. Item 3



BVAA run a training course on PED Directives, see bvaa.org.uk/training for details

Book your place on BVAA's PED and ATEX training courses at www.bvaa. org.uk or call 01295 221 270. Forthcoming dates:

Wednesday 1st July, Banbury Wednesday 14th October, Banbury

Did you know?

That you can follow BVAA on Twitter @theBVAA or join the Valve User Forum on Linked In.

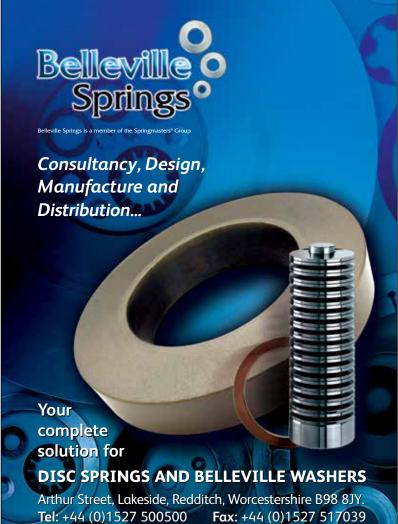


YPS Valves Completes Major Cryogenic Valve Order

Leeds based **YPS Valves** has completed a major order to supply cryogenic valves to ExxonMobil in Singapore.

The valves have been designed in-house to exacting standards as leakage allowances are much tighter than normal for this type of valve. Testing has been carried out at -130 °C utilising liquid nitrogen and helium gas, with a typical acceptance leakage of 30ml per minute @ 132.5 Bar.

YPS Vales Managing Director, Rachel Wormald, says: 'YPS has been supplying petrochemical plants, oil refineries, power generation plants and off-shore sites across the globe for over 40 years which means we have the knowledge and expertise to produce high integrity, high quality valves that stand the test of time under extreme conditions. All our castings are sourced from Europe and the USA to guarantee quality and durability.'



www.bellevillesprings.com

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An YPS Cryogenic valve under testing at low temperature

Rachel adds: 'We have supplied many of the major end users including Shell, ExxonMobil, British Gas and Dow.'

YPS can manufacture cryogenic valves with integral bonnets or as is more commonly used by fabricating an extended bonnet from high quality tube with high levels of non-destructive testing (NDT).

All valves are produced in house utilising the latest Solidworks 3D, CAD software and finite element analysis.

Meanwhile, an in-house purpose built testing facility can perform cryogenic tests at temperatures as low as -196 °C. All valves can be supplied with modifications to make them suitable for services at this temperature. Cryogenic and emission test facilities are available with bellows sealing.

YPS Valves launched in 1974 and is now one of Europe's leading designers and manufacturers of valves for the hydrocarbon processing, chemical, nuclear and off-shore industries worldwide.



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ExxonMobil approval for the Hot Forging of Super Duplex Fasteners



BVAA Member, **West Special Fasteners** has been awarded approval by oil giant **Exxon**

Super Duplex fasteners the specialists in hot forging Super Duplex fasteners have been awarded approval by the largest Oil company in the world ExxonMobil. The approval follows over a year of product testing, inspection, witnessing, documentation and system reviews. The approval is for the Hot Forging of Super Duplex bolting and ExxonMobil have only approved a few companies in the world to carry out this work. West Special Fasteners has been one of the largest producers of fully tested Super Duplex Fasteners in the UK, delivering over 40 tonne's of bolting in 2013 and 2014.

'This approval confirms West Special Fasteners position as a manufacturer that can supply Super Duplex Hot Forged fasteners to the highest standards in the world' said James Hawkins -Commercial Director - West Special Fasteners.

'the higest standards'

^C*Ustomers looking to source super duplex fasteners for critical applications can be assured that our fasteners are tested to the highest standards offering complete peace of mind, said Sonja Skelton - Sales Manager - West Special Fasteners.*



West Special Fasteners Limited

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AD01822V

Enhanced functionality for **Rotork** CMA boosts electric process valve control

Rotork has announced an extensive advancement of CMA electric actuation technology for the operation of process control and choke valves, introducing new options to meet evolving customer and market requirements.

the innovative CMA design can now be specified with increased functionality encompassing local controls, LCD positional display and programmable fail-to-position performance.

Designed for quarter-turn, rotary or linear operation, robust Rotork CMA actuators perform numerous process control valve,



The innovative CMA process control actuator can now be specified with increased functionality

metering pump and damper applications demanding precise position control and continuous modulation. Single-phase or DC electrical power is all that is required for simplified installation and control valve actuation. Explosionproof certification to international standards is available for hazardous area applications.

Local controls now offer manual operation at the valve, combined with a vivid LCD display of valve position which also incorporates critical and non-critical fault symbols. Control selection knobs enable selection of Local, Stop or Remote operation and Open or Close input commands in the Local control mode. Each mode can be locked in place to prevent unauthorised operation. The LCD display shows the valve position as a precise percentage of total valve travel.

'tailored and cost-effective'

For fail-to-position performance, a reserve power pack provides the actuator with the ability to perform a predetermined action on power failure. The power pack also preserves position indication on the LCD display during power failure. Upon restoration of mains power, the power pack is swiftly recharged to ensure continued fail-to-position functionality. Action on power loss is easily configured with the standard CMA HMI interface as part of the user-friendly actuator set-up menu, utilising a 6-segment LCD display and push button configuration.

The maintenance-free CMA drive train, environmentally protected to IP67 and permanently lubricated for operation in sub-zero temperatures as standard, can be mounted in any orientation. Accepting an industry-standard 4-20mA control signal, the CMA provides accurate, repeatable and backlash-free positional control. Resolution is 0.2% on linear and quarterturn applications, 2 degrees on the multiturn models. All CMA actuators have output speeds that are adjustable down to 50% of full speed in 10% increments and manual operation is provided as standard. Network compatibility encompasses Rotork Pakscan, HART[®], Profibus[®], Modbus[®], DeviceNet[®] and Foundation Fieldbus[®].

The latest CMA developments follow other recent refinements including upgraded electronics, HMI enhancements and a user selectable increased seating torque/ thrust option, enabling a more tailored and cost-effective sizing regime to be applied to the combination of modulating and tight seating demands often found in control valve applications. A new rotary model size has also been introduced.

The combination of all these improvements represents a comprehensive advancement of CMA actuator technology and functionality, focussed on precise process valve control, system simplification and reduced maintenance. In addition to traditional control valves, successful CMA applications include choke valves on shale gas installations, stroke adjusters on metering pumps, precision metering on chemical dosing and the operation of dampers.

rotork

ROTORK UK Tel: +44 (0)1225 733200 Web: information@rotork.com

Valve System Allows **Rocksavage** Power Station to Meet Demand



'Can we modify the existing installation from a base load unit into a flexible unit, capable of reacting quickly to on demand changes of the grid, including starting and stopping daily?'

his was the question asked by Rocksavage Power Station in Runcorn, Cheshire.

Rocksavage Power Station, owned by InterGen, was built in the late nineties to provide the steam and electricity supply for the nearby chemical complex. The installation was based on two Alstom GT 26 gas turbines, two Alstom triple pressure waste heat boilers and a steam turbine.

Because the installation was designed and built as a base load unit the flexibility to start and stop the installation was very limited. One bypass system installed between the HP main steam and the condenser was used to start the boilers in sequence, one after another.

For a flexible starting and stopping regime the time to get on line was simply far too long.

Cascade arrangement

The modification comprised the installation of a cascade arrangement per boiler, based on an HP bypass and an IP dump valve.

Per boiler an HP bypass valve, a PRDS and a control valve, that reduces pressure and temperature, was placed between the main steam line and the cold reheat line. During start up, steam, now coming from the PRDS instead of the steam turbine is introduced in the re-heater to take care of cooling the modules. This is a severe mass flow, mixed up with additional steam coming from the starting IP evaporator.

In the next step, hot steam, coming out of the IP re-heater is now 'dumped' into the condenser through an IP dump valve. The combination HP - IP bypass valves per boiler makes it possible to start both boilers simultaneously. A quick start of the whole installation now is possible.

Advantages

- Significant reduction of startup time which makes the installation more attractive to supply to the grid and saves money
- The possibility of heating up the boilers equally and smoothly and consequently minimizing material stress in super heaters and headers



IP bypass valve

• Extend the life cycle of the boilers significantly

Advanced Valve Solutions (AVS) has replaced many critical valves in UK power stations and has a proven track record in protecting stations from loss of production and saving £000,000s in repairs and replacement parts.



Advanced Valve Solutions (UK) Ltd

Tel: 01270 534685 Web: www.AdvancedValveSolutions.co.uk

New Solenoid Valve Design for Demanding Cryogenic Applications

The L89 cryogenic solenoid valve from Nadi Srl of Milan has been successfully employed in liquid gas installations around the world for many years, often to improve reliability on plants using valves from other manufacturers.

ast year, Nadi were approached by an Italian manufacturer of climate chambers to offer a solution as they had solenoid valves from a major valve manufacturer that were failing.

Conventional valve 'sticking' in liquid gas applications is caused by vapour or dirt freezing at cryogenic temperatures and bridging the close tolerances of the moving components.

Upon investigation it was found that there wasn't actually a mechanical problem with the existing valves, it was just that they could not cope with the particular application and were only partially opening thus restricting



Nadi L90 solenoid valve

'higher performance valve assembly'

the flow. Analysis of this problem showed that instead, the complex flow path of the LN2 regulation circuit in conjunction with the fluid density, pressure and cycle rates were preventing the valve from operating correctly.

Nadi took this information and developed a completely new valve design based on their existing L89 model but encompassing some radical changes to the internal parts to overcome the problem in this application. Subsequent testing demonstrated that the new design removed the partial opening problem and offered a significant performance increase for cryogenic gas systems over the original L89 design.

This higher performance valve assembly has now been standardised as the L90, completely superseding the L89 model and all body material, size and certification options from the L89 are carried forward with the new valve.

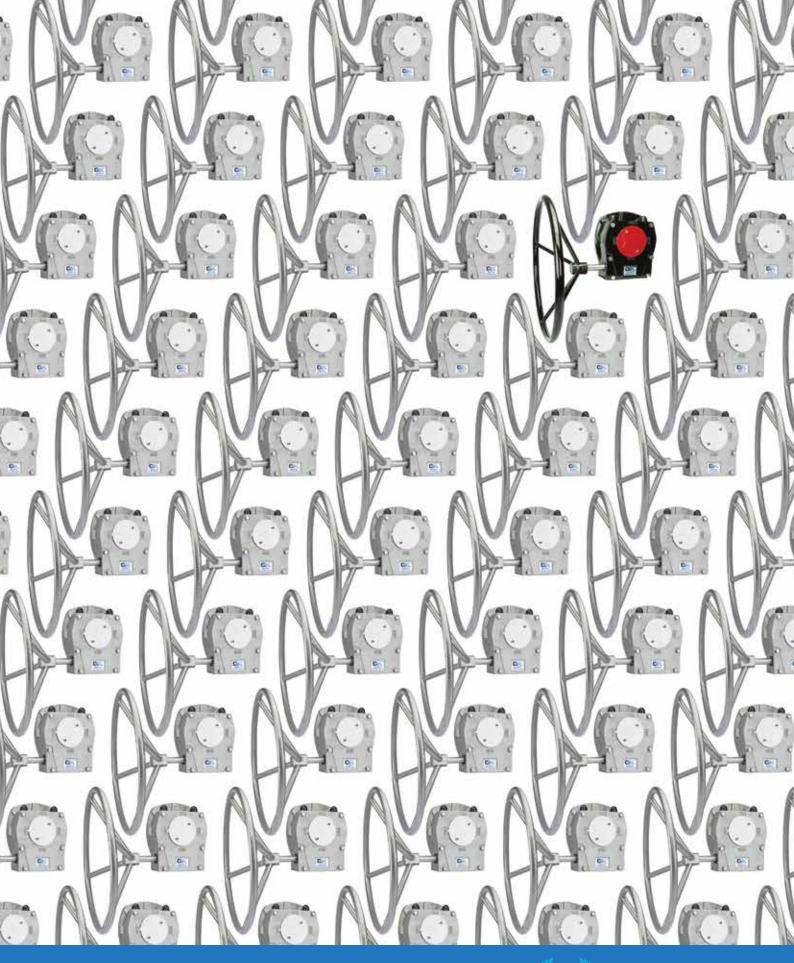
The L90 is currently available in sizes from $\frac{1}{2}$ " for safe or hazardous area installations and stainless steel body versions are available in the most popular $\frac{1}{2}$ " and $\frac{3}{4}$ " sizes.

The Nadi range of solenoid valves including the L90 is exclusively available in the UK from Red Dragon Ltd in South Wales.



Red Dragon Ltd Tel: +01443 772500 www.reddragonvalves.co.uk







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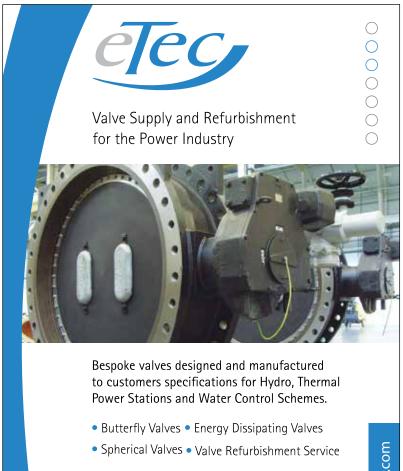
Units 1-8, Drakehouse Court, Hamilton Road, Sutton-in-Ashfield, Nottinghamshire NG17 5LD Tel: +44 (0)1623 515545 sales@quickits-online.co.uk www.quickits-online.co.uk

ASCO Numatics process expertise at ACHEMA 2015

Leading process industry experts, Emerson Industrial Automation will showcase its comprehensive range of high performance **ASCO Numatics** solenoid and pressure operated valves and access ories at Achema 2015, from 15-19 June at the Messe Frankfurt, Germany.

Presenting its reliable and robust solutions for automated flow control, Emerson will highlight the importance of designing integrated processing systems to realise improved performance and efficiencies, as well as demonstrating its expertise in delivering the complete solution for a wide variety of processing applications.

Visitors to Emerson's stand B4 in Hall 9 will be able to see live demonstrations of a fully integrated processing system, featuring advanced technologies from Emerson Process Management and ASCO Numatics to improve performance, efficiencies and confer precision control.



eTec Engineering Services Ltd T +44 (0) 01709 544111 E sales@etec.uk.com

www.etec.uk.com



ASCO's new Sentronic HD

At the core of the on-stand process presentation will be a DeltaV system from Emerson Process Management. Designed specifically to deliver intelligent control in process applications, on-stand it will automate an ASCO Numatics Valve Island which affords dependable control and easily integrates into existing systems. Displayed in a cabinet mounted solution, the valve island will pilot a number of key ASCO Numatics products, including a compact angle-seat valve in motorised and proportional configurations; a safe and reliable universal direct-acting solenoid valve; and a pilot solenoid valve offering an extended life cycle of up to 1 billion cycles thanks to its innovative design.

The set-up will also feature the new Sentronic HD. A highly accurate 3-way proportional valve with digital control, ideal for flow regulation and leakage measurement in process applications.

Peter Evans, Business Development Manager for the Process Industry at ASCO Numatics, comments: 'The processing industry is our lifeblood; we're dedicated to helping our customers achieve the most efficient and reliable flow systems possible. Whether our customers need to enhance their existing processing system, or design a new process from the ground up, we have the unique expertise and knowledge to deliver the complete solution.'



ASCO Numatics Tel: 01695 713 600 www.asconumatics.eu

Largest Ever Production Choke Valves for **Statoil**

World-leading supplier of critical flow control solutions **IMI Critical Engineering** has been tasked by international energy company **Statoil** with designing and building some of the largest ever production choke valves to be used topside on the Aasta Hansteen SPAR Platform in the Norwegian Sea.

he SPAR platform is a floating installation that is secured to the seabed and includes conventional topsides and processing facilities. This type of platform is specific to deep water operations and will also be a first for use on the Norwegian continental shelf.

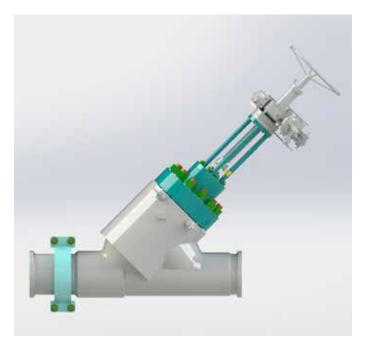
The platform will work to a depth of around 1300 meters, 300km off the Norwegian coast and is part of the first deep water field development within the Norwegian Sea. The medium will be transported to the surface at substantial speeds, requiring high-specification production choke valves to control the flow – which could potentially contain particles and other contamination – into the main process and so avoid excessive load and damage to other equipment and minimise risk to personnel.

IMI Critical Engineering's IMI CCI Design Engineering team in Vienna, Austria, designed these innovative production choke valves. The IMI CCI manufacturing facility in Brno in the Czech Republic has completed manufacturing and testing of the four 12" x 12" production choke valves - believed to be some of the largest ever produced by the company worldwide - to the internationally recognized ASME 2500 standard.

'...high quality, material and performance requirements'

The valve body was fashioned using a high isostatic pressure (HIP) process based on an innovative Y-globe design with the actuator at 45° to the main valve body. The valves also incorporate IMI CCl's patented DRAG[®] technology featuring solid tungsten carbide components, selected for their strength, durability and impact resistance and also ensuring premium control and reliability in some of the world's most arduous conditions.

An additional consideration was the need to reduce the valve's operating noise output to 75dBA or below to limit the effect of



The valve body was fashioned using a high isostatic pressure (HIP) process

noise on platform workers – a figure significantly lower than the usual 85dBA or above in these applications. This was achieved through honing the design of the trim in what was also one of the largest solid tungsten carbide DRAG[®] disk stacks to ever be built. High blast load resistance was also integrated into the design to enable it to withstand the effects of explosions.

IMI Critical Engineering's Michael Pedigo explained: 'Taking into account the high quality, material and performance requirements, coupled with the highly challenging geometry of the valves and associated sensitivity of the trim manufacturing and machining process, we are safe to say the task was accepted and accomplished as a complete team effort.'

'The high flow rate necessitated a valve of this size and our experience in manufacturing production choke valves and harnessing the unique performance attributes of DRAG[®] technology, enabled us to deliver on time and on budget and in line with our ethos of engineering great solutions for our customers.'

The assemblies containing the valves are now being dryconstructed and are set to enter service during 2016.

Statoil added: 'We have collaborated with IMI Critical Engineering on a number of projects worldwide and have always been impressed with their ability to understand each application and the deliver a solution which meets our specific requirements.'



CCI International Ltd Tel: 0161 655 1688 www.ccivalve.com

New **SIPOS SEVEN** selected for Opole power scheme

The new **SIPOS SEVEN** electric actuator will be supplied to the ultra-supercritical (USC) coal-fired power plant under construction in Opole, south-west Poland.



Around 1,000 SIPOS SEVEN actuators will be supplied to the new USC coal-fired Opole power plant in South West Poland.

he order for around 1,000 actuators confirms market interest in the innovative advancements offered by SIPOS Aktorik's new generation actuator range.

Key features that influenced selection of the SIPOS SEVEN devices were its full colour display that provides advanced screen capabilities and breakthrough multi-functional drive controller for easy and intuitive operation.

Working as a supplier to Alstom, SIPOS Aktorik – supported by local partner AUMA Polska, will provide full support for its electric actuators including commissioning and ongoing field service. The main customer for the scheme is Polska Grupa Energetyczna.

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. SIPOS actuators will be commissioned across the two 900 MW units that form the basis of the new plant. First deliveries of SIPOS actuators to the Opole scheme are planned for Q2, 2015.



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



Valve Packages for Oil & Gas



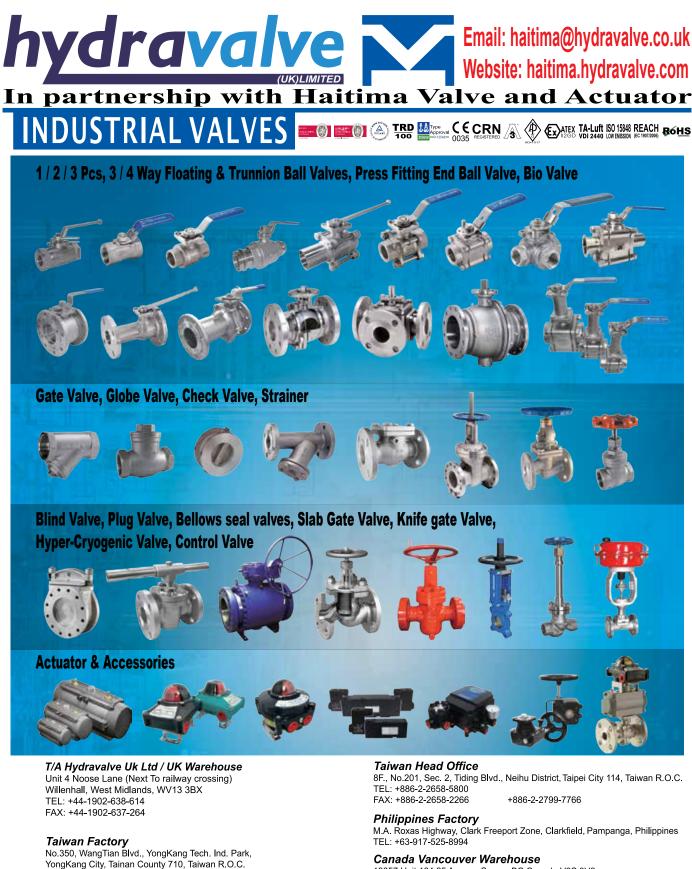
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New Diamond Technology to Tackle Drilling Costs

Life of drilling tools extended up to ten-fold using new **Hardide** technology

ardfacing specialist Cutting & Wear today announced the development of a new TSP (thermally stable polycrystalline) diamond hardfacing material that will increase the life of drilling tools operating in highly abrasive environments by up to 10 times and cut the cost of drilling operations.

The announcement was made at the SPE IADC Drilling Conference and Exhibition being held on 17-19 March in London. The new material incorporates 'Hardide-D', the first successful metallurgically bonded coating for TSP diamonds that is suitable for brazing, extreme loads and aggressive media. Hardide-D has been developed by coatings innovator Hardide Coatings (stand no. 231) and coating of the TSP diamonds



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

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



Hardide TSPs on the reactor

is performed for Cutting & Wear (stand 36) under an exclusivity agreement.

Cutting & Wear in-house wear tests have shown that the new TSP Xtreme inserts give a 200 times improvement over tungsten carbide inserts. They can be applied on downhole tools that need gauge protection such as stabilizers, bent housings, logging while drilling tools, rotary steerable tools and downhole motor bearings.

The TSP Xtreme inserts are applied using Cutting & Wear's well established Quick Tip hardfacing system which is licenced to users around the world. The whole of the tool can be protected with the TSP Xtreme inserts or critical areas protected with the TSP insert and the rest of the tool protected using standard tungsten carbide inserts.

The life of drilling tools can be extended considerably up to 10 times by using the TSP Xtreme insert, most significantly tools whose life is determined by the life of the hardfacing, also non-magnetic tools where reheating for hardfacing compromises the non-magnetic steel's properties and life, leading to significant savings for the industry.

Mark Russell, Managing Director, Cutting & Wear said: 'The new material is an evolution of TSP which has been used successfully for gauge protection of PDC (polycrystalline diamond compact) drill bits and steering elements on rotary steerable tools. The development of the TSP Xtreme insert has made diamond hardfacing technology available for more applications and practicable for workshop application anywhere in the world.'

Philip Kirkham, CEO of Hardide Coatings said: 'Diamonds are notoriously difficult to attach and are prone to oxidation and graphitisation, limiting their use in hardfacing. Previous attempts to solve these problems have been unsuccessful due to the porosity of other coatings and their weak adhesion to the diamonds.

'Hardide-D overcomes these hurdles as a pore-free tungsten carbide-based adhesive and protective coating which chemically bonds to diamond and has good wettability with brazing alloys. Other potential applications for the Hardide-D coating include PDC drilling bits.'



Hardide Coatings Tel: 01869 353830 Email: info@hardide.com

ASCO Primed for New Explosion-Proof Product Certification



The TR CU certification came into effect on the 1st of March 2015

Emerson Industrial Automation announces its market-leading range of **ASCO Numatics** solenoid valves and fluid automation solutions has achieved Technical Regulation Custom Union (TR CU) certification for explosion-proof equipment in Eurasia.

Anticipating regulatory changes to better serve its customers in Russia, Kazakhstan and Belarus, the new TR CU certification demonstrates the company's ongoing commitment to quality and safety.

Replacing the current GOST R national Russian certification and GOST K system for Kazakhstan, and now covering all the Eurasian Economic Community (Russia, Kazakhstan and Belarus), the TR CU certification came into effect on the 1st of March 2015. A mandatory requirement for any electrical equipment that is to be operated or installed in hazardous areas and potentially explosive atmospheres in Eurasia, compliance with TR CU is a mark of product quality and acts as proof that production is carried out to approved standards. As of 1st March 2015, it is not permitted to sell explosion-proof equipment in Eurasia without the TR CU.

Wim van de Haar, product and safety manager for Pilot Valves, ASCO Numatics said: 'Safety is of paramount concern to us. With the TR CU certification, our customers in Eurasia can be reassured that they are installing products of the highest quality. We already have the new certification in place for all major ASCO Numatics product ranges for the Russian, Kazakhstani and Belarusian oil and gas markets.'

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Growth and development for **NHC** Testing Department



pressure depths down to 8000m (26,000ft) and altitude of 16,500m (55,000ft)

NHC has become the preferred choice for many companies wishing to perform equipment tests and trials.

ational Hyperbaric Centre in Aberdeen is renowned for its involvement with the diving industry. in particular within the field of hyperbaric medical treatment and research, and now more recently as the Centre of Excellence for subsea safety training. However, the centre is also a UKAS accredited testing facility, fully equipped to conduct a variety of tests and trials for a whole range of industries.

The centre has accommodated various projects over the years such as pressure testing subsea control modules, umbilicals, valves, actuators, ROVs and submersibles for a variety of companies in the subsea, aviation, defence and renewables industries.

Testing & Projects Manager, Mike McDonald commented:

'Testing is becoming an increasing necessity to ensure the safety and functionality of both new and old equipment as companies continue to push the boundaries within these extreme environments."

NHC's range of chambers can simulate pressure depths down to 8000m (26,000ft) and altitude of 16,500m (55,000ft) in either wet or dry conditions and at variable temperatures. The WorkChamber and other smaller chambers are the first choice for many companies wishing to perform pressure and altitude trials on a variety of equipment.

NHC's Testing department is committed to providing a thorough and intensive testing service and is a regularly audited UKAS EN17025 Approved Testing Facility. Live video monitoring along with full instrumentation and logging devices allow results to be produced with incredible detail. A Pressure Cycle Tester was installed during 2014, which increased the multiple endurance cycle and long duration capabilities of the chambers. Investment is continuously being made to enhance the NHC Testing facility, ensuring the National Hyperbaric Centre stays at the forefront of the pressure testing industry providing clients with next-level equipment assurance.

If you would like more information about NHC Testing services, please contact Mike McDonald on +44(0)1224 698 895 or email info@nhctesting.com



national hyperbaric centre

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systems, suitable for even the most challenging conditions. Systems can be designed to include SIL certified products and redundancy, and all use the industry-proven instrumentation



range. Next time you need a reliable system to withstand extreme conditions, call **01695 713 600**, or visit our website at **www.asconumatics.eu**



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Bestobell Marine Breaks into LNG Re-Liquefaction Market

Bestobell Marine, a world leading supplier of cryogenic globe and check valves for ships, has secured two new high profile contracts for its cryogenic globe and check valves.

The valves are to be fitted in the LNG (liquefied natural gas) reliquefaction systems that will be installed on two LNG carriers being built at HHI (Hyundai Heavy Industries) shipyard in South Korea for Knutsen OAS Shipping of Norway. Similar systems will also be installed on two sister ships being built by Imabari Shipbuilding Group in Japan for Elcano.

This is the first time that Bestobell Marine has supplied its globe and check valves for LNG re-liquefaction applications. The company has previously supplied cryogenic globe and check valves for re-gasification systems, including for the five Hoegh FSRUs (Floating Storage



Regasification Units) that have been constructed at HHI shipyard.

Bestobell Marine's cryogenic globe valves are fully fire-safe and leak-free, based on a proven design that has been used by the company for over a decade for LNG ship applications.

Duncan Gaskin, Sales Director for Bestobell Marine, said: 'This is a very exciting contract win which could lead to new opportunities for our valves within LNG re-liquefaction. Because we have the expertise in the marine sector, including working with all the major Classification Societies, our customers can be assured that the valves they receive meet all the required standards and are fully fit for purpose.'

Bestobell Marine has over 35,000 cryogenic valves fitted on ships and has recently developed a brand new range of high pressure globe valves that are fitted in LNG fuel gas systems for MAN ME-GI engines, where natural gas is injected into the engine at over 300bar pressure. MAN has sold over one hundred of this type of engine in the past two years and this is driving a rapid increase in demand for high pressure cryogenic valves for these fuel gas systems. Bestobell Marine is playing a major role in meeting the challenge created by this demand with its new range of high pressure valves.

Bestobell Marine is the marine division of Bestobell Valves, a world-leader in the manufacture of LNG cryogenic valves, with over 50 years' experience. Bestobell Marine's Valves are widely used on LNG Carriers, FLNG (Floating Production & Storage Units) and FSRUs (Floating, Storage & Re-gasification Units). The company 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 Marine has over 35,000 cryogenic valves fitted on ships



Bestobell Valves Tel: +44 (0) 1142 240000

Tel: +44 (0) 1142 240000 **Web:** www.bestobellvalves.com

Quickits Provide the Link

Operating as a key supplier within the valve & actuator industry **Quickits Limited** are renowned for their ability to design & manufacture mounting kits to suit any application; the parallel linkage kit is another example of Quickits' diverse engineering capabilities.



Left: A finished product ready to ship Right: A 3D model of the valves

ambrian Valves based in Caldicot, Monmouthshire enlisted the services of Quickits in order to provide a parallel linkage, actuator assembly complete with braced pipework. The specifications being that the braced pipework needed to suit two 10" Ebro Z011A butterfly valves and had to be tandem linked, operated by one actuator that allowed one valve to be opened whilst the other was closed. Cambrian Valves client, Samson Controls will be installing the kit as part of a sophisticated cooling system designed to control the temperature of a high-rise London office block.

'Over the years Quickits have provided Cambrian with an excellent level of quality & service, which is one of the reasons why we used them to supply a similar kit for a cooling system installed at the Olympic village for the 2012 games.' Ian Chick, Managing Director of Cambrian Valves talking about previous projects supplied by Quickits.

Using the latest 3D design software Solidworks, Quickits' Engineering Manager Niel Hufton created a 3 dimensional GA (general arrangement) drawing which allowed the customer to view and electronically operate the complete assembly prior to commencing with production. The computer generated image below shows the entire assembly complete with butterfly valves and actuator. 'Utilising Solidworks for such designs allows us & the customer to see how everything would fit & work together at the earliest possible stage. It highlights any possible defects with the 'interference detection' function' says Niel, who goes on to explain, 'The customer specified the accuracy of the centres for the two connecting valves and these needed to be 936mm apart, which meant that the fabricated bracing arm between the pipework had to be spot on'.

With the vast amount of experience that Quickits' design engineering team have coupled with in-house qualified welding engineers there was no doubt that the final product would be nothing short of 100% correct.

The long running relationship that the two companies share has grown over the years. But it's Quickits' ability to design, manufacture & test any type and configuration of mounting kit that allows them to stand-out as the choice supplier when quality & service matter.



Quickits Ltd Tel: +44 (0)1623 515545 Web: www.quickits-online.co.uk

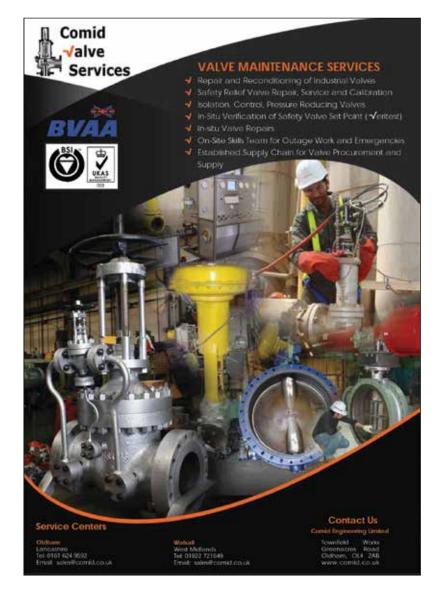
Armoloy Ace NADCAP Audit

Armoloy (UK) Ltd are pleased to confirm the results of their latest NADCAP audit. Once again this premium form of Quality recognition has been achieved.

n this occasion we are delighted to announce that we have accomplished the award of merit status based on the completed audit.

NADCAP Quality Assurance recognition, awarded by the Performance Review Institute, is the highest standard and most significant accreditation in the global aerospace field and is fully accepted by all members of the international aerospace community. It is also recognised by all other industries where the highest standards of Quality Assurance are basic necessities.

Armoloy (UK) Ltd has also recently successfully renewed its AS9100 Rev.C accreditation and the relevant ISO certification and is therefore able to comply







with the most arduous standards and requirements for both current projects and those continuing on into the future.

Our current involvement includes the coating of numerous components involved with various Airbus and Boeing aircraft builds, Bell and Agusta helicopters and the Lockheed Martin Lightning II joint strike fighter.

The Armoloy NTDC coating is widely employed to provide solutions in Aerospace, Nuclear and Power Systems, Oil & Gas equipment, Motion Control, Food & Pharmaceutical equipment and Packaging industries. It is our clear intention that we are able to confirm its abilities, its availability and its assured continuity of supply over the coming years.



Armoloy (UK) Ltd Tel: 01902 310375 Email: tdc@armoloy.co.uk

7 PRESS THE **RIGHT BUTTON**



With this control, the SIPOS SEVEN valve actuator makes power plant design and specification much easier

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Allvalves Online - More than an Online Valve Shop

Having the word online within the company name can be misleading as there is more than meets the eye with **Allvalves Online Ltd**.

The fast growing valve and actuator specialist in Pershore, Worcestershire is adding high profile projects to its long list of completed work. Having started as a web shop the company has been developed to become a technical company offering specialist solutions. More than just a 'stack them high, sell them cheap' company, Allvalves have worked with some of the biggest names in the UK on projects such as Biogas and AD plants, chromic acid applications, food and HVAC.

Adam Chapman, MD of Allvalves explains further: 'We wanted to use the BVAA once again as a platform to showcase some of the work we have completed. Some will see us a just another valve company but there is much more to us than that. We have partnered with some of the leading brands within this industry to offer almost every solution to any application we are involved in, both in the UK and all around the world.'

2014 was a good year for Allvalves, completing a number of large projects, in particular a large AD plant and a lube oil project for



Knife gate valves for a large Stafsjo project



Allvalves online supplied valves to a large biogas project



Actuated valves from Allvalves Online

Saudi Arabia. For the AD plant, Allvalves were able to help specify, select and source the correct valves and actuated packages resulting in to date, Allvalves largest single value order. Using a large quantity of Stafsjo knife gate valves and EBRO butterfly valves, Allvalves were able to offer the customer high quality products for their application. Also this year Allvalves supplied over 120 actuated ball and butterfly valves for a lube oil project in Saudi Arabia. All valves were assembled and dry bench function tested in Pershore, prior to the Intertek inspections to allow smooth export to Saudi Arabia. Repeat projects are planned for 2015 due to the success of the supply from Allvalves. The end of the 2014 also saw Allvalves supply a solution that its competitors couldn't. The team supplied epoxy coated PTFE lined butterfly valves with epoxy coated 3ph electric actuators.

2015 has already seen a large number of projects underway, including the company's largest export order to date a large number of Adler ball valves. Allvalves works with the Italian ball valve manufacturer on specialist applications such as chemical, ship building, hazardous and other industries. Another large biogas project was supplied and some smaller projects have been supplied such as ali-bronze Pentair high performance butterfly valves for a ship builder and actuated stainless steel high performance butterfly valves for gas applications. Allvalves has just shipped out a large project of Sun Yeh mechanical failsafe spring return electric actuators.

So the next time that you have a large project for manual and or actuated valve packages, whether it be standard applications or something a little bit special, do try Allvalves Online Ltd, you might just be surprised at what they can offer.



Allvalves Online Ltd Tel: 01386 553190 Website: www.allvalves.co.uk

Parker Hannifin set the standard for high load value



A Parker rodless linear actuator

Parker Hannifin, the global leader in motion and control technologies, has recently introduced a new integrated Basic Guide for rodless linear actuators.

deal for deployment in applications that demand high load values, the guiding profile of the Basic Guide is integrated directly into the cylinder profile. From a customer point of view it means that it can be specified in projects where space is at a premium and best in class performance is a must. What's more Parker engineers have 'designed in' long service life to deliver maximum uptime. Through the dispensing of the additional guiding profile not only is the installation space minimised but also the weight of the overall actuator is reduced significantly.

'energy saving'

With the ORIGA Basic Guide being integrated directly into the cylinder profile tube, the gap is closed between the standard version of the ORIGA OSP-P rodless linear actuators and their combination with the external Slideline plain bearing guide.

Using the Basic Guide, 5 mm T-slot magnetic switches can be fitted directly to the profile tube, without projecting edges. The guide carriage of the Basic Guide is fitted precisely to the cylinder profile by means of four slide profiles. The guide play is adjustable and can be readjusted at any time, even in the event of one-sided uneven loading and wear, without the guide carriage being misaligned as a result. Therefore the guide carriage always remains in its ideal horizontal position.

The Basic Guide uses slide units are both wear-resistant/, durability-tested and have already proved themselves in the Slideline. The service life is also prolonged due to the integrated wiper system and easy lubrication using the built in lubricating nipples.

As with all ORIGA cylinders, the Basic Guide has adjustable end position cushioning and magnetic pistons, plus end caps that can be rotated through $4 \times 90^{\circ}$. The usual options are also available for the Basic Guide, such as integrated 3-way valves for energy saving, single-side air connection, VITON seals, Niro version and a slow-running version for stick/slip free operation. A range of accessories, such as end cap mountings, mid-section supports and T-slot magnetic switches, round off the Basic Guide range.

The ORIGA Basic Guide is available as ATEX version and is certified in the EX range group of equipment II Category 2 GD. It comes in build sizes 25 mm, 32 mm, 40 mm and 50 mm with a maximum stroke length of 6,000 mm. For further information please visit www.parker-origa.com/ORIGA-Basic-Guide.9397.0.html?&L=1



Parker Hannifin Manufacturing Ltd Tel: 01271 313131 Email: ipd@parker.com

Albion Introduces New Range of Compact PICVs



The Art 20C range is a compact design and ideal for the automatic balancing of heating and cooling systems

Albion Valves (UK) Ltd, an increasingly popular UK valves supplier has introduced a new range of Pressure Independent Control Valves (PICVs) to its extensive portfolio of products suitable for applications within the building services industry.

he new product range known as the Art 20C range is a compact design and ideal for the automatic balancing of heating and cooling systems. It is particularly compatible with fan coil units and chilled beam applications where its reduced dimensions and compact design are hugely beneficial, and can withstand temperatures from -10°C +120°C.

The new range of PICVs has been introduced to complement Albion's Monolink system. When assembled together, the configuration offers engineers a much easier installation solution in applications where space is at a premium. The Art 20C range is available in DZR brass and its main functions are to regulate, control and modulate. The features of the Art 20C include: easy selection of required flow-rate using pre-setting dial, support of constant flow regardless of pressure fluctuations, flow modulation along the whole electric actuator stroke. It also offers greater flexibility if the system has been modified after the first installation.

The Monolink is a preassembled factory tested valve arrangement, designed in a simple and highly compact H block unit. It is suitable for a wide range of pipe connections and its structure offers a reduced risk of leakage and minimizes space required to connect to the system.

'improving energy savings'

The Art 20C range is available with a number of control permutations: a linear gear motor for proportional or 3 point control typical of building management systems, a thermoelectric actuator for zone or on-off operation and a self-acting thermostatic sensor for pipe work temperature control.

Albion Valves, Technical Specifications Manager, Paul Wightman commented:

'PICVs are recognized in the industry for improving energy savings and ultimately reducing costs. Our new Art 20C range can be used independently, however when paired with Albion's Monolink system, the combination of the two products offers the contractor twice the benefits.

Not only do they gain energy savings as a result of increased control and valve performance from the PICV, they also save on the time and cost of the installation by specifying the Monolink. So a winning combination!

Albion Valves currently stock around 5000 lines of industrial valves, all available from its distributor network.

NH BE D

Albion Valves UK Itd Tel: 01226 729900 Website: www.albionvalvesuk.com

Corrosion. It's what you can't see that can cause the biggest problems.

The internal working mechanisms of products and components used in certain applications and in harsh environments, can succumb to stress and corrosion too. This can eventually cause major problems such as unplanned maintenance, leaks and limitations on plant availability...

...which is why it is important that products and components used within these industries comply with NACE standards.

At Springtech we are used to developing valve spring solutions for harsh environments, working with NACE compliant materials such as Inconel X-750, Nimonic 90 and Elgiloy. These materials are produced to extend the lifespan of components and provide longterm savings and ROI for customers.

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Crane ChemPharma & Energy Launches the New Pacific[®]CSV Line of Cast Steel Gate, Globe and Check Valves

Designed in accordance with the industry's latest standards, the new **Pacific®CSV** line of cast steel gate, globe and check valves from **Crane ChemPharma & Energy** provide the highest level of quality and performance in demanding applications.

'Pacific has partnered with a worldrenowned foundry to deliver the highest quality of cast steel valves to our customers worldwide,' said Global Business Line Manager, Tarun Shivlani, 'These valves have been designed to exceed API 624 requirements and achieve industry leading fugitive emissions with superior packing selection, and the highest degree of manufacturing control.'





The new line of cast steel valves has several improved features

These valves are available in various sizes and materials of construction

Subject to Crane's rigorous development and testing process, each Pacific®CSV valve is uniquely built and tested per API 598 standards to offer exceptional performance in the global oil & gas, petrochemical, power and refining industries. The globe valves also comply with API 623, standard released specifically for globe valves. With higher Cv rates and lower operating torques than alternative valve types, Pacific®CSV valves deliver superior value to users in demanding applications.

The new line of cast steel valves has several improved features that enhance reliability and 0&M including:

 The gate valve's fully-guided wedge, which ensures smooth operation in both horizontal and vertical orientations to deliver improved resistance to sticking

- The globe valve's uniquely-designed line contact between disc and seat, which enables lower seating torque and faster set up.
- The swing check's disc fastener, which is restrained by the bonnet to eliminate the risk of a displaced disc and prevent damage to downstream equipment.

These valves are available in various sizes and materials of construction, including special alloys and stainless materials. For more information about new Pacific®CSV valves and Crane's complete portfolio of industry-leading valve solutions, please visit www.cranecpe.com.



Crane ChemPharma & Energy Tel: 01633 486 666 www.cranecpe.com

High Flow Insertion Regulator Offers **Significant Weight Savings**

Pressure Tech introduces a new patented high flow pressure regulator for use in 4["] pipelines and above.



The high flow pressure regulator is available from Pressure Tech

Pressure Tech regulator weighs one quarter of this and only the pilot regulator is of the external elements. Despite the compact design, the Cv values remains high: 4" = Cv65, 6" = Cv145, 8" = Cv260.

The 'dome loaded' design ensures the set point is stable throughout the flow range with minimal droop effect and control ranges across the range from 1bar to 100bar.

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Advanced Valve Solutions Announce New Partnership with STI in the UK

AVS provides installation, commissioning and aftersales support for all STI products, services and diagnostics tools

S TI provides control solutions for actuation in severe service applications. Common requirements are high forces in conjunction with high speed and precision positioning; all combined with extreme reliability and safety design criteria.

Reliability and performance are vital for process efficiency and no compromises can be made for the safety of operators, plant integrity and the environment.

To meet these requirements, STI is continuously developing the best performing pneumatic control actuation systems available on the market.

Advanced Valve Solutions UK has partnered with STI to be able to offer installation, commissioning, after sales support and diagnostics for the full range of STI products in the UK, this includes:

- Custom fit advice
- Custom fit solutions
- Process translation into valve and actuator
- Maintenance free actuators for linear and rotary valves
- High quality supplier with all components under one QA system
- High quality and accurate positioner
- Quick operating without additional booster
- Damping on closure by instrumental protection
- Replacing/upgrading existing non-STI products.
- Provide diagnostic services to improve performance and extend life
- Diagnostic software packages.
- Inspection and repair of damaged components

Since its foundation in 1960, STI has focused on development, design and production of complete actuation systems to operate industrial valves for the most demanding applications and processes – those applications assessed in terms of forces, speed, accuracy or a combination of these demands. This requires not just the muscle' (the actuator, linear or quarter turn) but also the 'brain' (the positioners and other components, which control the motion following an inlet signal).

STI products are designed for use in the most severe service applications (valves, dampers, fan inlet drives and other devices). Our goal is to meet customers' every specific need – as a result, we specialize in customized products.

Some actuation applications are on:

- Bypass valves in large steam and gas turbines;
- Anti-surge valves in LNG compressors (over 90% of compressor anti-surge valves in LNG plants worldwide are fitted with STI actuation control systems);

Advanced Valve Solutions UK will offer installation, commissioning, after sales support and diagnostics



- Safety relief valves in large pipelines;
- Combustion and exhaust valves.

Advanced Valve Solutions (AVS) has replaced many critical valves in UK power stations and has a proven track record in protecting stations from loss of production and saving £000,000s in repairs and replacement parts.



Advanced Valve Solutions (UK) Ltd

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W H Tildesley Apprenticeship Awards

Three young apprentices from a UK based forging manufacturer have received their stage 2 NVQ certificate. **W H Tildesley**, a drop forging specialist based in West Midlands, has run apprenticeship schemes for many years.



John Tildesley, MD awarding NVQ certs to Michael Craig, Andrew Killian and Daniel New

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Exotics ASTM A182 F51 – Duplex ASTM A182 F53 – Super Duplex ASTM A182 F55 – Super Duplex Monel Alloy 625

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hrough their training, the apprentices acquire a range of skill in preparation for a career working in the forging industry.

Managing Director, John Tildesley: 'At most times, we have several apprentices undergoing training. It's vital for us to take on and train young new recruits. As fully trained stampers, they will make a vital contribution to ongoing success and growth of our business.

'a recognised industry training program is a great start'

We strive to maintain the level of expertise within our company. Making sure as many of our employees as possible have the solid foundation of a recognised industry training program is a great start.'

W H Tildesley manufactures drop forgings up to 70kg in a wide range of materials including stainless steels and nickel alloys. Finish machined components if required.

We hold several NORSOK approvals via Aker Solutions.



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Customers to benefit as **Morin** actuators integrate into **Biffi** range



The Biffi range has a 60 year track record of reliable performance

Move will bring increased options and add greater geographical range to **Pentair's** customer care teams

Pentair Actuation and Controls has integrated two of its key actuator ranges, Morin and Biffi, in a move which will provide significant benefits to those who operate heavy duty valve applications.

The Biffi range has a 60 year track record of reliable performance within the oil and gas sector. This accumulated experience has seen the product evolve to meet customer requirements time and time again. Meanwhile, Morin was the first brand to develop a complete stainless steel scotch yoke actuator and to this day remains the benchmark.

Morin will become a product name under the Biffi brand which, together as a unified product range, will offer customers a wider, stronger and more complete offering in the heavy duty valve operation sector. Customers who have traditionally purchased either the Morin or Biffi actuators will now find they have an extended choice of sizes and materials; greater support over wider geographical areas; and will be able to source the entire range from their existing contacts.

As those who procure flow control products will know, the pressures on products and those who supply them have never been greater. As life cycles shorten and certification and documentation requirements increase it becomes vitally important to have a supply chain team you can rely on. Through this integration Pentair Actuation & Controls is bringing together a team who has years of experience of meeting customer needs across varied sectors.

Entering into a partnership with Pentair Actuation & Controls in heavy valve automation will provide customers with high levels of service and quick turnaround times across the globe.

Paolo Baroni, global marketing director, Pentair Actuation & Controls, commented:

'Integrating the Morin range under the Biffi brand enables us to respond to changing market needs, enhance customer proximity, and deliver excellent levels of service. Our consolidated offering provides improved scope for a complete actuation solution for a wide spectrum of application needs. Plus, by manufacturing internally, we maintain full control of critical components, process and quality.'

Jacqueline Onditi, global product manager for piston actuators, added:

'Throughout our long history in actuation, our products have evolved to the highest standards and we have developed a high value, integrated proposition to meet every possible customer requirement. At Pentair Actuation & Controls, we invest in technical training and global resources to deliver a personalized service and offer bespoke solutions to our customers as the partner of choice.'

More information on Biffi and Morin products can be found at www.biffi.it or by contacting your existing Biffi or Morin representative.



PENTAIR Valves & Controls Tel: 01858 467 281 Web: www.pentair.com



A new approach for efficient valve instrumentation

Automated process valves actuated by pneumatic actuators always need pneumatic and/or electropneumatic instrumentation components to build up the specific functionalities required for each application

ypically, these instrumentation components are mounted all around the actuator. The number of instrumentation components available in the market is huge. Additionally, even the most common functionalities can be built in many different ways. This results in a complex mix of components and systems in a plant, creating challenges to run the plant operations smoothly when it comes to spare parts stock, service functions, modification work or repair in case component malfunction takes place. With such inevitable challenges, is it possible to make valve instrumentation simpler and easier?

End user challenge

End users typically only specify the instrumentation components that are wired to the DCS or ESD system, such as the solenoid valve, positioner or limit switch. These additional components may be specified based on technical properties or an exact product brand and model. However, the required functionality may require more than just the components that a customer has specified. Depending on the process medium and climate condition, also other component materials and temperature ranges can be specified generically-but specifications go no further than that. Therefore, standardization has occurred on some level, but it still leaves the door open to deal with a wide range of different components.

This results in end users having a vast number of different instrumentation components installed in a plant and even the most common functionalities are built in many different ways.

Single engineered solutions

As the number of instrumentation components available in the market is huge, various brands, parallel product series and different types of components can be used to execute the same functions. Valve assembly vendors have their own established practices on how to build up certain valve functionalities. They also generally provide their own preferred range of components. Additionally, identical valve functionalities can be built up from the selection of many different types of components.

The most common automated process valve basic functionalities are on-off, critical on-off (ESD), control and control+fail safe functions. The responsibility of sizing and selecting the components to build up these functionalities is part of the valve assembly vendor's scope. Even by strictly following the customer's specifications, each and every instrumentation selection is a single engineered solution. The advantage of a single engineered solution is that it is tailor-made for the specific valve. The downside is the large number of variations delivered that customers need to struggle with. Therefore, it is fair to say that valve assembly related instrumentation has so far been just a selection of individual components, and has not been seriously standardized or developed as one product.

End user objectives

End user objectives regarding valve assembly related instrumentation include the following:

- Reliability. The number one objective is reliability. Plant production downtime for any unplanned reason results in production loss, even if it is caused by a single instrumentation component. Proven and tested components and systems are key to success.
- Lowest total cost of ownership. Lowering capital and operational expenses is essential. This can be achieved with competitive prices and a long component life cycle.
- **Spare part stock size**. The number of different component types used in a plant correlates directly to the size of the spare part stock.



By Antti Jokinen, Metso Flow Control Inc.

- **Ease of installation** and service. Testing and installation time during commissioning should be as short as possible. Servicing needs to be easy with fast tracking and changes of failed components.
- Minimized space and weight. Smaller valve assemblies enable a more compact pipeline layout. A light and compact design is less sensitive to vibration problems and does not require additional support.
- Service personnel expertise. A minimum number of different component types and instrumentation systems facilitate the work of service personnel.



Figure 1: Metso instrumentation panel – a highly compact and modular design throughout the whole product range. This picture shows a high-capacity panel for the on-off service of double-acting actuators.

MASTERCLASS

Solenoid valve



Figure 2: Metso instrumentation panel ideology example: The solenoid valve is the non-standardized part of the panel; the rest of the components are standardized.



Figure 3: With Metso instrumentation panel (on the left), all components are centralized on one panel plate, enabling simple installation and easy access to all components from one side. In single engineered solutions (on the right), components are typically assembled all around the actuator.

New approach to overcome challenges

To overcome these challenges, Metso has developed a new way to build up instrumentation functionalities. This new product called Metso instrumentation panel introduces a range of the most common process valve control functionalities. Typically, these functionalities are related to valve operation times and failure modes. Instrumentation panel is designed to meet the most stringent customer needs and withstand the most challenging plant environments.

Metso instrumentation panel for easy instrumentation selection

Defining the right function, sizing, as well as selecting individual instrumentation components require significant engineering efforts. The instrumentation panel has been designed to help this task by allowing an easy way to select the right functionality and components to match the stroking time and other requirements.

Metso's instrumentation panels are predefined assemblies of pneumatic components. The instrumentation panels are designed to execute the most common process valve functionalities in the most efficient way.

The instrumentation function panel is a highly modular and standardized product. Its basic ideology is that panel components are split into two categories: non-standardized and standardized components. Nonstandardized components are the ones defined in a customer's specification. Standardized components are the ones typically not in the customer's specification, but they are needed to achieve the correct functionality and stroke speed.

Efficiency and reliability

The instrumentation panel design principles and features support end users to achieve their objectives of efficiency and reliability.

All panel components are widely used and well-recognized brands in the market. The vast installed base and long-term use of selected components verify the field-proven reliability and high quality. Panel operation is tested. After top works assembly, the entire valve assembly functionality is tested again.

The number of component types and models is minimized, which makes it possible to reduce the size and capital of a plant's spare part stock. The component layout on the panel is standardized, which gives a homogenous look and layout to all of them. Moreover, it is easier for plant personnel to understand the system.

Component layout on the panel allows easy, one-point access on site. Panel mounting on the actuator is fast and easy. For servicing or troubleshooting, the entire panel can be replaced by a spare unit and the actual service or repair work can be done in the plant service workshop. An important benefit is the reduced time of returning the valve back into operation.

The instrumentation panel components are selected to meet the most stringent requirements. The wide temperature range makes it possible to assemble this product in any process plant. Component material options offer a technically and commercially competitive solution for all process environments. The instrumentation panel is available with a SS316 material option. Components are SIL approved as standard, and explosion-proof solenoid valves are available as well, making it a perfect product, for example, to fulfill demanding offshore plant specifications. Instrumentation panel functionalities are available with a wide flow capacity range, and thereby available for all valve sizes. Pre-determined stroke times make it easy to select the right capacity size.

Summary:

The Metso instrumentation panel instrumentation product provides end users with significant benefits. It increases the reliability of the valve assembly and reduces the spare part inventory and number of instrumentation components at a plant. Installation and maintenance is fast and easy, which results in direct cost savings. Selecting the right product for the process application is easy and straightforward.



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

Econosto UK – Back on Teesside!

Econosto UK is delighted to be opening a branch within the Eriks Teesside building to provide local support to our customer base.



Adam Jones and Mark Sales outside the new office in Teesside

dam Jobes has joined the business as Technical Sales Engineer based in the branch. Adam is a degree educated engineer, with over 7 years' experience working for a major valve manufacturer and will provide back-up to Marc Sales, the Econosto Area Sales Manager, as well as the Eriks Teesside internal and external sales teams.

Econosto, (as Ball Valves UK) had a successful time in the area in the past, and we are looking to rekindle those relationships, as well as forging new ones.

Our portfolio of products has expanded considerably since then, with global brands such as JC, Vinco, SRI, Taylor, CMO, Moniteur and Inoxpa, backed up with a formidable range of in-house Econ products. We are also in the exciting position of having unfettered access to our own brands such as AMG Pesch, ABK, Smith Forged steel valves and Valve Enterprise. With extensive stockholding (in excess of £3m in the UK and €30m+ in the Netherlands and Germany) backed by inhouse engineering and design capability for valve adaptations, modifications, testing and actuation supported by experienced personnel ensure that Econosto deliver on their promises.

By providing local service, backed up by a healthy stockholding of quality product, and engineering excellence Econosto plans to give the customer exactly what they need in in the Teesside area.



Econosto UK

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ATI Gains UK Presence



Your flow control needs are not generic. Why would your valve automation be?

ATI, The global leader in customized valve automation, has opened a UK office. If you are in need of highly engineered, customised linear valve automation solutions for Nuclear, Water, Mining, LNG, Oil and Gas, Power Generation or Petrochemical applications – look no further!



ATI bears hundreds of years in combined personnel experience and over twenty years' experience in providing engineered actuator and control systems for fast stroke, modulating, and special process control conditions. Unsurprisingly therefore, ATI sells more spring return linear actuators than any other company in the world with installed solutions in over half of the world's largest refineries.

Flow control needs are as varied and unique as the valves they use. What makes ATI unique is the ability to customise. Here at ATI pre-engineered solutions are not stocked - engineering can begin only after the customer specified process and application details. Once power systems and controls are determined, manufacturing can then commence.

Throughout the entire process our staff of highly qualified and experienced engineers will engage with your project needs and design automation solutions customised for each unique application.

ATI exclusively offers completely steel constructions for higher safety factors - no aluminium fibreglass, or other composite materials. In addition, customers bear confidence in working with a supplier who is approved to the very highest certifications, including ISO9001, PED, SIL 3, GOST, CUTR, and ATEX.

About ATI

ATI is a fully integrated manufacturing company based in the United States, starting with raw steel and finishing with completely customised valve automation solutions. ATI was founded in 1995 by Wayne Trautwein, a leading and industry respected design engineer specialising



ATI offers a vast range of premium actuators on/off and modulating valve applications

in Linear Valve Automation Solutions. In April 2013 ATI Europe Ltd was established in the United Kingdom to serve the needs of our rapidly expanding European customer base.

ATI Products

ATI offers a vast range of premium lowpressure pneumatic and high-pressure hydraulic actuators for on/off and modulating valve applications. Control and power storage solutions are carefully integrated to support these core products.



ATI Europe Ltd Tel: +44 161 830 2146 Web: www.atiactuators.com

SQEP supported by AUMA UK's ACE scheme

AUMA Actuators Ltd is supporting the adoption of SQEP (Suitably Qualified and Experienced Person) designation for electric actuator maintenance and installation with its ACE (AUMA Certified Engineering) technician programme.

he ACE scheme, which was launched in January 2015, enables industry personnel to comply with SQEP status and monitors accredited personnel.

Widely accepted definitions of SQEP include registration of expertise and qualification confirming that the person exhibits the required skills and judgement to resolve technical issues. AUMA's ACE initiative, which

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technician ACE logo provides assurance of competence

encompasses practical training and assessment for both in-house and off site personnel, provides accreditation cards to successful candidates. As a result, engineer's skills regarding SQEP status can be confirmed on-site.

The electric actuator manufacturer, which is part of the global AUMA group, has a strong track record in training and CPD (Continuous Professional Development) for both its own staff and customer's employees. Flexibility is offered with a three level programme: ACE Technician Level 1 aimed at inhouse technicians. ACE Technician Level 2 suitable for on-site installation and service activities and ACE Technician Level 3, which provides the highest level of qualification for those involved in communications protocols and systems integration.

AUMA observes that whilst SQEP is well established in the nuclear industry, it is seeing growing recognition across the wider power industry, but is still in its infancy in other sectors such as the water industry.

For full details of the ACE technician scheme, and its support for SQEP, contact Kerry Harris at AUMA Actuators Ltd on 01275 871141 or e-mail kerry. harris@auma.co.uk



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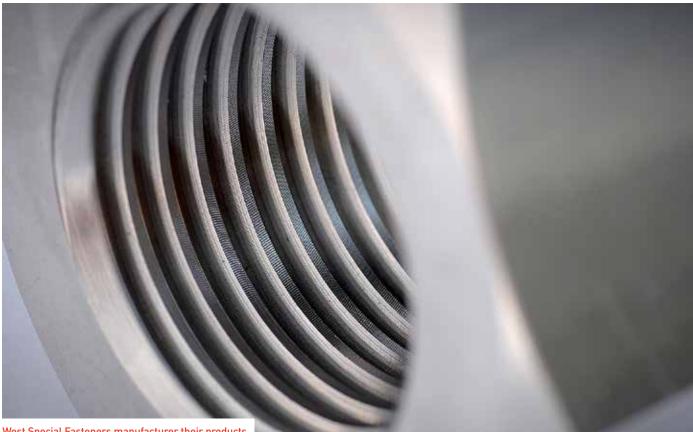




www.flow-technology.org

West Special Fasteners Receive Export Boost

Export growth bolstered for UK based fastener manufacturer after recruiting a dedicated Export Sales Manager



West Special Fasteners manufacturer their products

est Special Fasteners the Derbyshire based, hot forging and machining fastener manufacturer has seen considerable growth of it products around the World. Exports of the companies exotic alloyed fasteners for Subsea Pumps, Valves, Pipeline, FPSO (Floating production storage and offloading) to, Norway, France, USA, Australia, South Africa have all grown in the past year.

To focus on this increase in demand for its quality products the company has been looking to recruit another expert in fastener sales and specifications to manage our Export customers.

West Special Fasteners is pleased to announce the appointment of Tim Wilson as Export Sales Manager. Tim has over 19 years of experience in the hot forged and special alloy fasteners business and will be an asset to the company and be a great help to our customers' said James Hawkins - Commercial Director - West Special Fasteners.

'well respected'

'Tim is well respected within the industry and by joining us, he will strengthen our team' said Paul West - Managing Director - West Special Fasteners.



West Special Fasteners Limited Tel: 01246 291111 Web: www.westspecialfasteners.co.uk

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 nterlocking 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, Smith Flow Control is the first company to combine these mutually beneficial technologies

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 gases 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.

Some of the factors contributing to pipeline pigging incidents include:

- 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

'a safer operation'

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: 01376 517901 Email: sales@smithflowcontrol.com

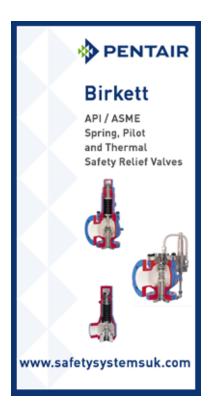


Managing Director appointed at SIPOS Aktorik

Dr. Thomas Suckut has been appointed **Managing Director** at electric actuator manufacturer, **SIPOS Aktorik**

is executive profile lists a series of senior posts including his previous position as COO/MD of Bilfinger Power Systems GmbH and Deutsche Babcock Middle East CEO, Abu Dhabi from 2010 to 2012.

In his new post as head of SIPOS, Thomas Suckut draws on extensive strategic and international sales management experience in markets highly relevant to the company. His recent work at Bilfinger included a programme to position the group of companies as a solution provider for enhanced plant efficiency.





actuator manufacturer, SIPOS Aktorik.

Thomas Suckut advises that SIPOS will continue to develop as a solution provider to support plant optimisation. Commenting on market development opportunities and the strength of the SIPOS team, he said:

'We are on the cusp of an exciting new era where it is recognised that, with electric actuators, a valve becomes part of the process chain: with its pioneering variable speed technology and new SIPOS SEVEN series, SIPOS is well placed to support this trend.

'The expertise and commitment of the company's staff to support this growth is clear. A team of highly educated engineers is at the heart of the organisation - these are extremely creative people who respond in a rapid, professional manner: each actuator is tailor made to meet the client's needs and that is an incredibly strong USP."

Dr. Thomas Suckut holds a PhD in process control technique (Dr.-Ing), RWTH Aachen from 1992 to 1995

SIPOS Aktorik is a member of the AUMA Group.



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Armoloy NTDC Products Meet REACH Legislation

West Midlands based coating

specialist has helped its customers ensure they stay on the right side of this European legislation through its use of specialist consultants

rmoloy (UK) fully recognises the far reaching consequence of the ongoing REACH legislation (formulated by ECHA, the European Chemicals Agency) which is now widely accepted in the international community. This legislation is designed to minimise the risk from ongoing exposure to harmful processes where no alternative is readily available. We support this objective.

Rather than attempt to sidestep this new legislation, we have chosen to totally embrace and comply with all aspects of the requirements in order that we may continue to offer our unique coating both to new and existing customers alike.

To achieve this objective, we have commissioned REACH consultants, REACHReady.co.uk to carry out an exhaustive assurance survey on all aspects of our company operations. Confirmation that we have satisfied these objectives will enable us to move forward in our REACH Compliance Programme and onto the Registration and Authorisation stages, for submission to ECHA. This survey has now been completed and we are currently liaising with all of our relevant registered suppliers in order to ensure complete compliance and ongoing authorisation.

Armoloy (UK) Ltd is located in the West Midlands in a purpose designed plant that fully recognises the ongoing requirements for both employees and the external environment. We apply our unique Armoloy Nodular Thin Dense Chromium to finished component tolerances adding the benefits of Hardness, Lubricity and enhanced Corrosion Resistance to precision machined items and assemblies.

A significant additional advantage of the Armoloy process over other technologies is that it is essentially a cold process with no stage of the coating application exceeding 70°Celcius, thus ensuring that no distortion takes place. 'As coated' requirements of plus or minus 1 or 2 microns are not unusual in our component production planning.

Armoloy NTDC (Nodular Thin Dense Chrome) can also be processed in accordance with AMS2438, AMS2460 (successor to QQ-C-320), DGS-PS-5250, ISO-6158 and various other NATO, DEF-STAN and Nuclear approved specifications. Our coating also has US FDA and European Certificate of Compliance for use on Food and Pharmaceutical products. Extensive toxicological testing has also been carried out to further ensure the safety of the coating in service.



Armoloy commissioned REACH consultants, REACHReady.co.uk to carry out an exhaustive assurance survey



Armoloy (UK) Ltd Tel: 01902 310375 Email: tdc@armoloy.co.uk

Pentair Supplies Specialist Support for Ball Valve Repair Project



and completed the job almost two weeks ahead of schedule

Pentair Valves & Controls has successfully provided maintenance support under its specialist service brand, SABO, for a valve repair project at one of the largest gas storage facilities in Europe.

fter experiencing leakage of ball valves in the facility, the customer turned to Pentair to discover the reason for the loss of seal tightness and provide maintenance to solve the issue within a short timescale.

A chosen partner based on the team's expert capabilities in this area, Pentair exceeded expectations and completed the job almost two weeks ahead of schedule. This minimized downtime and loss of production for the 17 billion cubic meter gas storage facility. On examination of the critical ball valve, Pentair discovered corrosion of the seat and inner valve body, and identified that the seat required reworking and a hard-facing. By promptly determining the root of the problem, providing a mirror polished surface to the ball and adjusting the clearance with new o-rings, Pentair delivered a successful outcome. This fast service completion also led to the early start of the pipeline testing procedure, which in turn allowed for early restart of the full pipeline.

The 30 inch / 750 CL 600 ball valves were located between the depleted gas reservoir used as storage 2,500m underground at the facility, and the pipeline system. Featuring an actuator with a high integrity pressure protection system (HIPPS) function, the valves isolate the high pressure gas storage from the pipeline system. It was paramount that Pentair delivered a successful and rapid outcome in order for the customer to fulfil their critical requirement of injecting gas into storage tanks by a fixed deadline.



30 inch / 750 CL 600 ball valve

The repair project posed a number of challenges for Pentair to manage, including handling due to the weight of the valves of more than 15 tons when assembled with the actuator. The extremely hard surface of the outer valve body also proved problematic. To overcome this, the previous coating, a two component polyurethane specific to offshore pipelines, was removed and grid blasted, which required special cast steel splitters - a unique capability for valves of this size. The Pentair team worked continuously to complete the mirror polishing of the valve ball, which helped to ensure the early completion of the valve service.

'The SABO team's expert product and application capabilities, combined with our dedicated support and commitment to meeting tight deadlines, means that customers can count on Pentair to deliver comprehensive premium service and MRO solutions to solve the issue at hand,' says Joachim Blom, SABO regional sales manager, Pentair Valves & Controls. 'Our collaborative approach working closely with our customer ensured a partnership that generated first-rate results.'



Pentair Valves & Controls Tel: 01858 467 281 Web: www.pentair.com

Perfecting Partial Stroke Testing



Left: Westlock Controls Digital EPIC 2 Right: Shown assembled with Norbro actuator and bracket

The addition of an Intelligent **Valve Position Transmitter** as part of the Safety Instrumented System is a cost effective and efficient safety monitoring solution

Background:

Safety valves used for emergency shutdown (ESD) generally remain static for long periods - a valve that is not operated on a regular basis may be prone to sticking.

Mandatory Full Stroke Tests (FST) requiring full plant shutdowns with all the associated costs and loss of production are unlikely to be replaced, at least in the near future, by any other form of testing or technological breakthrough.

Partial Stroke Testing (PST) while considerably increasing the time span between FSTs has issues with the methods traditionally employed.

Until now the main forms PST has taken are: The mechanical jamming of the valve via a stroke limiter, or the addition of a discrete valve controller (i.e., Smart Positioner) to the actuator.

Issues:

Mechanical Jamming, is a relatively inexpensive solution but has its disadvantages: Due to the physical presence of the jamming device the ESD Valve is unavailable during the PST, it provides no position feedback or diagnostics and reliability is dependent on procedures, training, and proper design specifications.

The Smart Positioner is the most complex of the old PST options. It is designed to generate an automatic PST function via an internal IP transducer and capture dynamic diagnostic data of the test. However, the positioner requires the use of additional devices such as limit switches or position transmitters to capture the ESD event.

Solution:

The issues associated with both the above methods can now be assigned to industrial history by adding an Intelligent Valve Position Transmitter as part of the Safety Instrumented System.

The first of this new generation to come to market is Westlock Controls' Digital EPIC-2 (DE2)

With only two moving parts, an analogue input and digital output (providing the

main control system with exactly the data required), a unique diagnostic function to test the solenoid valve by de-energizing it and monitoring the drop in pressure (without causing any movement of the valve), the DE2 works even when the power is off and enables the valve to be used in an emergency, even during a Partial Stroke Test.

This intelligent approach to PST can also bring major cost savings by defining if a failure in the system is 'safe' and can be dealt with during routine maintenance or 'dangerous' and needing immediate action.

A new innovative transmitter from a World leading manufacturer providing a giant leap forward in safety monitoring, while giving the optimum balance of cost and functionality:

Partial Stroke Testing Perfected.



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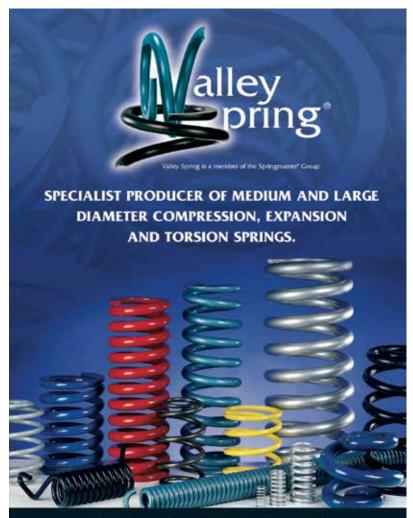
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High spec forged fittings including forged tees, elbows and pipe fitting components required on short lead times? **W H Tildesley** provides the solution.

orking closely with each customer to understand their particular requirement enables us to adapt our production to meet the tight deadlines required in this industry.

'There are many ways in which we can tailor our production to our customers' unique requirements. In some cases we hold customers' finished product onsite until it's required by them. In others, we hold raw material and maintain forging dies so that they're ready to go into the hammer within a few hours of notification. They key is to sit down with each customer individually and



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understand the needs of their business, to work out how we can best and most cost effectively support them.'

Many famous brands and leading providers use W H Tildesley produced forgings.

There are a lot of companies out there who are in the business of importing fittings by the container load in standard sizes and material grades. With all our manufacturing done in the UK, that's a market in which we don't try to compete. That said, we do produce some standard fittings in carbon steel grades and sizes, since we have customers that like to keep their supply with us for quality and reliability or just to keep their complete range purchased with one supplier. They also appreciate being close to a solution in case they have any issues they need to fix quickly.

'Where we offer something slightly different is for high grade materials or non-standard fittings, which don't get manufactured in bulk quantities and aren't always available on a quick turnaround from stock. For instance, we produce a lot of tees and elbows in nickel alloys and super duplex stainless steels on low to medium quantity runs at short notice' said Phil Hobley, sales and marketing manager.

W H Tildesley holds several NORSOK approvals. It manufactures tees, elbows and a wide range of fittings up to 70Kg. Drop forged blanks or finished components machined in-house.

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Forging Specialists

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'Ultimate Flow Control' at the Brew House

Flow control specialists **Zoedale** supply valves and actuators to several industries. Over the years the brewing industry has become one of their main areas of focus.

The Bedfordshire based business supply hygienic valves and actuators to breweries of all sizes from 1 barrel craft breweries up to the big multinationals like Carlsberg and Molson Coors.

A recent interesting project was with Northamptonshire based craft brewery Maule Brewing – The Zoedale team specified 1 ½" hygienic butterfly valves from Italian manufacturer Omal with a mix of Valpes electric actuators and Omal spring return pneumatic actuators to control the flow of all liquids in the brewery. Zoedale also supplied some 2" brass solenoid valves for the brewery chilling system.

The guys at Maule Brewing gave this statement about the valves:

'The valves play an important role in our process and production by ultimately giving us more control of our time and temperature. We can now control our mash in and sparge temperatures and



Northamptonshire based craft brewery Maule Brewing has benefited from Zoedale expertise



1 1⁄2″ hygienic butterfly valves from Italian manufacturer Omal

volumes with complete accuracy to help us to hit our brewing targets and extract the most from our high quality ingredients. Movement of our liquor from tank to tank has been made easier with ultimate flow control. At the other end of the brew house we have control over our temperatures and flow for an accurate temperature for pitching our yeast into the fermentation vessels. Overall the more accuracy we can have in the process the more consistency, quality and flavour we can get into our beers! The valves have no doubt helped us do that.'

Maule brewing now produce a core range including a hoppy Pale Ale, a Vienna Lager and an IPA.



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

Rotork Launch CQ Compact actuators

Pneumatic and Hydraulic Actuators offer power and performance where space is limited

he launch of the Rotork CQ Compact introduces a range of fully concentric, balanced design pneumatic and hydraulic valve actuators that deliver a reliable and efficient self-contained solution for applications demanding functional integrity and safety where space is limited.

In addition to providing reduced dimensions when compared with conventional scotch-yoke actuators, the CQ's symmetric design also presents a perfect weight balance on the valve, enabling increased efficiency for assembly and disassembly. The totally enclosed, rugged CQ weatherproof housing contains a helical mechanism which transforms linear piston motion into 90° (+/- 5°) rotation for the operation of quarter-turn valves. As an option, rotation can be increased to 180° . Complete customisation of the torque profile is available to suit individual valve requirements.

The CQ range features a choice of cylinder sizes and different actuator builds for many diverse applications. In all cases the CQ design incorporates



West Special Fasteners are manufacturers of stainless steel and nickel alloy special fasteners

Quality management system approved to **ISO 9001** by **LRQA**. Also approved by **ExxonMobil** for the hot forging of Super Duplex fasteners.

Our standard size range for forged fasteners is 3/16" to 2.1/2" for Imperial fasteners and M3 to M64 for Metric fasteners.



West Special Fasteners Limited Callywhite Lane Dronfield Derbyshire S18 2XR Tel: 01246 291111 Fax: 01246 291177 Email: sales@westspecialfasteners.co.uk www.westspecialfasteners.co.uk



The Rotork CQ Compact; the body style can change to suit the application.

the removable valve adaptation within the overall dimensions for maximum compactness and actuators can be easily and safely disassembled to access internal parts for field maintenance. Internal coatings provide enhanced corrosion protection for long term reliability. External epoxy finishes and a wide choice of seal materials can be specified to meet industry and customer requirements.

CQ Compact actuators are available for single or double-acting operation with output torques up to 600,000 Nm. Pneumatic operation is available using instrument air, nitrogen or clean natural gas at 12 barg pressure, whilst 210 barg is recommended for hydraulic operation. Environmental and hazardous area certifications include IP66M/IP68M, PED, ATEX, IECEx and GOST. The actuators are also suitable for SIL3 safety related duty.

The standard operating temperature range is -30°C to +100°C providing suitability for applications in harsh and challenging environments, with an optional low temperature limit of -60°C.

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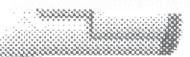




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Academy of Joint Integrity roll out Hose Management Course

Steve Clarkson, Flexitallic's Hose Technical Support Specialist, has developed the hose management programme to help customers to build capability and competency, which is in line with Energy Institute recommendations.

The new course covers the management, testing and inspection of rubber and composite hoses for use in industry, and can be delivered on-site at customer premises, or at training facilities located in Aberdeen, Middlesbrough, Yorkshire and Humberside.

Utilising bespoke equipment, The Academy of Joint Integrity provides accredited,

bespoke practical training to engineers and technicians covering all areas of joint integrity. The programmes are designed to increase competencies to ensure pipeline integrity, keeping your employees and plant safe.

Steve Clarkson said: 'The course covers the key elements of the Energy Institute guidance on hose management, ensuring those involved in testing and inspections know what they should be looking for and how to handle these important pieces of industrial equipment. As part of the course we help clients understand training requirements and ensure procedures meet best practice, we can even supply test equipment for use once the course has been completed.'

'Following the success of the initial training, it has been adopted by the group's training division, The Academy of Joint Integrity, which is fantastic because it means it means more companies across the country can build their capability and competency.'



Steve Clarkson



The Academy of Joint Integrity"

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Pneumatrol offers 3 week lead time on Namur and Remote mounted solenoid valves



Solenoid Valves





neumatrol Limited, the Lancashirebased specialist manufacturer of pneumatic control products for use within both hazardous and safe area environments, is pleased to announce that the most popular variants of its Namur mounted and Remote mounted solenoid valves are now available on a 3 week lead time, which include:

• C15 • Reflex • E2318 • E2518

The coil options (with standard voltage) available on this improved lead time include: Safe Area, Exd and Exia.

The Namur mounted solenoid valves are designed for direct mounting onto 1/4 turn pneumatically operated valve actuators meeting Namur standard fixing dimensions.

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 Reflex valve is value engineered for safe area applications, with long life expectancy.

The remote mounted solenoid valves have a well-established design with wide operating temperature range. Both E2318 and E2518 ranges are pilot operated solenoid valves, and they come with single coil spring return function with internal pilot air feed.

The majority of solenoid valves are available with SIL 2 & 3 certification (3/2 solenoid valves including Namur mounted valves where used in 3/2 mode).

It is our intention to continue to expand the product ranges available on improved lead times in the coming months. Please feel free to contact our sales office to discuss your specific requirements.



Pneumatrol Ltd

Tel: 01254 872277 Web: www.pneumatrol.com

Smith Flow Control Celebrates 30th Anniversary

Valve interlocking firm has grown from three staff members to 78

alve safety interlocking specialist Smith Flow Control (SFC) has celebrated 30 years of protecting people and assets at process plants worldwide.

SFC was formed in April 1985 by Malcolm Brown, Mike Smith and current managing director Mike D'Anzieri. The company now employs a total of 78 staff, mostly at its headquarters in Witham, Essex, but also in regional offices in Australia, China, India, the Netherlands and the United States. A third of all staff have been with the business for more than 10 years.

SFC introduced the coded card linear key concept to interlocking technology, and the concept has achieved widespread adoption on a global scale. The firm's product range



passion for perfection

Schubert & Salzer Control Systems is a medium-sized company in the Schubert & Salzer Group focusing on the developsolutions in control technology for liquid and gaseous media flows.

has evolved considerably over the past 30 years to include a full suite of mechanical interlocks for a wide range of applications and valve management products. More recently, new product development has diversified into electronics and RFID technology.

'Our product range is constantly evolving and we pride ourselves on delivering customised solutions that our clients need, 'explained Adrian Brown, SFC's R&D manager and son of founder Malcolm. 'For the last three decades, SFC has offered a precise and personal service. We appreciate and value the importance of supplying suitable products to our customers, and so adapt our product range to meet individual requirements. The continuous quest for new product development and ongoing product improvement requires a high level of energy and commitment, which can only come from a collective dedication to being the best in the industry."

'Our product range is constantly evolving'

Managing director Mike D'Anzieri added: 'The business continues to grow at a tremendously fast pace. I am incredibly proud of our achievements to date, and I am especially grateful to all the employees for helping to make it happen."

Schubert & Salzer **UK** Limited

Phone: +44 / 19 52 /46 20 21 Fax: + 44 / 19 52 / 46 32 75 info@schubert-salzer.co.uk

www.schubert-salzer.com



Smith Flow Control Ltd Tel: 01376 517901 Web: sales@smithflowcontrol.com

AUMA set for the future

Brand and organisational changes for the **AUMA** group have been initiated in 2015.

uring the last 50 years, the company has become a market leader in the field of electric actuators and valve gearboxes supported by individual group member brands: AUMA, DREHMO, GFC, Haselhofer and SIPOS.

In a transition designed to provide the foundation for continued growth, a migration to a common AUMA brand is taking place over a period of several years. The result will be one enterprise operating in five market oriented divisions: Water, Power, Oil & Gas, Industry & Marine, and Drives.

As a first step in the transition process the sales and service organisations in Germany, and in most international subsidiaries, have been consolidated. From January 2015, AUMA now offers its comprehensive product and service portfolio for all brands from a single source.

Matthias Dinse, Commercial Managing Director of the privately owned company explains the advantages of the new brand strategy:

'The structure enhances customer relationships and transparency. Each of our five companies has been successful in its market



segments and significantly contributes with its knowledge and experience to the group's success. In this market focussed move, we combine our strengths to further increase efficiency and flexibility to meet our customers' requirements and expectations. This creates a sound basis for continuous, sustainable growth and allows us to spearhead further innovations to the benefit of the electric actuator market.'

It is our intention to continue to expand the product ranges available on improved lead times in the coming months. Please feel free to contact our sales office to discuss your specific requirements.



Auma Tel: +44 (0) 1275 871141 Web: www.auma.com



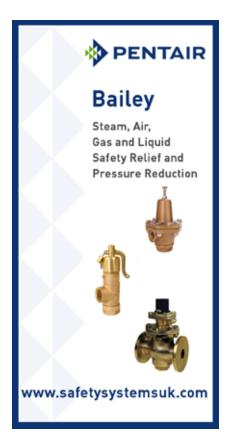
Jan Ward appointed to board of Hardide plc

Hardide plc, the parent company of advanced surface coatings technology innovator, Hardide Coatings has appointed Jan Ward CBE as a non-executive director.

s. Ward is the CEO and co-founder of Corrotherm International, a supplier of specialist metals for critical applications in the energy and aerospace sectors. Corrotherm supplies globally high performance alloys for oil, gas, power generation and aerospace markets from ten locations.

Ms. Ward was named a CBE in the 2015 New Year's Honours list for services to business and in 2014 she was named as one of the Top 100 UK manufacturing role models by The Manufacturer. She is the winner of several prestigious business awards and holds a number of business appointments.

She holds a BSc in Mechanical Engineering and is a Fellow of the Institute of Directors and of the Royal Society for Encouragement of Arts, Manufactures and Commerce.





Hardide coating reactor being loaded with components

In 2012, she was appointed as a nonexecutive director of UK Trade and Investment (UKTI). A past director of Woman in Business International and winner of Nat West Businesswoman of the Year, she has promoted women in engineering and mentored young business women for many years.

In the last three years, she has been closely involved with the Manufacturers Association and is a judge in the Manufacturer of the Year Award. She is also a judge for the Nat West Everywoman award and the Queens Award for Enterprise.

Hardide Coatings has recently announced it is opening a new USD\$7 million production facility in North America. The plant in Martinsville, Virginia will service existing and new customers in the oil and gas, aerospace, flow control and advanced engineering markets and is planned to be operational in the fourth quarter of 2015. The investment in the US follows the company's recent 50% increase in capacity at its UK production site in Bicester, Oxfordshire.

Philip Kirkham, CEO of Hardide plc said: 'Jan is extremely experienced and well-connected in the high-technology engineering and manufacturing sectors. Her knowledge, skills and experience will be of tremendous value as the company continues its international growth.'

Hardide Coatings develops, manufactures and applies advanced technology tungsten-carbide coatings to a wide range of engineering components. Its patented technology is unique in combining a mix of toughness and resistance to abrasion, erosion and corrosion in one material, as well as the ability to coat internal surfaces and complex geometries. The material is



Jan Ward CBE, Non-Executive Director, Hardide plc

proven to offer dramatic improvements in component life, particularly when applied to components that operate in very aggressive environments. This results in cost savings through reduced downtime and increased operational efficiency. Customers include leading companies operating in oil and gas exploration and production, valve and pump manufacturing, nuclear, advanced engineering and aerospace industries. The company is part of UK AIM listed Hardide plc.



Hardide Coatings Tel: 01869 353830 Email: info@hardide.com

SMC confirms return to **PPMA** Show



SMC: A reputation for innovation

After weeks of negotiation and rumours circulating within the motion control industry, **SMC** – the world leader in compressed air automation technologies – can confirm its attendance at the **PPMA Show** this September.

he announcement marks a return to the event that Milton Keynesbased SMC last attended in 2011. The Japanese-owned automation expert intends to make a real impact, with a stand that will be significantly larger than the 123m² one used at their last tenure at the PPMA Show.

SMC's UK Marketing Manager, Bob Hitner, commented: 'We have a reputation for attending industry exhibitions with stands that get people talking: eye-catching and well-staffed to draw people in, with a carefully-selected team who can really relate to customers' needs and concerns.'

'We'll be working hard between now and September to make sure this year's stand builds on that reputation – so that visitors to the PPMA show know they can find us for top quality, innovative products to make them more efficient and cut costs.'

Billed as 'the complete production line event for processing and packaging

machinery, robots and industrial vision', the PPMA Show runs for three days, from Tuesday 29 September to Thursday 1 October at the National Exhibition Centre near Birmingham. SMC will be on stand D70.

The company's website and social media channels will be updated regularly with news about their attendance at the PPMA show.



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

New Texas Manufacturing Centre to Expand **PPE's Global Capabilities**



New facility to increase production and distribution to clients in oil and gas, semiconductor and heavy equipment industries

Precision Polymer Engineering (PPE) one of the world's leading manufacturers of high performance molded elastomer seals, has announced the official opening of its new manufacturing facility in Brenham, Texas



on February 12, 2015. The new site, which commenced production in November 2014, manufactures high performance compression molded components for the oil and gas industry as well as critical components for semiconductor and heavy equipment applications.

Strategically placed near Houston, the hub of the American oil & gas industry and the Californian semiconductor manufacturing base, the new 30,000sg.ft site complements PPE's existing manufacturing facility in the UK and will include its own tool making, extrusion and inspection departments in line with PPE's flexible operating model. PPE's existing delivery record is already outstanding with some of the quickest lead times in the industry and now the opening of the Brenham facility will significantly boost PPE's production capabilities. The new facility opening event will bring together members of the media, customers and key opinion leaders from the sealing industry at the site, with a BBQ and tours of the facility.

Paul Gillyon, Managing Director of PPE added: 'We have made significant investment in the new Houston facility, both in capital equipment and experienced personnel which will further assist us in delivering our value proposition to our core oil and gas, semiconductor and heavy equipment markets. We are all very excited about this new resource, which includes a state-of-the-art cleanroom, and the opportunities it will bring to PPE and our customers.'

Sealing solutions play a significant part in the success of many companies across a wide range of industries. Whether its oil and gas exploration, semiconductor manufacturing or heavy duty equipment such as marine diesel engines, each industry requires different types of high performance seals in order to conform to increasingly stringent regulations. However, due to the expense and complexity involved in the manufacture of high performance elastomer materials, most components are manufactured to order where the process of acquiring appropriate, high performance seals can be challenging and extensive. It is therefore important that any provider of sealing solutions can deliver materials of the highest quality in the shortest possible timeframes.

PPE has a track record of developing exceptionally high performance materials for the most challenging applications. In the oil and gas industry PPE's materials, including the EnDura[®] brand, have become known for their performance in high temperature and high pressure applications. For critical applications in the semiconductor industry, PPE's Perlast[®] range has the chemical and plasma resistance needed to assure the required performance and process efficiency. PPE also offers a wide range of sealing solutions for heavy equipment applications in manufacturing and industry.



Precision Polymer Engineering Tel: +44 (0)1254 295400 Web: www.prepol.com

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New catalogue dedicated to Flow Control valve products



Our new range of 20,000 psi shutoff valves featuring industry standard medium pressure port configurations are the perfect solution when reliability is essential

Some applications simply demand a reliable product. Shutoff valves that must remain leak tight while pressure testing other components are a prime example where failure of a valve in the system can lead to false negative test results, leading to lost time, missed deadlines and increased costs.

Our new range of 20,000 psi shut-off valves feature elastomeric sealing. Whilst this sealing method is unable to withstand the same temperature extremes as a traditional packing gland, it benefits from the ability of an elastomer to provide a relatively constant sealing force throughout its life. This allows the leak tight performance to be maintained without the need to tighten the packing gland, and greatly reduces the risk of stem leakage particularly in higher duty cycle applications.

The unique aluminium bronze T-bar handle design leaves the one piece stem free such that it does not rotate against the valve seat when closing the valve, minimising the risk of galling of the seat, stem or threads. Carefully balanced areas within the valves ensure that backlash is minimised and torques are consistent, improving operator feel, particularly when attempting to slowly release trapped pressure.

With 1/4", 3/8" and 9/16" medium pressure port configurations from simple 2-way angle and straight patterns to block-andbleed configurations, the new range is particularly suited to test applications and production systems where reliability is critical.

The shut-off valve range is featured alongside the newly released FMF25 and VFMF25 fine flow metering valves and other existing products in our new Flow Control Valves catalogue, available to download from the website now.

Download your copy of the new Flow Control valve catalogue and view our other valve ranges at www.bisvalves.co.uk



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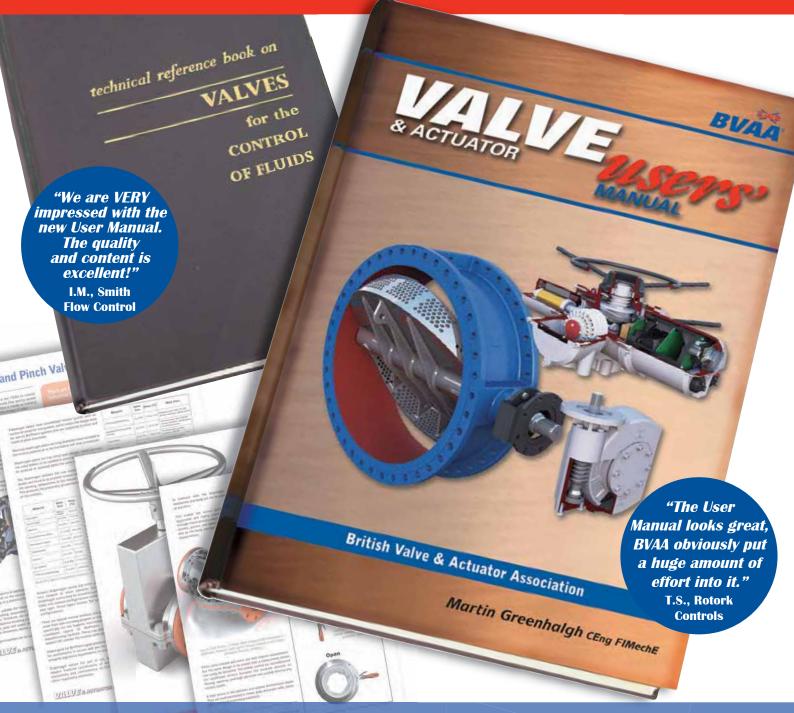
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