

# **VALVE** *user*® **MAGAZINE**



**SPECIAL  
OIL & GAS  
FOCUS**

**ONS 2014**

STAVANGER, NORWAY, 25-28 AUGUST 2014  
EXHIBITION CONFERENCE FESTIVAL

**British Valve & Actuator Association**



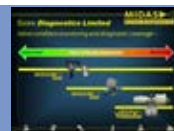
**BEL Valves  
at 50  
Page: 50**



**TorkDrive  
prevents  
valve damage  
Page: 84**



**K Controls  
extend range  
Page: 61**



**Score's  
new era  
Page: 88**

# Innovate & educate

## KNOWLEDGE CENTRE



Interact & learn  
with live webinars...



Watch  
educational  
on demand videos...



Experience  
the latest  
Triple Offset news...



Quality & Service with Excellence  
• ISO 9001:2008 Certified •

Spool Kit



Hand Wheel



Chain Wheel



Mounting Kit



Spring Return Handle



Pedestal Extension



Locking Device



Manual Extension



Switch Box



Stainless Steel Quarter-turn Gearbox



Quarter-turn Gearbox



Multi-turn Gearbox



Declutch Gearbox



Stainless Steel Declutch Gearbox



**THE UK'S LARGEST INDEPENDENT MANUFACTURER AND SUPPLIER OF SPECIALIST PRODUCTS TO THE VALVE AND ACTUATOR INDUSTRY**



VISIT US AT VALVE WORLD 2014  
HALL 4, STAND C21



Quickkits Limited

Units 3-8 Drakehouse Court, Hamilton Road, Sutton-in-Ashfield, Nottinghamshire NG17 5LD  
Tel: +44 (0)1623 515545 Fax: +44 (0)1623 515546 Email: sales@quickkits-online.co.uk



BVAA® and VALVEuser® are registered trademarks.

#### DISCLAIMER

The publishers endeavour to ensure the accuracy of the contents of VALVEuser. However the publishers do not warrant the accuracy and completeness of the material in VALVEuser and cannot accept responsibility for any error and subsequent claims made by any third parties. The contents of VALVEuser should not be construed as professional advice and the publishers disclaim liability for any loss, howsoever caused, arising directly or indirectly from reliance on the information in VALVEuser.

#### COPYRIGHT

All rights reserved. All material (including without limitation photographs) in VALVEuser, unless clearly indicated to the contrary, may not be reproduced in any format and in any circumstances without the prior written consent of the publishers.

Editor: Rob Bartlett FIAM  
rob@bvaa.org.uk

#### BVAA Ltd

9 Manor Park, Banbury  
Oxon. OX16 3TB (UK)  
Tel: (0)1295 221270  
Fax: (0)1295 268965  
Email: enquiry@bvaa.org.uk  
Web: www.bvaa.org.uk

VALVEuser® is a controlled circulation magazine, free of charge to genuine users of valves, actuators and related products and at the discretion of BVAA Ltd.

## BVAA Annual Meetings and AGM

21st November 2014  
Rockcliffe Hall, Darlington  
01295 221270 to book

# Valve Academy

**No, not the latest in the Police Academy film franchise, a genuine idea to boost our wonderful industry!**



by BVAA Director, Rob Bartlett

I, like I suspect many readers, underwent a traditional Apprenticeship, which by a rather convoluted route led me to my current post. Coming from farming family and a very rural-school background, my 'careers advisor' seemed remarkably short on ideas after my rejection of 'the family business.' Consequently I came to Engineering as a career rather more by accident than calling – I have to say I found it enlightening and I've enjoyed every minute since and would - and do - heartily recommend it.

So imagine my horror when I read a story in Engineering Careers magazine about a schoolteacher who called an 'emergency meeting' with the careers service when a star pupil floored them with the statement "I want to work in manufacturing"! His decision to seek an apprenticeship rather than continue to take 'A-Levels' was apparently regarded as a 'mistake' by the school.

I'm delighted to say that young man stuck to his decision, and after seven years of permanent employment, two sponsored engineering BTECs and a management qualification now enjoys a senior, well-paid position his company at the ripe old age of 23. Oh, and has no millstone of a huge student loan to pay off.

I think the attitude of this young man's school to manufacturing tell us a lot about the way industry is perceived by those outside or unfamiliar with it. Indeed my own son rejected my encouragement to get into manufacturing, regarding it as 'dirty.' He's now a potter – the irony of manufacturing's perceived 'dirtiness' is not lost me as I do the daily wash of clay-sodden clothing. Or indeed that it is, in fact, still manufacturing.

The BVAA recently discussed ways in which we can develop further our young professionals – the seed corn of our industry. We are not aiming to replace the terrific grounding provided by apprenticeships - far from it as we encourage their reintroduction after many years in the wilderness and effective shunning by successive Governments. No, what we aim to do is to take our star pupils and accelerate their development in the valve industry through exposure to our own industry's companies, networking and courses. Okay Academy is my word and might sound grand, but it essentially an early introduction to 'the University of working-life' to build up quickly the knowledge and experience that many of us have achieved over several decades.

The British Valve industry has a unique, world-leading knowledge-base, and it's our intention to ensure that know-how gets passed onto the next generation.

Cover: Hyperbaric testing at the National Hyperbaric Centre, Aberdeen



# World Class Independent Valve & Actuator **Training**



One-day **training courses** from leading **industry professionals**. Independent courses. No sales pitch, **just quality**, technical training.

These courses are a **MUST** for those involved in the engineering industry who need to know about valves and actuators. BVAA valve courses are delivered by our lecturers who have tremendous knowledge and experience of the industry. The sessions always result in comments of the highest praise.

## **BVAA Training Courses: October 2014**

**Introduction to Valves** - Monday 6th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Introduction to Actuators** - Tuesday 7th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Control Valves** - Wednesday 8th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Safety Valves** - Thursday 9th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Safety Integrity Levels (SILs)** - Friday 10th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Valve Metallurgy for the non-Metallurgist** - Monday 13th October

**Members Price:** £395.00 | **Non Members Price:** £450.00

**Combating Corrosion** - Tuesday 14th October

**Members Price:** £395.00 | **Non Members Price:** £450.00

**Casting Processes** - Wednesday 15th October

**Members Price:** £395.00 | **Non Members Price:** £450.00

**PED/ATEX Directives** - Thursday 16th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**Introduction to Hydraulics (held at National Fluid Power Centre, Worksop)** - Thursday 16th October

**Members Price:** £240.00 | **Non Members Price:** £360.00

**ISO 9001: 2015 Update Workshop** - Tuesday, 21 October 2014

**Members Price:** £240.00 | **Non Members Price:** £360.00

*All prices exclude VAT*



For full details on each course, visit **[www.bvaa.org.uk/training\\_courses.asp](http://www.bvaa.org.uk/training_courses.asp)**

British Valve and Actuator Association Limited • 9 Manor Park • Banbury • Oxfordshire OX16 3TB

**Tel:** +44 (0)1295 221270 | **Fax:** +44 (0)1295 268965 | **Email:** [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk) | **Web:** [www.bvaa.org.uk](http://www.bvaa.org.uk)



**Fax Back**  
**01295 268965**

## BOOKING FORM

### BVAA Training Courses: October 2014

Please complete the form and return to Karen Webb.

**All training courses are one day duration.**

**For full details on each course, visit [www.bvaa.org.uk/training\\_courses.asp](http://www.bvaa.org.uk/training_courses.asp)**

- **Introduction to Valves:** Members – £240.00, non-members – £360.00 – **Monday 6th October**
- **Introduction to Actuators:** Members – £240.00, non-members – £360.00 – **Tuesday 7th October**
- **Control Valves:** Members – £240.00, non-members – £360.00 – **Wednesday 8th October**
- **Safety Valves:** Members – £240.00, non-members – £360.00 – **Thursday 9th October**
- **Safety Integrity Levels (SILs):** Members – £240.00, non-members – £360.00 – **Friday 10th October**
- **Valve Metallurgy for the non-Metallurgist:** Members – £395.00, non-members – £450.00 – **Monday 13th October**
- **Combating Corrosion:** Members – £395.00, non-members – £450.00 – **Tuesday 14th October**
- **Casting Processes:** Members – £395.00, non-members – £450.00 – **Wednesday 15th October**
- **PED/ATEX Directives:** Members – £240.00, non-members – £360.00 – **Thursday 16th October**
- **Introduction to Hydraulics (held at National Fluid Power Centre, Workshop):**  
Members – £240.00, non-members – £360.00 – **Thursday 16th October**
- **ISO 9001: 2015 Update Workshop:** Members – £240.00, non-members – £360.00 – **Tuesday, 21 October 2014**

*All prices exclude VAT*

Delegate Name:

Course Required:

Email:


Company Name:

Address:

Contact Name:

Contact No.

Email:

Payment Method (please tick) ☐ Cheque (enc) ☐ Credit Card ☐

Name Card:

Total Amount:

Card No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiry Date:

--	--	--	--

Maestro Issue No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Signature:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

3 Digit Security Code:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Card Type:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

(Visa/Mastercard/Maestro/Visa Electron/Solo)

**British Valve and Actuator Association Limited • 9 Manor Park • Banbury • Oxfordshire OX16 3TB**

**Telephone: +44 (0)1295 221270 Fax: +44 (0)1295 268965**

**Email: [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk) Web: [www.bvaa.org.uk](http://www.bvaa.org.uk)**





# Let's turn it on!

Continuous growth and outstanding innovations on highest technical level will be presented at **VALVE WORLD EXPO 2014** in Düsseldorf. Valves, the whole range of equipment as well as up- and downstream technologies will take center stage. The **VALVE WORLD CONFERENCE** as major event of the valve industry analyses the markets' future, considering scientific evaluations. **Düsseldorf turns it on!**



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



Supported by:



[www.valveworldexpo.com](http://www.valveworldexpo.com)

Sponsored by:



Messe Düsseldorf GmbH  
P.O. Box 10 10 06 · 40001 Düsseldorf · Germany  
Tel. +49 (0) 2 11/45 60-01 · Fax +49 (0) 2 11/45 60-6 68  
[www.messe-duesseldorf.de](http://www.messe-duesseldorf.de)





# BVAA News



By Chris Warnett

View from  
**the other side**

## Efficient valve automation for remote sites

This article, the second 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](mailto:chris@cplloydconsulting.com)  
Tel 001 585 298 6239.

The conventional perception of a motorized valve has typically been that of a large isolating valve with a heavy duty valve actuator, usually powered by a three phase electrical supply. However, there are many processes where smaller valves are required and the demand for small electric actuators for isolating and modulating applications is steadily growing. Particularly where the environment may be hazardous, hostile or sometimes both.

In recent years valve actuator manufacturers have improved the performance of their small electric actuators. This has been due, in part, to new technologies in electric motor design as well as robust micro control circuitry. Actuator reliability has increased and costs have decreased.

These improvements now allow the demands of some applications to be met with both a commercially attractive and practical solution utilizing motor operated valves, sometimes controlled from a considerable distance.



The improved efficiency of these actuators means that less power is needed to operate some valves. This is particularly important for applications in remote areas where power distribution lines may not be available. Alternatively, where power is available, it is significantly less expensive to run low voltage single phase or DC power lines compared to higher voltage 3 phase lines.

### Oil and gas production

The search for new sources of energy is spreading into even more remote locations. Oil and gas production industries are employing new technologies to exploit resources. The rapid development of unconventional oil and gas production has placed new demands on equipment. More wells are being drilled in remote areas where there is no infrastructure to support conventional technology.

Previously, oil & gas well heads could use the produced gas to provide a power source to operate





chokes and shut off valves. However, this practice is now being avoided for environmental and economic reasons.

Remote installations have for some time been capable of control from a distance using telemetry powered by solar panels. The power demand of the remote terminal unit being low enough to be practical. However, to maintain continuous control of well head pressure and flow rates, regular adjustment of the control choke valve is often required. This necessitates the use of an actuator.

Small electric actuators powered by solar power packs are capable of operating many different types of control chokes and other valves.

In applications where many sites are spread over a wide area, each site requires its own solar power pack. The larger the solar pack, the more expensive it is. This means that low power draw actuators are a benefit, if not a necessity. There are two main factors that impact the power draw of the MOV assembly, the force demand of the valve and the efficiency of the actuator.

Some choke valve manufacturers are now producing control chokes that require less torque to operate. This allows a smaller actuator to be used which not only reduces the power usage, but also the cost of the actuator.

As the energy industry changes, then applications change. The valve and actuator industry is responding with developments that support those changes.

### Water distribution

Existing infrastructure can often be retrofitted to improve or extend operating life. This applies to any and all industries, but the development of inexpensive compact actuators and the newer methods available to power and control them is providing old installations and infrastructure with a new lease of life.

For example, in many cities around the world the water distribution systems have been in place for many, many decades. Leakage is inevitable with these systems, but as systems age the leakage rates increase. The problems associated with leaking pipes are not limited to the loss of water but also include wasted energy and physical damage from erosion.

Leaks can be mitigated by reducing pressure during off peak hours.

The use of compact electric actuators is ideal to precisely control the pilot pressure activation of larger pressure reducing valves in the distribution system.

The physical constraints of damp sub surface valve pits require robust, compact electric actuators that can operate frequently and reliably to adjust the main valve position. These valves can then be controlled from a central location to manipulate pressure and reduce leakage in an entire municipal area.

Ultimately the best way of reducing leaks is to repair or replace the miles of leaking distribution pipes. However, this takes time and resource. In comparison, the control of pressure in the system can be implemented relatively quickly and cheaply.

By utilizing centralized control of hundreds of pressure regulating valves, a municipality can implement leak mitigation in a shorter time frame.

# 'Opportunities there for those who reach for them'

**BVAA members should be working aggressively on global sales, especially given the near-term outlook for Europe. There are lots of opportunities, but you will have to reach for them.**

Europe Oil and Natural Gas Extraction is down 7.3% from last year and Europe is not likely to be a key growth market for BVAA members in the next two years. Extraction has been generally weakening since 2000, and this will likely persist as environmental regulations greatly restrict access to deposits. Although there is potential for some deregulation in the natural gas drilling industry, it will likely be a while before changes take effect. The fact that Russia is continuing to supply Europe with natural gas means there is less demand for immediate change to regulations.

Further depressing the outlook for Europe's oil and natural gas extraction industry is the fact that when considering the top 10 countries with technically recoverable shale gas resources, not a single EU member country ranks on the list. To increase Europe's energy security the region will need to improve efficiencies, develop renewable energies, and import gas from the U.S. and other regions. This suggests that through the near term BVAA members will need to look increasingly outside the EU for sales opportunities in the oil and gas markets.

The energy industry has been shaken up by a recent ruling from the U.S. Commerce Department, allowing two companies to begin exporting an ultralight oil called condensate that requires minimal processing. This move has altered the long-standing U.S. ban on oil exports and may open the door for additional exports in the oil industry. The hydraulic fracturing boom has changed the energy landscape in North America and as much as 13% of oil extracted from shale is of the condensate type which can be exported. The minimal processing requirements may hurt U.S. refiners but could be a boost to overall demand for U.S. oil production should regulations be further eased.

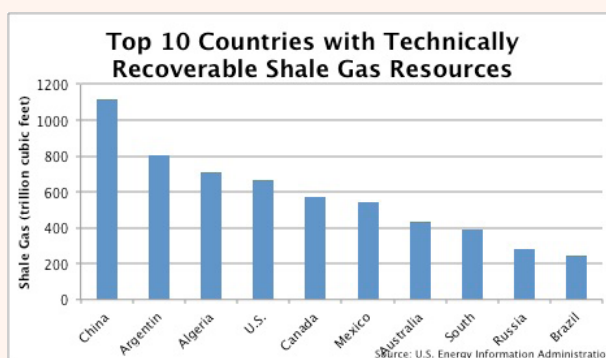
The oil market has been uncommonly calm since 2013, not erring from the \$90-\$110 per barrel range. North American oil production has been a great stabilizer for global prices. It is generally



Jackie Green

understood that OPEC likes prices around \$100 per barrel, but when normal production quotas break down other non-OPEC sources are now better able to fill the gap. This is insulating international prices from some of the larger market swings that we have seen in recent years. Expect prices to slowly relax from their current levels, but stay above \$90 over the next 12 months.

ITR Economics International is able to help your company see tomorrow's economy today. Confidence about your markets over the next few years will help you lead your business while providing you with a tool to outperform the competition. For additional information on how ITR Economics International can give you a greater planning tool to assist in meeting your business needs or to suggest future article topics, please email [jgreene@itreconomics.eu](mailto:jgreene@itreconomics.eu).





# Shale Gas: Meet the 'Frack Master'

**BVAA's CEO Rob Bartlett recently attended a screening of the film 'Fracknation' at the House of Commons. While there, Rob interviewed one of the highest profile advocates for 'fracking', Chris Faulkner, the CEO of Dallas-based oil and gas company Breitling Energy Corporation...**

**RB:** How important do you see Fracking to UK plc?

**Chris:** I think it's going to be a huge, huge gift to the United Kingdom as far as natural gas extraction goes. Take what we have up in Blackpool, for example: 1300 trillion cubic feet (TCF). 10% of that could power the UK for 50 years. Fracking will be the vehicle that delivers natural gas to the UK.

**RB:** Wow, that's amazing! How do you convince doubters that it is safe and for their long-term benefit?

**Chris:** If they're willing to listen, all it takes are the simple facts. Look at the United States, for example, where we've fracked 1.5 million wells since 1947. It's not untested or untried technology. We've set a precedent, we've proven it, it works, and it's safe.

**RB:** What specifically are the US Government doing that convinces the USA people so emphatically, that UK Government isn't doing you think?

**Chris:** Science. The US Government has taken steps to do the research, the EPA (Environmental Protection Agency) has done numerous studies with numerous water samples to prove that fracking is safe. It can be done similarly here.

**RB:** Is it a case of social permission do you think, rather than planning permission?

**Chris:** I think that getting the social license is a big part of this. Community concern and the local grass-roots effort is a major, major portion of what we encounter in the United States and it's going to be a big portion here. You saw Balcombe back in May and what happened there, so I would not underestimate the power of the people.

**RB:** What are the challenges that valve companies face, and I'm thinking there specifically of operating conditions etc. The corrosivity of the fluid, abrasion resistance that's needed etc. Is it particularly high?

**Chris:** No, it's no different than regular conventional oil and gas. The operating conditions in the oil field service companies are going to be the same as you see right now in conventional oil and gas operations in the North Sea, for example. There's been 50 years of production there and there's no difference between on-shore and off-shore, really.



Chris Faulkner

**RB:** As you may be aware we (BVAA members) are known for our high quality, high value valves, so do you think that high value suppliers like the UK companies have a future in the USA and UK fracking industries?

**Chris:** Sure. In the UK the only issue we have is availability of the equipment, availability of people, the knowledge and technology – that's the limitation that we have right now in the UK.

**RB:** Is that specifically rigs, because I understand there's very few of them?

**Chris:** Yes, there's about 60 rigs in all of Europe, compared to 1770 today in the United States, so there is a very big disparity in availability of equipment.

**RB:** Final question. How do UK suppliers engage with companies like Breitling? In terms of the supply chain how would we start the process of talking to you guys?

**Chris:** In the United Kingdom we need all the help we can get, so I am sure we'll be coming to you!

**RB:** Brilliant, that's a great answer, thanks very much!

# BVAA Spring Conference a big hit!



*Mark Richardson of James Walker Seals talks fugitive emissions*

## **The BVAA Spring Conference and Golf held at the Celtic Manor in May was given rave reviews by those who attended.**

Attendees were treated to a varied selection of excellent presentations ranging from fugitive emissions standards changes to the global outlook for the oil and gas industry; all of which were well received. The biggest hit of the speakers programme was BVAA board member and MD of Heap & Partners David Millar, whose frank discussion on Shale Gas

saw him graded 'excellent' by 90% of attendees.

The speakers programme was preceded by networking and a mini-exhibition and was followed by a dinner in the lodge at Celtic Manor.

This ever-popular event will return next year, with an expanded format. Contact BVAA for details.

Our heartfelt thanks to the sponsors who made the event possible, Cameron, Heap & Partners and Valvestock.

CONFERENCE AND GOLF SPONSORS:



VALVESTOCK



## Conference speakers programme

### NEW ACTUATOR TECHNOLOGIES

TONY O'DONNELL, THE SMART ACTUATOR COMPANY

Tony spoke about his company's innovation in actuator technology, 'RIFT'. RIFT stands for 'Reduced Induction Field Torque' and is really a design process for motors and generators. RIFT reduces the cost of manufacture by roughly 75%, the energy consumption and overall weight by about the same amount and has a much smaller carbon footprint than older design products.

### FINANCING INNOVATION THROUGH THE WORLDS LARGEST NEW PRODUCT DEVELOPMENT FUND

MARINA ROBERTS, PERA TECHNOLOGY

Part of the new €80 billion research and innovation program, Horizon 2020, the €3.3 billion Dedicated SME Instrument is not only the largest new product development fund ever conceived, it is also one of the most commercially aware. PERA Technology provided more details on how to access the fund.

### FUGITIVE EMISSIONS

MARK RICHARDSON, JAMES WALKER

Valve Fugitive emissions specifications are becoming ever more arduous and difficult to meet for a valve manufacturer. The focus of the discussion was the specifications ISO15848-1, API 622 and the new specification API 624. Mark discussed the recent changes made to these specifications and how they will affect UK Valve manufacturers.

### BUSINESS DEVELOPMENT & NETWORKING OPPORTUNITIES VIA BVAA

JIMMY PHILLIPS, BVAA

BVAA's Marketing and Communications Manager, Jimmy Phillips outlined what opportunities are available to BVAA members. Furthermore, Jimmy

outlined what tools and assistance is available to members before and at the networking events to ensure your time is best spent and that you come away with the contacts you want.

### RECENT DEVELOPMENTS IN WELDING TECHNIQUES

GEOFF MELTON, THE WELDING INSTITUTE

Geoff talked through the wide range of welding processes available today from traditional arc welding to laser, electron beam and friction.

### GLOBAL PROSPECTS

ROD WESTWOOD, DOUGLAS - WESTWOOD

Valves are truly multi-market, with key applications across the oil & gas lifecycle – from downhole applications right through to refining and distribution. Rod Westwood provided an overview of some of the key markets defining the demand for valves and associated equipment.

### CAN BRITAIN AFFORD TO IGNORE SHALE GAS?

DAVID MILLAR, HEAP & PARTNERS

After a brief explanation of the process of extracting shale gas the bulk of David's talk focused on myth debunking, looking at the real issues and what shale has done for the USA and could do for the UK.

### MANUFACTURING DEVELOPMENTS IN THE AMRC GROUP

DR ALAN MCLELLAND, NAMTEC/ AMRC

Alan explained how The University of Sheffield is building on the success of its world-leading Advanced Manufacturing Research Centre with Boeing by developing a cluster of industry-focused manufacturing R&D centres and supporting facilities.

## Delegate feedback

*"1st class - from the venue, logistics, choice of catering and even the smallest of details were thought of, communicated and well executed"*

*"...one of the best conferences I have attended for a very long time."*

*"I thoroughly enjoyed every aspect of it and the organisation that you all put together was nothing other than fantastic."*

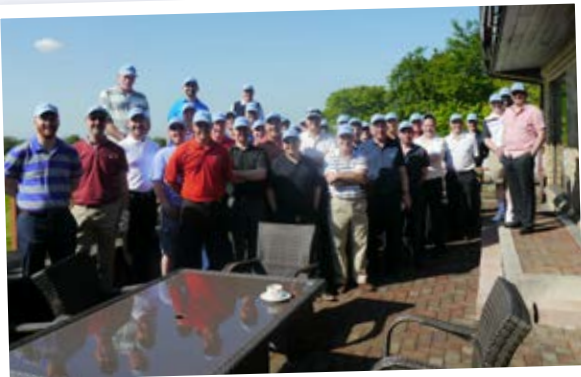
The venue and catering were also given a very big 'thumbs up' from BVAA members, who enjoyed a dinner and overnight stay on Wednesday evening before Thursday's golf.

100% of members who attended the event rated it and the venue 'Excellent' or 'very good'.

# Sun Shines on BVAA Golf Day

## Valvestock pip James Walker to coveted trophy

The Celtic Manor course was bathed in sunshine all day and there was a fantastic atmosphere among the players at the 2014 BVAA golf championship. As has become tradition, delegates from the association's Annual Spring Conference took the golf course on the day after the technical event. On this type of day the quality of the networking is more important than the result of the golf (writes a member of the team that came last); but some great golf was played and our fantastic prizes were claimed.



*The golfers gained protection from the sun in their BVAA hats*



*Richard Edwards of Noel Village tees off*

Stuart Billingham of KKI, playing in the first group out, hit a drive that was not to be beaten by any of the 43 challengers and won a new driver... even if his existing ones seems to work quite well! Adrian Apter of Cameron played a lovely approach on the 7th to win a putter as the nearest the pin prize. A tour quality golf bag was the prize for the best individual, several came very close to the winners total, but in the end consistent scoring from Phil Hyatt, playing for Valvestock on the day, scooped the prize.

The team event could not have been closer as both Valvestock and James Walker finished on 81 points, it went to count back and with the front and back nine scores also identical, in the end it was a superior score on the 10th hole (stroke index 1) which secured the prize for Valvestock! James Walker, of course, was left in second and Cameron third. Hobbs Valve paid the price for including perennial BVAA golf day loser 'Jonah' Phillips in their team and scooped up the 'booby prize' for last place... It's the taking part that counts remember!



*Marcus Sampson of Valvestock claims the BVAA Golf Cup*

### BVAA Golf Rankings

1. Valvestock – 81 points
2. James Walker – 81 points
3. Cameron – 77 points
4. D&D / Albion – 73 points
5. Xylem – 70 points
6. KKI / Noel Village – 67 points
7. Heap & Partners – 66 points
8. Schoolhill Engineering – 64 points
9. Zoedale / Valve Solutions - 60 points
10. SMC / Hardide – 57 points
11. Hobbs Valve / PDL – 53 points



# Oil & Gas UK welcomes Government's official response to Wood Review

Oil & Gas UK welcomes the announcement today (July 16) by the Energy Secretary, the Rt. Hon. Edward Davey MP, of Government support for Sir Ian Wood's UKCS Maximising Economic Recovery (MER UK) Review.

Malcolm Webb, Oil & Gas UK's chief executive, said:

*'The offshore oil and gas industry welcomes the reaffirmation of Government support for the Wood Review. We are encouraged by the proposed approach to implementation and look forward to the establishment of the Oil and Gas Authority (OGA), headquartered in Aberdeen. We need a fresh, well-resourced arms-length regulator to put the principles of the Wood Review into practice.'*

*'We are delighted to see Government commitment to providing a share of the future funding of the OGA, which is an excellent demonstration of the commitment to the tripartite approach called for by Sir Ian.'*

*'The Secretary of State challenges the industry to match the Government's commitment to Sir Ian's recommendations. I can assure him that our industry is committed.'*

At the core of Sir Ian Wood's MER UK is a tripartite collaboration between the industry, OGA and HM Treasury (HMT) to maximise economic recovery of the UK's oil and gas resource. HMT's announcement on Monday (July 14) launching a formal consultation on the North Sea tax regime is therefore timely and Oil & Gas UK looks forward to working with the new Exchequer Secretary to the Treasury, Priti Patel MP, to realise the full economic potential of the UKCS.



Malcolm Webb, Oil & Gas UK's chief executive

**DON'T FORGET:**  
**Oil & Gas UK's**  
**– PILOT SHARE FAIR**  
**– 5th November**



**SERVING INDUSTRY**  
**1939 - 2014**

# PCE Scotland Ltd Joins BVAA



The PCE team pose with their BVAA plaque

**Process Control Equipment Scotland Ltd (PCE Scotland), the West Lothian based stockist of high performance valves for the oil, gas and petrochem industry, has joined BVAA. The company is part of the PCE UK Group, which is headquartered in Stockton on Tees.**

*'We are proud to be part of the British valve industry and look forward to being active members of the BVAA' Keith Findlay.*

PCE Scotland stock an extensive range of high quality, high value valves specifically aimed at the Aberdeen oil and gas market. The company make use of the experience of its team in this demanding market to ensure customers are able to source the valves they need, when they need them; thus minimising costly down time.

*'Our team has plenty of experience in this industry, and the technical expertise needed to ensure we supply the right product, at the right price in a timely fashion' says General Manager Keith Findlay. 'We understand the cost and pressure caused by downtime or limited working and work closely with our clients to ensure this is kept to an absolute minimum.'*

Products stocked include floating ball valves, trunnion mount ball valves and cast steel gate, globe and check valves. Most of these valves are available in a variety of different materials including stainless steel, alloy, duplex, cast and forged steel and similar.



**PCE Scotland Ltd**

Tel: 01506 670444

Email: [enquiries@pcescot-ltd.co.uk](mailto:enquiries@pcescot-ltd.co.uk)



# GPEC joins BVAA

GPEC Ltd, the Wigan based valve representation and distribution specialist and provider of flow control advice, has joined BVAA. The company, founded in 2008 by Company Director Scott Gower, represents a number of world-class brands including Advanced Technology Valves spa, Adams Armaturen GmbH, AE Valves and Descote SAS.

*'We pride ourselves on our values of collaboration and long term partnership' says Director Scott Gower, a mechanical engineer with 20 years experience in the Valve industry. 'Those who we represent and those who we supply have benefitted from these values and we look forward to having a similar relationship with BVAA and its members.'*

GPEC offers valve distribution and business development consultancy services to customers in the oil and gas, petrochemical, power and nuclear fuel industries. Customers in all sectors have benefited from the depth of knowledge and experience they can offer.

More information can be found at [www.gpec-ltd.com](http://www.gpec-ltd.com)



Sean Gower, Louise Hilton and Scott Gower pose with their BVAA membership plaque



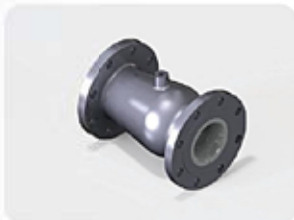
**GPEC Ltd**

Tel: +44(0)1942 356 653

web: [www.gpec-ltd.com](http://www.gpec-ltd.com)



**Specialists in design, manufacture and assembly of Nozzle Check, Twin Plate, Sprung Disc and Swing Type Check valves.**



**UK suppliers to energy, water and process industries since 1988**



[www.abacusvalves.com](http://www.abacusvalves.com)  
Part of The Glen Foundry Group



✉ [sales@abacusvalves.com](mailto:sales@abacusvalves.com)

☎ +44 (0) 1505 681 777

☎ +44 (0) 1505 683 999

# Engineering Excellence:

# McAuley Engineering Joins BVAA

**McAuley Engineering, the Ballymoney based Precision Machined Components specialist has joined the British Valve and Actuator Association. The successful Northern Irish Company has made the move as its Machined Components division begins to grow in popularity within the valve industry.**

*'Our focus on quality machining using the latest technologies has won us a number of customers within BVAA membership and the wider British Valve industry' says Sales Development Manager, Wesley McAuley. 'We firmly believe we have a quality product, with service to match, so the time seemed right to join BVAA in order to help bring this message to the rest of the valve industry'.*

McAuley Engineering from its inception has realised the importance of investing in the latest technology to meet increasing production demands from industry, but it also realises this must be married with a flexible and friendly service to ensure the customer enjoys a satisfactory experience.

This has remained the company's focus since it commenced trading in September 1997 to fulfil the specific needs of various local industries recognised by the Managing Director, Jonathan McAuley. The business was founded mainly with precision machining as its core product and since then has established itself as a premier supplier of CNC formed Tubular Products. The Company's precision ethos is now carried through to the manufacture of both its Tubular and Sheet Metal Division.

McAuley Engineering provide custom built components, fabricated to customer specifications. Services and facilities boasted by the 74,000sqft site in Ballymoney include CNC turning and CNC milling for the precision components division. The process utilises technology from conventional milling machines with DRO's fitted to the latest in machining centres with up to 9 axis. Cad Cam programming and CMM measurement allow McAuleys to undertake a wide scope of work within the valve sector

Wesley McAuley concludes: *'We pride ourselves on building long term partnerships with customers. Quality of work and flexibility in meeting customer's demands and deadlines are key to maintaining a strong relationship with current valued customers. Quality control and in-house training are processes foremost on the agenda of the company, with constant monitoring of these to ensure the customer receives not only quality product but also a quality service.'*



Wesley McAuley (left) receives the BVAA membership plaque



**McAuley Engineering Ltd**

Tel: 028 2766 6646

[www.mcauleyengineering.co.uk](http://www.mcauleyengineering.co.uk)



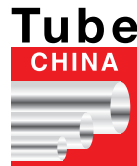
# Expertise in Flow Technology Trade Fairs



[www.tube.de](http://www.tube.de)



[www.tube-southeastasia.com](http://www.tube-southeastasia.com)



[www.tubechina.net](http://www.tubechina.net)



[www.valveworldexpo.com](http://www.valveworldexpo.com)



[www.valve-world.net](http://www.valve-world.net)



[www.tube-arabia.com](http://www.tube-arabia.com)



[www.tube-russia.com](http://www.tube-russia.com)



[www.tube-india.com](http://www.tube-india.com)



[www.valveworldexpoamericas.com](http://www.valveworldexpoamericas.com)



[www.valve-world.net](http://www.valve-world.net)



[www.neftegaz-online.com](http://www.neftegaz-online.com)



[www.tubotech-online.com](http://www.tubotech-online.com)



[www.pump-summit.com](http://www.pump-summit.com)

[www.flow-technology.org](http://www.flow-technology.org)



Messe Düsseldorf GmbH  
P.O. Box 10 10 06 \_ 40001 Düsseldorf \_ Germany  
Tel. +49 (0)2 11/45 60-01 \_ Fax +49 (0)2 11/45 60-6 68  
[www.messe-duesseldorf.de](http://www.messe-duesseldorf.de)



# ISO 9001:

# 2015 Update Workshop



**BVAA, in partnership with Lloyds Register Quality Assurance (LRQA), are running an update workshop on the 2015 issue of the ISO 9001 Quality Assurance standard.**

The workshop, to be held at BVAA HQ, Banbury (UK) on 21st October 2014, will include: -

- The ISO 9001: 2015 update
- Overview of Annex SL and the changes this will deliver to ISO Standards
- Session on the Proposed changes to ISO 9001: 2015

- How an organisation can address these changes
- Certification process for transition to the new standard

LRQA is one of the world's leading certification bodies and training providers, recognised for their professionalism and contribution towards assisting customers' drive their business improvement. All LRQA full-time trainers are professionally qualified and also registered assessors.

**Delegates Fees: £240+vat BVAA Members, £360+vat non-members.**

Fees include all course tuition, course materials, certificates and refreshments/lunch. Delegates can also purchase a copy of the new ISO 9001: 2015 DIS See also page 101.(draft international standard) for £30 per person. See also page 99



# Webtec Products Ltd Joins BVAA

**Webtec Products Ltd, the Cambridgeshire based manufacturer of fluid power products for industrial machinery, has joined BVAA. Now in its 50th year, Webtec is a British manufacturer of precision hydraulic measurement and control products used to improve productivity in the oil & gas, industrial, mobile and agricultural machinery sectors. Webtec's products are used to diagnose hydraulic faults, verify hydraulic conditions and achieve repeatable hydraulic control.**

Webtec's head office and state-of-the-art, BS EN ISO9001:2008 certified manufacturing facility is near Cambridge in the UK, and it has a major sales, stocking and service centre in Milwaukee, WI, USA and sales subsidiaries in France, Germany, China and Mexico.

Webtec designs, manufactures and markets two principal product ranges, hydraulic components and hydraulic test equipment. Webtec also provides Design Engineering services to manufacture complete products to customers' own specifications, for example specialist valves and test equipment. A major factor in Webtec's growth has been continuous investment in manufacturing.

Webtec's range of hydraulic control valves for mobile and industrial applications includes two and three port pressure compensated flow control valves, zero-leak rotary shear valves and manual winch valves, and in-line relief valves.

Meanwhile the company's range of hydraulic test equipment suitable for portable and fixed applications for condition monitoring, diagnostic testing and test stands includes hydraulic testers (digital, analogue, mechanical), flow meters (turbine, positive displacement, variable orifice), pressure meters (test gauges, industrial gauges, transducers), tachometers (infrared, inductive) and data loggers (portable, industrial).

Webtec also offers full repair and traceable calibration services for hydraulic flow and pressure measurement equipment from their St Ives, Cambridgeshire, UK & Milwaukee, WI, USA locations. The company acts as agents/distributors for Parker – Elyria, Ohio, USA



*Webtec MD, Martin Cuthbert poses with the BVAA membership plaque*

(formerly Teledyne Republic Valve range) and Milwaukee Cylinders, Cudahy Wisconsin USA.

Managing Director Martin Cuthbert added:

*'We are proud to have joined BVAA and excited to bring our experience and passion to a wider audience within the valve industry. As a design and manufacturing company we place a lot of emphasis on working closely with our customers, and look forward to building lasting relationships with fellow BVAA members.'*



## **Webtec Products Ltd**

Tel: +44 (0)1480 397444

Email: [sales-uk@webtec.com](mailto:sales-uk@webtec.com)

Web: [www.webtec.com](http://www.webtec.com)

# The Smart Actuator Company & Mars Valves announce Distribution Agreement



*Maurice Critchley, CEO, Severn Glocon Group, Wayne Lyons, sales director, Mars Valve UK Ltd and Tony O'Donnell, MD, the Smart Actuator Company*

**The Smart Actuator Company (SACO) and Mars Valves UK Ltd, part of the Severn Glocon group of companies, have signed a mutual distribution agreement; offering customers in the UK and abroad an industry leading, range of actuated ball valve packages and solutions.**

SACO is a British company manufacturing the SmartAct® range of actuators, based on innovative energy saving technology invented, developed and designed by UK-based RIFT Technology Limited. First launched in 2013, the SACO SmartAct®-1 actuator marked a step change in the field of electric valve actuation. With weight and energy consumption reductions of at least 75% compared to older design products, the actuator has a host of built-in features enabling it to be used in the

widest range of applications for any actuator in its class.

Mars Valves UK Ltd is a distributor for Mars Valve Co. Ltd, a leading international supplier of ball valves. 'Mars Valves UK Ltd has an enviable reputation for quality valve manufacturing and service,' says Wayne Lyons, sales director, Mars Valves UK Ltd.

Tony O'Donnell, MD, the Smart Actuator Company, said, 'We are delighted to be working with a group of companies of the stature of Severn Glocon. From the very beginning we have only wanted to be associated with the very best brands, companies and people in the valve and actuator marketplace. Working with Mars and Severn Glocon absolutely fits that desire. We are particularly grateful to Wayne Lyons for the help he has given us to date and look forward to working even more closely with him and his Severn Glocon colleagues in the future.'





*The Mars valve and SACO SmartAct®-1 actuator low-energy valve solution will use solar power to correlate wave movement with power generated on the Oceanus 2 wave device*

### Collaboration on Valve Projects

Under the distribution agreement, SACO and Mars Valves UK Ltd will work together to offer bespoke valve control systems. One such collaboration has been valve control for the recently launched Seatricty Oceanus 2 wave device at the Cornish WaveHub.

### ‘Smart Technology’

Severn Glocon’s subsea R&D business, Severn Subsea Technologies (SST) was responsible for the development of an integrated telemetry and control system for the Oceanus 2 wave device. Working with SACO and Mars Valves, SST was able to overcome a valve actuation problem. Brian Green, MD, Severn Subsea Technologies, explained, ‘Power for valve actuation, data acquisition and communications is provided by an array of PV solar cells and sealed lead acid batteries, allowing 24 hour telemetry, mounted on the top surface of Oceanus 2. We needed a low-energy actuator to maximise the use of the available power. The combination of a SmartAct®-1 actuator and Mars valve provided the ideal solution.’

Wayne Lyons again, ‘The fit of our product with the SmartAct® actuator has worked very well for the Oceanus 2 wave device; the valve’s quality and reliability along with the actuator’s smart technology have complimented each other to meet the needs of this exciting project. This kind of package could, in turn, be used to solve many applications in different industry sectors.’



#### The Smart Actuator Co. Ltd

Tel: 01684 565709  
www.smartact.co.uk



#### Severn Glocon Group Plc

Tel: 0845 223 2040  
www.severnglocon.com



# Rotork electric valve control contributes to Coca-Cola Enterprises environmental improvements

***Rotork CVA electric control valve actuation technology is helping Coca-Cola Enterprises (CCE) to increase efficiency and reduce energy costs at its Wakefield production plant.***

CCE has invested over £100 million over the last five years at the Wakefield site, which is the largest soft drinks production plant in Europe, as part of a long term programme highlighting its commitment to local manufacturing and the development of new technologies. Since installing and acting on the information produced by an Energy Monitoring system, the company has so far reduced electricity consumption at Wakefield by 13% since 2009.

An important part of the plan involves saving the on-going cost of providing and maintaining an instrument air supply for traditional pneumatic control valve actuation. This is being implemented at Wakefield by the introduction of the Rotork CVA control valve actuator to perform modulating and failsafe valve duties.

A recent example is on the production line where the adoption of Rotork CVA technology for a demanding valve duty has considerably reduced the cost of energy consumption when compared with traditional pneumatic actuation with no loss of performance.

Andy Reynolds, Automation Engineer at the Wakefield plant, takes up the story:

*'We were looking for an alternative to pneumatic control valves in order to remove the need for compressed air as much as possible in the area and reduce costs. Based on average air usage of 2m<sup>3</sup>/hr for a 3" control valve at £0.05 per m<sup>3</sup>, the running cost would be £870 per annum. The CVA actuator, using an average of 10 Watts at £0.15/kW, would cost £13 for the same period. This represents a minimum saving of £857 per annum per valve, as this figure does not take into consideration any leaks in the system.'*

*'Up to now, electrically actuated valves could not respond fast enough to maintain good pressure control in the bottle filling machine. Rotork were confident that their CVA actuator would not only give a similar*

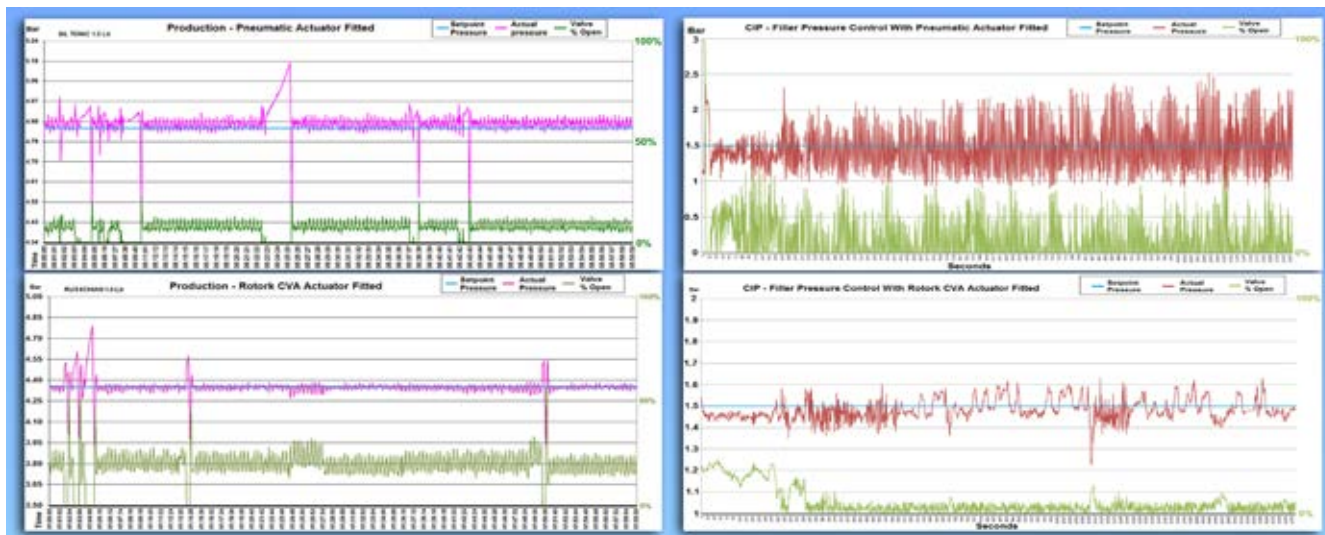


*A Rotork engineer demonstrates the improved control valve performance illustrated by the Rotork CVA actuator's datalogger.*

*performance to our existing valve, but would also be cheaper to run. Their confidence was so high they offered us an actuator on a sale or return basis if it did not meet expectations in any way.*

*'To prove this, the performance of the existing pneumatic control valve on the main product feed into the filling machine was first monitored and recorded. Using an adaptor made at Rotork's facility in Leeds, the CVA actuator was then fitted to the same valve and connected to the existing 4-20mA control signal from the PLC.'*

*'After running and monitoring the CVA actuator in a 24-7 operation for 1 month, the results from the two actuators were compared. The graphs clearly show that in production mode the CVA performs equally*



These two graphs show the improved positional accuracy of the CVA actuator in comparison with the pneumatic actuator in the production mode.

well, if not better than the pneumatic actuator. However, when in CIP (Clean in Place) cleaning mode, the performance of the CVA is much better than the pneumatic. This is because the CVA actuator does not overshoot the set point like the pneumatic actuator does when the set point is lower and back pressure in the circuit is higher when in CIP mode.'

Commenting on the work at Wakefield, Rotork UK Site Services Manager Ian Elliott said: 'We were asked by CCE to improve the production operation, which has been successfully achieved with the added benefit of a reduced reliance on costly instrument air. We are looking forward to the future with this household

name company and the opportunity to introduce our innovative products throughout their global operations.'

**rotork®**

**Rotork UK**

Tel: +44 1225 733200

[www.rotork.com](http://www.rotork.com)



By BVAA's Technical Consultant,  
Peter Churm

**TECHNICAL  
HOT SPOT**

## Check Valves EN 12334 and EN 14341 Update

**In March this year I issued a Hot Spot advising that the following European Standards are currently under revision within CEN/TC 69/WG 6:**

**EN 12334:2001**, Industrial valves — Cast iron check valves;

**EN 14341:2006**, Industrial valves — Steel check valves.

As the content of both standards is similar, CEN/TC 69/WG 6 proposed to consolidate both standards into one standard.

CEN/TC 69/WG 6 balloted CEN/TC 69 members for approval of the above mentioned proposal, following a vote of CEN/TC69 members this approval has now been agreed.

CEN/TC 69/WG 6 intends therefore to combine both standards and to keep the standard number of EN 12334 and withdraw EN 14341.

A copy of the intended combined standard prEN 12334 "Industrial valves — Steel and cast iron check valves" is available.

# Colson Industries bought by X-Cel Superturn

**Move to see investment in the Elland based valve manufacturer**



**Colson Industries, the Elland based manufacturer of valve products for the chemical and oil and gas sectors, has been purchased by X-Cel Superturn in a deal worth £1.75 million.**

Sheffield based X-Cel Superturn, which manufactures precision engineered components for the oil and gas sector, plans to strengthen the newly acquired company's management team with a technical director and area sales managers.

The group also propose significant investment in manufacturing equipment and training for existing and incoming staff. The investments should spark a growth in sales for the Yorkshire valve company which has been operating successfully since the mid-nineties. Manufacturing from a 30,000-sq/ft facility, Colson offers a wide range of Ball, Needle, Check, Manifold and Double Block and Bleed valves in sizes from 1/4 Inch to 3 Inch and in materials from 316SS to Duplex, Alloy 400, C276 and all other Super Alloys. The products are produced to the requirements of an ISO 9001:2008 Quality Assurance environment, and comply with requirements such as Fire safe design To BS6755 pt2/API 6D and the subsea design to the PR2 specification as necessary.

*'We believe that Colson has excellent products, and significant talent in valve design and manufacture'* says Mark Burrell Sales Director of the X-Cel Group

*'The Company will fit perfectly into the X-Cel group. This move is great news for Colson's existing and potential customer base as the market will soon be able to reap the benefits of investment in an already well performing company. Our aim is to manufacture over 75% of the valve components in-house using European materials and provide excellent service to all customers'.*

X-Cel was founded in 1984 by Andrew Taylor as Sheffield Superturn to manufacture small to medium CNC machined parts.

It has expanded through organic growth and acquisition and this year expects to increase turnover from £24 million to £30 million, independent of the Colson acquisition. It employs 135 people across its sites in Sheffield, Rotherham and Batley.

Colson X-Cel, as the new company will be called, continue to operate from its base in West Yorkshire, where facilities will be upgraded and staffing numbers increased. For more information on the deal, please contact Colson X-Cel.

**Colson X-Cel Ltd**  
Tel: 01422 377999  
sales@colson.co.uk





# ASCO Numatics. Experts providing engineered actuator control systems for any puzzle you can throw at us.



Backed by our extensive experience in developing the world's leading range of solenoid valves, our skilled engineers can design tailor-made actuator control 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](http://www.asconumatics.eu)**



**ASCO**  
**numatics**<sup>™</sup>

  
**EMERSON**<sup>™</sup>  
Industrial Automation

The Emerson logo is a trademark and a service mark of Emerson Electric Co. The ASCO logo is a registered trademark of ASCO Valve Inc. © 2014 ASCO. All rights reserved.

**EMERSON. CONSIDER IT SOLVED.<sup>™</sup>**

# Signed, Sealed and Delivered: Exclusivity Agreement between Crane and Heap & Partners

*Heap & Partners Ltd is pleased to announce that they have been appointed as the exclusive UK distributor for the Saunders range of industrial diaphragm valves.*



*The Crane and Heaps' teams after the signing of the exclusivity deal*

The partnership of these two companies goes back to 1933 when Heap & Partners helped to finance the setup of the Saunders Valve company. In 2011 this long and successful journey led to the exclusive National Distribution Agreement of Saunders HC4 Diaphragm Valves for the Life Sciences Market. From then Saunders market leading Aseptic brand have been available through Heaps Life Science Division, a specialist Division that provides a range of aseptic products into pharmaceutical, biotech, medical and food markets.

We are proud to have agreed extending the agreement to include all Saunders products and continue building an effective partnership with a diversified

manufacturer of highly engineered industrial products. Heap & Partners not only hold vast stocks of Saunders valves for immediate call off, but technical sales can help you select the right materials for your duty. This is a critical step in the selection process and should be undertaken with the backing of our trained personnel. Aiming to deliver a superior customer service, Heaps are delighted to have a team of great professionals who help to deliver a high level customer satisfaction as well as the efficient performance of the company. Business Development Manager Phil Patterson and Area Sales Manager Marc Walker are sharing with Heaps their experience and insights with Saunders having joined the company this year.



## Heap & Partners – new employee profiles:



**Phil Patterson**

*Business Development Manager*

*"I started at Heap and Partners in November 2013 as Business Development Manager – Crane Products, my main role is to work with the sales team and other managers to increase sales opportunities and thereby maximise revenue for our Company. To achieve this, I need to find potential new customers, present to them and ultimately create accounts with them that will continue to grow our business in the future.*

*I also help manage existing accounts and ensure they stay healthy and positive. I call on clients, often being required to make presentations on products and services that meet or predict our clients' future needs."*

**Marc Walker**

*Area Sales Manager, South England*



*"I joined the Heap and Partners Sales Team in November 2013, as the first external Sales Manager based in the South, joining at this exciting time as Heaps sign the new distributor agreement with Saunders.*

*It has given me a fantastic opportunity to build on the great foundations already in place.*

*Now armed with our complete product portfolio and the experience within the team at Heaps we can really offer the complete solutions to any valve or process requirements."*



**Heap & Partners Ltd**

**Heap & Partners Ltd**

Tel: 0151 488 7222

[www.heaps.co.uk](http://www.heaps.co.uk)

## WEATHERING THE STORM



[www.pepperl-fuchs.com/F31K2](http://www.pepperl-fuchs.com/F31K2)

Pepperl+Fuchs Ltd, 77 Ripponden Road · Oldham · OL1 4EL  
Phone: 0161 622 6311  
[fa-info@gb.pepperl-fuchs.com](mailto:fa-info@gb.pepperl-fuchs.com) · [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

### F31K2 – Valve position sensing with a global view

- Direct mounting onto standard actuators
- Ruggedized modular housing
- Optimized for outdoor use



**PEPPERL+FUCHS**  
*SENSING YOUR NEEDS*



# How much do your leaks cost?

The operation of valves and systems for the conveyance of fluids relies on efficient designs and correct installation for optimum running costs but the effects of wear, temperature gradients, corrosion, inadequate joint maintenance and many other factors conspire to challenge maintenance teams and increase operational costs. At every stage from manufacture through installation, commissioning and operation, time and energy can be saved by checking for integrity of joints, valves and systems and dealing with them before they cause larger issues such as process contamination, hazardous fluid leakage or loss of production.

The new CS 530 ultrasonic leak detector manufactured by CS-iTEC GmbH of Germany and available in the UK from Red Dragon Ltd, is designed to allow the user to identify leaks quickly either as part of an air system review, energy audit, ongoing testing or maintenance programme. Based on the heterodyne principle, the ultrasonic noise created by the tiniest leak is modulated into the human hearing range that can be fed to headphones and displayed on the instrument. The unit is easy to use and very sensitive allowing exact location of a leak using the inbuilt laser pointer.

The noise isolated headset allows the user to concentrate on the audible signals detected by the CS 530 without distraction from operating plant noise. When used as part of a regular maintenance or test procedure, an experienced user can identify potential early failure of valves through increased seat or stem leakage as well as seal or joint seepage and other forms of system leaks. For difficult to reach locations, the sensor can be detached using a flexible lead to allow testing where the screen would not otherwise be easy to read and the focus tip allows pinpoint accuracy locating the leak.

There is an optional self-contained ultrasonic tone generator that can be used with the CS 530 to test joint or weld integrity in pipe spools or vessels as well as valve seat leakage during installation and all without having to waste time and energy pressurising and depressurising the system. By identifying any leaks for remedial work before the pressure test, the CS 530 reduces the cost of testing and enables earlier completion of commissioning and handover.

Leaks from holes of 0.3mm diameter or below are not audible and may be present for some time before being detected. Even above this size, leaks could often be missed due to being lost in background noise and only become apparent through secondary indications such



*The new CS 530 ultrasonic leak detector is designed to allow the user to identify leaks quickly*

as corrosion, condensation etc. Whether on a liquid or gas line, identification and correction of these leaks will increase plant efficiency and reduce running costs dramatically meaning the ROI period for this unit can be measured in only a few weeks.

As an alternative to traditional methods like soapy water, the CS 530 is faster to identify the source of leaks and as a handheld remote sensing unit, there are very few areas where it could not be employed.

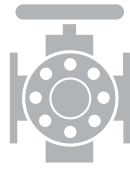


**Red Dragon Valves®**

**Red Dragon Valves**

Tel: 01443 772500

[www.reddragonvalves.co.uk](http://www.reddragonvalves.co.uk)



*The Academy of Joint Integrity™*



**We provide Accredited  
Flange Assembly,  
Gasket Awareness  
and Joint Integrity  
Training Courses in  
the UK and overseas.**

**BOOK NOW:**

**+44 (0)1274 860795**

**info@academyji.com**

**www.academyofjointintegrity.com**



# Award Winning Valves from the Award Winning Valve Maker

The Alco Valves Group, with headquarters in Brighouse, West Yorkshire, is one of the largest privately owned valve manufacturers in the United Kingdom. Alco has been making high pressure valves and manifolds to the highest international standards for the offshore, petrochemical, subsea, scientific and power generating industries for nearly 40 years.

The company designs and manufactures numerous types of award winning valves including ball, needle, double block and bleed, severe service, low and high temperature valves all from its UK plant.

Over the years Alco's organic expansion has seen it open and operate sales offices, manufacturing plants, technical support offices and warehouses in the UK, Houston Texas USA, Toronto and Calgary in Canada, Singapore, the Middle East, South East Asia and the Far East. In addition, the company has many agents and distributors in over 30 other countries around the world. Due to this world wide appeal the company has been awarded the Queens award for Enterprise among its numerous other accolades.

Alco's worldwide reputation is synonymous for quality and with its high levels of service the company has prevailed to beat-off worldwide competition to achieve large and repeated export contracts and frame agreements that extend for several years in to the future. Alco's exports have grown to a staggering 82% of revenue's in recent years; which means that tens of thousands of UK made valves are being exported to an impressive global customer base every year. The company's achievements are something to be really proud of.

In 2013 Alco acquired a new 15,000 sq/ft factory unit, near to its head office in Brighouse and has recently been updating and refreshing its head office infrastructure, both these developments are being self-funded by the company. It is also currently seeking another 50,000 sq/ft. of office and manufacturing facility in the West Yorkshire area. The continuing expansion is great news for the local economy and it will continue to assist the company's growth and capabilities.

To keep ahead of the industry the Research and Development department (R&D) has also benefited from new and advanced technologies such as rapid 3D digital modeling, 3D laser object scanning and 3D rapid printing. These technologies are employed as a method of prototyping three dimensional valve parts from a computer generated image/drawing. A physical component can be created in plastic or metal materials within minutes or hours rather than the conventional CNC machining of prototype parts, which can take considerably longer.

Alco Valves prides itself in its commitment to safety and uses stringent production testing facilities including the use of mass spectrometers, magnetic particle



*Alco's engineers are able to custom design to client's specifications*

inspection/dye penetrant and ultrasound testing within its production process. The mass spectrometers are capable of testing leakage gas rates of less than one part per million, the MPI/DPI are capable of pin pointing material defects to 0.6mm and the ultrasonic testing checks for any size surface and subsurface indications using differing sized probes.

*'continued development'*

Alco also has other testing capabilities include liquid gases to test low temperature products and hyperbaric testing to emulate deep sea valve applications and heat chambers are used to emulate hot fluid applications. All these severe circumstances that the company's products have been tested to resist and sustain, mean that when in service they are capable of withstanding many differing and brutal environments that can be found through onshore, offshore and in subsea applications.

Alco's Group Managing Director, Stuart Lomax, said 'Our continued development, growth throughout the world and sustainability is fantastic and feels very rewarding. This is a really exciting time for our businesses, both here in the UK and abroad. I would like to thank everyone at Alco, its customers and suppliers for their efforts, ongoing relationships and continued dedication contributing to the successes so far and we can all look forward to our continued commitment going forward.'

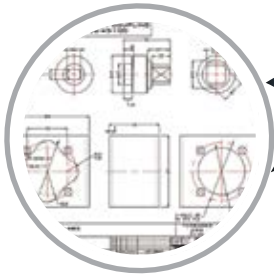


**Alco Valves Ltd**

Tel: 01484 710511

[www.alco-valves.com](http://www.alco-valves.com)





Quality & Service with Excellence  
• ISO 9001:2008 Certified •

# GLOBAL SOLUTIONS FOR THE VALVE & ACTUATOR INDUSTRY



Spool  
Kit



Manual  
Extension



Mounting  
Kit

**THE UK'S LARGEST INDEPENDENT MANUFACTURER AND SUPPLIER OF  
SPECIALIST PRODUCTS TO THE VALVE AND ACTUATOR INDUSTRY**



VISIT US AT VALVE WORLD 2014  
HALL 4, STAND C21



**Quickkits Limited**

Units 3-8 Drakehouse Court, Hamilton Road, Sutton-in-Ashfield, Nottinghamshire NG17 5LD  
Tel: +44 (0)1623 515545 Fax: +44 (0)1623 515546 Email: [sales@quickkits-online.co.uk](mailto:sales@quickkits-online.co.uk)

# New butterfly valve with double-function

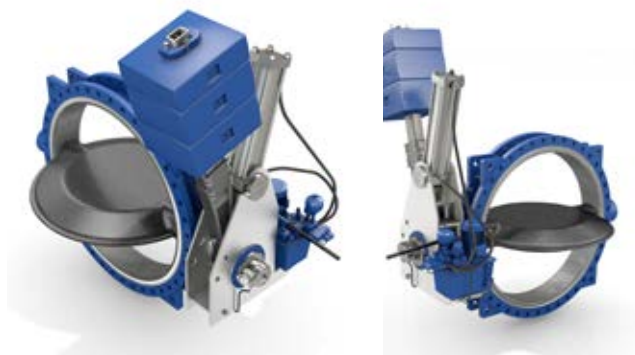
In July 2014, KSB Group will launch a new shut-off butterfly valve, which also functions as a check valve. It is manufactured in nominal sizes ranging from DN 500 to DN 1400 for pressure classes PN 6 to PN 40.

During normal operation, valves of the Dualis series work as electro-hydraulically actuated butterfly valves. They open and close like ordinary butterfly valves with a category A tightness to ISO 5208 / EN 12266-1.

In the event of a failure, a weight fitted to the lever arm closes the valve at an adjustable pre-set speed. This protects pumps, water turbines and pipelines from the destructive forces of surge pressure and prevents undesired backflow of the fluid handled.

The new soft-seated valve has been designed for applications in water transport, water distribution, seawater desalination and hydropower as well as in industrial cooling circuits.

The actuator is a compact unit which comprises all electro-hydraulic components. This allows easy access to all key components and facilitates dismantling and reassembly of the actuator. The valve needs to be connected to a three-phase 400 V/50 Hz power supply as standard. The opening and closing times can be set to the precise system requirements.



*The new compact Dualis series combines the functions of a shut-off butterfly valve and a check valve*

Dualis has been designed in modules to easily accommodate any customer-specific options, such as special control cabinets, various electrical measuring equipment, sensors or control units.



**KSB Limited**  
Tel: 01509 231872  
[www.ksb.com](http://www.ksb.com)



*By BVAA's Technical Consultant,  
Peter Churm*



## Explosive Atmospheres IEC 60079-0

### Revision of IEC 60079-0 Explosive atmospheres – Part 0 – Equipment – General Requirements

The proposed draft revision of IEC 60079-0 Explosive atmospheres – Part 0: Equipment – General requirements is being circulated as a Document for Comment.

This seventh edition cancels and replaces the sixth edition, published in 2011, and constitutes a full technical revision.

Comment should be forwarded to BVAA for onward submission to IEC by 31 August 2014

# A NEW RAPID RESPONSE TO EUROPE'S VALVE NEEDS



.....

DEMCO® | NEWCO® | DOUGLAS CHERO™ | OIC® | WKM® | NUTRON®  
LEDEEN® | MAXTORQUE™ | DYNATORQUE™

FLOW EQUIPMENT LEADERSHIP

## Cameron's Stock Valves Solution. When you need them. Where you need them.



Cameron's Rapid Response Centre – Europe delivers quick turnaround valves for customers across the continent, benefitting from an even stronger network focused on meeting your immediate valve needs. With this service, you get more access, more support and more responsiveness. Our broad portfolio of quality, daily service valves is available online 24/7. We provide in-house modification, customization and testing capabilities. And manufacturing and engineering through Cameron's worldwide network. All backed by Cameron's global footprint and trusted reputation for quality and reliability.

BROAD IN-STOCK VALVE INVENTORY  
ACTUATORS, GEARS AND CONTROLS  
MODIFICATION AND CUSTOMIZATION  
ONSITE TESTING FACILITY  
24/7 ONLINE INVENTORY ACCESS

► To review Cameron's online inventory of quality valves, visit [www.valvestockist.com](http://www.valvestockist.com) or contact us by phone at: 44 163 866 5000.

AD01497V

RAISING PERFORMANCE. TOGETHER™





# Record numbers get behind the scenes at CVS

*For the 5th consecutive year CVS opened its doors with more people visiting in one day than previous years. All visitors had the opportunity to get a behind the scenes look at CVS' ever expanding workshop as well as get involved with 6 supplier demonstrations.*



*Visitors had the opportunity to get a behind the scenes look at CVS' ever expanding workshop*

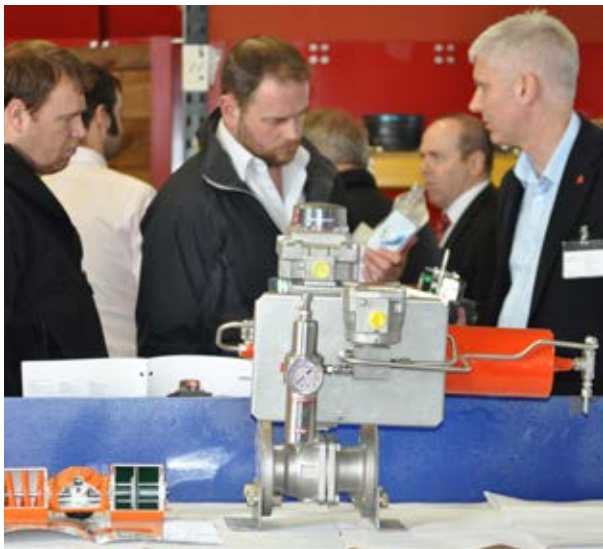
**Throughout the day the Sales Team talked to visitors representing all the major Aberdeen based Oil & Gas companies as well as one group who travelled over 500 miles to tour the facilities, having recently participated in a Lunch & Learn session held at its HQs in Newcastle.**

CVS' Key Account Manager, Ryan Machado said 'Showcasing a 4" 1500 Flow Control Valve that CVS has recently refurbished in the test rig with the client and other clients watching how we do the performance diagnostics with the DVC6200 was the highlight for me. It captured everything that CVS does in one

*job, from overhaul and repair of the original valve and actuator to supplying new instrumentation and painting and testing, all under one roof.'*

A highlight for CVS' new Business Development Engineer Jo Mortimer was when a large group arrived from a client company who only placed their first order with CVS at the beginning of the month. They were checking out the scope of CVS' capabilities and what relationships CVS has with its supply partners. Jo said 'It was great because our client got to see examples of what they're looking for from a complete valve company.'

The feedback from suppliers was good with one saying: 'An excellent & well attended open day at CVS



Various guests at CVS Open Day on Thursday 26th June

*which once again showcased significant advances in personnel and facilities at CVS. The new test area is very impressive.' Another supplier said: 'From our perspective I thought it was a really good event. The right people attended and were genuinely interested in the message we wanted to deliver. I think we showed that CVS and Emerson have a common purpose, the technical capabilities, and that by working together we are positioned to provide the service that our customers demand.'*

Looking ahead Sales Director Mac Stevenson said 'With yet another good turnout for the Sales Team we are looking forward to staging more events including Lunch and Learns at clients' premises.'



**Control Valve Solutions**

Tel: 01224 583116

[www.controlvalvesolutions.co.uk](http://www.controlvalvesolutions.co.uk)

# rotork®

## Valvekits



Engineers throughout the world of flow control rely on Valvekits capabilities and experience to design and deliver valve mounting kits and adaptation solutions in every liquid, powder and gas handling environment.

- All mounting kits manufactured with BSI ISO9001:2008 certification
- Experienced and qualified in-house design engineers, using the latest CAD technologies
- Unrivalled experience of projects of all sizes and descriptions
- 24 hour-a-day operations, next day deliveries
- 100% material traceability
- Continuous investment in new machinery and technologies
- Worldwide support by the Rotork flow control group, providing a local service in every territory



Valvekits - the market leader, see our dedicated website at: [www.valvekits.co.uk](http://www.valvekits.co.uk)

# rotork®

[www.rotork.com](http://www.rotork.com)

Redefining Flow Control



# SMC and Power Panels sign national integrator agreement

**Power Panels Electrical Systems, an acknowledged World leader in control and automation solutions, is delighted to announce the signing of a national agreement with SMC Pneumatics (UK) Ltd.**

SMC has over 50 years' experience in the pneumatics, fluid power and automation markets and is renowned for its commitment to innovation. In 2013 Forbes



Steve Bangs (SMC UK Managing Director) and Tony Hague (PP Managing Director)

magazine recognised SMC as one of the top 100 most innovative companies in the world for the third consecutive year. Its UK manufacturing operation is based in Milton Keynes alongside its European Technical Centre. Boasting the largest and most diverse product and solutions offer within its market sector, SMC supports the UK market with a nationwide team of more than 80 technically trained sales engineers.

The agreement sees Power Panels appointed as a national integration partner for SMC, with the two companies combining their respective engineering and manufacturing knowledge - utilising the innovation within the SMC organisation and their technology-leading products, to offer customers added-value solutions in electrical, electronic and electro-pneumatic control systems and assemblies.

Power Panels, who are based in the West Midlands and employ over 200 people at their manufacturing site, already work with world leading OEMs in a wide variety of market sectors including machine tool, medical, printing, packaging, food processing and semiconductor industries.

The agreement was officially signed at the recent Drives and Controls and MACH Exhibition by Steve Bangs (SMC UK Managing Director) and Tony Hague (PP Managing Director).

Tony Hague commented, *'We continually look for ways to improve the quality and diversity of the solution we offer our customers, and as such it is vital that we forge close links with other leading technology providers. We have been working closely with SMC for a number of years and the signing of this agreement further strengthens our relationship and intent to jointly provide the very best service and value to our customers.'*



**SMC Pneumatics (UK) Ltd**

Tel: 01908 563888

[www.smcpneumatics.co.uk](http://www.smcpneumatics.co.uk)



# VALVE TRADE FAIRS WORLDWIDE



[www.valveworldexpo.com](http://www.valveworldexpo.com)

Messe Düsseldorf GmbH  
P.O. Box 10 10 06 \_ 40001 Düsseldorf \_ Germany  
Tel. +49 (0) 2 11/45 60-01 \_ Fax +49 (0) 2 11/45 60-6 68  
[www.messe-duesseldorf.de](http://www.messe-duesseldorf.de)

  
Messe  
Düsseldorf

# Centrifugally Cast Ball Valves

***MetalTek provide effective solution to problem of cost effective production of exotic alloy ball valves***

**MetalTek, the Stoke on Trent based casting suppliers and metals experts, has developed an effective method of casting ball valves in high integrity alloys.**

Ball Valve manufacturers often face a common dilemma when they need to produce balls in special or unusual alloys.

A production mill run to produce an ingot to forge, or machining a spherical component from a solid can be cost prohibitive. Traditional static sand casting can give quality issues because of heavy wall thickness and varying wall thickness. MetalTek's capability to centrifugally cast a wide range of ball sizes and alloys has proven to be an excellent solution. Tooling is available to produce balls from 2" up to 38" diameter, thus eliminating tooling lead time.

*'Shaping and Product Integrity  
- Any Alloy or Quantity'*

Being a master melter, with AOD capability MetalTek are able to produce any quantity or alloy a customer may require whilst benefiting from the quality and integrity due to the Centrifugal casting process. In house machining allows us to proof machined bores with as cast O/D.

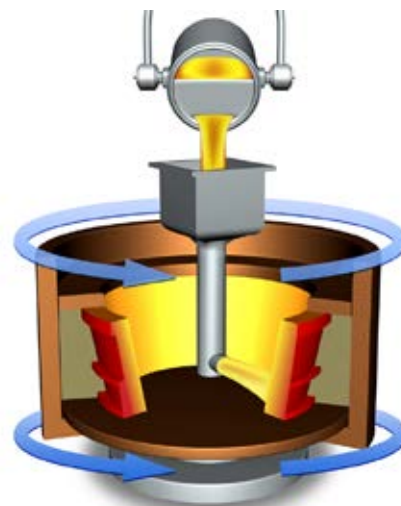
UK Business Manager Tim Hall added:

*'We are extremely proud of our capability in this area. Our customers have found the method to be cost effective, particularly for low volume, special alloy runs. Our in house machining capabilities allows us to deliver proof machined balls with minimal material removal when being finished machined and also helps to reduce lead times, so it is a complete service.'*

Contact MetalTek to see what benefits we can offer your company.



*Tooling is available to produce balls from 2" up to 38" diameter*



*Centrifugal casting*

**MetalTek**  
INTERNATIONAL

**MetalTek International**

Tel: +44(0)1782 418421

Email: [Tim.Hall@Metaltek.com](mailto:Tim.Hall@Metaltek.com)

[MetalTek.com](http://MetalTek.com)



# Emerson actuator offers increased reliability and performance in tough environments

***EL-O-Matic F-Series pneumatic rack and pinion actuators offer long-term corrosion protection and 'fit and forget' performance in a broad range of applications***

Emerson Process Management has announced a new enhanced range of EL-O-Matic pneumatic rack-and-pinion actuators. The F-Series offers a high cycle life and improved long-term corrosion protection, making them ideal for use with on/off quarter turn valves in applications with harsh environments.

Built upon 40 years of service from millions of applications, EL-O-Matic actuators offer proven reliability, providing users with "fit and forget" performance in a wide range of process applications such as those found in the chemical, refining, power generation, pulp and paper, pharmaceutical and food and beverage industries.

*'performance  
and reliability'*

The F-Series replaces the well-proven E Series, now offering even higher levels of performance and reliability. The actuators incorporate high-performance springs that optimise the torque range. Designed and produced according to the highest engineering standards, in manufacturing sites certified to ISO 9001 assure a long cycle life. Quick and easy to install, a modular construction, interchangeable components, dual drilled mounting holes and pinion inserts provide the widest range of mounting options.

Rugged, cast aluminium bodies and advanced powder coated finishing provide corrosion protection, even in



*40 years of service from millions of applications  
- EL-O-Matic actuators*

harsh environments. Drive pinions of aircraft grade ASTM 7075 T6 aluminium alloy ensure the ultimate combination of strength/weight ratio and additional protection against galvanic corrosion. Stainless steel external fasteners complete the corrosion protection specification and combine to provide greater cost savings and better long-term value.



**Emerson Process Management Ltd**  
Tel: 0870 240 1978  
[www.emersonprocess.co.uk](http://www.emersonprocess.co.uk)



**SERVING INDUSTRY  
1939 - 2014**

# Bray broadens its horizons

Bray Controls has added the Series 98 Scotch Yoke Actuator to its already extensive offering of controls to the market. The primary focus of the current program of pneumatic / electric actuation is complementary to the ninety degree valve program. The S98 has a direct mount onto all Bray Valves allowing Bray to offer the complete package. The flexibility of the ISO mounting can also be utilized on any quarter turn valve.

The heart of the Series 98 is the scotch yoke, double and single acting, which comes in both canted and symmetrical yokes, that offers the very best commercial advantage to the user.

The unit comes with some unique selling design features - it is truly modular with separate Torque, Pressure and Spring modules which affords flexibility and optimum actuator selection.



*The Series 98 scotch yoke comes in both canted and symmetrical yokes, both double and single acting*



*Bray can now offer a range of pneumatic actuation from 20 NM to 100,000 NM*

The standard body materials are carbon steel and ductile iron and an option for stainless steel, which afford optimum protection in extremely harsh environments. In addition a complete range of manual overrides and jackscrews are available to suit all operational requirements.

The actuator is SIL 3 capable and comes with PED and ATEX certification.

Bray can now offer a range of pneumatic actuation from 20 NM to 100,000 NM in both rack and pinion and scotch yoke design. Choose the applicable accessory from Brays complete line of positioners, valve status monitors and solenoids. There is also a range of BUS compatible controls typically to suit \*PROFIBUS and \*DEVICENET, as well as a large range of switches both contact and non-contact, and a range of EXD and standard ATEX solenoids.

Bray has the ability both in UK and Europe to customize control packages, and where required via their automation centre, can offer complete valve actuation packages, set and tested up to and including size DN 1200. Bray can offer both pressure and stroke testing of the complete actuated package, and if required third party witnessed.

**Bray Controls**  
Tel: 0141 812 5199  
Email: [www.bray.com](http://www.bray.com)



**SERVING INDUSTRY**  
**1939 - 2014**

# Crane Expands Saunders S360 Range

With compact streamlined 316 stainless steel housing, maintenance-free piston technology and easy change compressors, Saunders' range of S360 actuators has been expanded to accommodate valve sizes from 1/4" (DN8) up to 4" (DN100).

Saunders S360 piston-type actuators deliver superior performance for biopharm applications. The larger sizes now available complete the range and replace the existing Saunders ECX Actuators from 2.5" (DN65) up to 4.0" (DN100).

Users of the Saunders S360 will benefit from the actuator's unique design features, including:

- Modular range delivers compact dimensional envelope to enhance system design and reduce dead-leg between associated valves.
- Maintenance free piston technology provides powerful closure performance.
- Smooth corrosion resistant profile optimizes cleanability.

*'The Saunders S360 Actuator has always delivered reliable solutions to the life science and bio-fuel industries, adhering to the stringent regulations for safety and reliability in sanitary environments,' said Martin Ruse, Global Business Line Manager—HC4 for Crane ChemPharma & Energy. 'The expansion to the line will further enhance the level of support we can deliver to our customers and enable more users to benefit from Saunders innovative technology.'*

For more information about the extensive line of Saunders valve and actuation solutions, please visit us online.



Saunders' range of S360 actuators has been expanded to accommodate valve sizes from 1/4" (DN8) up to 4" (DN100)

**CRANE**

**Crane ChemPharma & Energy**

Tel: 01633 486 666

[www.cranebiopharm.com](http://www.cranebiopharm.com)



*By BVAA's Technical Consultant,  
Peter Churm*

**TECHNICAL  
HOT SPOT**

## Hot Spot Recast Pressure Equipment Directive 2014/68/EU

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

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

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

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

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

[www.parlament.gv.at/PAKT/EU/XXV/EU/02/58/EU\\_25824/imfname\\_10467767.pdf](http://www.parlament.gv.at/PAKT/EU/XXV/EU/02/58/EU_25824/imfname_10467767.pdf)



# SIPOS Aids Sewage Control at Sydney STP

An actuator and gearbox combination from SIPOS Aktorik is aiding sewage flow control at Brooklyn STP in Sydney, Australia. The order is the latest in a series of Sydney Water contracts gained by Barron GJM, SIPOS' agent for the region. Installed on a plant inlet valve, the actuation technology helps maintain water quality for the local population including Sydney's central business district, which is situated approximately 50 kilometers south of the Sewage Treatment Plant (STP).

The plant inlet valve at the STP will remain in its open position. In the event of failure of any of the sewage treatment processes, a valve will divert flow to a storage tank: if the tank reaches capacity, an alarm will trigger closure of the valve. A UPS / battery back up on the actuator ensures that the emergency procedure is maintained, even in the event of power failure.

Commenting on Barron's latest adoption of SIPOS' variable speed actuation, Weyand Magnaye, Water Products Manager at Barron GJM Pty Ltd said:

*'This is a prestigious and highly significant scheme. The STP provides a tertiary level treatment using membrane bioreactor technology and disinfection by ultraviolet light. Without satisfactory valve control, approximately 260ML of effluent would be discharged every year.'*

*'SIPOS' actuation technology was ideally suited for this installation as it supports the 240V single phase requirement of the site. Additionally, as this is a 240V actuator without a start-up current, a single phase UPS can be used for battery back-up. The actuator's variable speed capability was also beneficial as it enabled us to meet the desired operating time during commissioning without changing hardware.'*

Previous SIPOS actuator installation contracts managed by Barron for Sydney Water include Australia's fourth



Photocaption: A SIPOS Aktorik actuator and gearbox combination supports essential sewage control processes at Brooklyn STP.

largest sewage treatment plant where the actuators played a key role in a \$150 million improvement programme at the North Head STP. Other Sydney schemes that have adopted SIPOS devices are Cronulla STP, Warragamba Water Filtration Plant (WFP), Quakers Hill STP and Nepean WFP.

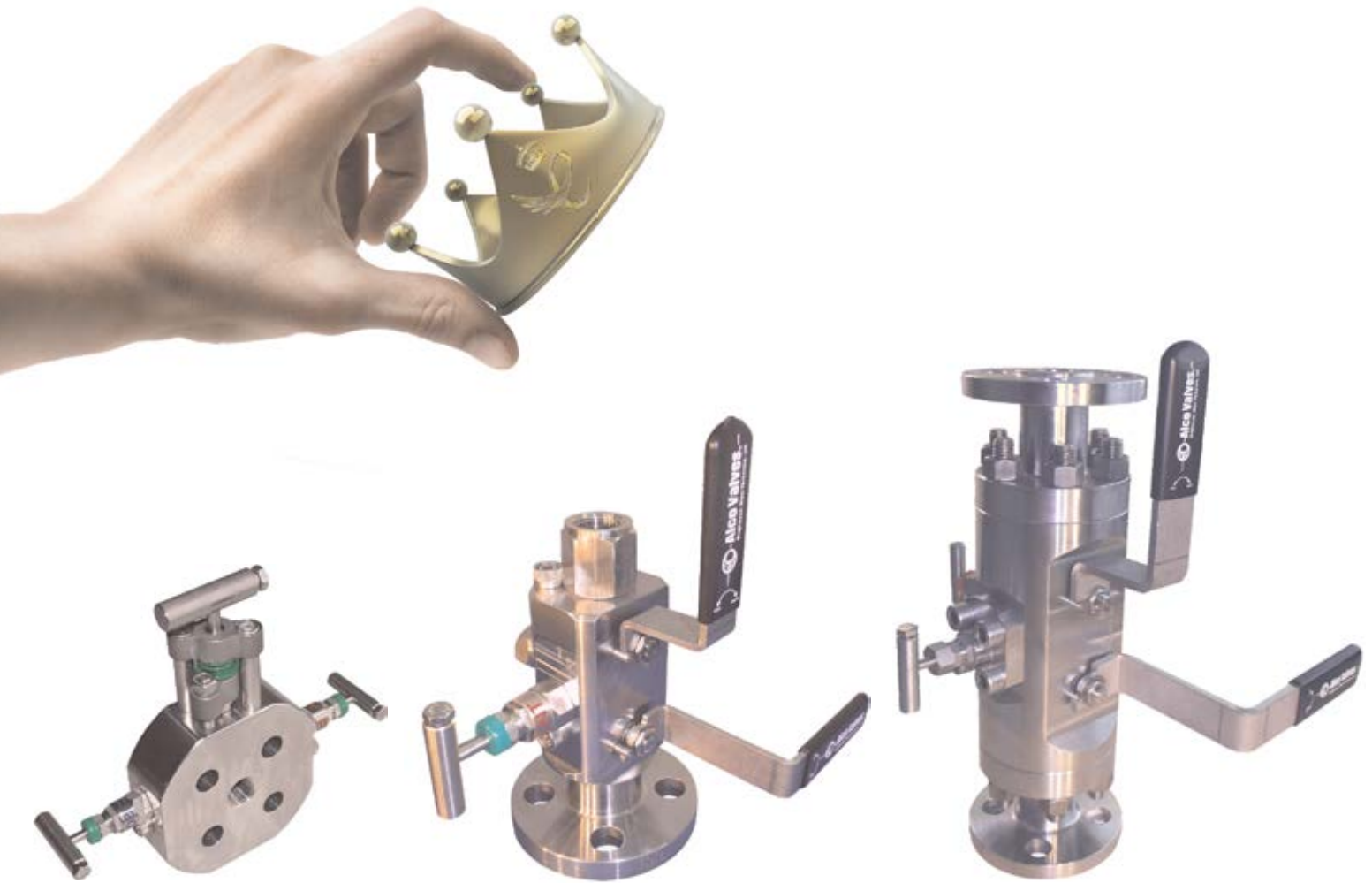
**SIPOS**  
**AKTORIK**

**SIPOS Aktorik**  
Tel: 01275 871141  
[www.sipos.de](http://www.sipos.de)

**BVAA** <sup>®</sup> **75 YEARS**

**SERVING INDUSTRY**  
**1939 - 2014**

**For nearly four decades we've been making award winning valves.**



**The Alco Valves Group.  
An award winning valve manufacturer.**

**MANUFACTURERS OF ONSHORE, OFFSHORE  
CRITICAL SERVICE AND SUB SEA VALVES**



UK (Head) Office:	Tel: ++ (44) 1484 710511	uk@alco-valves.com
Canadian Office:	Tel: ++ (1) 519 767 6655	canada@alco-valves.com
Calgary Office:	Tel: ++ (1) 403 291 2526	calgary@alco-valves.com
Singapore Office:	Tel: ++ (65) 6735 0526	singapore@alco-valves.com
Malaysian Office:	Tel: ++ (60) 16 374 6999	malaysia@alco-valves.com
Houston Office:	Tel: ++ (1) 281 564 2526	houston@alco-valves.com

**[www.alco-valves.com](http://www.alco-valves.com)**





# SMC gets into the flow with 2 port fluid valve range



**SMC, the world's leading provider of pneumatics, is proving to customers that it delivers a fluid, flexible and fast service with its universal 2 port fluid valve range. Recognising that automation occasionally requires non-pneumatic solutions, SMC has used its engineering and design expertise to develop a conventional range of fluid control valves.**

The broad range on offer – from compact and light designs to more complete solutions for medium flows and options for applications requiring zero differential pressure to large flows – is showcased in SMC's comprehensive brochure with technical data and parts directory plus an online 2 port valve selector.

*'one trusted partner'*

SMC's European Fluid Control Project Manager, Sebastian Fabio Agnello said: *'We have an enviable global reputation for our pneumatics expertise but we do recognise our customers also require alternative, non-pneumatic options. Increasingly customers wish to work with one trusted partner so we've adapted our product lines to meet their needs and wrapped this up under the 'USE' concept; Universal valves for standard fluids, Specific valves, optimised for specific fluids and Expert valves for specific applications.'*

He continued, *'We also recognise that speed of delivery is essential, so our European Central Warehouse is well stocked with our valve range, guaranteeing immediate shipping.'*

The universal range features two direct operated 2 port solenoid valves; the VDW10/20, is ultra-compact and ideal for air, vacuum and fluid handling and the VX2 series is suitable for high temperatures whilst being energy efficient and quiet to operate.

Pilot operated solenoid valve options include the VXD series which is also highly efficient and the zero differential pressure, VXZ series. Alternatively, the robust air-operated VNB series is highly versatile and can handle large flows as well as retain reverse pressure.

Supported by a range of specific and expert valves, SMC is now able to provide customers with a valve for any application in any environment.



**SMC Pneumatics (UK) Ltd**  
Tel: 01908 563888  
[www.smcpneumatics.co.uk](http://www.smcpneumatics.co.uk)



*By BVAA's Technical  
Consultant,  
Peter Churm*

# ISO 9001 is being revised

After minor changes to ISO 9001 in 2008, ISO/TC176/SC2 is preparing a revision of ISO 9001 planned for release in 2015 and implementation in 2016. This will be a complete revision of the standard. The standard revision is now at Draft International Standard stage.

DNV advise Major changes expected to be:

- Emphasis on Risk-based management including preventive action
- Increased emphasis on achieving value for organization and its customers
- Documented Information - decreased emphasis on documentation - expands concept of documentation - replaces Documents and Records
- Organizational Context - responsiveness to business environment
- Outsourcing is now External Provision
- Enhanced leadership requirements
- No requirement for Management Representative
- No requirement for Quality Manual

Changes to the standard will bring challenges to the user community and to Notified Bodies

Begin a dialogue with your Notified Body to keep informed on the draft International standard changes and to begin planning to revise your Management System.

See page 20 for more details.

## The single source for valve actuation, automation and flow control

All around the world engineers rely on Rotork's capabilities and experience to design and deliver valve actuation, automation and flow control solutions in every liquid, gas and powder handling environment.

Proven in the harshest conditions and critical applications, our innovative products and services are created with clear-cut objectives - **to deliver safe, reliable and efficient plant operations, unrestrained by project size and complexity.**

Rotork's unrivalled manufacturing capacity for market-leading products is supported by its global sales and service outlets, providing every customer and end-user with a local source for information, expert advice, maintenance and life-of-plant support.



For further information,  
visit [www.rotork.com](http://www.rotork.com)  
telephone:  
+44(0)113 205 7233  
email: [information@rotork.com](mailto:information@rotork.com)



### Redefining Flow Control

**rotork®**

[www.rotork.com](http://www.rotork.com)

[information@rotork.com](mailto:information@rotork.com)



# Certification for Quickits

***In order to secure substantial International contracts Quickits recently achieved the ISO 9001:2008 certification for its Quality Management System.***



*Quickits Nicola Spencer and Rob Smith pose with the ISO 9001 certificate*

Over the past few months Rob Smith (Managing Director) and Nicola Spencer (Quality Manager) teamed up with quality consultant Jo Holden to finalise the innovative online management system. This specially designed electronic application allows users to efficiently manage all aspects of the quality management system throughout the business. With this tool along with the expert advice of Jo, both Rob and Nicola set out to prepare the team at Quickits ready for the Centre for Assessments all important audit.

*'In past years it hasn't been a necessity to secure the ISO 9001:2008 certification' says Quickits Managing Director Rob Smith 'from day one we set our quality and service standards at the highest possible level. Having been in the industry for more than 20 years we are well aware of our customers' expectations and our reputation within the industry is testament to this. Achieving the certification allows us to secure additional, substantial international contracts and it's another step forward in the right direction.'*

After all their hard work it's certainly paid off for Quickits having achieved ISO 9001:2008 certification since May 2014. Consultant Jo Holden was so impressed with Quickits and will be publishing a case study on Nicola's creation of an NCI reporting procedure which analyses

Non-conformances, Complaints and Improvement Ideas. *'Nicola identified an old system of reporting non-conformances and complaints that wasn't really effective enough'* explains Jo, *'since then Nicola has created and maintains a very unique detailed procedure that provides root cause analysis which in turn leads to improved efficiencies throughout the business.'*

Rob Ashton, auditor for the Centre for Assessment recorded zero major and minor non-conformances during his audit of Quickits Ltd which apparently is rare for the first assessed audit of any company. It's easy to see why Quickits are proud to have gained this certification and the ease of achievement provides evidence that Quickits have always operated with quality and service high up on the agenda.



**Quickits Ltd**

Tel: 01623 515545

[www.quickits-online.co.uk](http://www.quickits-online.co.uk)

# SPECIAL OIL & GAS FOCUS

## INSIDE:

A selection of developments from the valve industry with special relevance those attending ONS Stavanger 2014

# ONS2014

STAVANGER, NORWAY, 25-28 AUGUST 2014  
EXHIBITION CONFERENCE FESTIVAL



**VISIT BVAA AT ONS2014**  
**SEE US AT STAND J980/31**



## BEL Valves:

# Looking good at 50



*BEL Valves today, and in 1964*

To understand BEL Valves beginnings we need to go back to the 1950s. This was the era that colour TV and seat belts were introduced, the Queen's Coronation, the 4 minute mile and the first animal in space. And what were BEL Valves doing back then? Well they hadn't yet come into being as we know them today. The business was manufacturing valves under licence for ICI for high pressure petrochemical applications and didn't start their own designs until 1964 as British Engines Valves. Just because we're on the theme – 1964 was also the first year that Match of the day aired on BBC2, the average weekly wage was £16, Prince Edward was born and it was the year that launched Pirate radio.

So, North East based, BEL Valves are celebrating their 50th anniversary this year. It has been a long and prosperous focus for the British Engines Group having seen employee numbers double in 10 years and turnover double in the last 5. As you would expect BEL Valves have achieved some significant milestones of their own in their 50 year history, see box:







*Radio Caroline and BEL Valves were launched in the same year, unlike the pirate radio station, BEL Valves is still going from strength to strength.*

- 1964** First valve designed and delivered - a 7/8" high pressure valve and actuator for a Polyethylene plant
- 1966** The first apprenticeship intake
- 1970** First valve export
- 1982** First subsea valve installed in the North Sea
- 1986** 100 apprentices trained
- 1990** First High Integrity Pressure Protection System delivered (HIPPS)
- 1994** First order value over £10m destined for Norway
- 2000** First of the deep water projects installed in the Gulf of Mexico at 1036m
- 2002** Development of the double isolation Eccentric ball valve
- 2004** Design of the Subsea Electric Actuator
- 2007** First Subsea High Pressure valve installation
- 2010** Highest pressure, water depth 7 bore size combination for the Gulf of Mexico
- 2013** Largest high pressure subsea HIPPS valve

Neil Kirkbride, CEO at BEL Valves, commented: 'We've been part of this global industry for 50 years and been involved in some fascinating developments throughout this time. None more so than now.'

BEL Valves are investing heavily in the future, embarking on significant expansion plans with a 5 year development that started last year. BEL's footprint will increase from 42,000m<sup>2</sup> to over 55,000m<sup>2</sup> enabling them to double capacity at their manufacturing and R&D facilities to meet an increasing demand. The additional space also makes room for the growing number of personnel.

With increases in demand from their focus markets, BEL Valves is continually developing its capabilities to provide facilitating technology for onerous service conditions, high pressures, high temperatures and ultra-deep water. Investing in markets where they anticipate growth, providing a path for sustainable success.



**BEL Valves Ltd**  
Tel: 0191 265 9091  
[www.belvalves.com](http://www.belvalves.com)

# Rapid Gas Decompression in Extreme Environments

By Jean-Luc Matoux, Global Application Engineer for Energy & Materials Handling, DuPont



*New oil drilling environments challenge the performance of valve seals. Copyright DuPont*

Increasing oil extraction pressures and temperatures, aggressive chemicals and rapid gas decompression (RGD) in new, more difficult drilling sites are creating operating environments beyond the capabilities of most elastomers. DuPont™ Kalrez® 0090 (K-312 “A” O-rings) perfluoroelastomer sealing parts, were developed to provide enhanced rapid gas decompression resistance in aggressive environments and have received the industry best “0000” rating in accordance with the NORSOK M-710 Rev. 2 standard and TOTAL GS EP PVV 142 specification.

The spectre of shrinking global oil reserves and the search for new, more difficult sources such as deep water and shale is well documented. Many new exploration sites challenge the oil and gas industry with increasing extraction pressures and temperatures, and by the presence of aggressive chemicals such as

ammonia, carbon dioxide, hydrogen sulphide (sour gas), methane, and steam — exacerbated by the phenomenon of rapid gas decompression (RGD).

Often referred to as HPHT (high pressure/high temperature) environments, these more aggressive drilling conditions pose a new set of problems for suppliers and operators of surface and downhole ball valves, packers, pumps, mechanical seals and drilling tools because they create operating environments beyond the capabilities of many commonly used equipment-sealing elastomers like hydrogenated nitrile rubber (HNBR) and fluoroelastomers (FKM).

Combinations of RGD, HPHT, and harsher chemicals can lead to seal failure, with the associated risks of, costly financial, safety and environmental issues, and ultimately to shut downs.



## The benchmark of seal performance

This scenario was one of the reasons why the industry pressed for the establishment of a test standard to qualify non-metallic sealing materials. NORSOK standard M-710, Rev. 2, October 2001, developed by the Norwegian petroleum industry, has been widely adopted internationally as the benchmark of performance for any elastomer seal in critical oil and gas service. NORSOK certification for RGD is essential to qualifying performance of elastomer seals in HPHT and aggressive chemical environments, with the objective of reducing the risk of seal failure. TOTAL general specification GS EP PVV 142, Rev. 5, developed by TOTAL, is also widely accepted as an independent test of elastomer seal resistance to RGD in valve applications.

## “0000” is the highest rating in NORSOK certification

In the NORSOK and TOTAL tests for RGD resistance, O-rings are subjected to pressures, temperatures and fluid media in a laboratory autoclave for 72 hours, replicating severe downhole well conditions, and then repeatedly pressurized and depressurized over a further 48 hours. The O-rings are then released from the jig, cut into four sections and examined by microscopy for RGD damage.

The NORSOK rating system determines the degree of internal crack damage to each O-ring cross section on a scale of 0 to 5, with a 0 rating being given to an O-ring section with no internal cracks, holes or blisters of any size, and 5 rating made where cracks go through the cross section, or the seal separates completely into fragments. Ratings from 4 to 5 are not acceptable; 1, 2 and 3 are considered acceptable. A 0 rating is the highest rating. A “0000” rating, where each section of an O-ring has no cracks, is considered best and confirmation of superior RGD performance for an elastomer seal in testing conditions.

## Kalrez® 0090: Achieving highest rating

Perfluoroelastomer (FFKM) parts offer the highest temperature and chemical resistance of all elastomers,



*Perfluoroelastomer seals offer the highest temperature and chemical resistance of all elastomers*

and are at the very top end of seal performance in the most aggressive chemical processing and oil and gas applications.

DuPont has more than 30 years experience serving the oil and gas industry with Kalrez® perfluoroelastomer parts. With oil extraction environments becoming more and more challenging for elastomer seals, DuPont embarked on a new formulation program in 2008 with the primary objective of developing a new compound with enhanced RGD resistance. Due to its fully integrated supply chain, DuPont was able to test hundreds of different formulations — not only using various curing chemistries and fillers but also alternative polymers — leading to the development of DuPont™ Kalrez® 0090 perfluoroelastomer parts. Before launch in 2010, Kalrez® 0090 parts were submitted for rigorous RGD resistance testing in October 2009 by the Materials Engineering Research Laboratory (MERL) in the UK, according to the NORSOK M-710 Rev. 2 standard.

The samples were exposed to a test gas of 90% methane and 10% carbon dioxide at 150 bar and 100°C, and a decompression rate of 20 bar/minute (see Table 1).

**Table 1:** Highest NORSOK and TOTAL ratings for DuPont™ Kalrez® 0090 seals tested.

	NORSOK M-710 (Rev. 2) Certified	TOTAL GS EP PVV 142 (Rev. 5) Qualified
Rating	No internal cracks, holes, or blisters	No internal cracks, holes, or blisters
<b>Test conditions</b>		
Gas	90/10 mol% CH <sub>4</sub> /CO <sub>2</sub>	80/20 mol% CH <sub>4</sub> /CO <sub>2</sub>
Temperature	100 °C (212 °F)	75 °C ± 2 °C (167 °F ± 3.6 °F)
Pressure gradient	15 MPa (~2200 psi)* to ambient	19 MPa (~2756 psi)* to ambient
Decompression rate	2 MPa/min	12.67 MPa/min
Cycling	10 cycles, one every 24 h	5 cycles
<b>Sample details</b>		
Size	BS 1806 size 312	BS 1806 size 349
Section diameter	5.33 mm, nominal	5.33 mm, nominal
Groove fill	67%, nominal	73%, nominal

\*Initial pressure maintained for at least 72 h prior to testing





NORSOK M-710/MERL and TOTAL GS EP PVV/CETIM certifications of Kalrez® 0090 RGD resistance

The Kalrez® 0090 (K-312 “A”) O-ring samples tested were certified as having attained the best possible NORSOK 0000 rating for rapid gas decompression resistance.

This superior performance was also substantiated in January 2012 by further tests conducted at the Centre Technique des Industries Mécaniques (CETIM) of France, in accordance with the TOTAL GS EP PVV 142, Rev. 5 procedure (see Table 1). CETIM found DuPont™ Kalrez® 0090 O-rings 113,67 x 5.33 mm also fulfill the acceptance criterion of the TOTAL General Specification GS EP EVV 142 Rev. 5. concerning O-rings used in the industrial valve industry.

### About Kalrez® 0090 parts

Kalrez® 0090 is the latest in a family of DuPont perfluoroelastomer parts for the oil and gas industry that includes Kalrez® Spectrum™ 6375 and Kalrez® Spectrum™ 7090. These products provide the

**Table 1:** Typical physical properties<sup>1</sup> of Kalrez® 0090 perfluoroelastomer parts

Colour	Black
Hardness <sup>2</sup> , Durometer Shore A	95
50% Modulus <sup>3</sup> , MPa (psi)	14.18 (2057)
Tensile Strength at Break <sup>3</sup> , %	19.49 (2827)
Elongation at Break <sup>3</sup> , %	80
Compression Set—O-rings <sup>4</sup> , 70 hr at 200 °C (392 °F), %	33
Compression Set—Pellets <sup>4</sup> , 70 hr at 200 °C (392 °F), %	19
Compression Set in Nitrogen <sup>4</sup> —O-ring, 336 hr at 250 °C, %	35
Upper Service Temperature <sup>5</sup> , °C (°F)	250 (482)
Lower Service Temperature <sup>6</sup> , °C (°F)	–21 (–5.8)
Tg <sup>6</sup> , °C (°F)	–1 (30.2)
Tr <sup>107</sup> , °C (°F)	–7.4 (18.68)
Volume Swell <sup>8</sup> , % change	
Steam, 225 °C (437 °F), 672 hr	<5
Ethylenediamine, 90 °C (194 °F), 672 hr	<5
H <sub>2</sub> S/CO <sub>2</sub> (65%/35%), 220 °C (428 °F), 672 hr	<5

- 1 Not to be used for specification purposes
- 2 ASTM D2240 (pellet test specimens)
- 3 ASTM D412, (AS568 K214 O-ring test specimens)
- 4 ASTM D395B
- 5 DuPont proprietary test method (anaerobic conditions)
- 6 DuPont proprietary test method
- 7 ASTM D1329 (slab test specimens)
- 8 ASTM D471 (AS568 K214 O-ring test specimens)

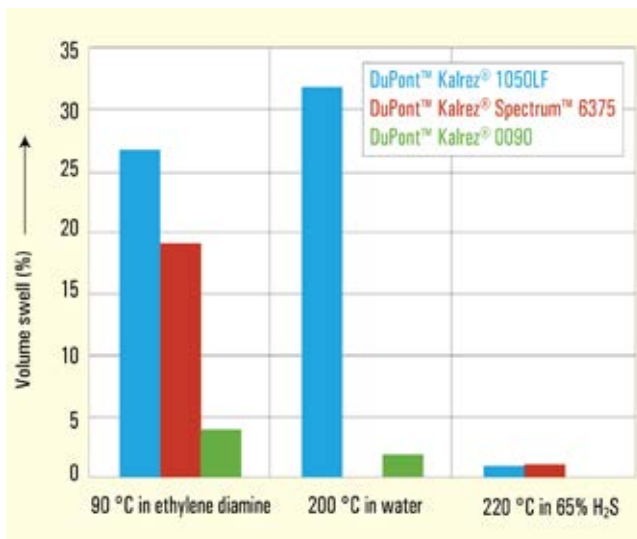
optimum balance of chemical, heat and mechanical properties for different chemical and oil and gas sealing applications.

DuPont claim to be the only fully integrated perfluoroelastomer seal manufacturer, having total upstream and downstream expertise of monomer, polymer, compounding and finished product.

### Key performance characteristics of Kalrez® 0090 seals:

- Exceptional resistance to rapid gas decompression, certified to highest 0000 rating in NORSOK M-710, Rev. 2 laboratory tests made with Kalrez® 0090 K-312\_ “A” O-rings
- Withstands attack by over 1800 chemicals, and resists ageing in sour fluid, including multi-phase fluids containing high concentrations of hydrogen sulphide

- Retains high levels of elasticity, recovery and extrusion resistance even after long-term exposure to temperatures as high as 250°C and as low as -40°C in high pressure environments.
- Although Kalrez® 0090 parts are a high hardness perfluoroelastomer, it remains elastomeric with low compression set under most aggressive HPHT environments.



Comparison of chemical resistance of Kalrez® 0090, Kalrez® Spectrum™ 6375 and Kalrez® 1050LF demonstrates outstanding resistance of Kalrez® 0090, particularly to high concentrations of hydrogen sulphide (H<sub>2</sub>S)

Technical information and data sheets on all standard and specialty Kalrez® perfluoroelastomer products are available at [www.kalrez.dupont.com](http://www.kalrez.dupont.com)

### Proven in commercial service

DuPont™ Kalrez® 0090 perfluoroelastomer seals with enhanced RGD-resistant properties are currently in use at several major oil and gas companies, and many leading oil OEMs have qualified Kalrez® 0090 seals for use in surface and down hole valves, data logging drilling tools, packers, completion tools and mechanical seals.

Learn more about Kalrez® and Rapid Gas Decompression, view video online [http://www2.dupont.com/Kalrez/en\\_US/applications/oil\\_gas/seals.html](http://www2.dupont.com/Kalrez/en_US/applications/oil_gas/seals.html)

### Authorized Distributors of Kalrez®

In the UK, Kalrez® 0090 perfluoroelastomer seals and technical support are available from Authorized distributors of DuPont™ Kalrez® and BVAA member Dichtomatik Ltd, of Derby.

**DuPont™ Kalrez®**  **DICHTOMATIK**

**Dichtomatik Ltd**

Tel: 01332 524401

[www.dichtomatik-kalrez.co.uk](http://www.dichtomatik-kalrez.co.uk)

## Celebrating 50 Years of Excellence in Valve Engineering



**BEL VALVES**

[www.belvalves.com](http://www.belvalves.com)



# EnerMech Launches Upgraded Ball Valve with 12 Week Delivery Pledge

## *Plans to add 100 staff to Valves Division in next year*

**Mechanical engineering group, EnerMech, has completed an upgrade and rationalisation of its Ball Valve range which will offer a lead time of 8-12 weeks for standard designs.**

The much shorter delivery times compared to other European high integrity valve suppliers is down to an increased use of common parts and higher levels of raw material stocks held by the UK-based group.

Stringent quality control is assured with all materials bought in advance from a fully audited and specially selected Norsok approved supply chain and 3.2 certification as standard.

Formerly known as LG Ball Valves, EnerMech LG Ball Valves are now available as a trunnion-mounted design in 2"-12" size and in pressure classes 150-2500, with larger sizes also available on request to meet client-specific requirements.

Key design upgrades include the ball-to-seat contact and sealing arrangement on both metal and soft seated designs. The designs are third party verified and rigorously tested, including hydrostatic and gas body and seat testing, cycle torque testing and fire testing to ISO 10497 international standard.

The EnerMech LG Ball Valve range can be incorporated into larger valve packages, allowing the provision of a variety of valve types, with the benefit of OEM support from EnerMech and other valve manufacturers with whom they maintain close working relationships.

*'...a more reliable solution'*

With plans to recruit a further 100 staff for its global Valves Division, the Aberdeen-headquartered group is also looking to open additional valves workshops in South Africa and Angola, and in the longer term two new facilities in Australia.

EnerMech Valves Director, Steve Abel, said: *'The new upgraded range offers a more reliable solution which will reduce maintenance costs for our clients and reduce down time. It is our objective to be able to deliver lead times of between 8-12 weeks which is exceptional for a high integrity ball valve.'*



*EnerMech LG Ball Valves are now available as a trunnion-mounted design in 2"-12"*

*'The reliability of our competitive lead times is ensured by holding stock forgings in bulk. Increasing the common parts in each valve size and stocking a strategic selection of raw materials means we can respond much quicker to our clients' requirements and meet shorter delivery periods and in this industry that is paramount.'*

EnerMech LG Ball Valves are designed and manufactured in-house and derived from a 25 year rich engineering heritage extending back to 1992 when LG Ball Valves was first established.

Bob Stephen, Valves General Manager UK, added: *'By undertaking the majority of engineering, machining, assembling and testing within our own facilities we gain maximum control over our manufacturing process, minimising delays, cost and risk involved with transportation and reliance on 3rd party suppliers.'*

A special one-hour technical introduction to the EnerMech LG Ball Valve range can be arranged by contacting Business Development Manager, Megan Hine on [mhine@enermech.com](mailto:mhine@enermech.com)

**EnerMech Ltd**  
Tel: 01224 723300  
[www.enermech.com](http://www.enermech.com)







# Springtech Nickel Alloy Spring Specialists

**Specialist springs designed and developed from Nickel alloys:**

**Inconel X-750, 600, 601, 625, 718 •**

**Nimonic 90, 80A, 75 • Monel 400, K500**

**• Phynox • Hastelloy • Titanium •**

**Nickel • Stainless.**

- Design, Development and Manufacture
- Oil and Gas Spring Technology Specialists
- Facilities in Aberdeenshire and Buckinghamshire

Global clients operating in the harshest conditions rely on Springtech to provide reliable and high performing spring technology for offshore and onshore energy related applications.



**For more information, meeting request or spring design review call us now**

Wire Forms • Wave Washers • Wave Springs • Flat Springs • Nickel Alloy Compression / Torsion Springs / Garter Springs



**SPRINGTECH**

Partners for Innovation & Performance

HEAD OFFICE: Springtech Ltd. Unit 1, Fairview Industrial Estate, Beech Road, High Wycombe, Bucks, United Kingdom.

Tel: +44 (0) 1494 556700 Fax: +44 (0) 1494 511002

Email: [enquiries@springs.co.uk](mailto:enquiries@springs.co.uk) Web: [www.springs.co.uk](http://www.springs.co.uk)

# Crane Launches Pacific®Forged Line of High-Pressure Gate, Globe and Check Valves

**Crane ChemPharma & Energy is pleased to announce the launch of the new Pacific®Forged range of gate, globe and check valves for use in Power, Oil & Gas and Chemical markets.**

Developed specifically for high-stress, high thermal-cycling applications, new Pacific®Forged valves prove that not all forgings are equal. Crane's unique forging process and next-generation design reduce the total cost of ownership, assuring consistent quality and long life for every valve.

The distinctive design of this new line offers numerous benefits to users, including:

- **Superior Forging Quality (100% Tested):** Multi-stage ultrasonic testing is standard on all forgings and finished valves, so customers can rely on consistent & continuous valve quality despite the most severe process conditions.
- **Lower Cost of Operation:** A contoured shape and a proprietary hard-face overlay process make Pacific-Forged valves resistant to cracks and delamination, reducing maintenance and plant downtime.
- **Quick lead-time:** 90% of our valve types can ship in less than 20 weeks.

*'The next generation Pacific Forged valves complete our portfolio with the addition of a high-performance forged product range,' said Steve Brown, Global Business Line Manager for Crane ChemPharma & Energy. 'Our customers will now benefit from lower operating costs and reduced downtime as a result of our unparalleled quality and superior pressure seal valve design.'*

For more information about Pacific®Forged gate, globe and check valves, please visit [www.cranecpe.com](http://www.cranecpe.com).



**Crane ChemPharma & Energy**

Tel: 01633 486 666

[www.cranebiopharm.com](http://www.cranebiopharm.com)



*By BVAA's Technical Consultant,  
Peter Churm*

**TECHNICAL  
HOT SPOT**

## Valve actuator family of standards EN 15714 -1,-2,-3 and -4

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

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

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

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

# Schoolhill Engineering find Intervention Tooling Solution



*Schoolhill Engineering's Top Entry Tooling*

**Schoolhill Hydraulic Engineering, the leading Aberdeen based providers of design, manufacture and testing services for hydraulic powered equipment, has developed special tooling for intervention solution for the servicing of large gate valves.**

The company which specialises in supply to the Offshore Oil and Gas industry produced the innovative design as part of a design and manufacture project for a major subsea valve specialist.

Managing Director Ronald Whyte commented:

*'At Schoolhill Engineering we have a culture of thinking and working as a team. This extends to our customers, and we are delighted to have been able to work with a prestigious valve manufacturer to produce an excellent solution to this intervention servicing conundrum.'*

In order to carry out the maintenance on the large 16" HSR gate valve a suite of 3 tools are required to allow valve seats to be replaced in situ. By servicing the valve without the need to remove it from the system, the new tooling solution allowed for quicker service, reducing the need for costly shut off of integral valves.

The tools were developed by Schoolhill's team of skilled engineers and consist of a spring compression tool, a gate removal tool and a seat change-out tool. They are mechanical hydraulic in operation and bolt on to the top of the valve body.

Mr Whyte added: *'Space constraints inside the valve body made this quite an engineering challenge, in particular for the seat removal tool, which locks on to the existing seats and hydraulically pulls them out of their pockets. It was therefore, very satisfying to reach such an effective solution.'*

This is the 3rd design and manufacture project for the same customer and it is our understanding that these tools are proving to be very successful.



**Schoolhill Engineering**

Tel: 01224 871086

Email: [hydraulics@schoolhillengineering.com](mailto:hydraulics@schoolhillengineering.com)

[www.schoolhillengineering.com](http://www.schoolhillengineering.com)



# Metso Celebrates Neles Globe Valve Technology Centre in South Korea

*Strengthening the valve production foothold with the most comprehensive range of control valves*



*Metso's globe valve technology centre ground breaking ceremony on April 22, 2014*

Metso announced on January 22, 2014 the decision to invest in a new greenfield Neles® globe valve technology center in South Korea. The groundbreaking ceremony for the new plant was celebrated in Chung-Ju, South Korea. The new factory will be ready for global deliveries during the last quarter of 2014.

The new plant will serve oil & gas and power customers both locally and globally and will strengthen service capabilities in the growing Asian markets. The new technology center consists of manufacturing, state-of-the-art control valve testing facilities, research and development, laboratory, engineering, and service support units for South Korean EPC companies.

*'The new technology center in South Korea will strengthen our capabilities to develop, produce and deliver our globe valves especially for customers in the oil and gas and the power industries. The South Korean EPC companies play an important role in many customer projects worldwide. Within the new facility we can better offer research and development, engineering and service support for them,'* says Markus Hauhia, Director, Globe Valve product line, Automation.

Today, Metso's control valve range is the most comprehensive on the market. It includes globe valves, top entry rotary valves, triple eccentric disc valves, eccentric rotary plug valves, and segment valves. The portfolio covers products suitable for every

application - from general to severe service and from low temperature or pressure to high temperature or pressure.

## Strong valve production foothold on every continent

Metso has a total of eight valve technology centers around the world. The investment made in South Korea continues Metso's strategy to strengthen valve operations globally. In 2011 Metso opened a new world-class valve technology center in Vantaa, Finland, and in 2010 in Shanghai, China.

The company is currently expanding its valve production facilities in the US in Shrewsbury, Massachusetts. Metso also has first-rate valve production facilities in Fergus Falls, Minnesota, and in Horgau Germany. The modern valve supply and service centers in Sorocaba, Brazil, and in Vadodara, India, serve customers in the specific country and region.

**Metso**

Tel: 0870 606 1478  
www.metso.com



# K Controls extends its range of sub-sea valve position monitors



*Enclosures are available in a range of materials including carbon steel, 316L stainless steel, 254SMO stainless steel (20%Cr -18%Ni-6%Mo), Duplex 2205 and Super Duplex*

**K Controls, the Middlesex based designer and manufacturer of networking, monitoring and control products for actuated valves used in the process industries, has extended its range of valve position monitors.**

K Controls submersible valve position monitors can be fitted to a wide range of 1/4 turn or linear, sub-sea valve actuators. 4-20mA + HART® 5 or 7, PROFIBUS® PA or FOUNDATION™ FIELDBUS signals can be provided to continuously monitor valve position. End of travel proximity sensor inputs are also an option.

When not submerged, the position monitors could be in an area where hazardous gasses are present. If this is the case they are supplied Exi or Exd, ATEX and IECEx certified. INMETRO is an option for Brazil. Versions of the product have been independently tested by SGS Baseefa, IP68 to EN 60529:1991, at a depth of 30 metres for a period of 96 hours.

Most other units are designed for depths to 150 metres and special pressure balanced units are available for depths to 2500 metres. Ingress and operational testing is performed prior to despatch. Third party witness inspection is also available.

Enclosures are available in a range of materials including carbon steel, 316L stainless steel, 254SMO

stainless steel (20%Cr -18%Ni-6%Mo), Duplex 2205 and Super Duplex. Optional surface coatings of the carbon steel and 316L stainless units include NORSOK M501 Rev 6 System 7B (Sub-sea) paint.

A standard M20 or 1/2" NPT conduit entry is provided. Alternatively the base can be machined to accept a customer specified sub-sea connector or cable penetrator. Units with multi pin connectors can be supplied with the associated cable sets that meet the exacting standards required for both subsea and shipboard use. Each cable set can be cut to a predefined length in order to facilitate installation.

Mounting kits for the actuators are usually manufactured from Super Duplex stainless steel. Applications include rig positioning, sub-sea emergency shut down or manifold valves, dry docks and FPSO ballast tanks.



**K Controls Ltd**  
Tel: 01895 449 601  
[www.k-controls.co.uk](http://www.k-controls.co.uk)

# AllValves Online Exhibit at UK Biogas Show

AllValves Online Ltd was pleased to hold its first UK exhibition at the AD BIOGAS show at the NEC, Birmingham on 2-3rd July 2014. The show brought together a variety of services and products for the rapidly growing AD and BIOGAS industry. Having secured project work over the last few months, AllValves Online are starting to gain experience in selecting the correct products for this type of application. Offering a wide range of products from lever and gearbox operated butterfly valves to actuated knife gate valves, AllValves Online has many solutions.

The show was also used an opportunity to showcase a number of products including some new products, all of which were supplied by the manufacturing partners that AllValves Online has chosen to work with. Sun Yeh Electric Actuators used the show to launch the new range of stainless steel housed electric actuators. The new housing option is available on the OM series of quarter turn actuators and covers a torque output of 40Nm through to 600Nm currently. The factory are working hard to produce the SS316 housing up to 4500Nm on the larger actuators they offer. The



AllValves Online Director Adam Chapman at the Biogas exhibition

**Alco Process Valves Limited**  
Suppliers of high and low pressure valve solutions worldwide.

Gate & Globe Valves

Check Valves

Ball Valves

from  
**www.alco-process.com**  
Tel: 01484 400348 Fax: 01484 723019  
Email: uk@alco-process.com

new unit is to be made available in a raw and polished finish enabling AllValves Online to have a solution for various applications including of course the hygienic and pharmaceutical industries. By the end of the year the OM series will also be available as fully approved and certified for use in hazardous areas with its ATEX approval. Also on the stand were high quality PTFE lined butterfly valves, heavy duty knife gate valves for slurry

applications, epoxy coated Sun Yeh actuators with local controls, ATEX approved pneumatic actuators with ATEX approved namur solenoid and limit switch box.

One of the concerns many of the installers and investors have with the AD and Biogas industry is the proposed changes in the Tariff available, scheduled to come into place in Q4 2014. As a result



many are concerned they won't be able to have the systems and plants commissioned in time to ensure the current Tariff is secured. AllValves Online were able to reassure visitors that with good stocks of both manual and actuated ball, butterfly and knife gate valves, deliveries wouldn't be a problem. Having already supplied large quantities of butterfly valves with special liners and automation on quick deliveries, AllValves were able to demonstrate to its potential customers of case studies where product that its competitors were quoting factory lead times, were supplied next day.

The buyers and installers within the industry also to be taking quality very seriously, Adam Chapman explains 'It has been refreshing to work with new customers and partners within this industry and being able to supply quality products for the required application. Too often quality is substituted for price. However, our experience so far within this industry is that quality comes first.'



Delegates visiting AllValves Online's stand

#### AllValves Online

Tel: 01386 553190

Email: adam@allvalves.co.uk

www.allvalves.co.uk



Precision engineered control valves for critical subsea and topside applications

- Relief Valves
- Check Valves
- Manual Valves
- Filters
- Directional Valves
- Solenoid Valves
- Manifolds
- Excess Flow Valves

[www.bisvalves.co.uk](http://www.bisvalves.co.uk)

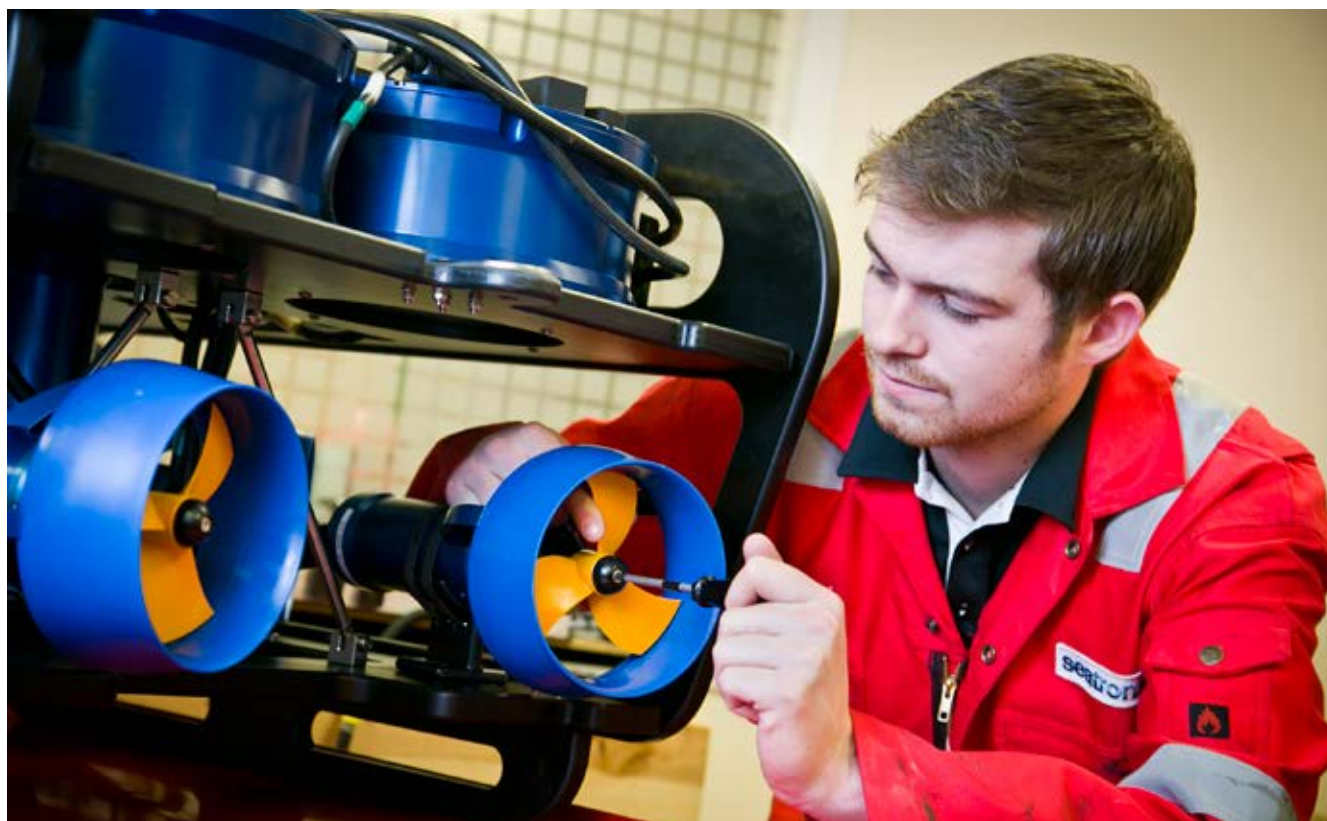
Tried • Tested • Trusted



Units 17-23, Kingfisher Park, Collingwood Road, West Moors, Wimborne, Dorset, BH21 6US United Kingdom

T: +44 (0)1202 896322 E: exhibition14@bisvalves.co.uk

# Hardide Coatings partners with Seatronics in first ROV application



Since using a Hardide coating, the Predator ROV manufactured by Seatronics has increased in performance

**Hardide Coatings, provider of advanced surface coating technology, has completed its first application for a remotely operated vehicle (ROV) for Seatronics with exceptional test results resulting in a greatly improved performance which has led to production orders.**

Since using the coating on a critical part of the thruster system, the Predator ROV manufactured by Seatronics has increased in performance and power, with critical wear issues also vastly improved.

David Currie, Managing Director at Seatronics, said: *'The Observation-class ROV sector is a growing market for us and we want to make the Predator as maintenance-free as possible. The Hardide coating solved the wear issues we were facing and increased the performance of the ROV. Using the Hardide coating on the Predator was like tuning a car to get more miles per gallon and getting F1 performance.'*

Seatronics, an Acteon company is a global leader in the sale and rental of subsea marine electronic equipment. The company manufactures the Predator ROV mainly for the oil and gas market to support operations using a diver or larger ROV to provide backup and support.

ROV operations are a growing market, with recent reports highlighting an 80% increase in ROV expenditure from 2013 to 2017 compared to the previous five year period (Douglas-Westwood World ROV Operations Market Forecast).

Hardide plc CEO Philip Kirkham said: *'This is the first time Hardide coatings have been used in the ROV industry. The results from the tests with Seatronics have shown the capability of the coating to make a significant contribution to the performance of this subsea equipment.'*

Seatronics has advanced its services with the Predator, now offering a fast response with the Rapid Deployment Platform (RDP). The company is also exploring other markets such as hull inspection in the maritime sector, port security, fish farm inspections, with added interest in search and rescue applications further down the line.

**Hardide Coatings**  
Tel: 01869 353830  
[www.hardide.com](http://www.hardide.com)







- **Bespoke Valve Supply**

- Independent valve specialist working with leading manufacturers
- Bespoke valves within standard delivery times

- **Valve Service, Repair, Installation & Commissioning**

- Guaranteed 24-hour UK site response on/offshore
- 2,500 m<sup>2</sup> facility in Portlethen – ISO 9001, ISO 14001 & OHSAS 18001 accredited; FPAL Verified Status

- **Valve Testing & Performance Monitoring**

- In-house testing and predictive diagnostics
- On/offshore maintenance to API and FCI standards

- **CVS Valve Manager™**

- Full valve life management for preventative maintenance to minimise planned and unexpected outages

**Tel:** 01224 583116 | **Email:** [sales@controlvalvesolutions.co.uk](mailto:sales@controlvalvesolutions.co.uk) | **Web:** [www.controlvalvesolutions.co.uk](http://www.controlvalvesolutions.co.uk)  
Badentoy Road, Badentoy Business Park, Portlethen, Aberdeenshire AB12 4YA



# RotaBolts Extending Life of Offshore Platforms

Extending the life of offshore oil and gas platforms beyond their original design philosophy has resulted in RotaBolt® measurement technology being adopted across a number of major projects. A combination of 'permanent' repair work, upgrading existing infrastructure and the development of new and complex strengthening systems has resulted in new contracts and a significant area of business for the company.

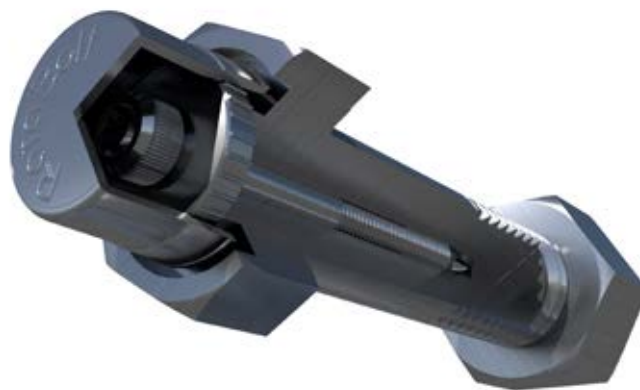
With expectations that oil and gas fields may still be producing for another 25 to 30 years, the work has also included the straightforward re-fit of RotaBolts on existing production infrastructure, such as on heat exchangers and high pressure pipe work and flanges, but it is where new designs and engineering techniques have had to be used that the fasteners have been helping to break new ground.

Where there has been a requirement for repair work to be carried out there have been no off-the-shelf solutions. Structural strengthening programmes have varied from applying massive clamping systems to platform legs and support infrastructures, through to fitting underwater cable stays more commonly associated with bridge structures. Changes to the design and engineering details have also impacted fabrication and installation.

James Walker RotaBolt is currently supplying a range of its measurement fasteners to offshore contractors for use on clamping systems, flanges and jacket reinforcement designs. These vary from M24 bolts



The RotaBolt range



*Rotabolt uses a unique technology to ensure the right tension is achieved by the fastener*

on clamps of less than half a metre in diameter, up to M90 bolts that are 3.5 metres long being used on cable stay clamps that are 130 tonnes.

*'depth of understanding'*

RotaBolts have been used in offshore applications, including subsea, since the mid 1980s. Bolting materials have changed over time in the quest for increased corrosion resistance, but the original technology that assures the correct tension is being achieved has remained unchanged.

*'There are still RotaBolts in service that were fitted on underwater applications back in the mid 80s,' commented Mike Hadley, Engineering Manager, 'in fact these are currently being re-checked as part of the extended life activity. I think we can safely say that no one else in the world has our depth of understanding when it comes to achieving bolted joint integrity in environments that are challenging and where the boundaries of engineering practice are being extended.'*

## James Walker®

**James Walker**

Tel: 01270 536000

[www.jameswalker.biz](http://www.jameswalker.biz)



PRECISION | RELIABILITY | PERFORMANCE

# If you're in the North Sea you need to talk to Severn Glocon Group



Whether you're topside or subsea, North Sea oil & gas production isn't getting any easier.

That's why we're always pushing boundaries with innovative valve solutions. From technical advisory services to design and manufacture, our skilled engineers deliver breakthrough approaches and technologies that make a difference.

**Find us on  
stand J980/16  
at ONS NORWAY**

**It all adds up to better uptime and productivity.**

## TOPSIDE



[www.severnglocon.com](http://www.severnglocon.com)  
[sales@severnglocon.co.uk](mailto:sales@severnglocon.co.uk)  
+44 (0)845 223 2040

## ESTABLISHED PLANT



[www.severnunival.com](http://www.severnunival.com)  
[epssales@severnunival.co.uk](mailto:epssales@severnunival.co.uk)  
+44 (0)8456 07 07 10

## SUBSEA



[www.lb-bentley.com](http://www.lb-bentley.com)  
[sales@lb-bentley.com](mailto:sales@lb-bentley.com)  
+ 44 (0)1453 733 060



# Hardide coating advances Heap and Partners' new ball valve technology

**Hardide Coatings, provider of advanced surface coating technology, has played a key role in the development of new ball valves manufactured by Heap & Partners.**

The valve manufacturer has developed its own range of 'Phase' trunnion-mounted ball valves for the UK energy sector, and the use of the Hardide-T coating has significantly improved the valves' performance.

Phase includes numerous variations of soft and metal seated side entry ball valves, used for the safe isolation of pipeline production and process equipment. This safety critical application often in erosive operating environments, meant the new valve required a durable protective coating.

*'high pressure applications'*

Heap & Partners selected Hardide-T for use in the Phase range, particularly in the smaller diameter valves, for several reasons. The primary rationale being the inherent hardness of Hardide-T, at 1100 to 1600 Hv with a typical coating thickness of 50 microns.

Peter Burnett, Business Development Manager at Heap & Partners, said: *'The Hardide coating achieved excellent results, meeting all the required leakage rates and delivering consistent results on various substrates. We also chose to partner with Hardide Coatings as we worked with the team previously on a project in the nuclear sector to tackle a corrosion issue and carry out re-engineering of valves, so we knew they could deliver positive results.'*

The Phase range comes in both metal to metal and soft seated options which posed additional considerations. Metal to metal seated valves often suffer wear by erosion when there is particulate in the process fluid. Most ball valves are soft seated, but wear can also cause scratches and resultant leakage.

Heap & Partners has now utilised Hardide-T on many ball valve applications for both oil and gas and nuclear clients. There have been no wear issues since employing







3" ASME 600 BWE top entry ball valve for nuclear application (F316 + Hardide-T balls and seats)

the coating and it has provided protection from erosion. In some cases the Hardide coating has also enhanced the corrosion resistance of the base material.

Hardide plc CEO Philip Kirkham said: *'The success of the coating boosted the performance of the new valve range and we are proud to work with Heap & Partners to play a part in developing this technology. Hardide-T is especially relevant for intricate ball and seat valves with its uniform application by low temperature CVD, and together with its cobalt-free composition meaning it can be safely used inside nuclear facilities.'*

The Phase valves are also supplied for high pressure applications, up to and above ASME 600 lbs. Ranging from 2" reduced bore to 12" full bore, the valves needed to operate at both low and high pressure. This bespoke product is aimed at niche applications in the UK energy sector, from upstream oil and gas to nuclear and power generation.

The new valve range expands Heap & Partners' specialist services which include the design, manufacture, and supply of leading process and instrumentation valves and ancillary equipment.



**Heap & Partners Ltd**  
Tel: 0151 488 7222  
[www.heaps.co.uk](http://www.heaps.co.uk)

Can you save  
money by  
upgrading your  
valve positioner?

Certainly.



Could your current valve positioners be costing you more than they should be? Find out with ABB's compressed air calculator app.

Comparing ABB's EDP300 smart positioner to other market-leading devices, the app shows how you can dramatically reduce your compressed air costs without compromising your valve accuracy.

To download the ABB app, search for "**ABB Compressed Air Calculator**" on the Apple app store or [scan the QR code](#).



Power and productivity  
for a better world™



# Preventing premature chemical dosing valve failure in subsea tiebacks



*An eroded single stage valve*

**In the designing, operating and maintaining of a subsea tieback, an operator has multiple challenges to consider. The way they choose to overcome these challenges will determine the system's reliability and operability, as well as its ongoing profitability.**

One of the principal challenges in subsea systems is enabling flow assurance through effective hydrate management. To minimise the risks posed by hydrate formation, a continuous MEG injection will be required.

In recent times, Yorkshire-based Koso Kent Introl (KKI) was approached by a major oil operator, who required specialist assistance to overcome a hydrate management problem in an existing chemical dosing system within a subsea tieback.

Several manifold MEG dosing valves had failed prematurely within the chemical dosing manifold, and the operator was seeking an ongoing solution that would eliminate the risk of this occurring elsewhere in the system in the future.

KKI engineers were briefed about the problem: prior to the tieback being implemented, pressures in the pipeline had been relatively low (60 barg inlet pressure, with only a modest drop to 30 barg outlet pressure). The dosing valves had therefore been able to cope with the flow. With the introduction of a new, higher pressure well tieback to the field later in its life, inlet pressure had subsequently increased to 350 barg. The high velocities and energy levels arising from this greatly increased pressure drop had caused failures in the existing single stage valves well before the end of the commissioning period. Sand erosion was also a major problem, known to be contributing to the valves' poor performance. The failure of the valves was causing costly, unacceptable interruptions to production in the field.

The KKI subsea engineering team are ever-mindful of the fact that the inaccessibility of any offshore site requires that system and components need to be designed for high reliability and low maintenance. In creating a suitable solution for the operator, KKI explored a wide range of application considerations, including rangeability, operating speed and retrievability.

The valve they proposed incorporated a multi-spline trim, with the flow sleeve and plug constructed as an insertable cartridge, allowing multiple stages of pressure drop to ensure that cavitation would not occur throughout the known flow range. The multi-spline trim option would be able to achieve the required rangeability of 200 to 1, due to the very precise fit of the plug within the seat.

The figures below illustrate the Velocity Control principle for the existing valve design, and for the proposed, multi-spline trim design.

The other major consideration was material selection. A range of scenarios were modelled, considering the effects of pressure drop for different materials at every stage of let-down, and determining long-term erosion rates for each. Materials considered included Inconel (cladding), various grades of Stainless, Stellite and Tungsten Carbide.

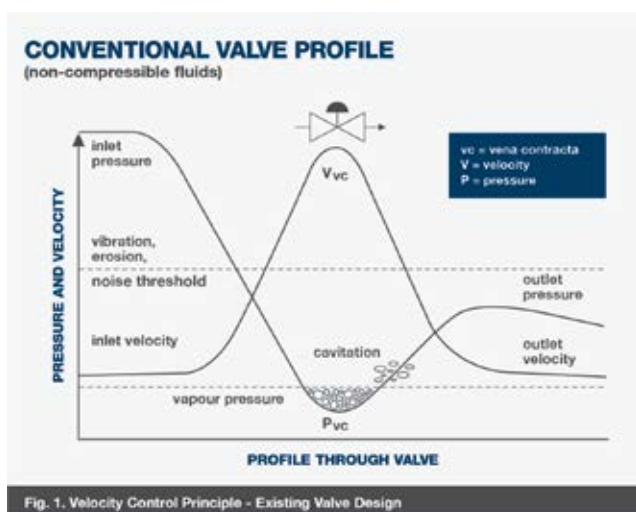


Fig. 1: Velocity Control Principle - existing valve design

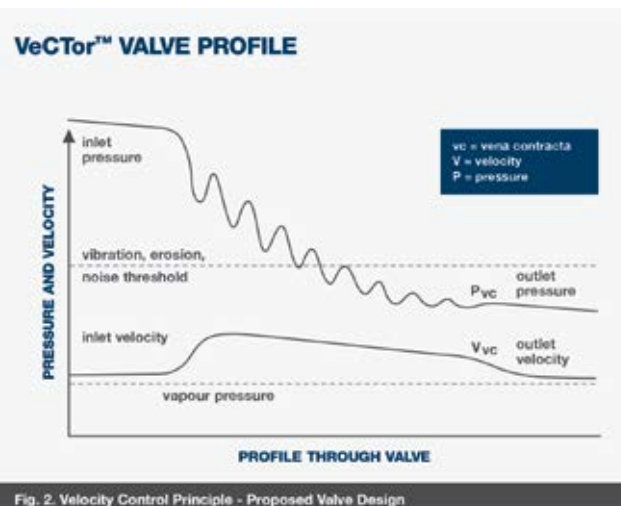


Fig. 2: Velocity Control Principle – proposed valve design

Guided by the KKI team, the operator selected the solid Tungsten Carbide option, and valve production took place at Kent Introl's facility in Brighouse, Yorkshire.

Although the requirement was for a subsea application in this instance, the same benefits, of cavitation elimination, reduced maintenance frequency and prolonged life are equally applicable in severe service topside applications.

## kentintrol

**Koso Kent Introl**

Tel: 01484 710311

Email: [info@kentintrol.com](mailto:info@kentintrol.com)

[www.kentintrol.com](http://www.kentintrol.com)



By BVAA's Technical Consultant,  
Peter Churm

**TECHNICAL  
HOT SPOT**

## Gate Valves - BS EN 1171

**Draft BS EN 1171 Industrial valves - Cast iron gate valves is currently submitted to the CEN Enquiry.**

This document supersedes EN 1171:2002 where the following modifications were made:

- Normative references were updated in Clause 2 and throughout the text;
- Para's 4.1.1, 4.1.2.1, 4.1.2.3, 4.2.1, Annex C and Table ZA.1 were revised to be in compliance with EU Directive 97/23/EC (PED).

This document has been prepared under a mandate given to CEN and supports essential requirements of EU Directive 97/23/EC (PED).

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

Please notify BVAA whether you consider the UK should submit a negative (with reasons) or positive vote on this draft. Latest date for receipt of comments: 30 September 2014



# Metso's Neles Globe Valve Technology Selected for Abu Dhabi Oil Refinery

**Metso will supply industry-leading Neles® globe valve technology to Abu Dhabi Oil Refinery Company's (TAKREER) chemical refining complex in the United Arab Emirates. The deliveries will include hundreds of Metso's Neles Globe control and on-off valves. Most of the control valves are equipped with Neles ND9000 intelligent valve controllers (FOUNDATION Fieldbus) for performance follow up and predictive maintenance, resulting improved process efficiency and uptime.**

The valves will be installed in a carbon black and delayed coker plant currently under construction. Once completed in December 2015, the plant will process 30,000 barrels of crude oil per day and have an annual production capacity of 40,000 tons of carbon black. The refining complex is located in Ruwais some 240 kilometers west of Abu Dhabi City in the United Arab Emirates.

*'Cutting-edge valve solutions'*

South Korean Samsung Engineering, which will provide project management services for the engineering, procurement, construction and commissioning processes on a turnkey basis, has chosen Metso's valve technology for the demanding project. *'It is the largest project ever executed by our company, and the total valve quantities are huge,'* says Mr. Yun-Ki Sung, Vice President, Procurement Dept., Samsung Engineering. *'We chose Metso as our valve partner because we can rely on fast expediting; their valve factory is conveniently located close us to us in South Korea.'*

*'Also, we have had good support from Metso in our past projects. To ensure smooth startups, Metso offers its wide product knowledge and application expertise, global manufacturing facilities and sourcing, full expediting and inspection support, a global service*

*network and comprehensive startup support.'*

Metso has valve technology centres and production facilities in Finland, the United States, Germany, China, South Korea, India and Brazil. Metso's deliveries will take place in August 2014.

Today, Metso's control valve range is among the most comprehensive on the market. It includes globe valves, top entry rotary valves, triple eccentric disc valves, eccentric rotary plug valves, and segment valves. There is a suitable product for every application, ranging from general to severe service and from low temperature or pressure to high temperature or pressure.

Metso's control valve solutions are known for providing optimized performance and extreme reliability in demanding refining processes. *'Cutting-edge valve solutions provide measurable operational efficiency and increased profitability. They increase yield, reduce energy consumption, lower maintenance costs and manage changes in the process, among others,'* points out Daisy Kim, Product Manager, Automation, Metso.

Reliable and safe process operation gained with Metso's technology is visible through fewer production interruptions and less downtime, longer uptime between maintenance shutdowns, as well as compliance with environmental regulations and safety legislation.

*'During the engineering, procurement and construction stages of*



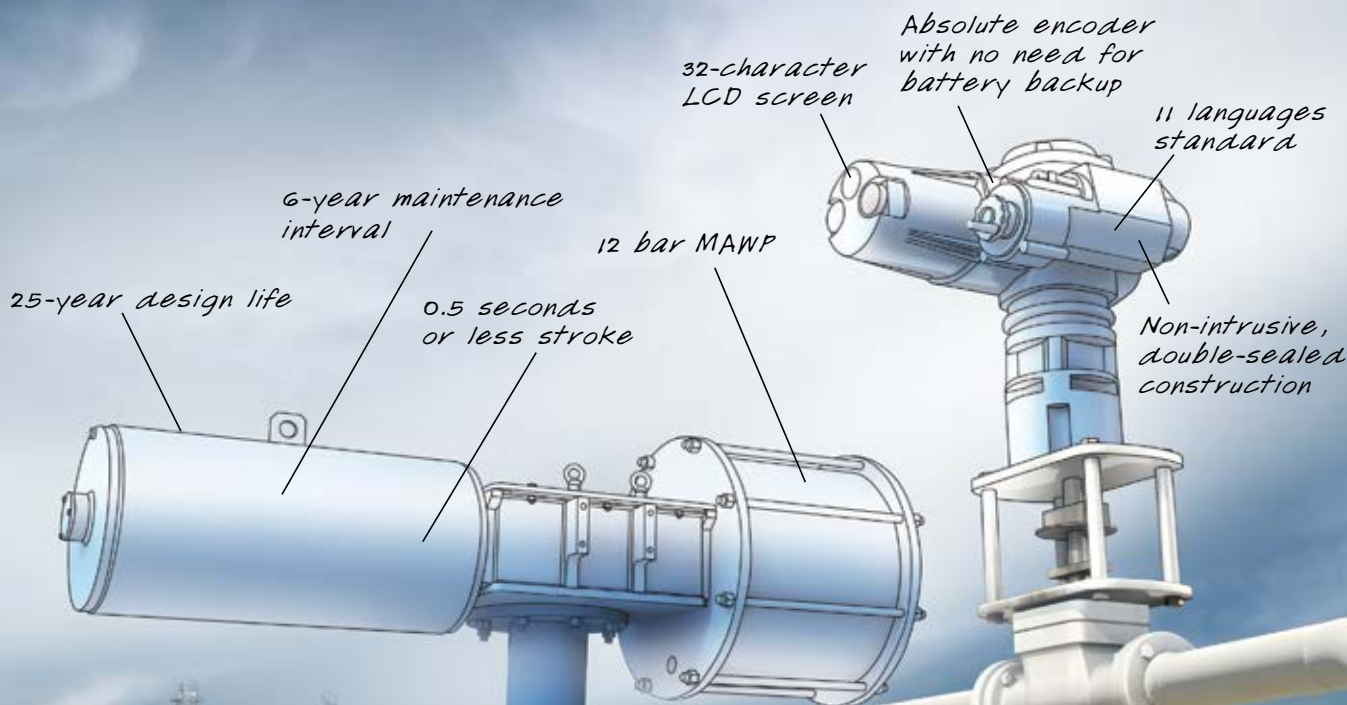
*The deliveries will include hundreds of Metso's Neles Globe control and on-off valves*

*a project, cooperation with Metso means fewer engineering and planning hours, expert engineering and application support, as well as easier product sizing and selection with hi-tech tools and services,'* Ms Kim continues. *'We also provide customers with our total project planning and management capabilities, along with application-specific valve technologies.'*



**Metso**

Tel: 0870 606 1478  
www.metso.com



## PUSHING THE LIMITS.

At Limitorque, we are used to pushing the limits. It's the philosophy that drives big ideas that make actuation a smarter, higher-performing part of the world's infrastructure. We see limitless opportunities to help plants perform better, processes run more efficiently, pipelines operate more safely, and valves function more intelligently and reliably. So when you're working with Limitorque, you'll get fresh perspectives and new thinking that push the limits beyond typical approaches. See how at [Flowserve.com/NoLimits](https://flowserve.com/NoLimits).



***Electric and fluid-powered actuators for the toughest requirements.***



# Innovative Operating Panel Allows Safe and Efficient Control of Actuated Valves

Smith Flow Control (SFC) has designed a specialist pigging panel to be installed on an FPSO built for the use in the Goliat oilfield, the first oilfield to be developed in the Barents Sea.

SFC's custom-built pigging panels will be used to control a series of actuated valves and ensures the safe opening of the pig vessel closure door. The panel itself is designed and built to exacting standards which incorporates the strict environmental requirements stipulated for operations in the Barents Sea.

The stainless steel electronic panel, specifically engineered for Arctic conditions, conforms to Zone 1 Ex de classification and protection class IP66. It is designed to support applications in the most aggressive environments, suitable for temperatures ranging between -40 to +55 degrees Celsius (-40 to +131 degrees Fahrenheit) with an anti-reflective coating that eliminates glare from the sun. The innovative panel is designed



*The stainless steel electronic panel conforms to Zone 1 Ex de classification and protection class IP66*

to meet strict safety guidelines and regulatory body requirements and works as a communication and verification system, improving efficiency and safety in the most testing conditions.

The panel is designed around the requirement to isolate power to the panel, with two interlocked key units to ensure a specific sequence of operation:

- The operator selects to close the valves as required
- Red LED lights verify that the valves have reached their fully closed position
- When all valves are closed, the operator can isolate the panel by removing the 'A' Key
- The 'A' key is then entered into the solenoid key unit and only when the safety and automation system confirms all valves are

closed, a permissive signal is sent to energise the solenoid and release the 'B' key

- This allows the operator to safely continue the mechanical interlocking sequence and, in this instance, only after the panel has been isolated and all the valves have been closed and locked, will the key be available to manually unlock the pig trap door to load or unload a pig.

The operating panel can be used in a wide variety of applications involving actuated valves. Manual valves can also be included within the key system logic (vent & drain), for example to launch or receive a pig.

The panel has been designed with the operator in mind, providing a safe and simple means of controlling valves for the most complex of processes.



## Smith Flow Control Ltd

Tel: +44 (0)1376 517 901  
www.smithflowcontrol.com







BRITISH ENGINEERING  
EXCELLENCE FOR  
OVER 45 YEARS

**kentintrol**

# VALVE SOLUTIONS FOR THE **TOUGHEST** SUBSEA ENVIRONMENTS

Our expert service includes design, manufacturing, project management and life of field support – all in accordance with international standards, specifications and legislation.



- Subsea choke valves
- Process control valves
- Offshore intervention equipment



**KOSO KENT INTROL LIMITED**, Armytage Road, Brighouse, West Yorkshire, HD6 1QF  
T. +44 (0)1484 710311 E. [info@kentintrol.com](mailto:info@kentintrol.com) W. [www.kentintrol.com](http://www.kentintrol.com)

Koso Kent Introl is part of the Koso Group of companies.

**KOSO**

# Rotork Site Services contributes to improved efficiency for Thames Water

*Using the non-intrusive setting tool, Rotork Site Services engineers confirm the commissioning settings on an IQ3M actuator on the river gates*



*Using the non-intrusive setting tool, Rotork Site Services engineers confirm the commissioning settings on an IQ3M actuator on the river gates.*

Thames Water is the UK's largest water company, providing essential services for 15 million customers in London and the Thames Valley. The company invests heavily in new technologies and improvements to increase efficiency and meet the challenges imposed by strict environmental regulations. A framework agreement for the supply of Rotork valve actuators contributes to the achievement of these objectives

through the upgrading and automation of flow control equipment in many areas of Thames Water's operations.

Rotork also assists Thames Water with the design and installation of valve and actuation plant upgrades. As illustrated by two recent examples, these contracts often include extended scope engineering disciplines that can be provided by Rotork Site Services, resulting in a simplified contractual route and a reduced requirement for additional sub-contractors. Both examples involve the installation of Rotork's latest IQ3 non-intrusive intelligent valve actuators, incorporating sophisticated diagnostic technologies for increased efficiency, reduced maintenance and improved long term asset management.

The first site is a river take-off inlet to a raw water pumping station, where IQ3M modulating actuators have been installed to replace locally operated electric motors on three large river gates. The upgrade enables the gates to accurately maintain a steady flow into the pumping station under all ambient conditions by automatically responding to changes to the condition of the river. The old motors were controlled from a switch panel inside an adjacent kiosk, but the unpredictable requirement for operation at any time, day and night, could cause operating delays which, combined with the restricted ability to accurately position the gates, resulted in potentially problematic fluctuations in the water supply to the pumping station.

The IQ3M actuators now operate automatically from a 4-20mA control signal from ultrasonic level sensors and a PLC, enabling accurate, responsive and virtually unlimited gate movement in small increments, 24 hours a day, without any human intervention. The installation is monitored in the site's central control room, from where the actuators can also be remotely operated if necessary.

In addition to the supply and installation of three Rotork IQ3M actuators and multi-turn gearboxes, the work undertaken by Rotork Site Services also involved the design and manufacture of new adaptation between the river gates and gearboxes, the removal of the old motors and cabling, the installation of electrical isolators and new power and control cabling between





David West, Thames Water's West London Abstraction Engineer, uses the non-intrusive setting tool to operate an IQ3 actuator at the upgraded reservoir inlet site.

actuators and the kiosk, modifications to the distribution board in the kiosk and the provision of an uninterrupted power supply. Mechanical and electrical installation and commissioning of the actuators was completed within the time allowed, without interruption to the normal operation of the treatment works.

At the second site, at another major water treatment works, Rotork has automated large manually operated penstocks on the inlet to a reservoir. Rotork Site Services performed a complete mechanical and electrical upgrade on one 60 inch and four 54 inch penstocks, involving the removal of old gearboxes and pedestals, the design and installation of new pedestals and installation of IQ3 actuators and bevel gearboxes. The electrical work encompassed new isolators and floodlights, cabling between the actuators and an existing kiosk and modifications to an existing distribution board.

In both cases, the replacement of old equipment with Rotork actuators has improved the efficiency of what had been laborious and time consuming processes. David West, Thames Water's West London Abstraction Engineer, comments:

*'At the first site the new inlet gate actuators and associated automated control system will allow us to run the inlet channel at a higher level than was previously possible. This will save us significant pumping energy costs by increasing the suction head on all our raw water pumps.'*

*'At the second site, installation of actuators and site lighting makes isolation of this statutory reservoir quicker and safer. What was recently a very physical four man job for several hours is now carried out by Rotork actuators.'*

**rotork®**

**Rotork UK**

Tel: +44 1225 733200

[www.rotork.com](http://www.rotork.com)



## The single source for valve actuation, automation and flow control

All around the world engineers rely on Rotork's capabilities and experience to design and deliver valve actuation, automation and flow control solutions in every liquid, gas and powder handling environment.

Proven in the harshest conditions and critical applications, our innovative products and services are created with clear-cut objectives - **to deliver safe, reliable and efficient plant operations, unrestrained by project size and complexity.**

Rotork's unrivalled manufacturing capacity for market-leading products is supported by its global sales and service outlets, providing every customer and end-user with a local source for information, expert advice, maintenance and life-of-plant support.



For further information,  
visit [www.rotork.com](http://www.rotork.com)  
telephone:  
+44(0)113 205 7233  
email: [information@rotork.com](mailto:information@rotork.com)



**Redefining Flow Control**

**rotork®**

[www.rotork.com](http://www.rotork.com)

[information@rotork.com](mailto:information@rotork.com)



# Zoedale Hire Business Development Manager

Due to continued growth and the introduction of a number of new stock lines Zoedale has recruited a Business Development Manager. Chris Parry joined the team in May with a background in isolation valves, control valves, steam and process applications. Chris is responsible for maintaining and growing Zoedale's existing customer base while also bringing in new business.

Established in 1976 Zoedale is well known for stocking solenoid valves, pneumatic actuators & valves and electric actuators but less so for the newer products in their portfolio.

Zoedale is the sole UK supplier of Omal valves which include wafer and split wafer ball valves, butterfly valves and trunnion mounted ball valves. With an emphasis on the oil and gas & petrochemical



*Zoedale is the sole UK supplier of Omal valves*

markets these valves are available with ATEX approval and a host of other certifications and approvals including API 6D. The ball valves come in stainless steel and carbon steel as standard with options for duplex and super duplex if required. With Chris's background and knowledge of ball valves he has already seen success when introducing these quality products to the market.

Zoedale are also now offering a selection of steam products including steam traps, safety valves and control valves. Combined with a range of high quality hygienic isolation valves they hope to build on recent successes in the brewing, food and pharmaceutical sectors.

Chris is already getting involved with the BVAA, look out for him at future BVAA and NOF Energy events.



**Belleville Springs**  
Belleville Springs is a member of the Springmasters® Group

**Consultancy, Design,  
Manufacture and  
Distribution...**

**Your  
complete  
solution for  
DISC SPRINGS AND BELLEVILLE WASHERS**

Arthur Street, Lakeside, Redditch, Worcestershire B98 8JY.  
Tel: +44 (0)1527 500500 Fax: +44 (0)1527 517039  
info@bellevillesprings.com www.bellevillesprings.com

**ZOEDALE**  
▶ keeping industry flowing

**Zoedale Plc**

Tel: 01234 832832  
www.zoedale.co.uk

## INDUSTRIAL VALVES



### 1 / 2 / 3 Pcs, 3 / 4 Way Floating & Trunnion Ball Valves, Press Fitting End Ball Valve, Bio Valve



### Gate Valve, Globe Valve, Check Valve, Strainer



### Blind Valve, Plug Valve, Bellows seal valves, Slab Gate Valve, Knife gate Valve, Hyper-Cryogenic Valve, Control Valve



### Actuator & Accessories



#### T/A Hydravalve Uk Ltd / UK Warehouse

Unit 4 Noose Lane (Next To railway crossing)  
Willenhall, West Midlands, WV13 3BX  
TEL: +44-1902-638-614  
FAX: +44-1902-637-264

#### Taiwan Factory

No.350, WangTian Blvd., YongKang Tech. Ind. Park,  
YongKang City, Tainan County 710, Taiwan R.O.C.  
TEL: +886-6-203-3939 +886-6-203-3296~7  
FAX: +886-6-203-7766

#### China Factory

NanLang Ind Park, NanLang Town, Zhongshan, Guangdong, China  
Post Code: 528451  
TEL: +86-760-8552-8866  
FAX: +86-760-8552-8511

#### Taiwan Head Office

8F., No.201, Sec. 2, Tiding Blvd., Neihu District, Taipei City 114, Taiwan R.O.C.  
TEL: +886-2-2658-5800  
FAX: +886-2-2658-2266 +886-2-2799-7766

#### Philippines Factory

M.A. Roxas Highway, Clark Freeport Zone, Clarkfield, Pampanga, Philippines  
TEL: +63-917-525-8994

#### Canada Vancouver Warehouse

19057 Unit 104 25 Avenue Surrey, BC Canada V3S 3V2  
TEL: +1-604-542-1138 +1-604-818-0368  
FAX: +1-604-542-1919

#### Europe Netherlands Warehouse

Blauwwater 23, 5951 DB Belfeld, Netherlands  
TEL: +31-77-475-4545 +31-6-5757-6575  
FAX: +31-77-475-1535



ALL HAITIMA PRODUCT HAVE CARRIED USD \$2,000,000

PRODUCT LIABILITY INSURANCE



# Water survey reinforces AUMA advantage for actuation

AUMA UK's strength of customer relationships, responsiveness and product excellence has been verified by a UK water industry survey. To ensure the validity of the research, which was commissioned by AUMA UK Ltd, anonymity was given to the significant sample of respondents who came from end users, OEM's, contractors and consultants.

Commenting on the input from the market and the positive engagement by customers of the survey, Paul Hopkins AUMA UK MD said:

*'This is the first time AUMA UK has carried out such an extensive survey in the UK and we are pleased with the generally positive endorsement we have received. The capability and responsiveness of our staff has been recognised and the benefits of*



*A water industry survey confirms the appeal of AUMA's modular actuator design and the strength of service provided by its staff.*

*'positive endorsement'*

*modular design, which is unique to AUMA, was commented on by more than half of the group surveyed. We will also take the opportunity to feed the survey results into our continuous improvement process as part of ISO 9000.*

*'The advantages of modularity that were reported included the ability to mount the control head remotely from the motor unit, on-site adaptability during installation, ease of maintenance and the ability*

*to have electrical and mechanical parts delivered separately, reducing installation time and the risk of component damage.'*

The AUMA survey group were also asked about future needs: many respondents were interested in the evolution of controls and bus system capability, this has given the leader in electric actuation an insight into future product development opportunities.

AUMA UK thanks all the companies that took part in the survey and confirms its commitment to build upon the strengths identified in the feedback.

**PENTAIR**

**Bailey**

Steam, Air,  
Gas and Liquid  
Safety Relief and  
Pressure Reduction

[www.safetysystemsuk.com](http://www.safetysystemsuk.com)

**Auma Actuators Ltd**  
Tel: +44 (0) 1275 871141  
[www.auma.com](http://www.auma.com)

**auma**®  
*Solutions for a world in motion*



# Pressure Tech Solution Saves Space, Time and Money

Pressure Tech is delighted to have been able to design and create a brand-new, exclusively tailored unit for a client, eradicating a host of engineering issues the company had previously faced with these products.

## Tailor-made approach

As always, our team listened and responded to the customer's very specific requirements, including examining ways in which the solution could be made as inexpensive as possible to install and run, without compromising on the cutting-edge technology and high-quality materials for which Pressure Tech is known.

In this instance, the client – a market leader in high-precision sensing, with a global reach – was looking to replace packages comprising a number of distinct components: the filter housing, pressure regulator, pressure gauge and all the associated pipe work. Drawing on our extensive experience in this field and the expertise of our team of specialist engineers and operators, we developed a single compact unit to neatly and efficiently contain all these elements, including the previously obtrusive pipes.



## Multiple customer benefits

As well as giving an instantly professional appearance, these bespoke units take up significantly less room and are easier to fit into the available space. They are simpler to install, requiring less time and labour, and are therefore also cheaper to get up and running. The fact that all the components are encased and there are fewer joints additionally means that the potential for damage and wear over time is lessened.

The client is delighted with the multiple benefits of the design, and Pressure Tech is pleased to have been able to demonstrate again the flexibility of our service and personalised approach to every individual application.

## Engineered Solutions for your Application

If you have an application where you believe that you could benefit from an integrated pressure regulation solution, we would love to talk to you.



**Comid Valve Services**



**BVA**



**BSI**  
**UKAS**

**VALVE MAINTENANCE SERVICES**

- ✓ Repair and Reconditioning of Industrial Valves
- ✓ Safety Relief Valve Repair, Service and Calibration
- ✓ Isolation, Control, Pressure Reducing Valves
- ✓ In-Situ Verification of Safety Valve Set Point (✓Veritest)
- ✓ In-situ Valve Repairs
- ✓ On-Site Skills Team for Outage Work and Emergencies
- ✓ Established Supply Chain for Valve Procurement and Supply



**Service Centers**

**Oldham**  
Lancashire  
Tel: 0161 624 9592  
Email: sales@comid.co.uk

**Walsall**  
West Midlands  
Tel: 01922 721649  
Email: sales@comid.co.uk

**Contact Us**  
Comid Engineering Limited

**Townfield Works**  
Greenwiches Road  
Oldham, OL4 2AS  
www.comid.co.uk

**PRESSURE TECH**

**Pressure Tech**

Tel: 01457 899307

[www.pressure-tech.com](http://www.pressure-tech.com)

# Strategic New Appointment For Albion

Albion Valves Ltd, supplier of specialist products for the process, water and HVAC industries, has appointed Paul Wightman as Technical Specifications Manager. Paul brings a wealth of technical expertise to the new position, having been recruited from a senior commercial business development role within one of the UK's leading heating organisations.

*'...willingly go the extra mile in providing first-rate customer service.'*




*Albion's new Technical Sales Manager, Paul Wightman*

With an engineering degree from Newcastle, Paul has worked in the building services and pump industry for 13 years, and as such has acquired considerable specialist knowledge and expertise from a variety of sources. Paul's keen business acumen, combined with technical knowledge places him in good stead for his new role at Albion.


Paul's specialism within the HVAC valves and controls sector has led to his active participation in strategic industry steering committees, such as the Chartered Institute of Building Services Engineers (CIBSE) and the Building Services Research and Information Association (BSRIA).


Paul commented: *'Albion has an industry reputation as a company who are willingly go the extra mile in providing first-rate customer service. I am committed to working with the team towards raising standards and striving towards excellence in application design and implementation. I very much look forward to all the challenges this new role brings.'*


David Keys, Albion Managing Director added: *'Paul's skillset is a welcome addition to Albion, his specialist industry and product knowledge will be a great support to our existing team and will enable us to add value in the services we provide to our distributors. We are confident he will be a valuable asset to the team.'*


 **Alco Valves**  
Industrial Valve Manufacturers

Manufacturers and suppliers of high and low pressure valve solutions worldwide.

 **High Pressure**

 **2 Way Inline Manifolds**

 **Multi-Way Manifolds**

 **Needle Valves**  
from

**www.alco-valves.com**

Tel: 01484 710511 Fax: 01484 713009

Email: [uk@alco-valves.com](mailto:uk@alco-valves.com)

**Albion Valves**  
Tel: 01226 729900  
[www.albionvalvesuk.com](http://www.albionvalvesuk.com)





# Score's Valve Automation Team – The Full Service

The design, manufacture and supply of actuator control systems is a key offering for any company involved in supply of actuated valve assemblies. It was with this in mind that Score Europe Limited set out over ten years to establish itself as a supplier of actuator control systems, leading to the creation of the company's Valve Automation Team in 2006. At the time Score were using external suppliers to meet all of their needs but recognised the many potential benefits of taking the service in-house for both Score and its customers.

Since 2006 Score Europe's Valve Automation Team has expanded greatly in terms of terms of capability and capacity, with currently a team of 22 conducting the company's sales of actuators and associated control systems. The team also now includes a number of Score's engineering apprentices, an important part of the apprenticeship scheme which last year saw Score Europe named as Apprentice Employer of the Year by Skills Development Scotland.




*This large electrically powered hydraulic power unit was designed, assembled and tested within 20 weeks*

Score's Valve Automation Team can now offer a full range of services from the bread-and-butter business of stocking and selling simple control systems, to the re-engineering of components and the design and manufacture of complete and complex control systems. A recent highlight was the successful design, assembly and testing of a large electrically powered hydraulic power unit completed within a demanding 20-week time period.

At Stavanger, during the Offshore Northern Seas (ONS) Conference and Exhibition from 25th-28th August, invited guests to the Score yacht berthed at the quayside and in close proximity to the Conference and Exhibition Centres, will be able to see a showcase of the company's range of valve automation services. This will be achieved with the aid of a specially designed Demonstration Cabinet equipped with a fully functional valve and control system demonstrating a range of the Valve Automation Team's capabilities.

Anyone seeking further information on Score's actuator control system services or seeking to arrange a meeting with a Score representative during ONS can contact Score via the electronic contact form at [www.score-group.com/contact](http://www.score-group.com/contact)


**MAHER**  
[www.maher.com](http://www.maher.com)

**NICKEL ALLOYS**  
K500, 400, 718, 625

**COPPER ALLOYS**  
833, 780, CA 104

**SPECIALIST ALLOYS**  
TITANIUM GRADE 5,  
A286, F55

**Stockholding and Machining**



Oil & Gas • Aerospace • Naval & Marine • Power Generation • Metalworking

Telephone: + 44 114 290 9200 Telefax: + 44 114 290 9298 E-Mail: [sales@maher.com](mailto:sales@maher.com)



**Score (Europe) Ltd**  
Tel: 01779 480000  
[www.score-group.com](http://www.score-group.com)



# TorkDrive:

## A torque limiting device which prevents valve damage



*TorkDrive limits or restricts the operator from applying excessive force*

**Smith Flow Control's TorkDrive is a unique device which prevents manual valves from being damaged due to excessive torque application during valve operation. It can be customised to suit most manufacturer's handwheel operated valves (Ball, Gear, Gate & Globe, etc) where valves require a Torque monitoring of over 80Nm.**

The device is set to a predetermined maximum torque and, if during the operation of the valve, the operating torque increases above the pre-set limit, the TorkDrive will slip, indicating an irregular valve condition. Following over-torque, the TorkDrive unit will automatically reset to the predetermined torque.

TorkDrive is a customisable add-on tool which minimises the risk associated with unavoidable plant/process shutdown and unnecessary repair costs through valve over-torque. It can be specified as a



*TorkDrive can be customised to suit hand wheels on all valve types*

simple, standalone unit mounted on either the valve input handwheel or directly to the valve input shaft; or it can be used in conjunction with SFC's EasiDrive portable valve actuator, a non-impacting, air driven power tool designed to simplify valve operations.

In most circumstances, manual adjustment of the power source (air or electric) restricts or limits the output torque and speed (RPM) of the EasiDrive. However, if the use of the portable actuator is not restricted to larger valves and is used on a wide range of valve with differing sizes and operating torques,

the TorkDrive would be the ideal solution. TorkDrive limits or restricts the operator from applying excessive force and protects the valve and valve seat from the over-torque that could be generated via the tool.

Features of the TorkDrive include unique clutch plates that are controlled by a series of calibrated compression springs. Two spring set configurations are available: a low range TorkDrive unit offering a maximum torque output range between 80Nm – 280Nm and a high range unit offering 250Nm – 420Nm. Each unit is factory set before installation and the unit can be adjusted to suit the host equipment's torque requirements using a calibrated setting scale within the body of the device. Each spring set has a unique colour code, ensuring that the correct torque range is always used.



#### **Smith Flow Control**

Tel: +44 (0)1376 517901

Email: [sales@smithflowcontrol.com](mailto:sales@smithflowcontrol.com)

[www.smithflowcontrol.com](http://www.smithflowcontrol.com)

# **a new look Reliable As Ever**

## **40 years of success and still delivering**



The EL-O-Matic F-Series actuator is the result of 40 years of production and design refinement. The new, re-designed EL-O-Matic actuator improved to meet today's industry demands delivers the same high standards of reliability for the automation of valves.



Pneumatic Rack & Pinion Actuators

For more information, visit us at [www.EL-O-Matic.com](http://www.EL-O-Matic.com) or contact your local sales partner



# Valvestock launches next-day service for plastic valve automation and actuation packages

*Valvestock, the specialist valve and actuator arm of Pipe Center, has introduced a new rapid response service for plastic valves and actuator packages aimed at installers, skid builders and end users*



Valvestock's plastic valve range

*eTec*

Valve Supply and Refurbishment  
for the Power Industry



Bespoke valves designed and manufactured to customers specifications for Hydro, Thermal Power Stations and Water Control Schemes.

- Butterfly Valves • Energy Dissipating Valves
- Spherical Valves • Valve Refurbishment Service

eTec Engineering Services Ltd

T +44 (0) 01709 544111

E [sales@etec.uk.com](mailto:sales@etec.uk.com)

[www.etec.uk.com](http://www.etec.uk.com)

[www.etec.uk.com](http://www.etec.uk.com)

**It provides dedicated technical support for the selection, quotation and next-day delivery of plastic valve automation and actuation products.**

The rapid response service, which sees assembly take place at Valvestock's Fareham facility, is initially available with GF actuated valve packages although further types of valve will be added in the near future.

Due to their resistance to aggressive chemicals, plastic valves are ideal for use in applications involving contact with acids, alkalis, inorganic and organic media. Compared with traditional metal components, plastic valves are lightweight, quick to install, and easy to modify to meet complex installation requirements.

Heading up the initiative is Adrian Squibb, who has more than 20 years' experience in the industrial market, with particular knowledge of diaphragm valves for use in oil and petrochemicals, power, chemical, waste and water and other process and manufacturing industries.

The company will stock GF automation products as part of its speedy valve service, enabling it to carry out builds from stock and provide rapid turnaround. It will also hold stocks of its own-brand Jet electric





Marcus Sampson

actuator, and supply the complimentary Durapipe range with standard lead times.

The new service has helped Valvestock secure a significant order for components for a biogas digester at a Midlands sewage treatment works. The plastic components replace traditional metal solenoid valves that were costly and only available on long lead-times. The plastic valves offered an ideal problem-solving alternative.

The contract includes plastic manual and actuated valves, plus on-site modification of existing valves, spindle extensions and retrofit actuation.

The new plastic valve service compliments Valvestock's existing metal ball, butterfly, gate, globe and diaphragm valves, plus its Saunders industrial valve range, built by Valvestock from stock under licence.

Marcus Sampson, general manager of Valvestock, said: *'I believe our offering is unique in the market. Valvestock is the only supplier in the UK offering plastic GF valve packages alongside Saunders industrial diaphragm valves, all built from stock and supplied in a 24-hour turnaround time.'*

He added: *'It gives customers access to rapid solutions to meet pressing replacement needs, particularly in the event of a failure. Depending on the application, down-time costs can be extremely high. With a 24-hour response time, problems can be remedied quickly before costs escalate out of control.'*

# VALVESTOCK

**Valvestock**

Tel: 01329 283 425

[www.valvestock.co.uk](http://www.valvestock.co.uk)

# rotork®

## Valvekits



## Everything for the valve industry except valves and actuators

**For more than 25 years, engineers have relied on Valvekits capabilities and experience to design and deliver valve adaptation and accessory solutions in every liquid, powder and gas handling environment.**

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

Manufactured to customers' specifications in a large range of materials, all designs are produced in-house by a highly trained design team and supported worldwide by the resources of the Rotork flow control group.

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



Valvekits - the market leader, see our dedicated website at: [www.valvekits.co.uk](http://www.valvekits.co.uk)

# rotork®

[www.rotork.com](http://www.rotork.com)

Redefining Flow Control

# Valve Condition Monitoring Enters a New Era - V-MAP® G3 from Score Group plc

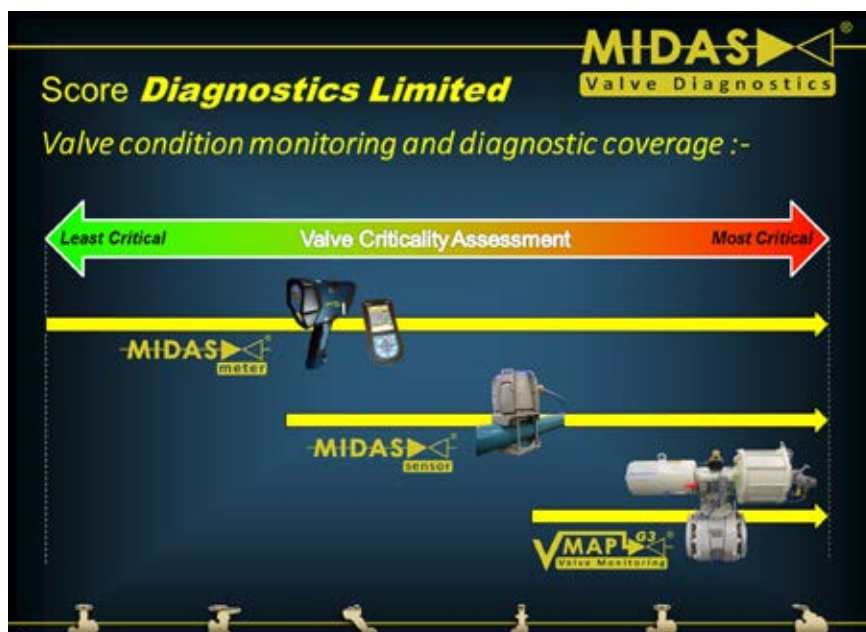
The affordable, easier to install, complete diagnostic coverage valve condition monitoring equipment and system you have been asking for is now available from Score Diagnostics Limited, part of the Score Group of companies.

The Score Group has a 30+ year track record of delivering market leading solutions for Intelligent Valve Management™ and 20+ years experience in delivering valve condition monitoring services / failure mode effects and diagnostic analysis consultancy. This has been coupled with our vision and of course the excellent guidance given to us by our existing customers, to show us the way forward for creating the market's best available technology and systems for assuring the required in service performance and integrity of critical valves.

It is no coincidence that this has happened at time when there is an increasing pressure on our customers to comply with operational safety and integrity standards such as IEC 61508/61511, ANSI/ISA-84.00.01, ISO 55,000 and of course to respond to the HSE's recent KP4 Audit findings in relation to the continuing safe operation of ageing plant and equipment.

Whilst our existing customers are aware that our flag-ship valve monitoring system V-MAP® has been available in the marketplace for almost a decade already in both its first and second generation formats, they are also aware of our continuous improvement culture. In light of this, they requested an enhanced valve condition monitoring solution for safety and process critical valves with the following features :-

- Fully Independent of all Valve and Accessories Manufacturers
- Widest Possible Diagnostic Coverage



- Passive and Non-Invasive Monitoring
- Easier to Install (in both Brownfield and Greenfield Sites)
- Reduced Weight and Space Requirements
- Reduced Installation Costs
- Enhanced Asset Life Cycle Management
- Performance Standards for all Safety Critical Elements
- Maximised Risk Mitigation with Minimised Probability of Failure on Demand
- Unique and Bespoke System Components
- Easy to Interpret Outputs and Alarms
- Evidence to Drive Proactive and Predictive Maintenance Models
- Wireless and Remote Installation Options

The new V-MAP® G3 system gives process and plant owners, integrity and safety assurance engineers as well as maintenance personnel enhanced visibility of all developing failure modes in valves and their operators and further extends the Score range of diagnostic



equipment available to monitor in-service performance over time.

V-MAP® G3 (patents applied for) is being exclusively launched to existing and pre-selected key customers by Score Group plc during ONS Week, in Stavanger (25th – 29th August 2014).

Further technical and commercial information is being prepared for the launch and anyone wishing to receive more information on this should contact Score Diagnostics Limited via the existing [www.midasvalvediagnostics.com](http://www.midasvalvediagnostics.com) website.



**Score (Europe) Ltd**  
Tel: 01779 480000  
[www.score-group.com](http://www.score-group.com)





# We can turn anything!

When it comes to quarter turn valves, we really have the perfect partnership. As exclusive UK partner for HKS actuators, we're confident at Hydrastore that we can engineer and deliver a solution, within extremely competitive timeframes, to actuate almost anything! Whether it be in the harshest conditions 2,300 metres sub-sea or, top-side.

- Wide range of SA-H/AFR double-acting and spring return/failsafe actuators
- Pressure rating up to 350 bar
- Torque up to 350,000Nm
- Competitive turnaround and delivery
- Wide capabilities and applications
- ATEX, DIN and SIL2 certification and standards

Call: 01427 874445  
Email: [sales@hydrastore.co.uk](mailto:sales@hydrastore.co.uk)  
Visit: [www.hydrastore.co.uk](http://www.hydrastore.co.uk)

Hydrastore



We Turn the World.



# SIPOS' Creativity Promoting Core Competencies

A new marketing campaign for SIPOS Aktorik highlights the range of specialist services provided by the electric actuator manufacturer. Taking a creative approach that reflects the company's innovation in actuation, latest adverts take the bold approach of using an image of an apple to promote the company's core competencies.

Commenting, Felix Metzenthin, Head of SIPOS Aktorik Marketing said: 'We are not like other actuator suppliers and, as a result, our marketing needs to differentiate us with powerful imagery and clear, compelling messages that summarise our services.'

'At SIPOS we ensure that all customers' needs for valve automation are catered for – our core competencies include accuracy, variable speed capability, a strong engineering ethos and extensive service expertise.'



SIPOS Aktorik highlights core skills in a new marketing campaign. Picture shows Norbert Eckerlein from SIPOS Aktorik's service department.

**Engineered Waterworks  
Valves & Ancillary  
Equipment**

- Valves: Gate, Check, Butterfly, Flap, Air & Control
- Actuators & Gearboxes
- EN598 Pipework & Fittings
- Flange Adaptors, Couplings & Joint Sets
- Fabricated Extensions Spindles & T-Keys
- WRAS Approved Valves

Tel: 01630 647111  
Fax: 01630 647734

[www.aquaflowvalves.com](http://www.aquaflowvalves.com)

'Actuation technology is all important for flow control applications, from sludge weir automation to nuclear plants: we are emphasising in our marketing that we think outside the box to provide comprehensive and efficient support for our actuator installations around the globe.'

With a track record in actuation innovation, SIPOS Aktorik is renowned for spearheading pioneering advancements for valve control. The international organisation is globally acknowledged for its actuator initiatives that include variable speed capability for protection against water hammer.

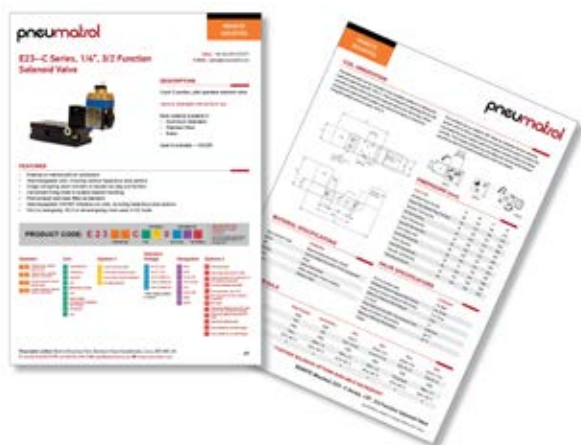
A strong reputation has been built for meeting the needs of customised actuator applications and bespoke requirements. SIPOS' range includes standard and specialist actuators including HiMod for extreme precision and continuous duty. Other products include actuators for nuclear power plants and SIMA Masterstations.

Key focus on customer service is key to SIPOS' continued success: this ensures on-going expansion on the international actuation arena. Comprehensive support is provided for commissions, maintenance, retrofits and revisions.

**SIPOS Aktorik**  
Tel: 01275 871141  
[www.sipos.de](http://www.sipos.de)

**SIPOS**  
AKTORIK

# Pneumatrol launches new valve product catalogue



Pneumatrol Limited, the Lancashire-based specialist manufacturer of pneumatic control products for use within both hazardous and safe area environments, has launched a new product catalogue that provides a comprehensive overview of the company and its valve and solenoid ranges.

The catalogue offers extensive technical information on its products, such as valve port connection size, working pressure, Cv factor, etc. It also provides useful technical reference including hazardous area zone classifications and product marking explanation.

To help users choose the desired product, this user-friendly catalogue features a colour coded part number section which is easy for users to follow.

The 112-page publication highlights Pneumatrol's capability to offer complete solution to its customers, including but not limited to product design, project consultation, technical support and distribution of products.

You can download the electronic version at Pneumatrol website or request a hard copy by contacting the sales office at 01254 872 277.

**pneumatrol**

**Pneumatrol Ltd**  
Tel: +44 (0)1254 872277  
[www.pneumatrol.com](http://www.pneumatrol.com)

**rotork®**  
Site Services



## World-leading experience in flow control, automation projects and maintenance services

Rotork's engineering teams are experts in the design and implementation of actuation solutions for all applications and environments.

We have the knowledge and expertise to design, build and maintain any installation, giving you improved efficiency, guaranteed quality and peace of mind.

- Retrofit Upgrade of Actuators & Controls
- Automation & System Integration Projects
- Field & Workshop Services, Factory Fit
- Predictive Maintenance, Health Checks, Call-out & Outage Services
- Technical Support & Spares



For further information, visit [www.rotork.com](http://www.rotork.com) and download our Projects & Services brochure, telephone: +44 (0)113 205 7233 or email [information@rotork.com](mailto:information@rotork.com)

**rotork®**

Redefining Flow Control



[www.rotork.com](http://www.rotork.com)



# New universal sealing disc for sliding gate valves

West Special Fasteners, the Dronfield based manufacturer of high integrity fastening products to the oil and gas industry, completed its first Subsea Chemical Injection Metering Valves (CIMV) fastener order since joining the BVAA.

'We are proud of our BVAA membership,' said Director James Hawkins 'and fasteners for CIMV is a product which is very relevant to the industry, so the successful completion of this order is a milestone for us.'

Chemical injection is an important part of oil and gas production. Chemicals are injected subsea to mitigate flow assurance & corrosion risks. A CIMV is an extremely important part and so the fasteners used on such a critical parts have to be highly tested and inspected.

West Special Fasteners has supplied several Valve companies in the UK with special fasteners; with some of the relationships dating back years. The company also has a European Valves manufacturer as a regular customer; however this is the first Valves manufacturer it has supplied outside Europe.



*Some Socket Capscrews manufactured in the UK by West Special Fasteners*

The project was for 3500 components of various sizes from M6 to M24, including Nyloc nuts, Socket Capscrews, etc in Stainless Steel grade A4-80 but tested to the highest standards. The technical specifications included every conceivable test including LPI (Liquid Penetrant Inspection), Chemical Analysis, Hardness, Tensile Test, Yield Test, Elongation Test, also full size Breaking Torque Tests, Proof Load Tests, and Destructive Bolt testing as per ISO 3506.

*'When it comes to this critical process, contractors need to be able to trust each component supplier; fortunately West Special Fasteners' experience in this field means the company is an extremely reliable partner'* adds James Hawkins.

West Special Fasteners is very familiar with ISO 3506 and helps with test data submission to the BSSA (British Stainless Steel Association). All of the components passed, all the tests, with flying colours.

The project was completed within 5 weeks, on time and sent to the customer via airfreight due to its urgency.

## SAFI, Thermoplastic Valves *The Solution against Corrosion*



### SAFI's highlights :

- High Grade Thermoplastics: GRPP (Glass Reinforced PP), PVDF, u/cPVC, ABS...
- Corrosion, Abrasion, UV resistance
- Exceptional mechanical strength
- Lightweight (e.g : 6" ball valve 15Kg / metal 65Kg)



NEW ! On [www.safi-valves.com](http://www.safi-valves.com)

Discover our latest product brochure!



**West Special Fasteners Limited**

**West Special Fasteners Limited**

Tel: 01246 291111

[www.westspecialfasteners.co.uk](http://www.westspecialfasteners.co.uk)



# Taking to the road to give young people a better start



Going the extra mile: Les Littlewood, right, will cycle from Land's End to John O'Groats

**In a bid to raise in the region of £20,000 for local organisation First Point, Albion Valves Ltd Sales Director, Les Littlewood along with four other cyclists will be donning their Lycra and taking to the road on a 1000 mile bike ride from Land's End to John O'Groats. The ten-day cycle has been organised by Ashfield Rugby Club, and will start on 24th August this year.**

First Point, is an East Midlands based organization focused on developing disaffected children and young adults, who often lack the reward of academic achievement by rewarding them for their participation in a host of outdoor, team and sport related activities. First Point is run by volunteers and as such is entirely dependent upon donations to survive.

The team at First Point knows from experience that inside every one of these young people lies the potential to achieve and to lead a fulfilling life. However, sadly without their engagement with First Point often there is a real possibility that many of them won't realize their own potential. For a variety of social and personal issues, and without the support

and direction provided by the team at First Point their futures remain uncertain.

Les commented:

*'Through my involvement with the club, I have long been a passionate supporter of First Point and the work they do with disadvantaged children and young adults, who through no fault of their own haven't been given the best start in life. These young people often find everyday activities such as simply going to school or college a real challenge.*

*They often lack the self-confidence, self-belief and basic grounding that they need to see them through into adulthood. The activities organized by First Point address this need by helping to equip them with interpersonal and practical skills, and offer a lot of fun in the process. It is imperative that this work continues to help provide a better start.'*



**Albion Valves**

Tel: 01226 729900

[www.albionvalvesuk.com](http://www.albionvalvesuk.com)

# SIL Approved Actuators from Zoedale

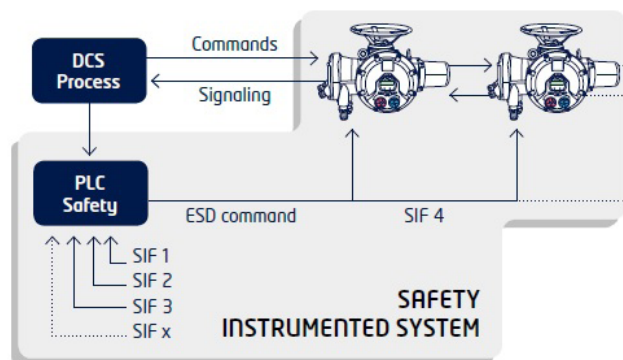
**Zoedale is the UK value added reseller (VAR) of Bernard high quality electric actuators and can now announce that these actuators can be compliant in a SIL safety system.**

SIL started out in 1998 as a series of standards known as IEC 61508 (*"Functional safety for safety-related Electrical/ Electronical /Programmable Electronics"*) and in 2003 after a few alterations they have become the SIL regulations of today. SIL (Safety Integrity Level) is a measure of safety level in an industrial environment, which is based on the level of security provided by a measure of risk. Regulatory, societal and economic pressures all contributed to the development of the SIL safety standards. In a SIS (Safety Instrumented System) there is one or more safety instrumented functions (SIF) the typical structure of a command chain includes sensors, actuator and the item being actuated (valve for example).

The most common SIS (Safety Integrated System) application within Bernard's speciality is an ESD (Emergency Shut Down) command chain (pictured right). In a SIS there are several safety instrumental functions (SIF) which can be categorised as one of the following: sensors that measure, PLC's that treat and command, and a safety device that operates components. Each SIF has its own SIL level; the combination of all these levels determines the SIL capability of the system as a whole.



*SIL (Safety Integrity Level) is a measure of safety level in an industrial environment*



*SIS system diagram*

An actuator with SIL offers a high level of confidence and diagnostic capabilities and these can be measured in different ways:

The level of confidence can be measured in: PFD – the Probability of Failure on Demand or PFH – the Probability of dangerous Failure per Hour.

The level of diagnostic capabilities is defined as SSF – Safe Failure Fraction Zoedale supply several SIL compliant actuators these include:

#### **Weatherproof:**

##### **Quarter-turn:**

SQ Range  
SQ20 to SQ80 (200 to 800 Nm)

##### **Multi-turn:**

ST Range  
ST6 – ST220 (60 to 2200 Nm)  
ASM Range  
ASM 0 to ASM 3

#### **ATEX Explosion proof:**

##### **Quarter-turn:**

SOX Range  
SOX18 to SOX80 (200 to 800 Nm)

##### **Multi-turn:**

STX Range  
STX6 to STX 1400 (60 to 1400 Nm)  
ST175 & ST220 (1750 to 2200Nm)

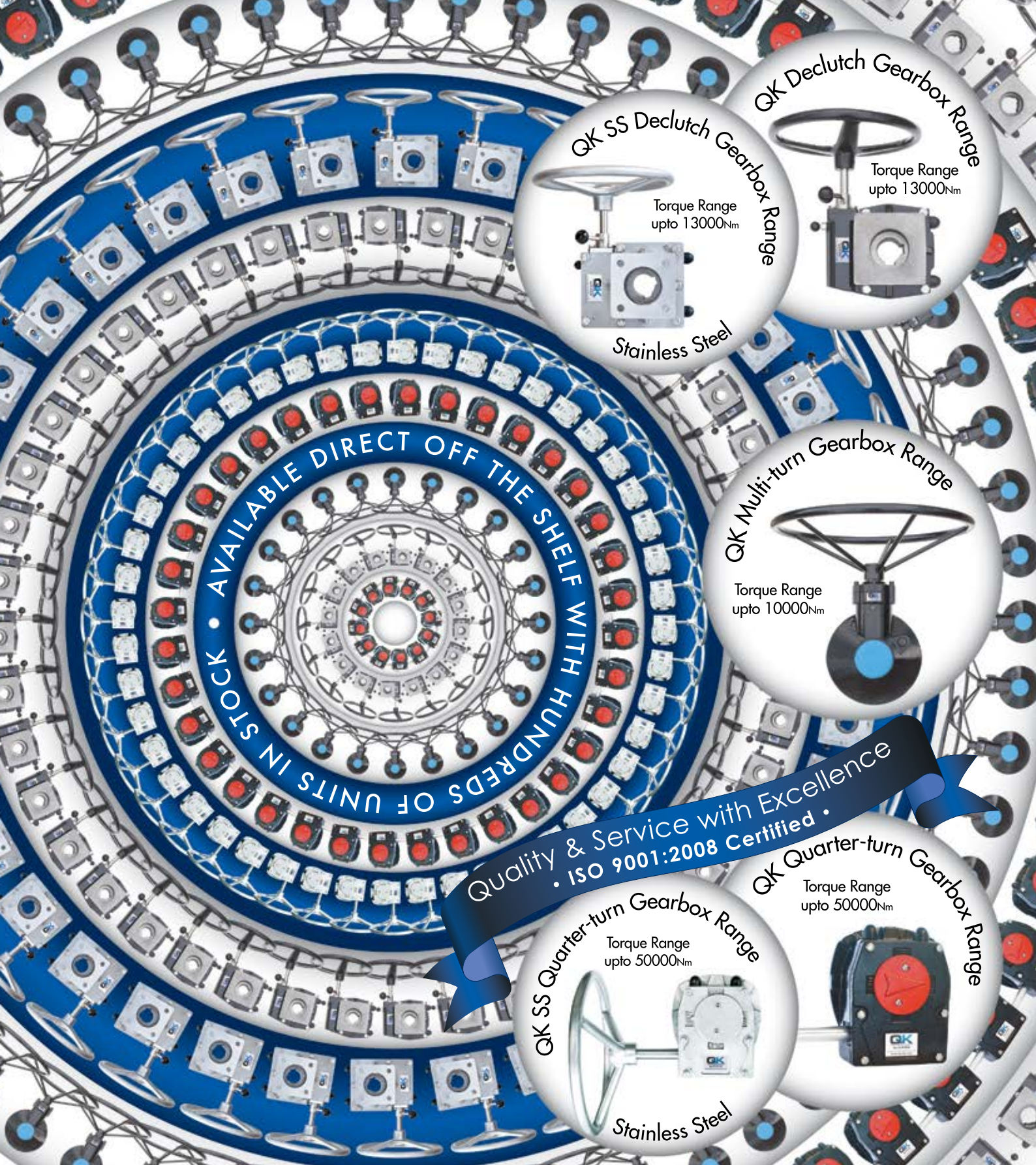
**ZOEDALE**  
keeping industry flowing

**Zoedale Plc**

Tel: 01234 832832

[www.zoedale.co.uk](http://www.zoedale.co.uk)





AVAILABLE DIRECT OFF THE SHELF WITH HUNDREDS OF UNITS IN STOCK

**QK SS Declutch Gearbox Range**  
Torque Range  
upto 13000Nm  
Stainless Steel



**QK Declutch Gearbox Range**  
Torque Range  
upto 13000Nm



**QK Multi-turn Gearbox Range**  
Torque Range  
upto 10000Nm



**Quality & Service with Excellence**  
• ISO 9001:2008 Certified •

**QK SS Quarter-turn Gearbox Range**  
Torque Range  
upto 50000Nm  
Stainless Steel



**QK Quarter-turn Gearbox Range**  
Torque Range  
upto 50000Nm



**THE UK'S LARGEST INDEPENDENT MANUFACTURER AND SUPPLIER OF SPECIALIST PRODUCTS TO THE VALVE AND ACTUATOR INDUSTRY**



VISIT US AT VALVE WORLD 2014  
HALL 4, STAND C21



**Quickkits Limited**  
Units 3-8 Drakehouse Court, Hamilton Road, Sutton-in-Ashfield, Nottinghamshire NG17 5LD  
Tel: +44 (0)1623 515545 Fax: +44 (0)1623 515546 Email: sales@quickkits-online.co.uk



# Engineering firm, KKI, scoops prestigious 'Business of the Year' award

Engineering company, Koso Kent Introl (KKI) - [www.kentintrol.com](http://www.kentintrol.com) - has scooped the prestigious title of 'Business of the Year' at the Brighthouse Echo Business Awards 2014. The award, sponsored by Projex Solutions, recognises KKI's business success, growth and achievement and highlights the company's innovation, best practice and highest quality standards.

Lynn Mowbray, KKI's operations director said: 'I am absolutely thrilled to receive this high profile award, that we were nominated for, on behalf of the whole team at KKI. To be acknowledged as Business of the Year is a huge achievement and marks our success in our hometown of Brighthouse since 1967 and our growing presence as a valve manufacturer on a global platform. We look forward to further success in the coming years.'

Koso Kent Introl is a leading valve company offering world-class engineering and manufacturing excellence to its global oil and



KKI's operations director Lynn Mowbray collects the award

gas customers. The organisation manufactures and exports standard service control valves, severe service control valves, high-technology surface choke valves and high-performance rotary valves to the oil and gas, petrochemical and power industries.

Host and TV presenter on the night, Clare Frisby commented: 'The company aims to meet its customer requirements while maintaining an ethical and legal approach to its business and respecting the environment, as well as the health and safety of colleagues. Maintaining the highest standards of quality throughout design, production and customer service is the cornerstone of KKI's philosophy.'

KKI continues to make significant investment in its people, technology and infrastructure. In the last two years, the engineering firm has opened an 18,000 square foot factory and a hi-tech £2 million machining centre in Brighthouse.

## Stockists and distributors for:

### Forged Steel Gate, Globe & Check Valves

½" to 2"

800lb / 1500lb / 2500lb – NPT, SW & BW

150lb / 300lb / 600lb / 1500lb / 2500lb – Flanged

### One of the widest materials ranges stocked in Europe, including:

#### Carbon Steel & Low Temperature

ASTM A105N

ASTM A350 LF2

#### Chrome Alloy

ASTM A182 F5

ASTM A182 F9

ASTM A182 F11

ASTM A182 F22

#### Stainless Steels

ASTM A182 F304 / F304L / F304H

ASTM A182 F316 / F316L

ASTM A182 F321 / F321H

ASTM A182 F347 / F347H

#### Exotics

ASTM A182 F51 – Duplex

ASTM A182 F53 – Super Duplex

ASTM A182 F55 – Super Duplex

Monel

Alloy 625



All Valves are fully EN 10204 3.1 certified

### Power Valves International Ltd.,

Centrus Business Park, Mead Lane, Hertford.  
SG13 7GX, England

Tel: 01992 538022 Fax: 01992 538033

Email: [power.valves@btconnect.com](mailto:power.valves@btconnect.com)



# kentintrol

## Koso Kent Introl

Tel: 01484 710311

Email: [info@kentintrol.com](mailto:info@kentintrol.com)

[www.kentintrol.com](http://www.kentintrol.com)

# Core Competence



## Our contribution for a healthier plant

With SIPOS actuators all your needs for valve automation are catered for. With our core competencies you are assured of accuracy, efficiency, variable speed, engineering and service capability.

Our actuator solutions cater for flow control applications from sludge weir automation to nuclear power plants.

**Talk to us – we have the actuators with smart heads.**

SIPOS Aktorik GmbH  
Im Erlet 2 · D-90518 Altdorf · Germany · [www.sipos.com](http://www.sipos.com)  
Tel: +49 (0) 9187 9227 0 · Fax: +49 (0) 9187 9227 5111



# Bray goes the extra mile!

**Denis Bell and Raymond Scott of Bray Controls, joined a team of cyclists to take on the challenge of cycling from John O 'Groats to Land's End in aid of the Gene Therapy Charity. The cycle covered 905 miles and was completed in eight and a half days! Denis has worked with Bray for six years as Operations Manager and Raymond an Electrical Engineer joined Bray in 2012**



*The challenge included nearly a thousand miles of cycling*

The Team was led by Stuart Wren whose daughter Chloe aged eight, suffers from cystic fibrosis. Chloe is on constant medication and spends one week of every month in hospital. As with many conditions, gene therapy is being studied as a possible cure.

This challenge was a great achievement considering the age of some of the cyclists – which ranged from mid-thirties to early sixties and some of them had only been cycling for as little as three months. It seemed like an impossible feat, yet every member of the team completed the challenge. This would not have been possible without the support team who consisted of three men, a minibus and a support van. The support team were there in the morning to check all the bikes and get everyone safely on the road, whilst also carrying spares for the bikes. They then went ahead and prepared all the food and refreshments for all the stops during the day.

On day three, Fiona Campbell of “Bowenworks” donated her time, by spending the evening giving the team some physiotherapy and some stretching techniques to prepare them for the remainder of the cycle. Fiona also supplied some treatments for the team to take with them. Without this support many of the team



*Morrisons provided food and drink for the trip*

would not have been able to complete the challenge. Although the cycle was long and arduous, the people the team met along the way were so generous in their giving, and even the emotional support of passers-by was a huge support. They experienced all four seasons during the trip, with weather extremes from snow still on the ground in the mountains, to sunburn. The pain endured was more than compensated by the beautiful scenery. Everyone agreed, to see the UK at its best is better viewed from a bike than inside a car! Experiencing the dramatic scenery of Glencoe, the views from the Shap summit in Cumbria, the Wye Valley at Monmouth in south Wales and the final approach to Land's End through Cornwall will be the lasting memories of this challenge and not the burning pain of sore muscles!

*‘great achievement’*

The Team would like to thank Morrisons for their support during the trip as they supplied food and refreshments during the challenge, laying on a buffet and refreshments at Alness in the Scottish Highlands and Penzance in Cornwall, ten miles before the finish. They are also very grateful to the Scottish Police who donated the minibus, and “Mann Freight” who donated the support van.

At the last count the team had raised around £7000 – a tremendous effort from all involved and for a very worthy cause.

**Bray Controls**  
Tel: 0141 812 5199  
Email: [www.bray.com](http://www.bray.com)





# Are you ready for the changes?

ISO/DIS 9001:2015 and ISO/DIS 14001:2015 are now publicly available

The incorporation of Annex SL means a new structure and layout for ISO 9001 and ISO 14001 and one which all Management System standards should adopt as they are revised or introduced in the future.

**Public Training:** LRQA training has developed training workshops to support organisations, in understanding and implementing the revised changes. The workshops will focus on the proposed changes and how those changes will impact on your Management Systems.

These events include comprehensive delegate notes and buffet lunch.

**In-Company Training:** Alternatively these workshops can be delivered on your own site, enabling the training to be focused on your actual Management Systems. Giving greater understanding on how the changes will affect your organisation, people and Management Systems.

## Public Training

ISO 9001:2015 Update Workshops			
Manchester	24th July	11th August	10th September
Birmingham	30th July	18th August	
London	4th August	4th September	

Combined ISO 9001:2015 and ISO 14001:2015 Update Workshops	
Weston, Cheshire	1st September
Scotland (Glasgow/Edinburgh)	2nd September
Birmingham	3rd September
London	4th September

Call us today to book your public training course or to discuss your In-Company requirements **0800 328 6543** quoting V7 and speak to one of our experienced training advisors or log on to [www.lrqa.co.uk/training](http://www.lrqa.co.uk/training)

## LRQA Training

T 0800 328 6543

E [lrqatraining@lrqa.com](mailto:lrqatraining@lrqa.com)

W [www.lrqa.co.uk/training](http://www.lrqa.co.uk/training)

## Certification

T 0800 783 2179

E [enquiries@lrqa.co.uk](mailto:enquiries@lrqa.co.uk)

W [www.lrqa.co.uk](http://www.lrqa.co.uk)



Lloyd's Register  
LRQA

Improving performance,  
reducing risk

# Parker Hannifin extends ETH electro cylinder range

Parker Hannifin, the global leader in motion and control technologies, has again extended its popular ETH range of high force electro thrust cylinders. The new ETH125 combines the advantages of hydraulics with those of electronics, profiting from its rugged design and the resulting long service life. Typical applications for the ETH125 include material forming and press applications, food processing and packaging machinery, industrial automation and other applications where users are looking for an energy saving electro cylinder for precise positioning and force control.

As with the frame sizes ETH032, ETH050, ETH080 and ETH100 the development of the ETH125 focused on realising an extraordinary force density (force per frame size). The precision ground ball screw is the centre piece of the construction. The ETH cylinder offers low friction, an efficiency of up to 90%, smooth



*ETH125 combines the advantages of hydraulics with those of electronics*

operation over the entire speed range and a long service life. Thanks to the high availability of the ball screw, short lead-time, attractive prices are guaranteed. Like its smaller "siblings", the ETH125 features an integrated anti rotation device as a standard, which simplifies the integration of the cylinder into customer systems. The standard central lubrication port integrated into the cylinder body helps reduce maintenance overhead and downtimes to a minimum.

The ETH125 is available with screw leads of 10 mm and 20 mm. It is able to achieve thrust forces of up to 114000 N, travel speeds of up to 833 mm/s and accelerations of up to 10 m/s<sup>2</sup>. ETH125 comes in defined standard travel lengths between 100 mm and 2000 mm, but is configurable in steps of 1 mm also. With a repeatability of up to 0.03 mm, the ETH125 is up to all tasks requiring precise motion, positioning, setting and actuating.

Like all cylinders of the ETH series, the ETH125 is available with parallel or inline motor configuration. Thanks to a variety of mounting options, which can be chosen according to customer requirements, customer may combine the cylinder with many different motors and gearboxes. The number of rod end configurations and mounting options offer the

flexibility to integrate the electro cylinder into customer application. Available sensors and cables can be directly immersed into a groove in the ETH profile, which may then be protected by a cover. This ensures a smooth surface for easy cleaning and safe handling.

The ETH is offered as standard in IP54 format with galvanised screws, but is also available with stainless steel screws or in full IP65 format with additional coating protecting the cylinder against aggressive chemicals; thus meeting the needs of more demanding environmental conditions.

Simplifying product selection and mounting, Parker can also provide a complete drive train, including matching servo drive controllers, motors and gearboxes. All these components can be selected and programmed easily with the easy-to-use Compax3 software-tools.


**Alco Valves**  
 Industrial Valve Manufacturers

Manufacturers and suppliers of high and low pressure valve solutions worldwide.

**Fire Safe Design**



**Panel Mounted**



**Multi-Way Manifolds**



**Ball Valves**  
from  
[www.alco-valves.com](http://www.alco-valves.com)  
 Tel: 01484 710511 Fax: 01484 713009  
 Email: [uk@alco-valves.com](mailto:uk@alco-valves.com)



**Parker Hannifin  
Manufacturing Ltd**  
 Tel: 01271 313131  
[www.ipde-innovations.com](http://www.ipde-innovations.com)



# Hardide Coatings invests in cutting edge technology



*Hardide Coatings Technical Director Dr Yuri Zhuk*

**Hardide Coatings, provider of advanced surface coating technology, has invested a six figure sum in new technologies that will strengthen its service and delivery capability; these include a Scanning Electron Microscope (SEM) and equipment to further improve the pre-treatment process.**

The company has enhanced its analytical capabilities by investing in the latest SEM technology to image and analyse coatings at the sub-micron level. This allows imaging of chemical elements in extremely fine detail and strengthens the company's understanding of coating issues and behaviours.

The SEM uses a focused beam of electrons to interact with atoms and generate a variety of signals from the sample. This reveals information on the topography, composition, crystalline structure and orientation of materials comprising the sample. It is already being used to develop new Hardide coating applications, analyse customer parts and continually improve the production process.

Hardide Coatings Technical Director Dr Yuri Zhuk said: *'The SEM was a significant investment but one which is already paying off by providing us with a new level of information which we are using to deliver a better service to our customer base. This includes leading companies in oil and gas, aerospace and other advanced engineering sectors.'*

*'This technology also augments our ability to develop new applications and coating modifications more quickly and accurately. Together with smaller investments including new equipment in our pre-coat area, this enables us to take the Hardide surface technology to the next level of technical excellence.'*



**Hardide Coatings**  
Tel: 01869 353830  
[www.hardide.com](http://www.hardide.com)

# New markets and applications anticipated for Schischek damper and valve actuators

For over 30 years Schischek has been supplying electric explosionproof products for building services and HVAC applications in many industries, including onshore and offshore oil and gas, refineries, chemical plants, laboratories, pharmaceuticals, water treatment and ship building. The recent acquisition of the company by the Rotork group of flow control companies presents new opportunities for both organisations. Whilst the addition of the Schischek range enables Rotork to increase its activity in hazardous and non-hazardous area HVAC markets, Schischek actuators also fill a gap in Rotork's product range which is applicable to small valves and opens up new market areas, especially in the processing industries.

Schischek manufactures electric actuators for quarter-turn and linear valve and damper operation, each available with a spring-return failsafe capability and with 'Ex' or 'Red' explosionproof or 'In' non-explosionproof enclosure specifications. A combination of designation and colour coding for Schischek products defines the appropriate hazardous or safe area of application to avoid any mistakes. For example, the Max range of quarter-turn actuators is available as the ExMax and painted yellow, indicating suitability for ATEX zones 1, 2, 21 and 22. The RedMax version, painted red, is suitable for ATEX zones 2 and 22; the InMax version, painted green, is only suitable for non-hazardous safe areas.

The Max range is manufactured in two body sizes for quarter-turn operation at output torques between 5 and 150 Nm with an on-site selectable stroke time of 3, 15, 30, 60 or 120 seconds. The selectable stroke time is one of a number of options that are built into the standard product, including the adaptable power supply and choice of on/off, three-position or modulating control. For position signalling and feedback a 4-20mA or 0-10V supply can be utilised, whilst two end of travel auxiliary position switches are optionally available.

For failsafe operation in either direction an integral spring return version is available for output torques up to 60Nm, which can be programmed to operate with a 1, 3, 10 or 20 second stroke time. In its failsafe version the actuator is available with SIL2 safety integrity level approval. Max actuator duties in explosionproof environments include dampers for smoke, temperature or fire protection and the operation of ball and butterfly valves, typically in sizes up to 50mm (2 inches).

For linear on/off, three-way or regulating control, Run actuators offer an output torque range of 500 to



*Schischek ExRun actuator for linear on/off, three-way or regulating valve control*

10,000N and stroke lengths between 5 and 60mm. Up to five running times between 2 and 15 seconds per millimetre are selectable on-site, together with the self-adaptable power supply and choice of position signal and feedback supply. The Run actuator is not available in a linear failsafe configuration, but this function is achieved by the combination of a Max actuator and



Lin gearbox. The Lin converts the actuator's quarter-turn output into a linear stroke, selectable at lengths between 10 and 42mm.

*'the highest quality  
and reliability'*

Customers supply Schischek actuators to end-users as a packaged valve or damper, including all necessary adaptation parts and accessories. In many cases valvemakers free-issue products to Schischek workshops at subsidiaries or agents, where actuation and factory testing can take place locally, prior to shipment to site.

Both Schischek and Rotork are known for manufacturing products of the highest quality and reliability. These products complement each other and will enable Schischek to significantly extend its offering in the HVAC market, supported by Rotork's worldwide presence.

Rotork's rack and pinion pneumatic actuators are one example of a product that gives Schischek the ability to increase its offering to encompass electrical sensors and monitoring equipment with electric and pneumatic actuation. In another scenario, Rotork's range of larger explosionproof electric actuators can be used with Schischek actuators to increase versatility and scope of supply. Motorway tunnels in Melbourne, Heathrow

Airport's T5 terminal and the London Olympic Village are just three of many locations where Rotork IQ intelligent electric actuators are used for fire control and HVAC applications. Power stations are another area of activity, where large linear and rotary Rotork electric and pneumatic actuators are used for applications including the modulating control of inlet and draft dampers for boiler combustion control.

At the other end of the size range, Rotork's abilities in the process industries will benefit from the option of using Schischek electric actuators to control small linear valves requiring up to 10kN operating force and quarter-turn valves with torque requirements up to 150Nm. By providing isolating and modulating control with a failsafe function, these products sit neatly below Rotork's ranges of control valve actuation products, including CVA and CMA electric actuators, broadening the scope of supply in plants containing large and small bore pipework and introducing the option of an all-electric solution in every area of the process.

**rotork®**  
**SCHISCHEK**

**Schischek Ltd**  
Tel: 01245-256007  
[www.schischek.co.uk](http://www.schischek.co.uk)



**A UK manufacturer providing first class technical advice and safe, reliable products for process valve networking, monitoring and control**



- Position or Control Monitors for use on valves, dampers, pneumatic or hydraulic actuators
- Environmental and hazardous area protection to the latest standards
- Submersion to depths of 2,000 metres or operation at extreme temperatures
- Use on instrument loops implementing safety functions up to SIL2 or SIL3
- Connection via remote I/O or fieldbus systems

**Call: +44 (0)1895 449601**  
**Visit: [www.k-controls.co.uk](http://www.k-controls.co.uk)**  
**Email: [sales@k-controls.co.uk](mailto:sales@k-controls.co.uk)**

# Update pressurized equipment certification to the new TR CU 032/2013 with SGS

**TR CU 032/2013 “on safety of pressure equipment” came into force on February 1, 2014**

TR CU 032/2013 “on safety of pressure equipment” came into force on February 1, 2014. Last minute issues have been resolved and it is now possible for certified bodies to issue TR CU Certificates/Declarations.

## TR CU 032 Standards List

Manufacturers and certification bodies now have access to the full list of standards that apply to TR CU 032 detailing how products should be designed and how to prove their conformity. This new TR CU has two functions:


- Proof of conformity (formerly covered by GOST-R TR Russia or TR CU 010 “on safety of machines and equipment”).
- Proof for industrial safety (formerly covered by RTN-permits)

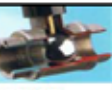
Effective since the end of March, TR 032/2013 has two lists of standards, one for manufacturers

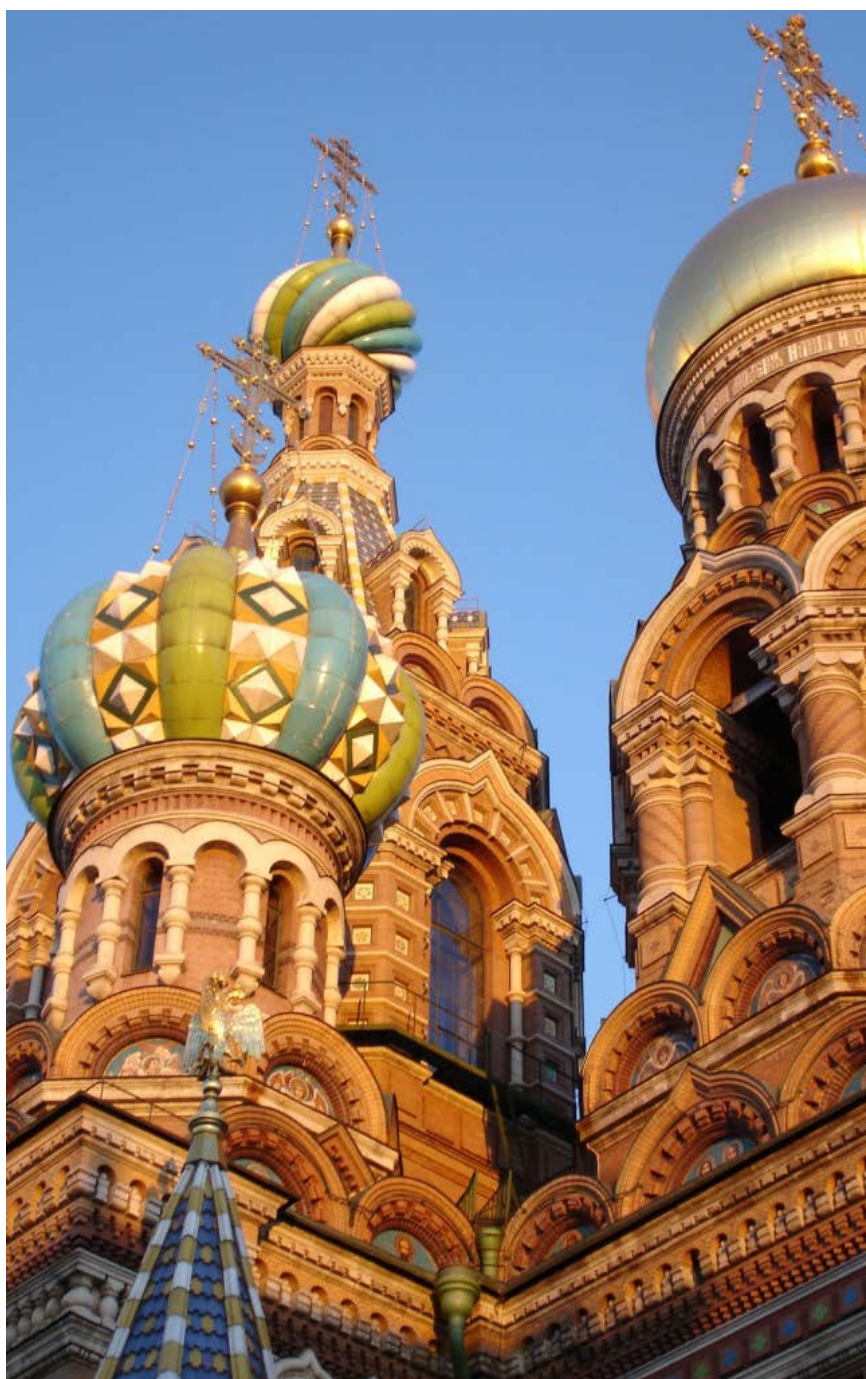
**ALDERLEY  
ENGINEERING**  
TOP QUALITY VALVE & REGULATOR COMPONENTS FROM ITALY  
+44 (1606) 301350  
Email : sales@alderleyeng.co.uk  
www.alderleyeng.co.uk

**TECNOFOR s.r.l.**  
Via Degli Artigiani, 3  
25080 - Palzone (BS)  
Italy

**STET**  
Via Unione 5 1-24060  
Castelli Calepio (BG)  
Italy

**GAPI  
FLUORIL**  
PTFE RODS & TUBES, VALVE SEATS,  
ENGINEERING & ELECTRICAL  
COMPONENTS

**FLUORIL/GAPI**  
Viale Europa, 47  
25036 - Palazzolo (BS)  
Italy



*Products being imported into Russia and the Customs Union countries must comply with a wide range of complex certification systems and national standards*



and one for CBs and test labs, approved by decision No. 22 of the Eurasian Commission. The list for manufacturers includes references to the European Norms as well as to ASME. How CB and test labs prove, in detail, the conformity of equipment designed according international standards to the new customs union rules remains an open question.

## Product categories

Pressurized equipment as vessels or pressure pipes are classified into four categories depending on the technical parameters (volume, pressure, media, diameter). The categorization determines the conformity assessment scheme, ranging from declaration with manufacturer's proofs up to certification with testing and/or inspection controls.

*'Through our global network, SGS can facilitate TR CU 032/2013 Certifications/Declarations,' said Sven Grube, International Business Development Manager, SGS. 'We are aware that in the wider marketplace accreditation of certification bodies and test labs is very slow. We can help clients to avoid bottlenecks, delays in execution and higher prices as demand rises.'*

## TR CU interpretation

Following the introduction of TR CU in other product areas, some uncertainty is anticipated surrounding how to deal with products, for example whole plants, production lines, package units and modules, that may fall under several TR CU (e.g. TR CU 010 "on safety of machines and equipment") but consist of one or more items of pressurized equipment. Does every pressure

vessel need a separate certificate of conformity or is it possible to issue one certificate for the whole plant summarizing all pressurized equipment? SGS can help client navigate this regulatory landscape and provide a solution that will be applicable both for customs clearance and for final commissioning/implementation.

## SGS GOST Certification: SGS Russian Certificates and Permits

Products being imported into Russia and the Customs Union countries must comply with a wide range of complex certification systems and national standards. Depending on the nature of the goods being shipped, one or more approvals may be necessary.

As the world's leading certification company, SGS offers unrivaled experience in Russian certification requirements. Our accredited certification body status and Rostekhnadzor license uniquely places SGS to provide the resources and expertise to help you obtain any approvals needed to access Russian and CU markets.



### SGS Industrial Services

Tel: 01469 570248

[www.uk.sgs.com/industrial](http://www.uk.sgs.com/industrial)

# World Class Independent Valve & Actuator Training



## NEW: BVAA Training Course

### Introduction to Hydraulics

**One day course, 16th October 2014**



Held at NFPC's world class practical hydraulics facilities at Worksop, Nottinghamshire.

#### On completion of this course you will:

- Know the parts that make up a typical hydraulic circuit
- Know their function and have an opportunity to use the parts to build a working circuit
- Recognise the symbols used to formulate a circuit diagram
- Know the potential dangers associated with the use of hydraulics in industry
- Know the factors that can affect performance and result in failures.

To book, contact **Tel: +44(0)1295 221 272** or **[karen@bvaa.org.uk](mailto:karen@bvaa.org.uk)**

# AUMA reaches IOW Innovation Award Finals

AUMA Actuators achieved runner-up in the 2014 Scottish Institute of Water Innovation Award finals with a variable speed actuator supplied as part of its UK product portfolio. The SIPOS 5 actuator is the first, and currently the only, electric actuator included on the Energy Technology List as part of the Government's Enhanced Capital Allowance (ECA) scheme.

The award is significant for AUMA, which is in its 50th anniversary year, as it reinforces the company's presence in Scotland and the calibre of its electric actuation technology. A number of actuator installations in the region include Scottish Water's Aviemore and Lossiemouth Water Treatment Works and Laighpark Sewerage Treatment Works.

In addition to reducing costs through energy and tax savings, the SIPOS 5 variable speed actuator innovation provides enhanced




*The SIPOS 5 variable speed actuator with ETL listing reaches the finals of the Scottish Institute of Water Innovation Awards*

control capability which can reduce plant expenditure. For example, multi-turn valves such as plug valves which provide linear flow control, can be replaced by lower cost quarter turn valves e.g. butterfly valves. This is possible because the variable speed actuator can linearise the flow characteristics of a quarter turn valve.


Savings can also be made by removing costs associated with water hammer protection such as installing surge tanks. The variable speed capability of the actuator allows the closure rate of the valve to be reduced when approaching its fully closed position. This not only reduces the risk of water hammer, but also protects the valve seat.

AUMA UK is part of the AUMA global organisation with manufacturing headquarters in Germany and representation on all continents.



Valley Spring is a member of the Springmaster® Group

**SPECIALIST PRODUCER OF MEDIUM AND LARGE DIAMETER COMPRESSION, EXPANSION AND TORSION SPRINGS.**



Pottery Lane East, Chesterfield, Derbyshire S41 9BH  
Tel: +44 (0)1246 451981 Fax: +44 (0)1246 454327  
E-mail: sales@valleyspring.com www: http://www.valleyspring.com

**auma®**  
*Solutions for a world in motion*

**Auma Actuators Ltd**  
Tel: +44 (0) 1275 871141  
[www.auma.com](http://www.auma.com)



# Have you received **VALVE<sup>user</sup>** MAGAZINE for the first time?

Why not receive Valve User the greener way – register for receipt by email.

Would you or a colleague like to sign up to receive copies of BVAA Valve User on a regular basis? Or perhaps you would like to be taken off from our mailing list? Simply complete the form below and return it to BVAA on Fax: +44 1295 268 965.

Please add me ☐ /remove me ☐ from the list

Name: .....

Job title: .....

Company: .....

Address .....

Postcode: .....

Telephone: .....

Fax: .....

Email: .....

Receive by post ☐ or by email ☐



**British Valve & Actuator Association**

# Nearly 50 years ago, BVAA published the very best **Valve & Actuator Users' Manual...**

technical reference book on  
**VALVES**  
for the  
CONTROL  
OF FLUIDS

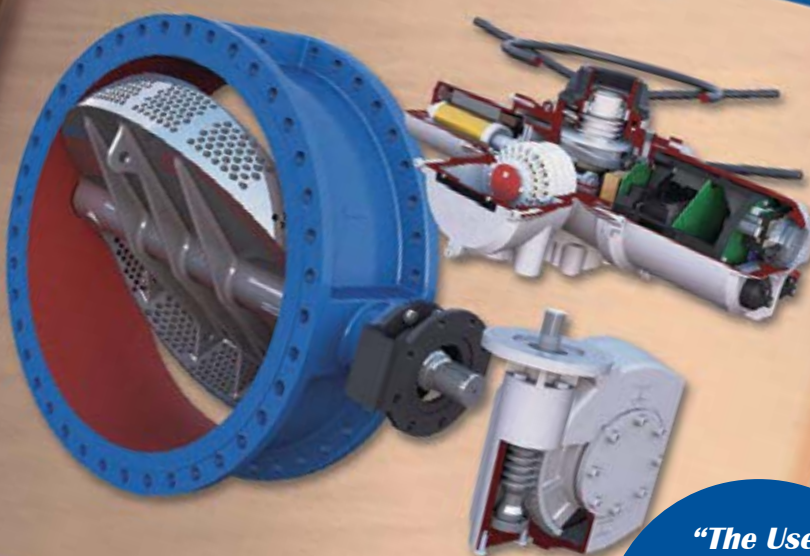
**"We are VERY  
impressed with the  
new User Manual.  
The quality  
and content is  
excellent!"**

**I.M., Smith  
Flow Control**

**VALVE  
& ACTUATOR**

**Users'  
MANUAL**

**BVAA**



**"The User  
Manual looks great,  
BVAA obviously put  
a huge amount of  
effort into it."**

**T.S., Rotork  
Controls**

## ... 50 years later, we still do!

**Contact BVAA and order the latest 6th Edition today!**

£49.50+p&p, £34.50+p&p for BVAA Members



British Valve & Actuator Association  
9 Manor Park, Banbury, Oxfordshire OX16 3TB  
Tel: 01295 221270 Fax: 01295 268965  
Email: [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk)  
[www.bvaa.org.uk/usermanual.asp](http://www.bvaa.org.uk/usermanual.asp)









**VALSTEAM**  
valsteam.com **ADCA**

**UK Distributor**

# Steam Control Valves



# Process Control Valves

**ISIS**  
**FLUID CONTROL LTD**

E-mail: [sales@isis-fluid.com](mailto:sales@isis-fluid.com) [www.isis-fluid.co.uk](http://www.isis-fluid.co.uk) Tel: 01608 645755

# Excellent valves only the looks can be improved



visit us at  
**ONS**  
**25 - 28 August**  
Stavanger  
stand J996

*axial choke valve by Mokveld*  
*girl with pearl earring by Johannes Vermeer*

World class axial choke valves. Streamlined flow path shaped  
for erosive applications. Proven in use.

other masterpieces? [www.mokveld.com](http://www.mokveld.com)



 **mokveld**