

# valveuser

## Magazine



## WSG - The New Choice

Flowstar  
Stock API  
Safety Valves



Page: 24

Nabic - Safety  
& Control  
Valves



Page: 64

Heap &  
Partners  
Record  
breaking  
order

Page: 8



LK Valves &  
Controls join  
BVAA

Page: 18



Mounting Kit



SS Spring Return Handle



Spring Return Handle



Pedestal Extension



Locking Device



Manual Extension



Chain Wheel



Switch Box



Spool Kit



SS 316 Quarter-turn Gearbox



Quarter-turn Gearbox



Multi-turn Gearbox



Declutch Gearbox



SS Declutch Gearbox



**QK**  
quickkits



VISIT US AT VALVE WORLD 2016  
HALL 4, STAND E14



Quickkits Limited

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





# DNV Approved Products

In Partnership With Haitima



Stainless Steel Ball Valves fitted  
with a Pneumatic Actuator



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



Stainless Steel Full Bore Valves (Screwed or Weld End)



**UKAD& BIOGAS** | 6-7 JULY 2016  
BIRMINGHAM NEC

Come and see us at stand A501

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

Tel: 01902 637263

[sales@hydravalve.co.uk](mailto:sales@hydravalve.co.uk)



@hydravalve



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  
1A Banbury Office Village  
Noral Way, Banbury OX16 2SB (UK)  
Tel: (0)1295 221 270  
Fax: (0)1295 258 893  
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.

**Cover:** WSG - The New Choice



## Comment

by BVAA Director,  
**Rob Bartlett**

# ‘When Oil Comes Back...’

This is the frequently quoted prelude I hear to yet another theory about how things will be in the valve industry once *‘things return to normal’* in the oil and gas sector.

I’m beginning to wonder what ‘normal’ is. Or was. Or indeed might be.

Some who have been in the industry far longer than me are apt to quote the number of times they’ve seen significant fluctuations in the market, the intimation being that basically you have to hunker down and wait for the storm to pass. As a recent guest to a BVAA exhibition stand recently said, *‘Rob this isn’t a storm, this is a hurricane.’* So what to do?

Well hunkering down isn’t really a great survival strategy. Not long ago I was planning a trip to Pompeii and hunkering down didn’t do the residents there much good when Vesuvius eventually let go. They became fossils. And quite dead. New people settled of course when the area eventually became re-habitable, but the previous occupants of that space were deeply buried and largely forgotten.

Certainly the last decade has been good for the valve industry and particularly so in the oil and gas space. It’s not been without its challenges lately though. But it does appear to be moving into a new phase.

There is definitely an eye now towards significant cost-reduction and efficiency, and I’m pleased to report BVAA is doing its bit in this initiative – I hope to report more fully on that in a future issue.

There is also a sea-change (no pun intended) in the way in which some offshore production will take place in future. Driving to yet greater depths, with its associated issues, and in more remote places at a time of improving designs, is leading to more subsea production systems.

Niche markets are where quality British valve and actuator companies excel of course, but such companies are able to



Body shapes of victims after the Vesuvius eruptions, Pompeii, Italy. Photo taken on: April 28th, 2013. ID 31329367  
©Enrice Della Pietra | Dreamstime.com

use that superior knowledge and design capability in other sectors too.

And there are many other spaces. A lower oil price leads to cheaper energy and feedstocks making other areas of industry attractive again. For example, a surge in USA industry investment has been reported to be linked to shale gas – a global market reportedly growing to \$200b+ by 2022. The American Chemistry Council reported investment in their industry linked to shale recently topped \$164b. Still oil and gas of course, but different, and a potential catalyst to improved valve markets elsewhere.

Indeed later in this issue there is an excellent article on how two BVAA members received record orders from another alternative sector. I’m pleased to say from a lead passed on by the BVAA to its members!

So what’s the answer? If I knew that, a lucrative career in lecture tours of business schools beckons! But I certainly think it is wise to substitute *‘If’* for *‘When’* in this article’s title, and have alternative strategies in place.



# World Class Independent Valve & Actuator Training

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

**Introduction to Valves** - Monday 4th July  
**Members:** £260.00 | **Non Members:** £390.00

**Introduction to Actuators** - Tuesday 5th July  
**Members:** £260.00 | **Non Members:** £390.00

**Control Valves** - Wednesday 6th July  
**Members:** £260.00 | **Non Members:** £390.00

**Safety Valves** - Thursday 7th July  
**Members:** £260.00 | **Non Members:** £390.00

**PED / ATEX Directives** - Monday 11th July  
**Members:** £260.00 | **Non Members:** £390.00

**Safety Integrity Levels (SILs)** - Tuesday 12th July  
**Members:** £260.00 | **Non Members:** £390.00

**Valves – Advanced Level (2 day course)**  
Monday 18th July and Tuesday 19th July  
**Members:** £260.00 | **Non Members:** £390.00

All prices exclude VAT

## BOOK NOW!

Online: [www.bvaa.org.uk/training\\_courses.asp](http://www.bvaa.org.uk/training_courses.asp)

Email: [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk)

Tel: **01295 221270**

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  
1A Banbury Office Village  
Noral Way  
Banbury  
OX16 2SB

Tel: +44 (0)1295 221 270  
Fax: +44 (0)1295 258 893  
Email: [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk)  
Web: [www.bvaa.org.uk](http://www.bvaa.org.uk)

## BOOKING FORM

### BVAA Training Courses: Summer 2016

Please complete the form and return to Barbra Homer.

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** - Monday 4th July - **Members:** £260.00 | **Non Members:** £390.00

**Introduction to Actuators** - Tuesday 5th July - **Members:** £260.00 | **Non Members:** £390.00

**Control Valves** - Wednesday 6th July - **Members:** £260.00 | **Non Members:** £390.00

**Safety Valves** - Thursday 7th July - **Members:** £260.00 | **Non Members:** £390.00

**PED / ATEX Directives** - Monday 11th July - **Members:** £260.00 | **Non Members:** £390.00

**Safety Integrity Levels (SILs)** - Tuesday 12th July - **Members:** £260.00 | **Non Members:** £390.00

**Valves – Advanced Level (2 day course)** - Monday 18th July and Tuesday 19th July

**Members:** £260.00 | **Non Members:** £390.00

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:

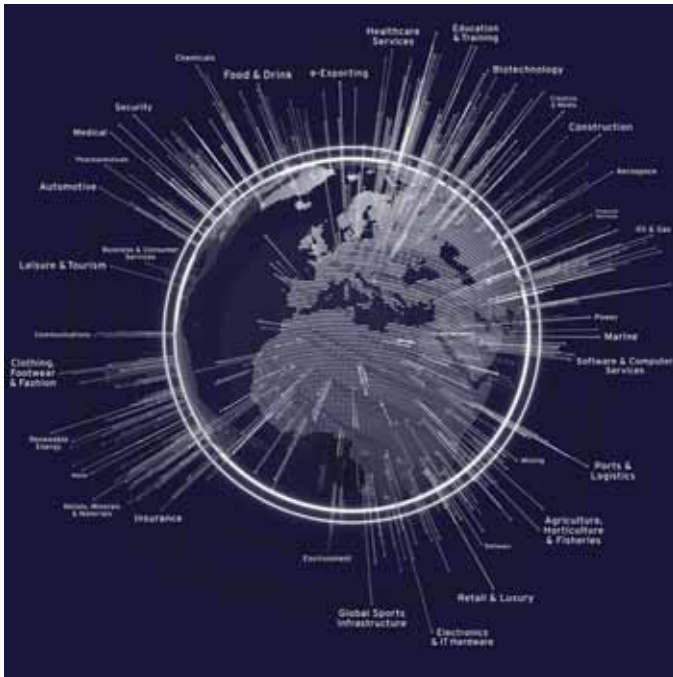
3 Digit Security Code:

Card Type:

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



# Realising global opportunities



Every day, in countries around the world, there are business opportunities for **BVAA member companies**.

**T**he government is working with commercial partners to bring these opportunities to you, and to clearly signpost the support available to help you realise them. Visit [www.exportingisgreat.gov.uk](http://www.exportingisgreat.gov.uk) to find a business opportunity.

## Finance and insurance: one key area of support

Export finance and insurance can increase your capacity for growth. It can mean higher levels of finance compared to conventional lending. You can give your overseas buyers time to pay, while protecting your cash flow.

There are many ways to arrange this. The right one for you will depend on individual circumstances.

But if you expect any difficulties in obtaining the support you need, then consider contacting UK Export Finance, the UK's export credit agency and a government department.

Its mission is to ensure no viable export fails for want of finance or insurance from the private sector. It helps firms of all sizes access the finance and insurance needed to realise their export ambitions through:

- Free and independent guidance on sources of export finance
- Release of working capital with bank guarantees for contract bond or credit facilities

- Security of payment with export credit insurance
- Competitive finance for overseas buyers with buyer credit guarantees or direct loans

## Recent examples of support

**1** UK company Sensonics needed their bank to put up two performance bonds in order to win a major contract in the UAE to supply vibration monitoring equipment. Their bank asked them to set aside cash against the risk of these bonds being called. This would have left Sensonics without the working capital to perform the contract. UK Export Finance stepped in with a risk-sharing guarantee that allowed the bank to free up the working capital.

**2** When family-run business Flexal Springs found it hard to get credit insurance for an export of precision springs to India, UK Export Finance provided the cover it needed with an Export Insurance Policy. This provided them with greater confidence to grow their overseas business.

To find out more visit the UK Export Finance website.



**Tel:** +44 (0)20 7271 8001

**Web:** [www.gov.uk/uk-export-finance](http://www.gov.uk/uk-export-finance)

# Record Breaking Order Thanks to BVAA Membership



The Princess Royal unveils plaque

**Heap & Partners** have secured the biggest order in their 150-year history thanks to their BVAA membership. Back in 2013 Heap & Partners spotted a potential enquiry published to all members in the BVAA's leads service...

**T**hey proceeded to quote exactly what the customer had requested, and of the companies that were bidding, Heap & Partners were the most cost effective. However, it was still far more than the Customer had originally anticipated. Therefore, Heap & Partners started working with the Customer to better understand the application and their requirements.

Utilising Heaps extensive valve knowledge and experience, they then started working with fellow BVAA member Hobbs Valve to provide a solution that met all their requirements at a quarter of the original cost.

### Three years of work

Having worked on the job for almost three years refining the package to the customers' extensive testing (including Seismic testing) and quality requirements an order has now been received. This order will not only benefit Heaps, but also BVAA Members Hobbs Valve and PDL. Effectively paying for their membership of the BVAA for years to come.

Heap & Partners Managing Director David Millar said "Not only did we receive this enquiry from the BVAA service but we also managed to help provide the ideal solution for the customer thanks to the close relationships we have built up with our fellow members. Networking with the BVAA membership is invaluable". This was also the highest value single purchase order received by Hobbs Valve in their ten-year history.

### A record breaking streak

For Heap & Partners, landing at the end of March, this record breaking order hasn't just been an isolated incident. It actually





**The Princess Royal pictured here with MD David Millar meets with the Heap & Partners apprentices.**

follows on from a record November and December order input, the second best January on record, a record February and all time record March. This winning streak has massively boosted the company's order book, setting the company on track for an excellent 2016. A nice way to celebrate their 150th birthday!

### Royal approval for 150th

This month the Princess Royal visited Heap & Partners Ltd in Birkenhead to help them celebrate their 150th year in business. The Princess spent two hours talking to staff and hearing about the company and its long history.

Heap & Partners Ltd was founded in 1866 in Liverpool as an engineering supply company. Today the company still carry out the same function, but are now very focused upon fluid handling equipment – valves, controls, and instrumentation. Not only do they distribute valves but today they also manufacture high tech bespoke valves for the Nuclear, Oil & Gas and Subsea markets. Some of the most arduous applications on this planet.

**Not only did we receive this enquiry from the BVAA service but we also managed to help provide the ideal solution for the customer thanks to the close relationships we have built up with our fellow members.**

The Princess flew into Birkenhead by helicopter, landing in the historic Birkenhead Park, the very park that New York based its own Central Park on. The Park itself was celebrating its own anniversary as it had been established 169 years ago to the day. Before she moved on to Heap & Partners.

The Princess was accompanied by the Lord Lieutenant of Merseyside, The High Sheriff of Merseyside, the Wirral Mayor and the Leader of Wirral Council. The Party spent some time talking to the eight Apprentices the company is currently training before the Princess unveiled a Plaque to mark the occasion. Andrew Will, Sales Director of Heap & Partners said *"It was amazing to watch as the Princess engaged with every single member of staff, taking the time to talk to each one."*

### Now for more celebrations

Heap & Partners are now looking forward to continuing their year of celebrations and intend to mark the occasion with a number of events. The first graduation from their new apprentice program, a long service award party for Alan Close who has worked for the company for 50 years, a large black tie party at Liverpool Town Hall and numerous other smaller scale events.



**Heap &  
Partners Ltd**

**Tel:** +44 (0)151 488 7222

**Email:** [info@heaps.co.uk](mailto:info@heaps.co.uk)

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

# View from the Other Side



Chris Warnett CEng MIMechE, is president of CPLloyd Consulting Inc. ([www.cplloydconsulting.com](http://www.cplloydconsulting.com)), providing marketing and applications expertise for the valve automation industry and its customers. He has over 38 years of engineering, sales and marketing experience in valve automation. Chris is the author of the Amazon.com best-selling book "Valve actuators". The book can be found online at [www.createspace.com/5327931](http://www.createspace.com/5327931)

## Potable Water Treatment

**H**istorically, one of the first infrastructure projects of any city, town or village has been a potable water supply. That means many new plants are being built in areas of expanding population. Also, in developed areas of the world, many existing water treatment plants are old and need modernizing. Valve actuators play an important role in maintaining the quality of our water supply by contributing to the efficient operation of potable water filtration plants.

The process in a water plant takes raw water from rivers, lakes or other sources. A chemical coagulant is added to the water such as aluminium sulphate. The coagulant, when mixed into the water, causes the small solid particles to stick together in a process called flocculation. The water passes into large clarifiers that allow the solids in the water to settle to the base of the tank where they are collected for disposal.

The water then passes through an ozone or other type of disinfection process on its way to the filtration process.

At the filter bed, the flow of clarified water is introduced into the top of the filter along troughs. The water runs down through the filter media with large particles trapped first and finer particles adhering to the lower filter media. At the bottom of the filter, the bottom drain pipework collects the filtered water; it is passed on to the secondary disinfection stage, after which the water is stored ready for distribution.

The process is continuous, with the exception of the filtration. These filters have to be cleaned regularly by reversing the flow to "backwash" the trapped particles out of the filter media to waste. This means the filter has to be taken out of the process (taken offline) while this is done. Water treatment plants have several filter beds so that while one is backwashed, the others can continue the process flow.

Automated valves are used in many locations around the plant to control the flow of water through the various processes using sluice gates, butterfly valves and gate valves with electric or fluid-powered



**Figure 13.2.a. Potable water treatment plant. Image by permission of Rotork.**

actuators. Usually the fluid-powered actuators are pneumatically powered, although decades ago many hydraulically powered actuators used the processed water under pressure.

A key automated valve is the rate-of-flow control valve. This valve is usually a butterfly valve and is modulated to ensure the rate of flow through the filter keeps the water level above the filter media but below the filter tank top. Sensors near the top of the filter sense high and low levels. The flow of water through the filter changes as solids build up and reduce the flow throughput. Because this would increase the filter water level, the rate-of-flow controller compensates by opening the rate-of-flow butterfly valve to increase effluent flow.



Figure 13.2.d Automated valves for backwash control. Image courtesy of AUMA.

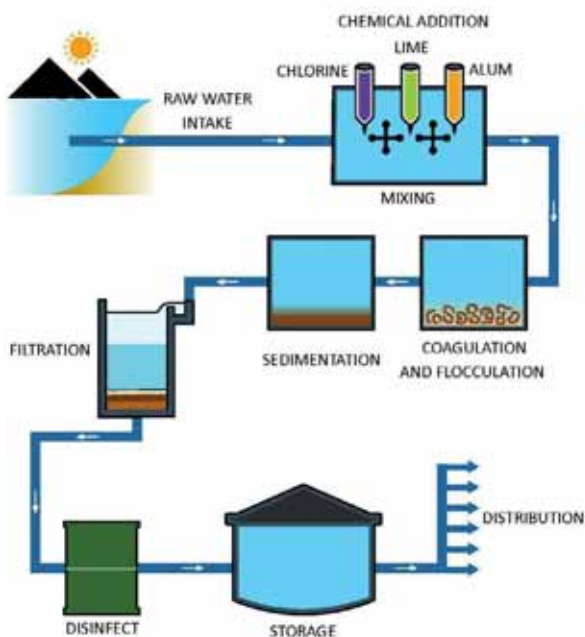


Figure 13.2.c Filter and backwash in a potable water plant.

The most complex process is the backwash sequence needed to periodically remove solids from the filter. The backwash procedure drops the water level to just above the top of the media. The filter media is then agitated to loosen solids. This is done by pumping air up through the filter to loosen the filter media as well as the

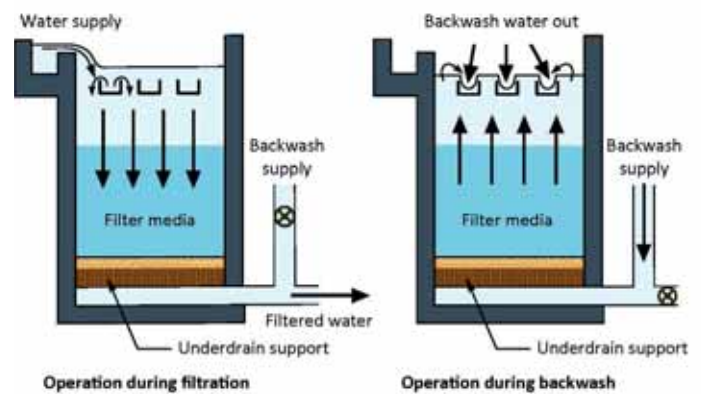


Figure 13.2.c Filter and backwash in a potable water plant.

filtered solids, a process known as air wash or air scour. The top of the filter media may also be agitated by a "surface wash" system. Clean backwash water is then pumped up through the bottom of the filter by the backwash pumps. The solids are washed up and into the troughs at the top of the filter and out as waste. The inlet and outlet valves to the filter have to be sequenced carefully to ensure the correct flow; a sudden inrush of water could damage the filter by displacing the strata of the media. This sequence of events is usually done automatically by the process controller. Once the outflowing water reaches an acceptable level of clarity, measured by the turbidity sensor, the backwash is stopped and the valves are actuated back to their normal filtered position.



# Enhanced Training at the BVAA!



**The BVAA Training Suite** has just gone through a major upgrade, to further enhance our valve training experience.

**M**arch 2106 saw the introduction of a new range of training equipment at the 'Peter Churm Technical Centre,' (PCTC) an important part of the BVAA's facility in Banbury, UK. We asked BVAA's Director Rob Bartlett to explain what's been going on.

*'When BVAA moved to our new premises, it sadly coincided with the passing of our much-loved Technical Consultant, Peter Churm.'*



Peter Churm (left) and Rob Bartlett



Auma's Paul Hopkins presenting BVAA with two new training actuators

*'Naming the new Technical Centre after Peter was to honour his memory, but also in part to give us the drive to make sure the centre and its contents were worthy of his name,' commented Rob.*

Recent additions to the centre include four new moveable training rigs, which enable BVAA's wide range of valve and actuator products to be mounted permanently on display.

*'Each one of the rigs is themed towards one of the BVAA courses,' enthused Rob. 'For example there's one for Safety Valves, another is decked out only with Control Valves, another just Actuators. It also facilitates a more hands-on experience,' he added. 'The PCTC now encourages a very tactile experience, and students can get to grips with products in such a way that wasn't possible before. Many of the units are sectioned and this combination means they can interact and study the assemblies and their component parts, operate the valves and see just how they work and differ from other types. All the products we couldn't fit onto the units are now conveniently placed in the integral storage, so all the equipment for one topic is now all in each place.'*



Some of the new BVAA training rigs & Rotork's Chris Waring installing our latest training actuators

*They really are fantastic and not something you would see in the workplace*

It doesn't stop there. 'We've had a swathe of new products from members,' continued Rob. 'There are some stunning Auma actuators – one is an electrical unit that has sectioned areas to safely show the inner workings during operation, and a manually-operated unit that has a cutaway, so students can see the way in which the gears work. They really are fantastic and not something readily available in the workplace,' commented Rob.

There is also a great selection of new Rotork actuators on a specially created frame, complete with "Barber's Poles" underneath to show how the actuators control the ¼-turn and multi-turn valves that would ordinarily be attached.'

He added 'Another addition is the Gemü unit. Several sectioned diaphragm valves are on a display case of their own, specially created just for the BVAA. There's a good range of sizes and materials to show the diversity of applications.'

So is the centre complete now? 'Far from it,' says Rob. 'We're really only just getting started. We have plans for a fully operational pneumatics bench, complete with compressor and working exhibits. We also still need smaller, light-weight units to hand around the class during the discussions. There's also plenty of scope for different materials, and some of the demo pieces feature traditional technology – we'd really like some cutting-edge examples. All donations gratefully received!' added Rob.

So would Peter be proud of the Centre we asked? 'Well I don't think the word "pride" was in Peter's vocabulary,' mused Rob. 'He really enjoyed bringing on younger engineers, but I think he would have been a bit abashed at all the fuss. He'd be pleased with the progress though I think, and I'd probably get a "well done lad, keep it up."'



The Gemü diaphragm valve unit



# BVAA Activities

Spring is traditionally a time for the **BVAA Working Groups** to meet again and 2016 is no exception.

## Valve WG

The Valve Working Group met on 10th March, at the kind invitation of KT Hydraulics in Elland. As well as the usual agenda, TEG (Technical Expert Group) and BSI Reports, the WG received several presentations including a 'safety moment' from BP, a proposed Valve Integrity Joint Industry Project from DNV, and updates on various Directives relating to the industry. The day was concluded with a tour of the impressive KT Hydraulics facility.

## Actuator WG

BVAA's Actuator WG, which regularly meets in conjunction with its BSI counterpart, met at BVAA HQ on 5th April. Although other projects are very much on the table, the group is currently focused on the UK's input into the revision of the ISO 5210/5211 attachments standards. The group is always on the lookout for new actuator



Toby Miles of DNV outlining the Valve Integrity JIP proposal

expertise, contact [rob@bvaa.org.uk](mailto:rob@bvaa.org.uk) if you would like to participate.

## Other Group Meetings

Further recent meetings include the Butterfly TEG, whose work on reviewing EN593 has now been completed, the Fugitive Emissions TEG (via teleconference, a first for BVAA TEGs) and the recently re-tasked Business Development Group under new Chair Tim Guest (Zoedale). The latter



BVAA/BSI Actuator WG meeting at BVAA

has a strong programme of new activities planned already, which it is anticipated will lead to several new services and initiatives.

As we go to press BVAA are in the middle of a very busy two-week cluster of training courses, delivered at the newly re-kitted Peter Churm Technical Centre at our Banbury HQ. The usual pattern of courses is being delivered, including introductions to Valves, Actuators, Control & Safety Valves, with additional courses covering 'Advanced Valves,' PED and ATEX.

## BVAA Conference

Also in preparation are the final aspects of the BVAA Conference at Celtic Manor (17/18 May). A varied programme this year will feature presentations on 'The Internet of Things,' 'How to make Money from Twitter,' 'Zero Defect Castings,' updates on new BVAA publications and services, and 'Doing Business in Iran.' There's also the small matter of the fiercely contested BVAA Golf Day, a superb networking event!



Geoff Newman delivering the Safety Valves course



# Auma's Generous Donation



CLIC Sargent's James McDonald (left) receiving the donation from Auma UK's MD Paul Hopkins with BVAA's Rob Bartlett

As part of the recent upgrading of **BVAA's training facility**, and in connection with their supply of specially adapted training actuators, Auma UK kindly made a significant donation to charity as part of the arrangements.

**C** LIC Sargent is a charity close to the hearts of BVAA and on 8th April their fundraising manager James MacDonald, and BVAA's Rob Bartlett, attended the Auma facility in Clevedon for a handover ceremony.

Rob commented 'It was extremely generous of Auma to make the proposal in the first place, and I was delighted when the nomination of CLIC Sargent was accepted. It was only when Paul visited to help deliver the units that we discovered both of us had witnessed first-hand the good work done by the charity in assisting families suffering with childhood cancers.'

Rob added 'It's a tremendous "win win" situation all round. The charity has benefitted thanks to Auma's generosity, and the students at BVAA will now be able to get hands on with the very latest actuator technology.'

Paul Hopkins added, 'We were delighted to assist BVAA in its goal of improving actuator understanding, and the donation to CLIC Sargent was an added bonus.'

You can find out more about the work of CLIC Sargent at [www.clicsargent.org.uk](http://www.clicsargent.org.uk)



**Tel:** +44 (0)1275 871 141  
**Email:** [mail@auma.co.uk](mailto:mail@auma.co.uk)  
**Web:** [www.auma.com](http://www.auma.com)

# BVAA's Mad Hatters

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

### Competition

Here's keen cyclist Mike Day using his BVAA hat for some welcome shade, whilst others take advantage of a more opportune solution; but what is the delta-winged jet? The first correct answer to [isobel@bvaa.org.uk](mailto:isobel@bvaa.org.uk) wins a £50 charitable donation to the charity of your choice.



### Competition WINNER!

In Valve User Magazine Issue 36 we gave you this picture of Bob Peters of Zoedale and asked you to guess where he was in the world.

Gowtham Yanala, of Crane Building Services & Utilities, correctly guessed that Bob was stood in front of Hanuman Temple in India – well done Gowtham!

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



### Charity Event? Hat up!

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

## Charity Hatters

### Reading Half Marathon

Susan Sanders, Russell Adamson, Colin Brown and Matt Harris of HSP Valves all competed in the half marathon together with Isobel Davies (not pictured) and they all completed the race – well done!

Paul Poxon and Rob Lloyd of HSP Valves all completed the 3k sprint race – well done too!

Both teams raised money in support of MIND and Alzheimer's Society, a donation has been made to these charities from the BVAA.



# BVAA New Members

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



John Radford, Managing Director and Adrian Sorsby, Field Sales Manager of Balluff Ltd with a BVAA plaque.



Directors; Colin Evans, Alan Forrester and Alan Wareing of LK Valves & Controls Ltd with their BVAA plaque.

**BALLUFF**  
sensors worldwide



**LK VALVES**  
AND CONTROLS LIMITED



Alan Hall, Director and Steve Ridgway, Partner of PrimoTek Associates with BVAA plaque.



Steve Orton, MD of Gemü Valves Ltd



Robert Jones, Area & Business Development Manager of Latty International Ltd with the BVAA plaque.

**PrimoTek** Associates

**GEMÜ®**





# LK Valves & Controls Joins The BVAA

**LK Valves & Controls Ltd**, the Liverpool based stockist and distributor, has joined the British Valve and Actuator Association.

**T**he company's main focus is on the stocking and distribution of a wide range of valves, actuators and ancillary pipeline equipment for both the industrial and marine markets. Formed in 2005, from the onset the Directors took the decision to concentrate on becoming a high-end quality supplier. The company's core product group is developed and manufactured by LK Valves AB Sweden, and by entering into formal agreements with other European supply partners, it has built a diverse product portfolio.

Current agreements include; LK Valves, Wouter Witzel, El-O-Matic, Damcos, Orbinox, Winel, IMI Truflo Marine, W&O Supply.

Alan Forrester, LKV&C Managing Director said "In recent years, our company has seen exceptional growth. This boost has not



**Directors; Colin Evans, Alan Forrester and Alan Wareing with their BVAA plaque.**

*arrived by chance. We have signed a number of formal agreements with market leading European valve and actuator manufacturers and today we have the ability to supply full project sets of valves including automated systems."*

Many of the marine products stocked in Liverpool have Classification Society Type Approvals and the company has a hydraulic test facility allowing it to carry out individual pressure testing of valves, offering on-site testing witnessed by 3rd party inspectors on behalf of its customers. In the last decade of trading the company has been awarded many prestigious projects including a £1.5m UK contract and a £1m export contract.

Within the marine sector the company has recognised the need to service the growing number of ships built in the Far East now operating in and around UK waters and has invested £100k in a full range of Japanese Industrial Standard (JIS) marine valves. This range is now held in the company's warehouse in Liverpool for immediate dispatch for urgent ship repair and in-service fleet requirements.

The company's purpose built Liverpool premises house both industrial and marine sales departments, warehousing, logistics and accounts, all of which are staffed by highly professional, reliable, dedicated and very experienced staff with a "can do" attitude, always making every effort to ensure they provide the best possible service to every customer. Its modern warehouse in Liverpool has in excess of £450K stock inventory, with access to back up stock held by its principal suppliers at their mainland European facilities.



**Sales team; Dave Halliwell, Reece Wyatt, Colin Evans, Alan Wareing, Phil Crombleholme & Wayne Oldham outside LK Valves & Controls Liverpool premises.**



**LK Valves & Controls warehouse in Liverpool has in excess of £450k stock inventory for immediate same day dispatch**



**Tel:** +44 (0)151 548 3300

**Email:** [sales@lkvalvesandcontrols.co.uk](mailto:sales@lkvalvesandcontrols.co.uk)

**Web:** [www.lkvalvesandcontrols.co.uk](http://www.lkvalvesandcontrols.co.uk)

# Ian Sully, former Managing Director, AUMA Actuators Ltd

It is with deep regret that the AUMA Group announces the death of Ian Sully, a former Managing Director of its UK subsidiary, AUMA Actuators Ltd.

Ian passed away on 15th April 2016. He was a devoted husband to his wife Lindsey and loving father of two sons Kyle and Callum. He was passionate about his work for AUMA: he joined the company in 1985 and, after a short break from the organisation, he returned as a Technical Sales Representative. Ian was promoted to Sales Manager of AUMA Actuators Ltd in 1992, and subsequently to MD in 1996. From 2011, he continued his support for AUMA in a technical and sales advisory capacity.

Everyone who knew Ian was impressed by his knowledge, expertise, commitment, energy, passion and wicked sense of humour. He was extremely driven, and his achievements extended beyond growing AUMA in the UK, where his support to staff and customers was second to none.

He achieved many sporting accolades including Iron Man events, where his infectious enthusiasm led to many colleagues being persuaded to participate and large sums of money being raised for charity.

Ian will be sadly missed by his family, colleagues and customers.



## BVAA's Technical Hot Spot



## ATEX DIRECTIVE 2014/34/EU

### What is it?:

**This Directive applies to the following products:**

- (a) equipment and protective systems intended for use in potentially explosive atmospheres;
- (b) safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but required for or contributing to the safe functioning of equipment and protective systems with respect to the risks of explosion;
- (c) components intended to be incorporated into equipment and protective systems referred to in point (a).

### Why is it important?:

ATEX items placed on the market from today must be accompanied by a Declaration of Conformity to the new Directive 2014/34/EU.

Formal guidance on the transition is given in the following EU document: **EU guidance on ATEX transition to 2014/34/EU**

### This states:

*"... the main changes in the new Directive 2014/34/EU with respect to the previous Directive 94/9/EC are quite limited, and do not concern the most substantial characteristics of the act that remain the same: scope, essential health and safety requirements, categorization and conformity assessment procedures."*

### The most significant changes are:

- Reference number
- Definitions are updated
- Economic operators (manufacturers, authorised representatives, importers, distributors) and their obligations are specified.
- Notified bodies: more detailed requirements and procedures outlined

Transition arrangements state that existing certificates referring to 94/9/EC remain valid. There is no time limit to this, however, any changes to certificates after 20 April 2016 will need a new certificate. More detailed guidance is given in the document.

### As a minimum, ensure that your Declaration of Conformity:

- refers to 2014/34/EU
- has the statement *"This declaration of conformity is issued under the sole responsibility of the manufacturer."*

Draft legislation in the UK has been discussed and should have been released before today, but is as yet not available.

### Supersedes:

ATEX Directive 94/9/EC.

**BVAA ATEX Guidelines will be updated when the new UK legislation has been released. Please contact the BVAA if you require any clarification or assistance.**

# WSG - The Three Bests



**That's the philosophy** of the newest player in the valve repair and refurbishment market.

*"Employ the best people, have the best equipment in the industry, and provide the best possible service to our customers," explained WSG Managing Director Gareth Turner.*

Speaking from the company's hugely impressive and brand new 35,000 sq ft. purpose built facility in Normanton, West Yorkshire, Gareth continued, "We're extremely passionate about this business. As part of the well established Well Services Group (WSG) we already have a great reputation in the oil and gas industry for providing nitrogen services to refineries, gas terminals etc. We also have an extremely successful joint integrity business, covering flange management, Bolt torque and tensioning as well as on site machining. As we were already removing and reinstalling valves as part of our customers' plant outages, moving into the valve repair and refurbishment space was the next logical step for us, to give our customers a fully integrated solution."

*"There are tremendous efficiencies in having one supplier handle all these aspects of an outage," explains Gareth. "The head count on-site drops considerably, as we have multi-skilled staff able to handle all of the different disciplines. There's also the advantage*

*of having a single point of contact, as we're managing the whole process. It also means we can adjust and control the return of product to site to suit the customer, and not be beholden to the vagaries of a third party valve repairer's priorities or indeed pressure from their other customers. Then there's the inherent cost saving of course."*

*"In addition, we also have some of the best testing facilities imaginable, so we can be sure any product returned is fully tested, certified and ready for installation."*

## **The Best People**

So what about the 'people' claim? "We were clear from get-go that having committed to this sector, we would only employ the very best personnel for the new valve repair strand," said Gareth. "We have put together a team with vast industry experience – some really well-known names in the industry, with impeccable CVs, qualifications and crucially, the many years' of experience to go with it."

He continued, "Our Valve Business Manager Neil Jackson is leading a team of true industry experts, many of whom would be known personally to the readers of Valve User magazine. A huge proportion of our custom is repeat-business, and our customers are true believers in our business, so it is incumbent on us to give them back the valve knowledge and experience they can believe in too."

*"Some of our staff have Chartered Engineer status, and we're already finding we are able to offer consultancy on a range of*





Gareth Turner, MD

related topics – it really is staggering what we are able to offer,” added Gareth. “We also have in-house FEA and CFD capabilities, and CAD/CAM manufacturing.”

### The Best Equipment

Step inside the vast WSG workshops and the level of investment is immediately apparent. “We adopted a philosophy that only the best would do,” explains Neil Jackson. “With the exception of our hard to come by but fully refurbished 48 inch Webster Bennett, everything is brand new. This includes a 15-ton overhead crane, three CNC ball-grinding machines, Haas CNC milling and Turning equipment together with a suite of traditional manually operated machinery.”



Some of the WSG test facilities

### The Best Service

“In addition, we have two hydrostatic test cells, and a fully submerged gas testing facility all up to 20,000psi capacity, designed to the very highest safety standards whilst also equipped with data logging and HD camera systems. We have the capacity in house to design, manufacture and build these facilities, so that’s exactly what we did! We also have a fully portable PSV testing facility, a paint plant, and shot-blasting on site. Accuracy is fully maintained by means of a Faro measuring system. For on-site work we have a complete, self-contained workshop, with its own power and utilities. We drive in and within minutes we are fully operational without needing anything from the client.”



Redundant valves will give WSG apprentices a chance to test their skills

Neil continued, “Transparency for our customers is paramount, so we have an electronic tracking system. Our technicians record every key stage of progress on tablets at their workstations, and customers can log-in and, in real time, track the progress of their valves. They can even re-schedule work to suit their priorities. Customers can ‘witness’ valve testing from the comfort of their own office, with all cameras and data available to them on screen, while talking to the test technician at the same time.”

### An Eye to the Future

“We’re committed to valve repair and refurbishment for the long term,” explained Gareth. “Together with ‘Leeds Enterprise Partnership and Wakefield District Council’ we’ve invested into an Apprenticeship programme that will see us take on two new apprentices this year and next, rising to three every year thereafter.”

“And even that we’ll tackle with an eye to the customer,” added Neil. “We’ve acquired a large stock of redundant valves, and we’ll use these for tests and projects work, so our apprentices will be able to get real-life experiences while never risking our customers’ valuable assets.”



Tel: +44 (0)845 604 0281

Web: [www.pns-services.com](http://www.pns-services.com)

# Assentech Limited: Wins Outstanding Performance Award

**Assentech Limited** are a UK based leading supplier of equipment, services and technical expertise in the fields of Tank Storage and Process Safety.

**A**ssentech have successfully been recognised for, and been presented with an award for outstanding performance. The accolade has come from Eastman Chemical Company in recognition of Assentech's supply of Groth tank protection devices for the TH3 project, which were delivered to a very exacting schedule.

Assentech Limited's managing direction, Ewart Cox, said: "We are very pleased to receive this award, following delivery of tank protection equipment 2014. Recognition of this work and receipt of this award late in 2015 is testament to the efforts of the whole Assentech team."



The awarded Eastman Chemical Company accolade.



James Taylor, Phil Sambells, Ewart Cox of Assentech with Robert Dodgson and Rhys Price of Solutia

"This was a fast paced project with tight deadlines. We ensured that we collaborated closely with Eastman to fully understand their requirements, and at the same time used our technical experience and excellent support from the factory to deliver quality products and meet the performance criteria. This was the first time Eastman Chemical Company and Assentech Limited had worked together and the accelerated timescales ensured it was a particularly demanding job. We were able to quickly establish a solid working relationship due to the open and collaborative nature of both the Eastman and Assentech teams, which supports our reputation for providing a high level of customer service and satisfaction."

Eastman Chemical Company TH3 project procurement lead, Robert Dodgson, said: "We were extremely pleased with the level of service and professionalism demonstrated by Assentech, right from our initial enquiry, through to delivery and post installation. As a recipient of only two of these awards made by Eastman Chemical Company in the UK, based on performance in 2014, Assentech are rightly proud of their achievements."

For more information on Assentech Limited and their products visit their website or contact one of the team.



Phil Sambells, James Taylor and Ewart Cox of Assentech



**Tel:** +44 (0)1726 844 707  
**Email:** [info@assentech.co.uk](mailto:info@assentech.co.uk)  
**Web:** [www.assentech.co.uk](http://www.assentech.co.uk)



# hydravalve

(UK)LIMITED



Email: [haitima@hydravalve.co.uk](mailto:haitima@hydravalve.co.uk)

Website: [haitima.hydravalve.com](http://haitima.hydravalve.com)

In partnership with Haitima Valve and Actuator

## 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



# Flowstar Stock API Safety Valves



**Flowstar Ltd**, the Hull based stockist of safety, relief and reducing valves, has increased its stock of the Broady 3500 API / ASME Safety Valve in Carbon Steel and Stainless Steel in both standard and fully UK made variants.

**F**lowstar has been a stockist of Broady valves for over 20 years and has recently increased its stock holding of the Broady 3500 Safety Valve meaning they can be delivered next day. Flowstar are located within 2 miles of the Broady factory in Hull and have a good well established working relationship with them.

## Broady 3500 Features

- Designed, manufactured & tested to API 520, 526 & 527
- ASME Section VIII Division 1 UV Stamp, CE Marked to Cat IV
- API orifice from D to T
- Sizes: 1" x 2" through to 8" x 10"
- Suitable for gases, liquids and vapours
- Available in Carbon steel, Stainless Steel, Ali Bronze, Duplex, and other Special materials.

Flowstar has comprehensive information about Safety Valves on their website should you want to know more.

## What are API Safety Valves?

Safety Valves that meet API 526 have standardised:

- Orifice designation & area
- Valve size & pressure rating (Inlet & Outlet)
- Materials
- Pressure – temperature limits
- Centre-to-face dimensions (Inlet & Outlet)

What this means is that in the majority of cases one manufacturer's API safety valve is directly interchangeable with another manufacturer's valve.

## Stock Sizes

Flowstar keep the following types and sizes in both Carbon Steel (ASME SA216 WCB / A352 LCC) and Stainless Steel (ASME SA351 CF8M).

- 3511D - 1" Class 150 x 2" Class 150
- 3531D - 1" Class 300 x 2" Class 150
- 3511E - 1" Class 150 x 2" Class 150
- 3531E - 1" Class 300 x 2" Class 150
- 3511F - 1.1/2" Class 150 x 2" Class 150
- 3531F - 1.1/2" Class 300 x 2" Class 150
- 3511G - 1.1/2" Class 150 x 3" Class 150
- 3531G - 1.1/2" Class 300 x 3" Class 150
- 3511H - 1.1/2" Class 150 x 3" Class 150
- 3531H - 1.1/2" Class 300 x 3" Class 150
- 3511J - 2" Class 150 x 3" Class 150

Flowstar keep the following types and sizes with UK castings in both Carbon Steel (ASME SA216 WCB / A352 LCC) and Stainless Steel (ASME SA351 CF8M).

- 3511D - 1" Class 150 x 2" Class 150
- 3531D - 1" Class 300 x 2" Class 150
- 3511E - 1" Class 150 x 2" Class 150
- 3531E - 1" Class 300 x 2" Class 150

**flowstar**

**Tel:** +44 (0)1482 601030

**Email:** hull@flowstar.co.uk

**Web:** www.flowstarvalveshop.com

# New Product: Activalve

**Hydravalve UK Ltd**, the West Midlands based stockist of valves, actuators, pneumatics and hydraulics, have added the new Activalve product to its extensive range.

Every year many thousands of homes suffer catastrophic water damage as a direct result of frozen pipes that have burst. Significant damage can also occur when a homeowner is unable to find or operate their mains water valve in an emergency. Over 2600 gallons of water can spew out each day if a rupture is left unchecked. It consistently accounts as one of the largest insurance claims sectors.

Manufactured in Italy by RuB valves, Activalve is the only mains water control product available on the market featuring an automatic shutdown function that operates without power or battery backup. This sensible, low cost practical solution is instantly identifiable and simple to operate.



Activalve operates on the principle that the temperature in your property drops evenly in the event of heat failure. It is designed to trigger above freezing point so will still work if there is a few degrees differential between areas. It should be placed in the location that is likely to be the coldest first, this will depend on where you live and your property type. Activalve should replace your old main water valve or can be placed in line with it if necessary.

The product is fitted with a RuB s.468 full port shut off ball valve 3/4" [22mm]. Precision engineered to the highest standard, having passed 100,000 cycle lift tests. Manufactured in Italy by RuB Valves, an ISO 9001:2008 certified company.

Activalve will be available to purchase on our website soon; for more information on pricing and availability please contact Hydravalve UK Ltd.

A blue background with various mechanical parts like springs and washers. In the center is a large, tan-colored Belleville washer. To its right is a silver-colored disc spring. The text 'Belleville Springs' is at the top in a stylized font. Below it, in smaller text, is 'Belleville Springs is a member of the Springmasters Group'. Further down, it says 'Consultancy, Design, Manufacture and Distribution...'. At the bottom, it says 'Your complete solution for DISC SPRINGS AND BELLEVILLE WASHERS'. Contact information is at the very bottom.

**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

**hydravalve**  
(UK) LIMITED

**Tel:** +44 (0)1902 637263  
**Email:** sales@hydravalve.co.uk  
**Web:** www.hydravalve.co.uk

# Reducing Friction by More Than 30%, The Stem Slides Rather than Rubs



**The new packing LATTYflon 3265LM** contains a corrosion inhibitor (exclusive LATTY process) that durably protects all the parts of the fitting.

**T**his packing consists of a braided core made from PTFE-impregnated carbon yarns and a sleeve made from cross-braided, impregnated and lubricated PTFE yarns.

Its elastic composite structure ensures sealing efficiency with a low tightening torque, thus allowing reduced operating effort and minimum hysteresis while greatly improving fluid control.

These properties provide excellent resistance to extreme temperatures, from  $-100^{\circ}\text{C}$  to  $+300^{\circ}\text{C}$  at a pressure of 300 bar or at a steam pressure of  $+285^{\circ}\text{C}$  for 80 bar. Quality and longer life contribute to reduced maintenance costs.

Comparative tests between conventional PTFE packing's and LATTYflon 3265LM have shown a reduction of friction by approximately 30% in the same operating conditions.

The packing LATTYflon 3265LM may be used as sealing rings in conjunction with graphite-based packing's such as LATTYgraf 6995 NG or LATTYgraf 6988 EF as anti-extrusion rings and complies with the requirements of ISO 15848-1, Class BH, relative to Fugitive Emissions.

Ease of fitting and quick replacement with our ready-to-install rings, thus reducing production down time.

The packing LATTYflon 3265LM is also approved by BAM (oxygen) and TA-Luft (fugitive emissions) to meet industrial requirements.

The mounting flexibility makes it ideal for use by manufacturers (OEMs) of control and regulating valves in areas such as chemical and petrochemical industries, nuclear and cryogenic applications.

**ALPHA<sup>®</sup>**  
**ALPHA CONTROLS LTD**  
**QualityEngineering**



## New Appointment at Alpha Controls Ltd

**Alpha Controls Ltd** are delighted to announce the appointment of Dave Eastham as our Technical Sales Manager. Dave has over 35 years association with industrial process valves, actuation, and controls in a variety of positions.



He has worked for both franchised Distributors and Manufacturers alike. His many roles have included Assembly Technician, calibrating and testing actuated ball, butterfly and diaphragm valves before moving onto Regional Area Sales Management and Project Expediting Management.

His tasks have included: After Sales Customer Support Manager, trouble shooting, and problem solving - customer focused roles with many challenges to overcome.

Finally becoming a Key Account Manager, he has joined **Alpha Controls Ltd** as our UK Technical Sales Manager. We would like to welcome Dave to our organisation and wish him every success in the future.

**Dave can be contacted at our Engineering and Technical Centre on +44 (0) 1942 525833 or by mail at [technicalsales@alphacontrols.co.uk](mailto:technicalsales@alphacontrols.co.uk)**



Alpha House, 1 Ormside Close, Hindley Industrial Estate, Hindley Green, Wigan. WN2 4HR.  
Tel: +44 (0)1942 525833 | E-mail: [technicalsales@alphacontrols.co.uk](mailto:technicalsales@alphacontrols.co.uk)  
[www.alphacontrols.co.uk](http://www.alphacontrols.co.uk) | [www.alphacontrolsystems.com](http://www.alphacontrolsystems.com)

**HIGH QUALITY | EXCELLENT PRICE | WHERE QUALITY COUNTS**



**Tel:** +44 (0)1777 708 836  
**Fax:** +44 (0)1777 707 474  
**Web:** [www.latty.com](http://www.latty.com)



# Orseal Valves in Unique Offshore Project

A major offshore development in the UAE, the Upper Zakum oil field project has an estimated value of US\$3.7billion and **Orseal** were delighted to be selected by the Phase 2 consortium (including Petrofac Emirates and Daewoo Shipbuilding & Marine Engineering - DSME), as one of more than 30 specialist sub-contractors required for this unique venture.



12" butterfly valve with pneumatic spring return actuator

**L**ocated 80km off the coast, UZ750 is considered to be one of the major technical achievements in Abu Dhabi, and oil production capacity is set to increase to 750,000 bpd once the project is completed – now in its second phase, being carried out by Orseal's customer in UK for Petrofac and DSME.



3" butterfly valve with pneumatic spring return actuator with all controls



12" actuated valves housed in the packing cases to avoid damage during transit

With a mandate to significantly increase production at Upper Zakum, a number of options were evaluated by ZADCO (the Zakum Development Company) who settled on the concept of artificial island-based drilling and production centres, using innovative Extended-Reach Drilling (ERD) and Maximum Reservoir Contact (MRC) technology. While both of these technologies have been applied in other parts of the world, they are new to this region and the projected scale of application at UZ750 is without precedent.

For this high-profile project, Orseal supplied a range of valves, from ½" to 12" manual operated and pneumatic actuated valves, to use in the Vacuum Pump Package for Satrah al-Razboot (SARB), material being carbon steel and ali-bronze (for seawater).

Orseal carried out all inspection activities at their supplier premises to ensure that the products conformed to all end-user specifications – particularly important in this project, where space was at a real premium within the skid design. All logistics had to be precisely managed – with full contract delivery on the agreed date. All goods were specially packaged for air freight shipment to Dubai, ensuring no damage to any items of value during transit. Orseal provided a comprehensive document dossier package, included with the delivery to Free Zone Dubai.

With completion of UZ750 expected in 2017, this artificial island solution offers significant benefits, including a reduction in life-cycle development costs, and Orseal are pleased to have been a part of this major, innovative project.

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



**Tel:** +44 (0)1204 474300  
**Email:** sales@orseal.com  
**Web:** www.orseal.com

# New High Pressure Valves Released for Marine Sector

**Parker Bestobell Marine**, part of Parker Hannifin – the global leader in motion and control technologies, has developed a range of high pressure cryogenic valves that are fully approved for use in the marine sector.

**T**he valves can withstand pressures of up to 625 bar, with a range from ½" to 3" and are designed specifically for the MEGI Engine fuel gas system.

The range includes manual, gearbox operation, single actuator and tandem actuator valves. In addition, Parker Bestobell Marine also offers high pressure check valves.

Duncan Gaskin, Market Development Manager for Parker Bestobell Marine, said: "We developed these valves in collaboration with a number of shipbuilding companies which required them for the MAN ME-GI fuel gas systems."



*As worldwide markets look to reduce air pollutants and with the introduction of Emission Control Areas (ECA), we expect to see demand increase for high pressure valves that are marine approved."*

Parker Bestobell Marine has previously supplied its high pressure valves for fuel gas systems for a variety of projects, including five Teekay LNG (Liquefied Natural Gas) carriers being built at DSME (Daewoo Shipbuilding & Marine Engineering Co Ltd) in South Korea, two LNG carriers being built at HHI (Hyundai Heavy Industries) Shipyard in South Korea for Knutsen OAS Shipping of Norway and three LEG (Liquefied Ethylene Gas) carriers to be built in China for Ocean Yield of Norway, which are the first to use Ethane as a fuel.

Parker Bestobell Marine's new high pressure valve range will be launched at the LNG18 exhibition in Australia in April 2016.

**Bestobell Valves**

**Tel:** +44 (0)1142 240 000  
**Email:** [sales@bestobellvalves.com](mailto:sales@bestobellvalves.com)  
**Web:** [www.bestobellvalves.com](http://www.bestobellvalves.com)



**WE SPECIALISE IN:**

**STAINLESS STEELS  
SKIDS  
SPOOLS  
MANIFOLDS**

**0191 460 9295**  
**[www.wh-partnership.com](http://www.wh-partnership.com)**

WH Partnership Ltd | Staithes 2 | The Watermark | Gateshead | Tyne & Wear | NE11 9SN





Looking for that missing piece to your puzzle?



Call us today and we'll  
put together the perfect valve for you.

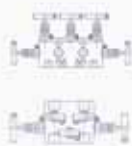
## **Alco Valves Group**

 **Alco Valves**  
Industrial Valve Manufacturers

 **Alco Hi-Tek**  
Double Block & Bleed and Piping Interface Solutions

 **Alco Sub-Tek**  
SUB SEA VALVE ENGINEERING

 **Alco Process  
Valves Limited**



**UK (Head) Office**

**USA Office**

**Singapore Office**

**Dubai Office**

Tel: (+44) 1484 710511

Tel: (+1) 281 564 2526

Tel: (+65) 6735 0526

Tel: (+971) 5039 36519

uk@alco-valves.com

usa@alco-valves.com

singapore@alco-valves.com

uae@alco-valves.com

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

Follow us on:





# That's Not What It Was Designed For!



**T**en years or so ago, Nadi srl in Italy took their solenoid valve technology and applied it to a customer requirement for pressure vessel integrity testing.

The result was the VCT9367 tandem solenoid valve as pictured here with two 100bar rated 2/2 normally closed solenoid valves in series mounted in a common body.

## Block & Bleed

The client had tried 3/2 solenoid valves but had problems with maintaining pressure as the valves changed state and needed to be able to apply and release pressure independently using one compact unit. On the resulting VCT9367, the first valve applies pressure to the vessel through the outlet port that connects to the inlet of the second valve which is closed.

When the vessel test period was complete, the first valve was closed and the second valve opened to vent the gas for recycling. This design proved very successful in this application and was made available with brass or stainless steel bodies and options for safe area or ATEX Exd versions.

## Recirc & Spray

More recently Red Dragon had a request for a similar duty on high pressure cold water. Many pressure wash systems use a pump feeding a demand valve where the pump has to build pressure while the valve is open and in this automated washing system, this would result in inconsistent cleaning.

In order to overcome this problem, the pressure line needed to be constantly recirculating back to the pump so that the draw off was

always at the same pressure. It could be done with separate valves but this takes up more space and time for the installation. The other downside to separate valves was the distance from the recirculation line to the demand valve needs to be as short as possible to prevent pressure losses.

We trialled the VCT9367 in this application using a different configuration from that it was designed for and it worked perfectly. The first valve controls the output from the pump and when open connects to the recirculation line for the manifold. The second valve is the demand valve that permits water to the spray nozzles at a constant pump pressure.

By understanding the clients' needs and the capability of the Nadi valves, Red Dragon was able to solve their problem and enhance the quality of their product successfully using an existing valve but contrary to its original design intent.



**Tel:** +44 (0)1443 772 500

**Email:** [sales@reddragonvalves.co.uk](mailto:sales@reddragonvalves.co.uk)

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

# Schoolhill Hydraulic Engineering Strengthens Management

Hydraulic solutions provider **Schoolhill Hydraulic Engineering** has strengthened its management team with a series of key appointments to support the company's growth in the UK and overseas.

A number of new management positions have been created over the past few months, the most recent of which is the appointment of Stuart Bell to the position of operations and sales director. Stuart's appointment follows the recruitment of Gordon Bowie and David Brown to the positions of materials manager and drawing office manager respectively. Mark Fraser has also been appointed in a consultancy role to support the company's improvement initiatives. He will oversee all financial functions across the business.

The new appointments are part of Schoolhill Hydraulic Engineering's drive to consolidate and build on the company's reputation for designing and producing specialist engineering components for the offshore and subsea industries. From its headquarters in Aberdeen, the organisation aims to provide an integrated and highly-responsive service offering, ranging from research, development and design, through to manufacture, assembly and testing.

Stuart brings with him substantial design, project management, manufacturing and business development experience, with a strong background in the energy-related and subsea sectors. In his new role, he will focus on raising awareness of the company's increased capabilities and its commitment to customer service, while also developing its business into new markets.

*"Schoolhill Hydraulic Engineering's range of specialist deepwater subsea products continues to attract attention both domestically and outside the UK," says Stuart. "I am looking forward to helping the business develop its client portfolio, while retaining its reputation for design expertise and product quality. Schoolhill Hydraulic Engineering has an excellent product range and our ability to anticipate and respond to customer needs will be crucial going forward."*

Gordon and David each bring a number of years of relevant experience to their positions. Both are tasked with improving operational efficiency in their respective departments.

Ronald Whyte, managing director of Schoolhill Hydraulic Engineering, said: *"These are undoubtedly challenging times for the industry, however we are encouraged by the success that our subsea and other oil-related products continue to enjoy both at home and overseas."*

*"Stuart's appointment is key to our ability to capitalise on this position by ensuring that we adopt a proactive approach towards new and existing customer needs. His strong track record in project management and business development will be invaluable to achieving our plans for growth. The new managerial expertise gained via the input of Mark, Gordon and David is already making*



Stuart Bell

*an impact on our day-to-day operations and will be of great benefit as we seek to take the company to a new level."*

Founded in 1948, Schoolhill Hydraulic Engineering has over 30 years' experience in the design and production of subsea engineering products, including gripper cylinders for running tools and quick exhaust valves (QEVs) for high integrity pressure protection systems (HIPPS). In recent years the company has formed collaborative relationships with complimentary businesses to increase its capabilities and service offering to the subsea sector. These include the provision of sales and technical support for Spanish-owned Glual Hydralica's range of subsea piston accumulators and an agreement with Stockton-based fabrication provider Francis Brown Engineering (FBE).



**Tel:** +44 (0)1224 871 086

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

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

# New **ABB** App Highlights Potential Compressed Air Energy Savings



New ABB app highlights potential compressed air energy savings

## New **ABB** app points the way to compressed air savings in valve control applications.

**U**sers of pneumatic valve positioners can now assess the energy efficiency of their valve installations with ABB's new compressed air calculator app for the Apple iPhone and iPad.

Based on the amount of compressed air consumed by conventional positioners, the app shows how using the latest smart positioner technology can help operators to dramatically reduce their energy costs

Easy-to-follow instructions show the user exactly what parameters are needed to calculate any potential savings. The user is prompted to enter the number of pneumatic positioners on site, air cost per standard cubic foot and the percentage of time spent at a steady state to calculate the user's current compressed air energy

costs. These costs are then compared to the potential savings that could be achieved using ABB's TZID-C and EDP300 intelligent positioners, where compressed air is only consumed when required.

*"At present there is no other app on the market that can show positioner users the significant energy savings that can be made by using smarter technology," says Jo Kirkbride, ABB's Product Manager UK & Ireland, Actuator & Positioning Products. "Conventional valve positioners can typically consume compressed air even when not in operation, many sites could be racking up thousands of pounds in wasted energy."*

Consider a positioner which spends 50% of its operational time in a steady state position (steady set point). Assuming

a compressed air cost of 1p per scfm (standard cubic feet per minute), the cost of this wasted energy, in the worst case, can be as much as £2,106.78 per year. Replacing this positioner with a smart positioner could save between £500 and £1,200 per year per positioner through reduced compressed air consumption.

The app also allows you to measure savings in different currencies, including Sterling, Euros and US Dollars. To download the ABB app, please visit the Apple App store ad search for "ABB Compressed Air Calculator".



**Tel:** +44 (0)870 600 6122

**Email:** [moreinstrumentation@gb.abb.com](mailto:moreinstrumentation@gb.abb.com)

**Web:** [www.abb.com](http://www.abb.com)



# Who are *'They'*?



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

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

## **But just who are *'They'*?**

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

**Faceless people? Not us!**



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



**British Valve and Actuator  
Association Limited**  
1A Banbury Office Village,  
Noral Way, Banbury. OX16 2SB

Tel: +44 (0)1295 221 270  
Fax: +44 (0)1295 258 893  
Email: [enquiry@bvaa.org.uk](mailto:enquiry@bvaa.org.uk)  
Web: [www.bvaa.org.uk](http://www.bvaa.org.uk)

# SIBA BeerX 2016 – A Review

With 2015 seeing a huge decline in business from the UK Oil and Gas industry, Valve and Actuator reseller **Zoedale Ltd** decided it was time to target another industry.

---

**F**or the last 10 years The UK has seen "Craft Beer" becoming very fashionable and, with the average Pint costing £5 - £7 (or more in London), there is a lot of money in the industry. Zoedale has seen recent successes in this industry sector particularly among the mid-tier independent Craft Brewers looking to expand to meet demand.

Off the back to this success Zoedale decided to take a stand at the SIBA BeerX show in Sheffield. Given that there was a 50 metre long bar with 80 Cask Ales and 30 Keg Beers on offer in the adjoining hall there was no shortage of volunteers to work the stand!

The show ran for 3 days from 16th March at Sheffield Ice arena and saw 1,700 trade delegates visit the exhibition hall where they were able to meet with suppliers offering everything from Hops and Malt to



complete brewery systems and everything in between. The atmosphere was very positive (probably because there was so much beer being consumed) and Zoedale reported that it was the best exhibition they had ever exhibited at.

*"This is the first trade show we have exhibited at where people ask 'how much is that? Can you quote me today?' whilst browsing products. Over the 3 days we had 17 live enquiries and have closed 2 orders*

*already. Most of the delegates were brewery owners so had the authority to make quick buying decisions, which definitely made it a worthwhile event for us"* said Tim Guest, MD of Zoedale Ltd.

As well as beer and the exhibition, BeerX included a number of seminars and presentations on everything from beer canning to the future of the UK brewing industry. With the number of craft breweries increasing and demand for the product gaining more and more momentum it looks like the shift in strategy is paying off for Zoedale Ltd.

Zoedale stock and supply hygienic Valves and Actuators, Pumps, Heat Exchangers, Manways. For more information, please contact Katie Hoey on 01234 832832.

---



**ZOEDALE**  
keeping beer flowing

**Tel:** +44 (0)1234 832 832  
**Email:** [enquiries@zoedale.co.uk](mailto:enquiries@zoedale.co.uk)  
**Web:** [www.zoedale.co.uk](http://www.zoedale.co.uk)



# Quickits' Wheels Keep on Turning



Chainwheel



Chainwheel exploded view

Despite the significant reduction of project orders within the valve and actuator industry, mainly due to the low oil price, **Quickits** continue to invest with the launch of the new QK CW range of chain wheels.

**D**esigned and manufactured in partnership with our sister company Valve Control Solutions Limited the new range of chain wheels can be fitted by way of a clamping system to a range of hand wheels or directly to a gearbox input shaft eliminating the need for clamps or interface plates.

Supplied as standard with a black powder coated finish the new range utilises straight link welded chain with a quick link connection. This allows adjustment to chain length on site without the need for specialist tools or skills.

*"While most companies within our industry are looking at the negative aspects of the downturn in business we at Quickits are using this time to focus on developing products and improving services" says Managing Director, Rob Smith. "There are some exciting times ahead for Team Quickits with significant capital investments planned for 2016".*

The QK CW range is available for same day dispatch complementing the full range of products that Quickits are able to offer. For further information, visit the Quickits website.



**Tel:** +44 (0)1623 515 545  
**Email:** [enquiries@quickits-online.co.uk](mailto:enquiries@quickits-online.co.uk)  
**Web:** [www.quickits-online.co.uk](http://www.quickits-online.co.uk)



## AUMA's intelligent electric actuation solutions:

### Enhanced control capability:

- Variable speed
- Water hammer eliminated
- Flow linearisation
- Tax saving - ETL certified



### Remote diagnostics:

- Asset management
- Planned preventative maintenance



### Modular actuator design:

- Enables design flexibility
- Minimises on-site time
- Reduces H&S risks
- Lowers system costs

### Explosion Proof range

### Certified training



### Contact AUMA to find out more:

Tel +44 1275 871141  
[mail@auma.co.uk](mailto:mail@auma.co.uk)  
[www.auma.co.uk](http://www.auma.co.uk)

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



# Absolute Feedback Systems for Efficient Drives

The BML series from **Balluff** offers rugged, precise and quick absolute position and angle measurement systems, which are ideal for installation or direct integration into drive and positioning systems.

The new, magnetically encoded absolute position and angle measurement systems using Permagnet® Nonius technology close a gap in the segment of compact, integrative, absolute measurement systems with IP 67 housing for external installation.

As an open kit for full integration, they now have the option of being used in rotary applications as well. Using these systems, the formats, strokes and end positions of axes can be adjusted automatically, quickly and reliably. Their dynamic drive control precisely tuned to the product also ensures an energy-efficient manufacturing process at the maximum number of strokes. Extremely small installation systems in metal housings also have their place in even the tightest installation spaces, while open kits are ideally suited to individual integration in electric drives.

## Why get an incremental system if an absolute system also works?

What they all have in common are the advantages of absolute measurement systems, such as being ready for use immediately at switch-on, no loss of position during unplanned stops and quick start-up even for complicated multi-axis applications. Linear versions of magnetically encoded systems have long been used for monitoring the positions of x, y and z-axes in machine tools or in the direct drives of pick and place automation systems. Many companies use them as a cost-effective, rugged alternative to glass scales. They can also be found in fully electric micro injection moulding systems, where they precisely control the injection volume and maintain the pressure level



Permagnet magnetic products are available in an absolute and an incremental version as code discs for rotary movements and in tape form up to 48,000mm long for linear movements

during the plasticizing process. As highly dynamic systems, they are also highly valued in print shops for computer-to-plate processes. In that process, they act as a rugged alternative to high-precision optical methods in the electric drive shafts, providing real-time feedback with high synchronous accuracy.

## System structure

Magnetically encoded position and angle measurement systems consist of a sensor head and magnetically encoded tape, which is available in both a linear and a rotary version. The sensor head glides over the tape magnetically encoded with alternating polarity at a distance of up to 2 mm. Since the systems work magnetically and without any contact, they are also able to withstand temperature changes and dirt, such as from dust, oil and wear. There are significant differences in the quality of magnetic measurement standards, which is largely determined by the strength and uniformity of the magnetic fields.

## Exact measurement using Permagnet® Nonius feedback technology

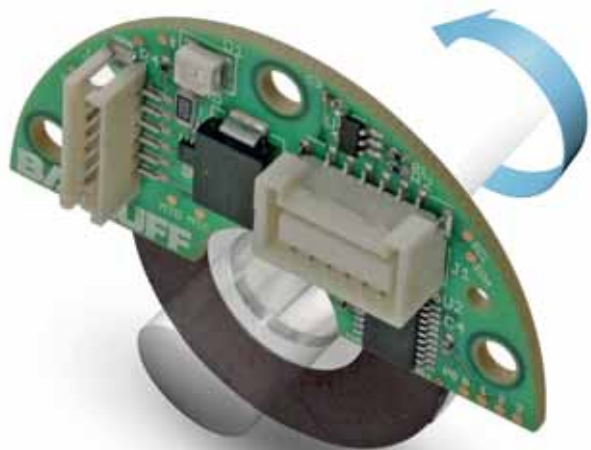
Balluff utilizes Permagnet® Nonius technology. This technology was first used to advance hard drive capacity, where it enabled bits to be packed more densely together. This resulted in a significant increase in storage capacity.

The perpendicular arrangement of the north and south poles results in a uniform, concentrated alignment of the elementary magnets. The concentrated alignment of the magnetic fields allows the transitions between the poles to be scanned with extreme precision, which results in high measurement quality. Compared to conventional systems, BML systems with Permagnet® tape are extremely resistant to interference, feature low hysteresis and have minimal linearity deviation. They are available as absolute and an incremental versions as code discs for rotary movements and in tape form as self-assembling rolled goods up to 48,000 mm for linear movements.

## For simple integration in rotary applications

The new "Disc 30" BML encoder kit is a highly accurate, absolute feedback solution for design engineers, which can be integrated easily and directly into motors and actuators. The BML Permagnet encoder feedback is an alternative to conventional magnetic or optical solutions for accurate control of motors and drives. The low space requirement for the solution for rotary applications provides another eye-catching quality; it is just 12 - 20 mm in length and 30 mm in diameter depending on the design.

Another highlight is the air gap of up to 0.5 mm between the code disc and electronic



**The motor feedback evolution kit is an all-in-one package and offers a test environment with a varied, absolute and incremental selection of interfaces (code disc with electronic processor unit).**

processor unit, which is large compared to optical systems. During mass production of motors and actuators, the advantage of this gap is reflected in more flexible, simplified assembly, direct cost savings and competitive advantages. Contrary to what some may believe, the moderate installation tolerances and the large distance between the code disc and electronic processor unit ( $\ll 0.5$  mm) do not have a negative effect on system accuracy. The new solution reaches a system accuracy of  $\ll 0.2^\circ$  at a resolution of up to 17 bits without any difficulty.

A fully integrated, single-chip solution is the core of the magnetic scanning and signal generation process. The position data is generated in real time and made available in absolute form using interfaces typical in drive engineering, SSI or bidirectional BiSS C. Incremental SIN/COS analogue signals and ABZ signals are also on hand for use.

### **BML evaluation kit for determining the optimum solution**

In addition to the BML encoder kit, Balluff also offers an evaluation kit. It includes a perpendicularly magnetized Permagnet® absolute angle measurement system with high system accuracy. Just like the encoder kit, it offers a variety of serial (absolute) and incremental interfaces for connection to many different closed-loop systems. It is easy to use. Once adapted to the drive, the user can run required system tests to derive a customized, optimized solution using the BiSS-USB adapter and provided evaluation software.

# **BALLUFF**

*sensors worldwide*

**Tel:** +44 (0)161 282 4700  
**Email:** sales@balluff.co.uk  
**Web:** www.balluff.co.uk

# **ISIS STEAM SPECIALISTS**

**VALSTEAM**  
valsteam.com **ADCA**

The Official UK  
Valsteam Adca Partner

The ADCA range of steam equipment & valves offers everything that you require for your steam system.



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

Tel. 01608 645755

**STEAM TRAPS - PRESSURE REDUCING VALVES  
 CONTROL VALVES - SPECIAL EQUIPMENT  
 PIPELINE ANCILLARIES  
 FABRICATED PACKAGES - CLEAN STEAM**

# Corrosion.

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

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

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

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

We can offer you spring design, development and manufacturing based on a wealth of experience, working in industry sectors such as medical, aerospace, automotive and energy, with specific oil and gas expertise in areas such as:

- Downhole Applications
- Subsea Systems
- Valves
- Pipelines
- Propulsion systems



Call us to discuss your requirements or for a **FREE** design review on: 01494 556700



# SPRINGTECH

Partners for Innovation & Performance

ABERDEENSHIRE: Fraserburgh, Aberdeenshire AB43 9BU.

Tel: +44 (0)1346 518061

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 Web: www.springs.co.uk





## Flowstar Stock European Steam Safety Valves



**Flowstar** Ltd, the Hull based stockist of safety, relief and reducing valves, has increased its stock of the Besa Steam Safety Valves. Besa valves are fully manufactured within Europe.

**T**hey have been designed to the same specifications and with the same centres as many of their competitor's products which means they can be directly interchangeable with many other leading brands.

### Who is BESA?

Besa was founded in 1946 in Italy.

Besa predominantly manufacture Safety valves for heaters and boilers, shipyards, power generation plants as well as pharmaceutical, chemical and petrochemical industry.

Flowstar are the exclusive stockist and distributor for the UK and Ireland.

Besa Safety Relief Valves are designed, manufactured and selected accordingly with European directives 97/23/CE (PED), 94/9/CE (ATEX), EN 4126-1, EN 12516, ASME B16.34, API 520, API 526 and certified/approved by I.S.P.E.S.L. and pascal (Besa's industry PED directive), ICIM (ATEX directive), RINA, Germanischer Lloyd and Bureau Veritas (marine field), GOST-R F SETAN (Russian market).

### Stock Sizes

Flowstar keep the following types and sizes in both Cast Iron (G250) Flanged PN16 and Carbon Steel (ASTM A216 WCB- EN 1.0619) Flanged PN40 x PN16. Stainless Steel Besa valves are currently to order.

25mm x 40mm, 32mm x 50mm, 40mm x 65mm, 50mm x 80mm, 65mm x 100mm, 80mm x 125mm, 100mm x 150mm

The following sizes are to order:

125mm x 200mm, 150mm x 250mm, 200mm x 350mm, 250mm x 400mm

**flowstar**

**Tel:** +44 (0)1482 601030

**Email:** hull@flowstar.co.uk

**Web:** www.flowstarvalveshop.com



**VALVE PACKAGES  
FOR OIL & GAS**  
[www.isisoilandgas.com](http://www.isisoilandgas.com)  
Tel. 01608 645755



A comprehensive range of  
products to suit all your  
Oil & Gas valve requirements.



**MANUAL & ACTUATED VALVES  
CONTROL VALVES - DBB  
INSTRUMENT ISOLATION  
PILOT SOLENOIDS & REGULATORS**

# New Hydraulic Gear Flow Meters Can Take the Pressure

**Webtec**, the hydraulic measurement and control company, based in Cambridgeshire, UK has announced the launch of a brand new range of high-pressure, precision gear flow meters rated up to 150 lpm (40 US gpm) for use on applications as diverse as hydraulic component leak testing, wind turbine lubrication monitoring and offshore diagnostic fault-finding.



In an industry first the new GF series is designed specifically for the hydraulic and lubrication market, not the process industry, so all products are designed and calibrated for use on oils, or phosphate-esters or water-glycols. Webtec recognised that positive displacement meters, like the new GF series, are often used in such a wide range of industries that the Engineer tasked with specifying them is often baffled by the number of, often irrelevant, options.

Since hydraulic circuits are often prone to regular pressure spikes, Webtec has ensured the new GF gear flow meters are rated up to 420 bar (6000 psi) maximum operating pressure, and also have a safety factor of over three, unlike many process meters.

Product selection is made easy as all meters come complete with the transducer pre-fitted, linearized and pre-programmed, fully traceable certified test results and the option of suitable connecting cables. The GF series uses an all stainless steel construction and comprises three sizes covering the range 0.1 to 150 lpm (0.03 to 40 US gpm) and offers excellent accuracy of better than 0.5% of the indicated reading with both frequency (Pulse) and mA outputs as standard. The GF series is available to order now, please visit the Webtec website for further details.



**Tel:** +44 (0)1480 397 400  
**Email:** [information@webtec.co.uk](mailto:information@webtec.co.uk)  
**Web:** [www.webtec.com](http://www.webtec.com)

## *CeeVee Ltd* Valves & Automation For Process and District Heating Industries



**Stockist and Distributors  
of High Quality Valves  
and Accessories**

**Ballsector Control Valves  
Wafer and Flanged**

**Ball & Butterfly Valves for  
District Heating Systems**

**High Performance  
Butterfly Valves**

**Pneumatic Actuators**

**Switchboxes**

**Namur Mount Solenoid Valves**

**Bursting Discs**

**[www.cee-vee.co.uk](http://www.cee-vee.co.uk)  
Tel: 01453 821666**

# Optimising Safety Measures in High Pressure Systems

**Albion Valves (UK) Ltd**, an increasingly popular UK valves supplier, is advising distributors to ensure they check for type test approvals and certification of the EU's Pressure Equipment Directive (PED) conformity, when specifying safety valves, as opposed to relief valves in a pressurized system.

**B**oth safety valves and pressure relief valves are used as the last safety device in a pressure system, however engineers and specifiers need to be mindful that requirements can vary significantly from system to system.

In applications where PED is applicable, it is mandatory to use safety valves with the appropriate approvals. If a valve without type test approval is installed there is no guarantee that required blow-off at 10% would be reached, which poses a big safety risk.

In a system that doesn't fall into this directive, it is at the discretion of the engineer whether or not to use a type test approved safety valve. In this instance, generally a relief valve designed with proportional opening characteristics and therefore a lower blow-off capacity can be safely specified.


However, it is important to realize that the liability for using a non-conforming product rests with the installer, which is why Albion recommends using a certified safety valve wherever possible.

In order to help take the headache of complex EU legislation compliance away from their distributors, Albion has introduced an extensive range of PED compliant safety products.

Safety valves are all either set, sealed and certified by the factory, or onsite at Albion on a test rig prior to dispatch. Each valve is laser etched with its own unique serial number to allow certification to be traced.


Les Littlewood, Albion Valves (UK) Ltd, Sales Director commented: *"Ensuring that products and systems meet the requirements of the EU Directive can be a complex and time consuming process. We have taken this headache away from our distributors by doing the research and securing approvals to ensure that the pressure equipment we supply is legally compliant and fit for purpose."*

Albion currently stocks over 5000 lines of commercial valves, suitable for applications predominantly within the process, water, building services and HVAC industries, all available from its distributor network. For more information visit the website or contact the team.



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



**Tel:** +44 (0)1226 729 900  
**Fax:** +44 (0)1226 288 011  
**Web:** www.albionvalvesuk.com





# Keep It Clean... Reduce Emissions from Aged Plant

In a time where industries are driven to **improve safety**, reduce emissions and to maximise on key assets, we are constantly surprised to learn that preventative maintenance isn't always prioritised as a key focus.

**M**anaging pollution is a complex task and any responsible Site Manager will know the importance of maintaining aged assets as the first step towards successful adherence of ISO 14001, ISO 28300 and EEMUA231.

According to current industry guidance, assets with critical safety implications such as breather vents, require regular and documented service inspections

and checks to ensure on-going performance. EEMUA231 and SAFed IMG-1 is a co-branded document detailing the management of ageing plant.

You will also satisfy the requirements of the Health and Safety Executive and the Environment Agency who are becoming increasingly focussed on how tank storage assets are maintained and programmed scheduled. You not only guarantee peace of mind; you also satisfy the regulatory bodies.

## How about a quick test?

Walk your plant and cast your eye over the piping infrastructure and tank furniture and take a moment to consider what each component does. There aren't many parts that don't have a function that contributed to the overall safety of our working environment.

You can identify your exposure by understanding what maintenance measures your Company has currently in place. Ask yourself what any routine investigation by a regulatory body might

discover and what weaknesses would be identified. A fully competent and compliant site would have full maintenance records in place to prove that site safety and environmental impact are known and addressed. Adherent companies routinely check suitability of installed equipment against changing process conditions.

In the course of our work we test all brands of conservation vents with varying designs of quality. In many cases the operator is unaware of the performance of their equipment but most vents would benefit from tighter sealing.

---

**“The bitterness of poor quality remains long after the sweetness of low price is forgotten” – Benjamin Franklin.**

---

## The benefits of an optimised breather vent are as follows:

- Minimised vapour loss. Media with a flash point below ambient temperature will produce vapours throughout the day. What escapes first are known as the light ends. The longer this process continues, what remains in the tank lowers in volatility and quality.
- Maintaining product quality. Some products oxidize easily, caused by the free flow of air into the tank or emulsify when mixed with water entering the tank via condensation.
- Reduced corrosion. The presence of free flowing, damp air creates the perfect environment for rust formation in the roof of a carbon steel tank.
- Reduced risk of fire through the reduction in presence of vapour clouds.
- Reduced corrosion of surrounding equipment.



Assentech offers valve refurbishment back to original factory specification with original parts

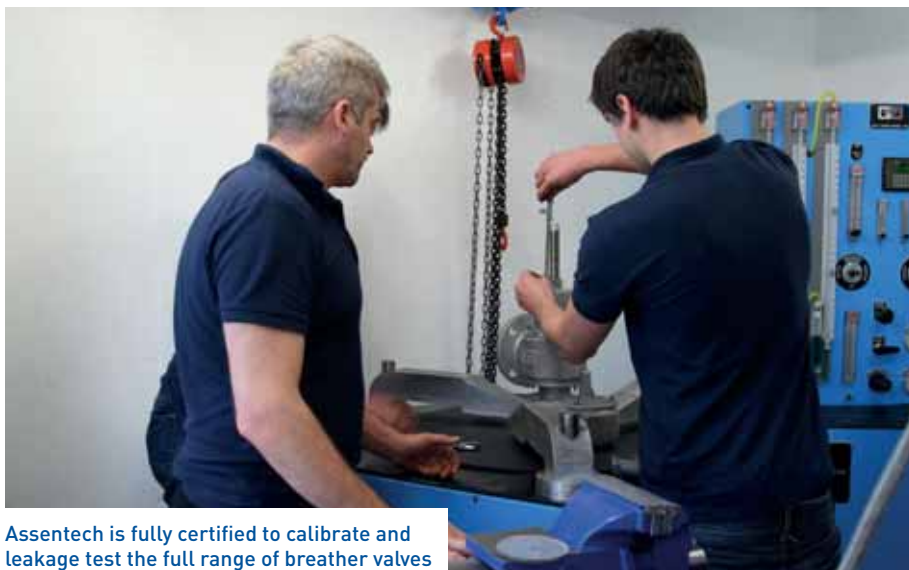
Breather vents are all built and tested according to API2000 and ISO28300. It is logical to check performance of breather vents against the manufacturers' standard. It is not possible to check vent performance by simple pop testing as an ASME valve would be measured. This is because PVRV's have a modulated action so the point at which it opens cannot be determined by simply pressurising the vent.

Our first step in reviewing the service requirements of breather vents is to look at the whole application. This includes a review of the tank design pressure and vacuum, fill and empty rates and current vent size and set points. It is often assumed that a plant is planned, designed then built. However, plants evolve over time with annexes added or removed and processes upgraded or modified in some way. The importance of a full technical review at the beginning of a preventative maintenance programme is recognised in the new guidance from SAFed IMG-1 and EEMUA231 in relation to management of ageing plant.

The HSE does not accept reduction in performance of safety equipment as it ages. Therefore, all breather vents must be benchmarked against API2000 or ISO28300. It is this level of performance monitoring that the HSE is going to be looking for going forward. If an incident occurs resulting in damage to a storage vessel, or loss of containment, the first thing the HSE will look at are the maintenance records of all venting equipment.

EEMUA 231 and SAFed IMG-1 recommend the appointment of an independent, competent person in response to the Pressure Safety Systems Regulations (PSSR). This person has to be independent from the influences of the company management structure. As more companies comply with ISO14001, the focus on continual improvement can be relatively easy to achieve by reducing the leakage rate from storage tank vents.

According to ISO 28300 every vent manufacturer has to test each valve for leakage. In the work that Assentech has carried out using their own bespoke calibration test equipment, the vast majority of breather vents do not meet these criteria.



**Assentech is fully certified to calibrate and leakage test the full range of breather valves**



**One of the benefits of an optimised breather vent is minimal vapour loss and reduced emissions – Lets keep it clean!**

Assentech provides both professional and practical support for customers who recognise the need to maintain and assess the performance of their storage tank vents. From initial technical review, through advice on legislative compliance, through refurbishment, comprehensive calibration and leakage testing, to full documentary follow up. We will cover every aspect of keeping breather vents in as new condition and will provide all the relevant supporting certification.

We are actively tailoring full maintenance packages which may include full certified calibration and leakage checks at 3-4 years, with documented interim annual

inspections. We can also train your staff to conduct the interim inspections if required. Breather vents are relatively simple devices but there are many potential hazards when they are maintained by inexperienced fitters.



**Tel:** +44 (0)1726 844 707  
**Email:** [info@assentech.co.uk](mailto:info@assentech.co.uk)  
**Web:** [www.assentech.co.uk](http://www.assentech.co.uk)



## Getting to Grips with HIPPS

**Robert Walker**, Director at Severn Glocon Group, urges a closer look at High Integrity Pressure Protection Systems

**O**il and gas production facilities and processing plants are facing demands to deliver higher flow rates and throughput. They need to achieve this without compromising safety, in the face of tightening environmental constraints. This trend has initiated the rise of High Integrity Pressure Protection Systems (HIPPS) as the ultimate protection system for both new and existing installations. However, the perceived complexity and cost can be a barrier to uptake. It is worth taking a closer look at HIPPS though. When the systems are expertly specified, designed and integrated, their deployment can bring multiple, long-lasting gains over and above the immediate environmental benefits.

### Safety system trends

HIPPS offer a sophisticated valve-based safety instrumented system (SIS) to protect equipment from over-pressurisation. In a hydrocarbon production and processing environment they act as a barrier between high-pressure upstream and low-pressure downstream sections of an installation.

In extreme scenarios, over-pressurisation can result in the full emergency shutdown of a plant. This procedure can have a significant economic impact, bringing subsequent loss of production and increased maintenance costs. Traditionally, over-pressurisation is dealt with through simple relief or flare systems. When pressure builds up to a certain point, a relief valve opens enabling the gas or fluid to escape. The objective is to minimise damage and danger. However, in reality the released medium can be flammable, toxic, or both. Lack of containment can be catastrophic in terms of human safety and the environment.

Using HIPPS instead of a pressure relief system significantly enhances a plant's safety and environmental credentials.

Rather than removing the excess gas or fluid once a defined pressure has been exceeded, it is triggered at an earlier stage. The source of high pressure is shut off before over-pressurisation occurs, avoiding the need for venting. HIPPS cut off the inflow of excess media and contain it in the system through the rapid deployment of two in-series safety shut off valves/actuators (final elements). Once activated, these final elements automatically shut off and isolate the high pressure source.

Installations that have to comply with strict environmental regulations have been the forerunners in development and uptake of HIPPS. It can be the only feasible option in scenarios where environmental restrictions limit the use of traditional relief systems that involve emissions. The reliability of HIPPS in preventing downstream overpressure makes it a superior option from a safety perspective also. It can provide a valuable solution in situations where extremely high pressures are involved or when the required sizing of a relief valve is difficult to define.

There are also significant economic advantages associated with HIPPS that are often overlooked. As an emergency response solution, HIPPS deployment is far less costly than a lengthy emergency shutdown and all the repercussions that entails. What's more, using HIPPS in a pipeline unlocks the potential for lower design pressures downstream of the HIPPS.

This facilitates a reduction in required wall thickness for assets, allowing for de-rated pipework to be utilised downstream, bringing potential size, weight and cost advantages, as well as having a positive impact on flow rates and throughput.

So while environmental requirements have been the core driver of HIPPS, there are in fact three scenarios where the systems can offer an effective solution. If the surrounding environment needs to be protected, the economic viability of a development needs to be improved or the risk profile of a plant needs to be reduced, HIPPS should be brought to the table as a potential alternative to simple relief systems. HIPPS are equally effective in new projects or when adding to or upgrading existing installations.

### Safety Integrity Levels

Like all safety instrumented systems intended to protect equipment, personnel and environment, HIPPS are designed and built in accordance with standards set by the International Electrotechnical Commission (IEC). Two performance-based, non-prescriptive standards, IEC 61508 and IEC 61511, are applicable to HIPPS. When HIPPS are deployed appropriately in line with these standards, the fundamental concepts are integrated with the total lifecycle of a plant's overall safety system. Together, the standards provide a framework and lifecycle







approach for design, implementation and management where the level of risk definition varies between sectors.

The core standard, IEC 61508, is geared towards electrical, electronic or programmable safety-related systems. It also provides a framework for safety-related systems based on other technologies including mechanical systems. The additional IEC 61511 provides structure for designers, integrators and users of safety instrumented systems. It covers the wider parts of the safety loop, such as the sensors and final elements, in more detail. Importantly IEC 61511 is more specific for use in the Process Industry.

Each HIPPS design is rooted in a safety integrity level (SIL) specific to the individual process application. Levels are represented by a simple number scheme, 1 to 4, where 4 equates to the highest level of required dependability. This approach enables senior managers and decision makers to discuss safety integrity systems with engineering teams without requiring a detailed understanding of the technical aspects. However, without due diligence, it can lead to over-simplification and a tendency to over-specify systems by erring on the side of caution. Since HIPPS are seen as an alternative to safety relief systems, there is a common misconception that the SIL requirement must be high. However, more rigorous interpretation of SIL assessment workshops will identify the actual necessary SIL requirements which, in fact, may be lower (or even higher) than first thought. Opting for the correct SIL

rating has significant benefits as it not only ensures that the safety and environmental impacts are fully satisfied but it enables the appropriate performance standards and testing frequency to be set at the correct level with potential economic benefits.

A best practice approach involves the intelligent evaluation of systems in order to allocate the most appropriate SIL. The level is defined following a detailed risk analysis (HAZOP) of the entire plant and the individual process, providing a benchmark for the required risk reduction. It is the end user's responsibility to ensure consistent and appropriate SIL assignments by establishing a robust risk management philosophy and risk tolerance. Working alongside independent functional safety professionals as early as possible will ensure a robust engineered solution.

In a gas plant context, the European standard EN12186 and more specifically EN14382 prescribe the requirements for the over-pressure protection systems, and their components. The response time and accuracy of the loop as well as safety factors for over-sizing of the actuator are dictated by these standards. Independent design verification and testing to prove compliance to the EN14382 standard is mandatory. Users often refer to this standard for HIPPS design.

### HIPPS components

HIPPS is an application-specific safety system best represented as a complete functional loop that typically consists of three fundamental components:

1. Pressure Transmitters monitor the pipeline pressure against a predefined limit. Defining the number and types of transmitters and their voting systems is a function of the SIL rating. In an electronic HIPPS, pressure transmitters are configured for 'two-out-of-three' (2oo3) voting.
2. A Logic Solver captures signals from the pressure transmitters and performs a 2oo3 voting logic before de-energising the solenoids and closing the final elements.
3. The final elements comprise two shut-off valves and actuators in series (for SIL 3) each fitted with two dissimilar solenoids. The solenoids are optimised to provide fast, reliable stroking or partial stroke testing over an extended service life and activate the final two shut-off valves in the loop which provide the corrective action to bring the process to a safe state.

This configuration ensures a high degree of redundancy to enhance system performance and reliability. The 2oo3 methodology enhances the system's ability to detect a problem when it occurs, while reducing the likelihood of a response being accidentally triggered when there isn't a problem. Should one of the three pressure transmitters fail, it will not compromise functionality as two high pressure readings are required for activation. Likewise, if one of the valves in the final element fails, the second valve acts as a back up to maintain the isolation of the high pressure source.

### Dedicated HIPPS integration

Clearly, in an ideal world there would never be a need for safety systems to be activated. Plant designers and engineers should continually strive for inherent safety. Holistic thinking and intelligent design reviews are essential to get the most out of HIPPS. They are the last line of defence and shouldn't be used as an alternative to designing out potential over-pressurisation problems.

Projects that don't allow adequate time for critical assessment upfront can result in plants having a HIPPS with an inappropriate SIL specified. This can result in the installation either continuing to rely on emergency shutdown valves or failing to realise the full benefits of HIPPS if they are installed. Ascertaining the correct SIL assignment at the outset is a critical



# MASTERCLASS

success factor, and this should form the central driver for system design and decision making.

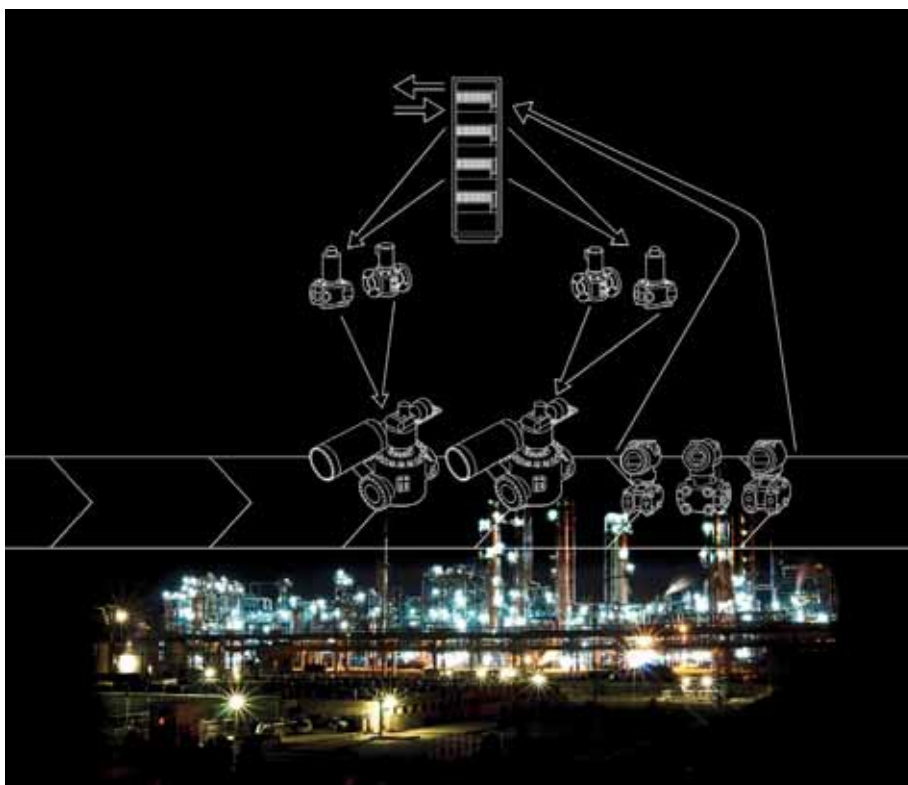
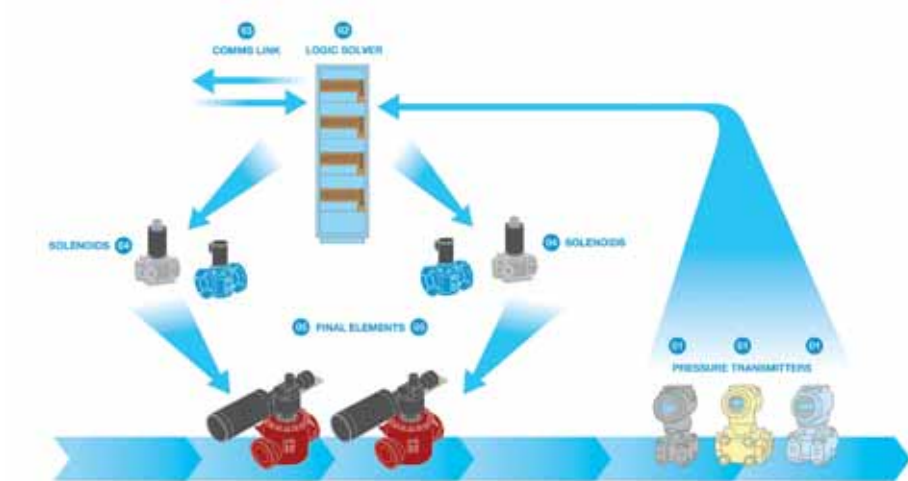
Choosing an independent HIPPS integrator that has the freedom to draw on the best technologies in the market to meet specific needs of an individual plant application is an effective route. The depth and breadth of their specialist HIPPS expertise can underpin innovative approaches with a superior level of reliability. For instance,

the expert selection of components from various manufacturers can reduce the potential for a 'common cause factor' resulting in system failure. While it is good practice to use two final elements in the loop to enhance redundancy, they are generally two valves of the same type from the same manufacturer. Opting for two different valve designs (i.e. gate valve and ball valve) from independent suppliers is the surest way to maximise redundancy and enhance overall safety.

There's no denying that HIPPS are complex and challenging. Ideally, their development and integration should draw on the combined expertise of electronic and software engineers as well as mechanical engineers. These experts need to work cohesively with functional safety management professionals to interrogate the design brief and look in detail at SIL requirements. Therefore, it is a best practice approach to engage with an independent integrator who can not only offer all of these required professionals in-house but has a robust functional safety management system in place and a competency management system which ensures that the required professionals are trained and certified to exceed the required industry standards.

Using such a business model makes sure that all the requirements of the HIPPS integration can be put into place with a single point of contact, easing communication throughout planning, development and delivery, reducing the time lost by removing the necessity for constant liaison with several third parties. In addition to this 'one-stop-shop' approach external third party professional consultation can support the project in a validation role at agreed specific milestones throughout the project, this makes for a structured, cost and time saving approach.

A collaborative approach between the end user and an independent HIPPS integrator can facilitate the creation of an innovative and effective long term solution. Opting for best-in-class, expert-led protection of equipment that could be susceptible to over-pressurisation brings multiple benefits. Enhanced safety and environmental credentials go hand-in-hand with considerable economic advantages. For more information contact Robert Walker on +44(0)7884 658 078 or [robert.walker@severnlocon.co.uk](mailto:robert.walker@severnlocon.co.uk)



**Tel:** +44 (0)845 223 2040  
**Email:** [sales@severnlocon.co.uk](mailto:sales@severnlocon.co.uk)  
**Web:** [www.severnlocon.com](http://www.severnlocon.com)

# Don't let your choice of Filter Regulator restrict you!

With the highest flow rate for their size, a broad range of temperature capabilities, a selection of materials and global certification - ASCO's range of Filter Regulators will not restrict you.

Available in 316L Stainless Steel and Aluminium, and with operational temperatures ranging from -60°C to +90°C our filter regulators can be used on any actuator in any environment.

For more information,  
please visit [www.asconumatics.eu/fri](http://www.asconumatics.eu/fri)



**ASCO**<sup>TM</sup>



  
**EMERSON**<sup>TM</sup>

The Emerson logo is a trademark and a service mark of Emerson Electric Co. © 2016 Emerson Electric Co.

Fluid Automation. Right. Now.<sup>TM</sup>



# Introducing Primotek Associates Limited

As the latest member of the “**BVAA family**” a North West based valve consultancy offers a different set of skills to the valve industry and to the Association Membership in particular.

**B**ased in Skelmersdale Lancashire, Primotek Associates Limited is a small multi-disciplined engineering and marketing consultancy which offers bespoke solutions to the valve industry. Established in 2005, Primotek has a wide range of technical and commercial experience in the team, developed over many years in a variety of technical and commercial roles with renown UK valve manufacturers.

Primotek specialises in technical and commercial support to valve manufacturers, distributors and equipment manufacturers primarily in the HVAC and plumbing sectors of the commercial construction industry but also in the process, water and industrial market sectors. In addition to supporting the UK valve market, Primotek also has at least 50% of its business with overseas clients.

Knowledge and expertise is focused on, but not limited to the commercial valve industry and also covers fittings, pipes and

sanitary equipment. Primotek staff have over 100 years' valve experience and its independence ensures unbiased solutions.

Tailored solutions are provided in a variety of disciplines which include:

- Third Party Approvals
- Outsourcing
- Technical support such as Trouble Shooting and Assessments of Failed Products
- Sales & Market Development including Market/Product Development Studies
- Literature support including for example; brochures, instructions, data manuals
- Bespoke training
- Discrete recruitment.

Whilst the core business is technical and marketing consultancy, product sales was not an initial objective but Primotek reacted to the requests of some clients and designed and had manufactured a range of flow measurement products - orifice type metering stations used in the commissioning of HVAC systems.



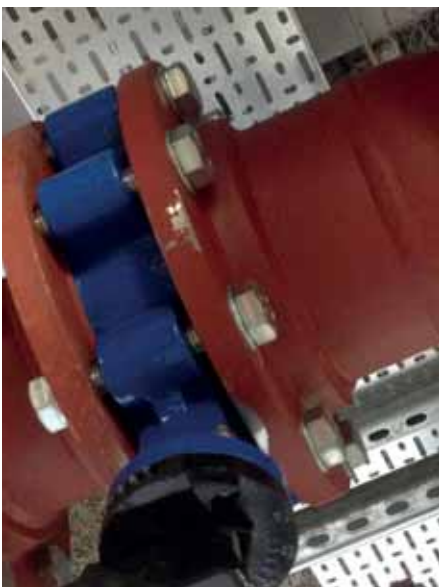
This was done in-house utilizing the knowledge of hydronic and design and outsourcing skills.

The valve industry is a close knit community and so confidentiality is a key watchword.

Each and every project is treated in absolute confidence and when required, Non-Disclosure Agreements (NDA) are put in place with our clients before commencing work.

The combination of services and skills offered is quite unique in the industry and Primotek's availability allows clients to outsource projects to them whilst they continue their normal activity.

With great teamwork and a 'can-do' attitude, Primotek can help clients realise strategic objectives faster, allowing them to concentrate on their day to day issues.



**PrimoTek**  **Associates**

**Tel:** +44 (0)1695 720 027  
**Email:** sales@primotek.co.uk  
**Web:** www.primotek.co.uk

# Smith Flow Control Custom Builds Operating Panel to Enhance Valve Safety and Efficiency



Smith Flow Control Operating panel

Oil & gas company Eni Norge approached valve safety expert **Smith Flow Control** to help simplify its valve processes on the Goliat Field oilfield.

**S**mith Flow Control provided a solution by developing a custom-built operating panel that enhances safety and increases efficiency. It does this by moving the control and operation of Eni Norge's large number of valves to a single, safe location.

The electronic operating panel works as a communication and verification system and enables an operator to control a sequence of actuated valves directly

from the panel. Two operating panels were installed on a floating production, storage and offloading vessel built for use on the Goliat Field, the first oilfield to be developed in the Barents Sea.

Although the operating panel can be used in a wide variety of applications, in this case the panel was specifically designed for use with a pigging procedure. Each panel controlled four valves and incorporated two mechanical interlock key units to ensure a specific sequence of operation.

For example, an operator can select to close valves from the panel. An LED lights up to confirm the valve has reached its fully closed status. The incorporation of mechanical interlocks allows the operator to safely continue the sequence of the pigging process; after the panel has been isolated and all the valves closed and locked, the final key is released to manually unlock the pig trap door to load or unload a pig.

Used in this way the operating panel enhances safety but also serves to streamline complex processes and boost efficiency by providing a one-stop control and verification system.

Smith Flow Control is a Halma Company. Halma makes products for hazard detection and life protection and is a market leader in specialist electronic, safety and environmental technologies.



**Tel:** +44 (0)1376 517 901  
**Email:** [enquiries@smithflowcontrol.com](mailto:enquiries@smithflowcontrol.com)  
**Web:** [www.smithflowcontrol.com](http://www.smithflowcontrol.com)

# Three Decades of Problem Solving for Process Industries



The DuPont™ Kalrez® range of 'O' ring seals withstand temperatures up to 327°C, while offering superior chemical resistance to more than 1800 chemicals and eliminate seal swelling to increase MTBF in a wide range of aggressive processing operations.

**DuPont™ Kalrez®** perfluoroelastomer parts (FFKM) were developed some three decades ago and have delivered outstanding sealing reliability throughout, even in the most aggressive production and processing environments. These high performance products are available in the UK from authorised distributor Dichtomatik Ltd.

**T**he Kalrez® parts improve sealing reliability particularly in conditions where high heat, aggressive chemicals and plasma are utilised. Aerospace and downhole oil and gas applications were some of the first successful applications of Kalrez® products where seal failure was unacceptable. An outstanding resistance to fuels, additives, lubricating oils and corrosive chemicals has ensured the high durability expected and achieved with Kalrez® products. They also provide a broad chemical and high temperature resistance to acids, amines, ultrapure de-ionised water and strong bases etc. This ensures that chemical/hydrocarbon processing plants can run hotter, longer and with a wider range of chemical products while also providing substantially increased MTBR times and improved operating safety.

With a combination of thermal and chemical performance as well as rubber-like sealing ability Kalrez® FDA compliant seals offer the pharmaceutical, food and beverage industries the highest level of protection against product contamination and seal failure. Within electronics manufacturing operations, unplanned maintenance due to incompatible sealing materials can also be dramatically reduced.

A typical example for the application of the Kalrez® products is their use as replacements for metal 'O' rings in a gear pump application, operating at temperatures up to 327°C and 100 bar pressures within the chemical process industry. The installation involved exposure to highly aggressive media, as well as fluctuating internal sealing forces within asymmetric pump housings when pumps were situated

within reactor environments. Long-term reliability and stringent performance were an absolute necessity, and operating times in excess of 10 years have been achieved without the occurrence of production problems through the loss of sealing performance. The changeover to Kalrez® seals was so successful that they are now fitted as standard equipment to the manufacturer's extensive range of gear pumps. The need for regular dismantling and re-assembly of pumps through seal failures has been eliminated, leading to cost savings through reduced maintenance and significant savings in production downtimes.

Superior chemical resistance to more than 1800 chemicals is provided while chemically induced swelling of sealing products can be eliminated, even where concentrated nitric acid, sodium hydroxide, ethylene diamine or even super-heated steam is involved.

**DuPont™ Kalrez®**  **DICHTOMATIK**

**Tel:** +44 (0)1332 524401  
**Email:** [kalrez@dichtomatik.co.uk](mailto:kalrez@dichtomatik.co.uk)  
**Web:** [www.dichtomatik-kalrez.co.uk](http://www.dichtomatik-kalrez.co.uk)



# NEW PRODUCT LAUNCH!

## Introducing Chainwheels

We're proud to announce our own range of ductile iron or stainless steel chain operators that are designed and manufactured to our high standard of quality.



Available for same day dispatch.

Visit [www.quickits-online.co.uk](http://www.quickits-online.co.uk) for data sheets and more information

**QK**  
**quickits**



VISIT US AT VALVE WORLD 2016  
HALL 4, STAND E14



Quickits Limited

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

# ERIKS UK's Top 10 Tips: Selecting the Right Gasket

**Gaskets can often be overlooked in manufacturing and process operations**, despite providing a vital seal between mating surfaces. It is only when they start to fail that their importance is recognised.



**G**arry Wakeling, Industrial Sealing Manager at ERIKS UK offers their top 10 tips for selecting the right gasket and avoiding contamination entering the production line.

## 1. Value your gaskets.

The importance of gaskets in manufacturing and process operations is often undervalued, yet they provide an essential seal that prevents leakage and contaminants entering a piece of equipment. Gaskets should be carefully specified to ensure plant safety is maintained, damage to equipment is prevented, and potential downtime - and its associated costs - are kept to a minimum.

## 2. Establish the correct specification.

In order to correctly specify a gasket for its application, important criteria such as chemical, temperature or mechanical compatibility need to be considered. Failure often arises when these elements are overlooked, leading to gasket material, shape or thickness being incorrectly specified.

## 3. Consider the temperature of the application.

During the specification process, it is essential that the application's operational temperature is considered. Gaskets become brittle at low temperature, leading to a lack of flexibility in the seal which can ultimately lead to ingress or contamination.

## 4. In high temperature applications, consider graphite.

Finding a gasket suitable for higher process temperatures can be a difficult task. Graphite is an ideal solution as it offers a robust resistance to high temperatures, limiting the threat of ingress.

## 5. In hygiene-critical applications, consider PTFE.

The issue of chemical contact is especially critical within the food processing and pharmaceutical industries, where process substances can rapidly degrade gasket materials that are not compatible with the application. However, a range of chemical-resistant gaskets are now available using materials such as PTFE, which can result in exceptionally resilient gaskets.

## 6. Get custom-cut gaskets fast with CAD/CAM services.

Today's state-of-the-art cutting systems use CAD/CAM to deliver fast results to a range of specifications and can cut custom-sized components without transferring contaminants to the gasket. This increases wider gasket availability and reduces unnecessary downtime in machinery overhauls.

## 7. Gaskets can be over-specified as well as under-specified.

There is a tendency for end-users to over-specify unnecessarily expensive gaskets. Sometimes a simple gasket is perfectly adequate for the application and offers a cost-effective solution, which is good news when a plant often requires the cutting of thousands of gaskets. However, it is also important to ensure that gaskets are not underspecified in an attempt to cut costs, as any potential downtime could cost the end-user much more than if they'd fitted the correct gasket in the first place.

## 8. Consult an expert supplier.

When it comes to selecting the right gasket for your application, the best option is always to consult the experts. An expert in gasket technology will be able to establish your specification needs and see whether the performance requirements of your application can be met by a simple, inexpensive gasket, or whether more advanced materials are needed.

## 9. Make cost savings by rolling out new specifications plant-wide.

If you establish that current components across your plant have been over-specified, one option may be to implement a planned reduction of gasket quality. This can help to limit any continued unnecessary expense, whilst also ensuring that components are also not underspecified.

## 10. Time spent reviewing gaskets will bring measurable ROI.

It pays to take expert advice and specify the right solution, especially when you consider the costly results of wastage and downtime that occur when contamination enters the production line. Taking the time to make the correct gasket selection, and to prepare the flanges and fit the gasket, will provide invaluable savings within the manufacturing process and bring measurable ROI.

# ERIKS

**Tel:** +44 (0)1925 883 950  
**Fax:** +44 (0)1925 830 843  
**Web:** [www.eriks.co.uk](http://www.eriks.co.uk)

# Emerson Introduces Wirelessly-Monitored Storage Tank Safety Valves



Enardo 850/950 series of wirelessly-monitored pressure vacuum relief valves.

**New Enardo 850/950 Series** with Smart Wireless technology provides immediate information to help prevent safety and emissions problems.

**E**merson Process Management has introduced the Enardo 850/950 series of wirelessly-monitored pressure vacuum relief valves (PVRVs) that provide safety and emissions control by managing the pressure in storage tanks in the oil and gas, chemical, petrochemical and pharmaceutical industries.

The pressure in storage tanks fluctuates due to changes in temperature, liquid level, or both. A PVRV opens and closes in response to these pressure fluctuations to ensure that safe pressure levels are maintained. However, because these PVRVs are located on the top of storage tanks, they are difficult to monitor.

Site managers are increasingly looking for ways to increase safety and efficiencies. Emerson's new wireless solution enables immediate response to prevent problems related to safety, emissions, and the quality of a tank's content.

*"Until now, PVRVs have remained unmonitored, with no feedback loops commonly seen in other pressure control devices. As the tank's primary pressure control device, this wirelessly-monitored solution can be invaluable,"* said Steve Attri, product manager for Emerson Process Management.



**EMERSON**  
Process Management

Tel: +44 (0)870 240 1978  
Fax: +44 (0)870 240 4389  
Web: [www.emersonprocess.com](http://www.emersonprocess.com)

# rotork®

## Protecting your equipment makes sense



## Rely on Rotork

### Choose the Client Support Programme that suits your needs

- Protect your investment
- Increase plant availability
- Maximise productivity
- Reduce your cost of ownership

Get the facts, find your nearest Rotork office or more information about the Client Support Programme at [www.rotork.com](http://www.rotork.com)

T +44 (0) 113 256 7922  
E [information@rotork.com](mailto:information@rotork.com)  
W [www.rotork.com](http://www.rotork.com)





# Rotork Valve Actuators at Hub of Automated Flood Alleviation Scheme

An extended scope contract performed by **Rotork Site Services** has successfully delivered full automation of a flood alleviation scheme protecting the historic town of Cardigan in West Wales.

**T**he project involved replacing actuators from another manufacturer, installing a PLC control cabinet and interfacing with the existing river level sensor and telemetry system.

The flood alleviation scheme on the River Mwdan was constructed 20 years ago by the local authority. It consists of a V notch weir, an over-spill grid into a culvert that travels approximately half a mile through the hillside into the estuary and three flushing penstocks. In 2006 the scheme was adopted by Natural Resources Wales (NRW – formally Environmental Agency Wales). Since then, NRW has installed CCTV and telemetry to enable remote visual monitoring of the site from central control rooms and mobile devices.

During recent periods of intense rainfall the weir has been at the point of over-topping and, to reduce the flood risk, two of the penstocks were opened. As well as proving the vital importance of the penstocks, these events also highlighted the unreliability of the electric actuators originally installed. Poor environmental sealing had enabled moisture to enter electrical enclosures, causing operational failures. As a result, NRW decided to replace the actuators and at the same time introduce full automation of the flood alleviation scheme.

The extended scope contract awarded to Rotork Site Services encompassed all aspects of the task, enabling Rotork to organise the total supply of the work together with project management services. Rotork's responsibilities included an initial survey, removal of the old actuators and replacement with new, installation of a PLC control cabinet with HMI for local control and indication, interfacing with the level sensor and telemetry system and commissioning of the completed installation. The new Rotork



**New Rotork IQ actuators installed on the flushing penstocks. The level sensor that controls the operation of the actuators via the PLC is situated in the downpipe installed between the back two penstocks. Two of the site's CCTV installations for remote visual monitoring of the river can also be seen.**

IQ12 intelligent electric actuators installed are controlled by the PLC, using the signal from the river level sensor and operating in 5% travel increments.

Operation of the site is now fully automated and remotely monitored. If necessary, the automatic system can be overridden and the actuators can be operated remotely via the telemetry system or locally via the HMI panel on the PLC control cabinet.

Mike Haley is the NRW MEICA electrical engineer who has been responsible for automation upgrade project. He comments: "The scheme using Rotork actuators has successfully introduced the level of automation and remote monitoring

that we required and restored reliability to the operation of the three penstocks. Rotork actuators have a proven record of reliability at other NRW sites, including an installation which has been operating in an exposed coastal environment for 30 years."

**rotork®**

**Tel:** +44 (0)1225 733 200  
**Email:** [information@rotork.com](mailto:information@rotork.com)  
**Web:** [www.rotork.com](http://www.rotork.com)

# Remote Valve Operator Eases Water and Wastewater Processes



Smith Flow Control FlexiDrive

**T**he FlexiDrive from Smith Flow Control helps workers in the water and wastewater industry remotely operate valves in hard-to-reach or hazardous locations.

The FlexiDrive's linear drive cable transfers torque from a handwheel to any conventional wheel-operated valve up to 30 metres away, accommodating 540-degree bends in the cable run.

FlexiDrive can be used in the most extreme climates, making it suitable for water and wastewater applications. Valves in underground pits that create a risk of falling, or in areas with odours from chemicals or waste, can be operated from a safe location. A submersible version of FlexiDrive is available that operates valves in up to 15 metres of water.

FlexiDrive is completely maintenance-free and available in two sizes to accommodate large and small valves.



**Tel:** +44 (0)1376 517901  
**Email:** [sales@smithflowcontrol.com](mailto:sales@smithflowcontrol.com)  
**Web:** [www.smithflowcontrol.com](http://www.smithflowcontrol.com)

# rotork®

**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

Get the facts, find your nearest Rotork office or more information about Rotork Site Services at [www.rotork.com](http://www.rotork.com)

**T** +44 (0) 113 256 7922  
**E** [information@rotork.com](mailto:information@rotork.com)  
**W** [www.rotork.com](http://www.rotork.com)





# Comprehensive Sealing Solutions



**Groupe LATTY** delivers comprehensive sealing solutions for industrial valves and fittings, including the supply of standard and tailored parts as well as qualification and training

**T**he standard-forerunner in the industrial sealing sector, Groupe LATTY owes its leadership to a willingness to invest in R&D in order to develop products that meet specific industrial valve and fitting requirements.

At its plant at Brou, Eure-et-Loir, France, the Group designs and manufactures products that meet the highest industrial standards.

LATTY develops comprehensive sealing solutions suited to each type of industrial valves. Two new packings for stuffing boxes LATTYpack Valve and LATTYpack Control round out the valve sealing range. These packings consist of several preformed rings with a fully controlled height under load and are used in valve stuffing boxes. They reduce friction by up to 30% through the presence of an agent specifically developed by the LATTY Group and in this way extend the lifetime of stuffing boxes. The new packings have obtained ISO 15848-1, API 622, 624, 589 and PMUC certification.

Moreover, our valve and fitting test laboratory enables us to test sealing solutions on customers' equipment under optimum operating conditions. For several years manufacturers of industrial valves have been asking us to certify their equipment in order to ensure compliance with the standards required by major buyers in the petrochemical, chemical, food-processing and pharmaceutical industries. To date, we have performed over 100 certifications on equipment items such as control valves, on/off valves, valves measuring 1" to 10"

and in pressure classes ranging from 150 to 2,500 lbs (20 to 420 bars), with validation by the relevant bodies. This equipment now complies with existing regulations relative to fugitive emissions, fire and oxygen tests.

In order to ensure the optimum assembly and operation of our customers' equipment, we provide training via multilingual modules based on the choice of sealing solution for industrial valves in order to meet the operational requirements specific to each industrial environment. Training is carried out on our valve training benches with a focus on good practices in the fitting of stuffing boxes and static sealing solutions in order to ensure the safety of your personnel and the reliability of your equipment. GROUPE LATTY is an approved training organisation.

**JOHNSON**  
valves

+44 (0) 23 80669 666  
sales@johnsonvalves.com

The UK's largest independent  
stockist of

**Bailey Birkett**

Safety Relief &  
Pressure  
Reducing Valves



**Tel:** +44 (0)1777 708 836  
**Fax:** +44 (0)1777 707 474  
**Web:** [www.latty.com](http://www.latty.com)



# 2016

Düsseldorf, Germany  
29 Nov – 1 Dec

VALVE WORLD



EXPO

DÜSSELDORF

®

10th Biennial Valve World Conference & Exhibition  
10. Internationale Fachmesse mit Kongress für Industrie-Armaturen



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

Sponsored by: **KITZ** **MRC Global** **MW NEWAY**  
**PENTAIR** **rotork** **VELAN** **EMERSON**  
Process Management

Supported by: *energy* **API**



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)

**M**  
Messe  
Düsseldorf

# Orseal Valves at Filanovskogo – One of the Largest Crude Oil Finds in Decades



Inspection visit at supplier site



Reduced bore valve with pneumatic actuator



Swing check valve class 300

**The Filanovskogo (Filanovsky) field**, 50k offshore in the Northern Caspian Sea, was discovered in 2005. With reserves of 153.1 million tonnes of oil and 32.2 billion cubic metres of gas, the field is expected to reach maximum oil production at a level of 12 million tonnes by 2017 with maximum gas production expected to exceed 26 bcm by 2028.

**T**he infrastructure at the Vladimir Filanovsky offshore field consists of a 15,200t ice-resistant fixed platform (IRFP-1); a living quarters module platform accommodating 125 people and including a helipad; a 21,000t central processing platform (CPP) to process and pipe the oil and gas ashore, and a risers block (RB) platform, all linked with connection bridges. Construction works include the laying of 330km of subsea pipeline and 350km of onshore pipeline.

For this major project, Orseal won a prestigious contract to supply a range of valves – from ½" to 20", manual and pneumatic, actuated and motor operated. Orseal supplied valves in carbon steel to suit the specific temperature requirements of -30 degrees C. All valves needed to conform to the Russian GOST certification standard – with Orseal supplying all documentation and related drawings to ensure compliance. Orseal's consultancy on this project included not only the specification and supply of appropriate valves, but also all associated logistical support and advice. They were on-site with the supplier for full inspection of all valves to avoid any discrepancies and non-conformance, and to save the client's time.

Orseal engineers assisted with logistics and delivery at the client's site to reduce any delays, including packing for export to suit air freight and delivery to the overseas client fabricator.

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



**Tel:** +44 (0)1204 474300  
**Email:** [sales@orseal.com](mailto:sales@orseal.com)  
**Web:** [www.orseal.com](http://www.orseal.com)

# New IQ Valve Actuator Has Optimised Stem Acceptance and Torque Output

**Rotork has introduced a new model in its IQ range** of non-intrusive intelligent electric actuators with an optimised combination of valve stem diameter acceptance and torque output to facilitate economical automation of valves and penstocks typically found in the water and effluent treatment industries.

**T**he new IQ19 actuator combines a stem acceptance of up to 51mm (2 inches) diameter with torque output up to 135 Nm (100 lbf.ft) and output speeds up to 72 rpm @ 50Hz (86 rpm @ 60Hz). The combination meets the

operating requirements of large numbers of penstocks, sluice gates and gate valves.

The actuator incorporates the full range of advanced reliability, functionality and asset management features, including an

unrivalled range of data logging capabilities, for which the Rotork IQ marque is well known. An information-rich backlit display is the focus of attention for non-intrusive wireless commissioning, communication and multi-functional indication, including user-friendly multi-lingual menus for setting-up and configuration.

Local position indication, valve and actuator status, asset management and diagnostic operating information is available to download or viewed directly at the actuator. Diagnostic graphics present a window into the plant, showing the valve torque, usage profiles and service logs, facilitating real-time analysis directly at the actuator and in the control room. Preventative valve maintenance requirements can be identified, eliminating unplanned interruptions to the plant or over-cautious planned maintenance outages.

Reliability is optimised by the IQ double-sealed IP66/IP68 watertight and temporarily submersible enclosure, which permanently protects internal electrics from the ambient environment, even during site wiring with the terminal housing cover removed.

On the actuator's compact and robust enclosure, local Open/Close and Local/Stop/Remote selectors are coupled magnetically to internal switches without penetrating the actuator body, further enhancing non-intrusive environmental protection. Emergency handwheel operation with motor preference is provided as standard.

Suitable for all industry standard three phase power supplies, IQ19 actuators offer network connectivity with Foundation Fieldbus®, Profibus®, HART® and DeviceNet® open systems, as well as Rotork's own dedicated Pakscan wired or wireless systems.

The new IQ19 valve actuator facilitates economical automation of valves and penstocks typically found in the water and effluent treatment industries.



**rotork®**

**Tel:** +44 (0)1225 733 200  
**Email:** [information@rotork.com](mailto:information@rotork.com)  
**Web:** [www.rotork.com](http://www.rotork.com)



# Valveforce Appointed Exclusive UK Distributor for All Clorius Controls A/S Products



2 Differential Pressure Controls



3 Way Linear Control Valve



3 Way Rotary control Valve

**BVAA Member Valveforce** has announced they are the new exclusive UK distributor for Clorius Controls who recognise them as the control valves specialists that provides outstanding technical knowledge and support to the UK heating, cooling and ventilation market and also has extensive stock for immediate dispatch.

## The perfect partnership

Valveforce and Clorius' relationship has been established for many years so when Clorius decided to appoint just one preferred UK distributor Valveforce was the obvious choice. Clorius recognised Valveforce as one of the UK's leading control valves specialists with the technical ability and in-house team to support the respected installed base they want to market their products to.

Clorius specialise in the development and production of equipment for monitoring, controlling and regulating heating, cooling and ventilation. Their products consist of valves, thermostats, pressure difference regulators and electronic controllers making up a complete range within this field. Clorius supplies the ship building industry, provides industrial applications as well as heating and ventilation for buildings and has a history of supplying quality products and services that meet the high standards set by the maritime industry.

## New products and larger schemes

As Clorius' offering evolves and grows new products are being introduced including new actuated and control valves especially in larger 2 and 3 way versions on CWS and

HTLW and general HVAC control. Valveforce appreciates the build quality and flexibility that Clorius offers and is already working in the industries that Clorius wants to target. By working together Valveforce has the opportunity to extend our offering into larger products and schemes such as:

- Engine jacket cooling water systems
- Central cooling water systems
- Hot water heating and distribution
- Heating systems for fresh water generators
- Distribution valves for heating, venting and air conditioning systems
- Large scale distribution systems
- District heating schemes
- On CHP engines
- Large HVAC systems

## Control valves in stock for immediate dispatch

Valveforce has an extensive product range in stock available for fast dispatch and sensible delivery time for very large valves.

## TD-56-2 Differential Pressure Controls

TD controls reduce the high and fluctuating pump head in district heating systems and other large distribution networks to

a suitable and, under all circumstances a constant differential pressure.

- Exacting regulating accuracy
- Nominal Pressure PN16/ PN25
- Self acting
- Easy to install and use

## 3 Way Linear control valves PN10/16/25 DN15- DN300

This unique product guarantees reliable operation and performance. Whenever a media is heated or cooled to a certain temperature Valveforce can supply the most efficient solution.

## 3 Way Rotary Control Valve Stainless Steel with Electric Actuator

This stainless steel rotary 3-Way control valve with a slide for quarter turn operation is designed for regulating of the most industrial fluids and aggressive media.

It offers a maintenance free operation, 100% operational performance and a leakage rate of less than 0.5% thereby reducing energy consumption and improving your bottom line. The compact and robust design is up to 50% lighter than comparable valve designs.



**Tel:** +44 (0)1217 111 908  
**Web:** [www.valveforce.co.uk](http://www.valveforce.co.uk)

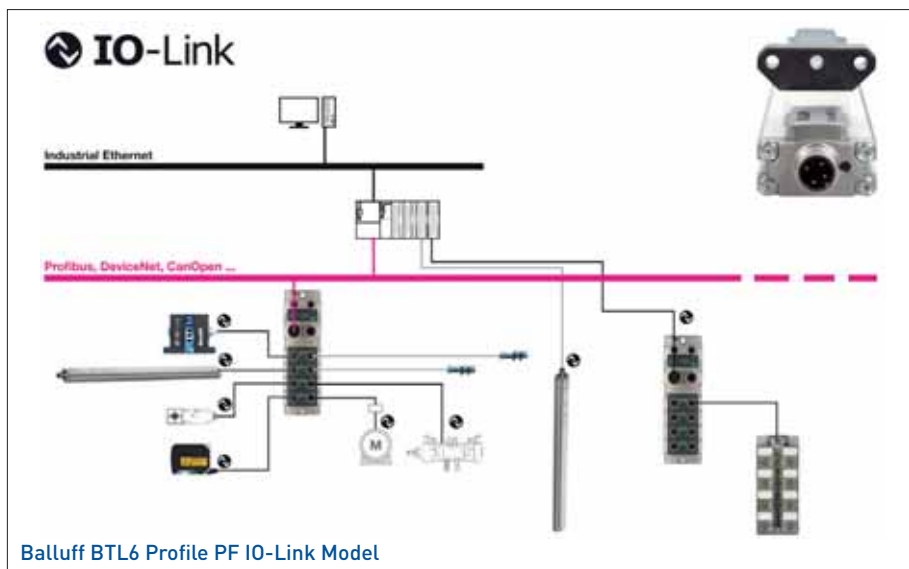
# Balluff's Magnetostrictive Linear Position Measuring Systems with IO-Link

Position measuring systems from **Balluff** stand for the precise detection of measurement paths in large parts of the manufacturing and assembly industry. With the Micropulse BTL6 Profile PF IO-Link model, Balluff is the first company worldwide to equip magnetostrictive linear transducer position measuring systems with IO-Link.

All measured values and status data are sent digitally and via a simple, three-wire cable via IO-Link master to the control level. The contact-free transducers with intelligent communication interface are used preferably where comprehensive IO-Link designs are to simplify the configuration, accelerate the installation and reduce costs during wiring. Thanks to IO-Link, the end results are streamlined productive manufacturing solutions, that enable automatic configuration during running operation and provide transparent diagnostics down to the process level.

PF magnetostrictive position measuring transducers from Balluff are characterized by their flat construction and a robust, shock-, vibration- and soiling-insensitive design in enclosure rating IP 67. Thanks to multi-magnet technology, the contact-free transducers reliably detect the measurement position and ensure absolute and precise results. Measurement lengths from 50 to 4,570 mm can be realized; the position measuring systems tolerate a vertical and horizontal offset of the magnet to the sensor profile of up to 15 mm.

With its point-to-point connection under networks of any type, IO-Link establishes a high-performance communication channel in both directions. Against the background of increasing demand for IO-Link designs,



Balluff has, with the Micropulse PF IO-Link, equipped another device from its product line with the intelligent interface. The contact-free position measurement technology communicates with a speed of 230kB, achieves a process data cycle of 1 ms and offers a resolution of 1µm. As a result, even fast movements can be reliably detected. Via M12 connectors with a standard sensor cable, the transducers are connected quickly and easily to the IO-Link master and integrated in the controller.

Due to the integrated information flow, all data can be stored centrally and consistently. With IO-Link, configuration

in running operation, monitoring and diagnostics all the way down to the place of occurrence are possible.

**BALLUFF**  
sensors worldwide

Tel: +44 (0)161 282 4700  
Email: [sales@balluff.co.uk](mailto:sales@balluff.co.uk)  
Web: [www.balluff.co.uk](http://www.balluff.co.uk)

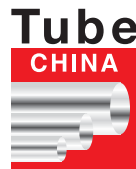
# Expertise in Flow Technology Trade Fairs



[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)





# How Smart Positioners Can Save You Money

Maybe you think that your existing conventional valve positioners provide the accuracy you need. However, Jo Kirkbride, for **ABB Measurement & Analytics UK**, argues that there are too many other advantages at stake to ignore the drive to go digital.

**T**he spread of communications technologies such as fieldbus means that smart valve positioners have really come into their own in recent years. Virtually all new-build control schemes will now incorporate smart positioners, while most existing installations tend to upgrade to smarter systems whenever their old analogue controls need to be replaced. Whether it's a new-build project or an upgrade, the advantages of going digital are clear.

## Commissioning

The benefits begin with installation and commissioning. Unlike conventional positioners, which must be mechanically configured in a process that can take up to three or four hours per valve, smart positioners use an autostroke routine to set themselves to the valve in as little as two to three minutes. Since many large sites will have hundreds of valves, this can have a significant impact on scheduling for a new-build or downtime for an upgrade project.

In addition, many valves may be sited in inaccessible locations or an inhospitable environment, which means that the ability to communicate with them remotely from set-up onwards will yield significant savings. Smart positioners are typically equipped with at least one communications protocol and sometimes more. For example, ABB positioners can communicate using 4-20mA, HART, Profibus or FOUNDATION Fieldbus.

## Recalibration

Because they are controlled electronically and offer a much higher data resolution, smart positioners are less vulnerable to drift and tend to stick closely to their programmed tasks over a longer time than traditional positioners. This is also due to the fact that the components are generally smaller, which makes them less vulnerable to disturbances such as plant vibrations.

This feature, coupled with auto-stroking, means that many users of smart

positioners find that they never have to reset their units after commissioning. Even if they do need attention, however, smart positioners can be recalibrated at the touch of a button using the same routines as commissioning. This goes even further towards minimising any downtime.

## Reduced air costs

Cutting energy costs is paramount in today's climate of escalating prices. Any chance to reduce the energy used to generate compressed air is especially valuable, since around 90% of the energy consumed by a compressor ends up as waste heat, not compressed air. This effectively makes compressed air ten times more expensive than electricity.

So it's important when choosing a smart positioner to check its air consumption. The following example provides an idea of the type of savings that can be achieved using a smart positioner. Let's assume that we have standardised on one of the top five positioners in the UK market and that these positioners spend 50% of their operational time in a steady state position (steady set-point).

Assuming a compressed air cost of 1p per scfm (standard cubic feet per minute), the cost of this wasted energy, in the worst case, can be as much as £2,106.78 per year.

Now let's assume that we replace these positioners with an ABB EDP300 or TZID-C smart positioner. Based on the above, the intelligent control of compressed air consumption provided by the positioners will save between £500 & £1,200 per year per positioner.

## Maintenance

In many instances, particularly those with fairly constant or predictable loads, the amount of wear on control valves is likely to be very limited. For such applications it is usually sufficient to use positioners that are typically expected to handle 100,000 strokes. However, for processes where changes are likely to be more frequent or less predictable or where accurate control is critical, it is essential to use equipment that can deliver a consistently fast response for as long as possible.

Compared with manual control systems, today's smart positioners provide scope for significant maintenance cost savings. For a start, remote communications mean that engineers no longer have to physically check every unit to pinpoint those that need attention.



**ABB's EDP300 digital positioner features a small and compact design, a modular construction, and an excellent cost-performance ratio**

Moreover, some of today's smart positioners now also offer data gathering and diagnostic capabilities that can help to reduce unplanned maintenance to an absolute minimum. A simple example might be counting valve open/close cycles in order to predict the amount of wear on the valve trim, stem or seals.

When they first arrived on the market, smart positioners found a home predominantly in industries with the most to gain, such as large chemical plants. However, their entry was restricted when it came to certain applications, such as those in hazardous areas where all-pneumatic systems were still the norm. That is no longer the case. For example, ABB's range now includes an intrinsically safe, Exia-rated version and a SIL2 variant for safety-critical applications. There is also a fully-certified Exd model for offshore applications.

## Summary

The continuing developments in smart positioner technology, coupled with the benefits of enhanced cost efficiency, greater accuracy and reduced maintenance, make them increasingly attractive for both new and retro-fit installations in all industries.

Furthermore, their ability to offer improved energy performance over traditional devices makes them ideal for businesses looking for new ways to beat the continuing escalation in fuel prices currently affecting UK industries. To see how much you could save by switching to smart positioners, ABB has developed an online calculator tool, available through the website. It is also available as an App.



**Tel:** +44 (0)870 600 6122

**Email:** [moreinstrumentation@gb.abb.com](mailto:moreinstrumentation@gb.abb.com)

**Web:** [www.abb.com](http://www.abb.com)

# NABIC – Offers a Comprehensive Range of Safety & Control Valves

**NABIC** has long been recognised as the industry standard for commercial and industrial hot water applications. In fact, NABIC valves, available in gunmetal and stainless steel, are also suitable for use with a wide variety of fluids and gases including steam, hot water and air.

**T**ypical applications are vented and unvented heating systems, hot water and steam boilers, compressed air systems, pump relief and bypass.

NABIC has a rich history dating back to 1864 and the Victorian Age - it is a brand name built on pedigree and trust. NABIC is an acronym for National Boiler Insurance Company and came into existence due to a rising tide of boiler explosions which were causing extensive damage to commercial properties and considerable loss of life.

For instance, in 1854 there was a boiler explosion in Rochdale which killed ten people. The inquest ruled that the incident

was caused by neglect – one safety valve was inoperative and the other had been over-weighted to “stop the boiler blowing off”. This incident was one of many that took place across the country in the industrial heartland of England which had the biggest concentration of steam boilers in the world and started the unstoppable process of making working environments safer.

The NABIC Company was born out of necessity to insure commercial activities and they employed highly skilled engineers to carry out the inspections. So it was no surprise that the new Company was also keen to look kindly on any new inventions which would help safeguard boilers. In 1863 John Smith patented a fusible plug for boilers and NABIC bought the rights in 1864 for £2000 and this provided the base for the company to grow.

NABIC commenced manufacture ensuring the quality of the fitting and offered customers a 10% reduction in premiums if they fitted them. NABIC set the trend as fusible plugs were so effective and other companies followed their lead and told their customers to request NABIC. The name became the industry standard, a modern day ‘Hoover’ for the boiler industry and still carries gravitas today.

All valves are manufactured in the UK, and pressure set to customer specific requirements. And now, for the first time NABIC valves are available to purchase online direct from the manufacturer, via a Fastrack next day service. The platform has been built to improve the customer experience and to be effective in the field as the site is optimised to handle the latest smartphones and tablets.

NABIC is a leading brand of Crane Building Services & Utilities and offer



a range of safety valves that serve a variety of industries including Education, Healthcare, Petrochemical, Food, Power Generation, Leisure and Commercial Heating protecting life and property against failure to control system pressures.

## Safety Relief Valves

A range of safety relief valves available in high lift and standard variants primarily used for water, steam and air applications.

## Pressure Relief Valves

Standard and high lift pressure relief valves for applications where pressure tightness is required on the discharge side of the valve.

## Combined Pressure and Temperature Relief Valves

Designed for use on unvented hot water supply systems where protection is essential against excessive temperature and pressures.

## Anti-Vacuum Valves

Utilised to protect drying cylinders, storage tanks from collapse due to an internal vacuum. Also used on steam systems, to assist condensate drainage and prevent suction of contents from vats.

## Boiler System Valves

The NABIC range of valves comprise automatic air vents to remove trapped air from a sealed system and three way vents and cocks to allow for easy maintenance while the system is still running.

## Pipe Interrupters

Pipe interrupters are safety devices designed to protect potable water systems. They prevent the backflow by automatic ventilation of the system and elimination of the vacuum.

# 5 STAR CARE DEMANDS 5 STAR SAFETY



## Test Valves and Equipment

Test valves are utilised on steam boilers to provide a means for attaching a pressure gauge to allow for calibration under working conditions.

## The Royal Edinburgh Hospital

**Project:** Royal Edinburgh Hospital

**Client:** McCallum's Water Heaters

**Contractor:** BBESL in Scotland

**Specifications:** NABIC Fig. 500T Combined Pressure & Temperature Relief Valves, Fig. 542 Safety Relief Valves, Fig. 568 Anti-Vacuum Valves.

NABIC Safety Valves were installed in the £48million recently developed special care unit at the Royal Edinburgh Hospital. The vast programme of works at the Royal Edinburgh Hospital campus, which started in January 2015, will see the entire site transformed over the coming years with modern and fit-for-purpose facilities. Phase one redevelopments include new accommodation for the adult acute mental health inpatient service,

older people's mental health assessment, Intensive Psychiatric Care Service (IPCU) and the new Robert Fergusson National Brain Injury Unit.

NABIC Safety Valves were supplied to McCallum's Water Heaters who have built the Skid unit plant rooms and Chlorifier's. McCallum's currently choose NABIC valves in all of their major projects due to the trusted brand name which ensures products of a high quality, reliability and longevity.

## 5 Star Luxury Demands 5 Star Safety - The Renaissance Hotel

**Project:** St Pancras Renaissance Hotel, London

**Client:** Marriott Hotels

**Contractor:** EMCOR UK

**Distributor:** BSS (Kings Cross) Ltd.

**Specification:** NABIC Fig. 500 High Lift Safety Valves

NABIC Fig. 500 valves were installed in the plant rooms of the sumptuously renovated

five star St Pancras Renaissance hotel which opened to much fanfare. The luxury accommodation consists of 245 bedrooms, 38 suites, 9 meeting rooms the Gilbert Scott restaurant & bar, health club and spa.

The NABIC safety valves are installed in all 5 boiler rooms helping to provide hot water to bathrooms on the hotel's seven floors. The Fig. 500 is WRAS approved and designed for use on unvented systems where a high capacity emergency steam relief capability is required.

**CRANE**

**Tel:** +44 (0)1473 277 300

**Email:** [enquiries@cranebsu.com](mailto:enquiries@cranebsu.com)

**Web:** [www.cranebsu.com](http://www.cranebsu.com)



# Manufacturing Accolade for SMC Pneumatics

Milton Keynes company **SMC Pneumatics (UK) Ltd** is celebrating winning the trophy for Manufacturing at the Business Achievement Awards 2016.

**A**t the biggest annual gathering of local businesses, more than 500 people saw the company presented with the Award for Manufacturing at a glittering ceremony on Thursday 10 March at stadium:mk

Now in its third year, the Milton Keynes Business Achievement Awards (MKBAAs) celebrate local business excellence by recognising and rewarding achievement.

An elated Kevin O'Carroll, SMC UK's Managing Director, said, "In the 38 years we've been in the UK we've established a reputation for engineering excellence, and

*all of us in the company are thrilled to get this manufacturing accolade. We know that many of our UK customers benefit from our customised product options and assemblies produced at our Milton Keynes facility.*

*Winning this prestigious Award is all the sweeter, particularly as there are so many other great manufacturing companies in the Milton Keynes area", he concluded.*

In addition to the 230 staff based in Milton Keynes, SMC also has a nationwide sales team of around 120 technically trained sales engineers.



**Tel:** +44 (0)1908 563 888

**Email:** [sales@smcpneumatics.co.uk](mailto:sales@smcpneumatics.co.uk)

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



## BVAA's Technical Hot Spot



## ACTUATED VALVES AND CONFORMITY TO THE ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF THE MACHINERY DIRECTIVE 2006/42/EC

### What is it?:

This European Directive specifies the essential Health and Safety Requirements applicable to machinery. The BVAA Guidelines supported by CEIR takes the view that most actuated valves are excluded from the definition of machinery and therefore the Machinery Directive does not apply. As a result of concerns expressed by VDMA of Germany the Commission Machinery Directive working group is now considering whether Actuated Valves come under the definition of machinery or partly completed machinery.

### Why is it important?:

If it is decided that actuated valves are considered to be machinery under the definition of machinery in 2006/42/EC then Category 1 actuated valves would be excluded from the Pressure Equipment Directive in accordance with Article 1 paragraph 3.6. Category 2 and 3 actuated valves may be excluded from the Machinery Directive under Article 3 because they are covered more specifically by the PED.

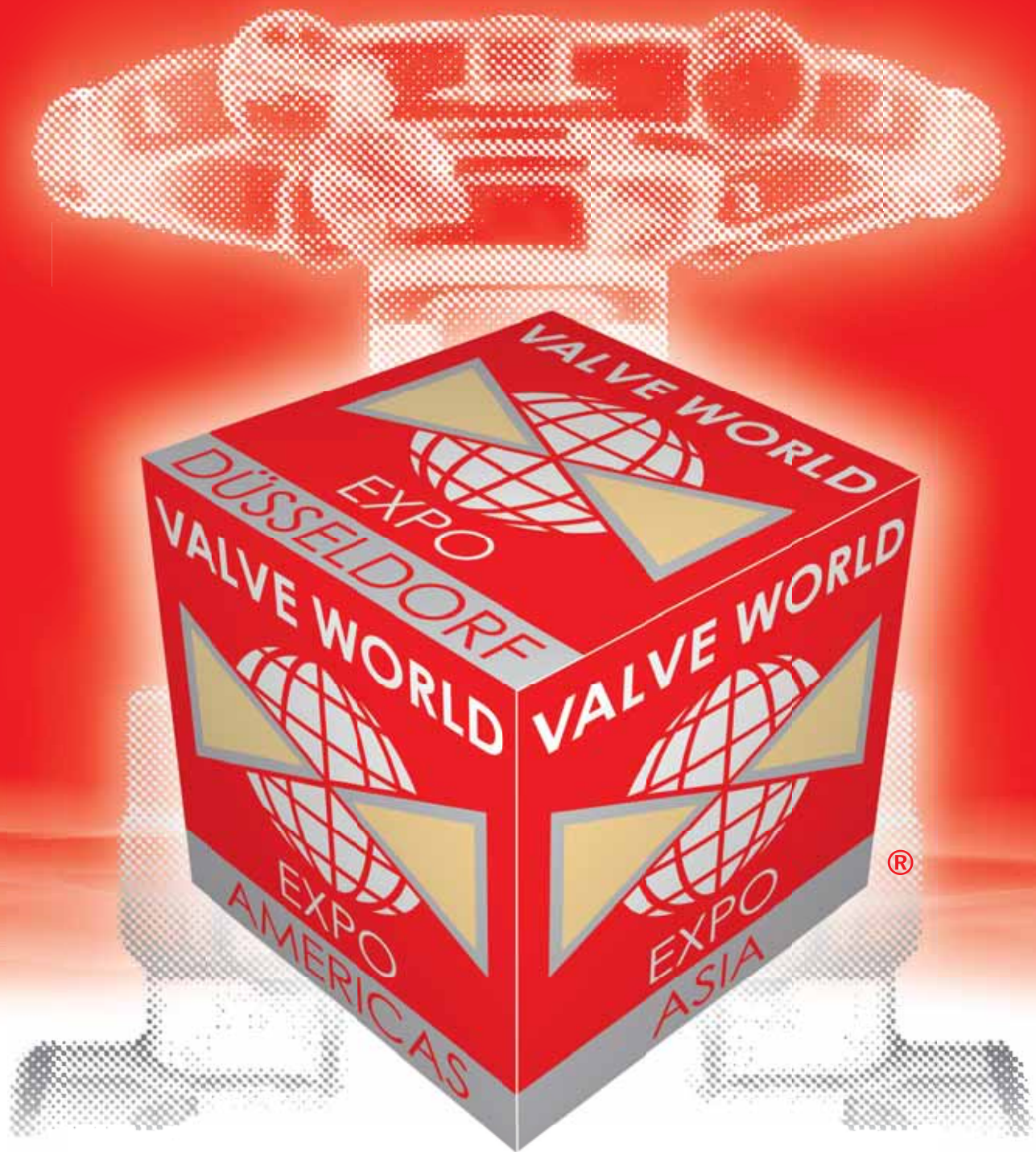
### Supersedes:

Will potentially require an update of manufacturers' Declarations of Conformity and BVAA guidelines.

The BVAA is attending meetings with CEIR and VDMA to try and reach a common position. The matter is also being discussed by the Commission's working groups for Machinery and Pressure Equipment Directives. The BVAA has met with the HSE Machinery and Pressure Equipment Directive specialists to seek their views and to try and reach a common UK position. Agreement on a common position is expected later this year and BVAA Guidelines for the Machinery Directive and Pressure Equipment Directive will then be updated.

***This HOT SPOT is issued for information and as an advanced warning that change may be coming. Comments from members regarding their experiences with customer requests for Declarations of Conformity to the Machinery Directive would be welcome.***

# 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

# EnerMech Records Group Profits of £26 Million



EnerMech Ltd CEO, Doug Duguid

**UK Revenues** Grow to £140 Million and £4.5 Million Profit. Company Well Positioned for Oil Industry's Call for Greater Co-operation.

**M**echanical engineering group, EnerMech, grew revenue by 27% in 2014 with turnover rising to £258.9 million from £202.5 million, while profits (EBITDA) increased from £14.2 million to £26.7 million.

In the latest accounts to December 2014 lodged at Companies House, EnerMech's UK division pushed up revenue on the previous year from £131.5 million to £141.7 million and recorded profits after tax of £4.5 million.

Chief executive officer, Doug Duguid, said that the Aberdeen-headquartered Group revenues in 2015 would be in line with what was achieved in 2014, a performance which he was pleased with against a depressed oil price.

Mr Duguid said: "We are working in a challenging environment given the continuing decline of the oil price, with most customers focussed on reducing operating costs.

"Our multi-business line integrated offering puts us in a good position to respond to the industry's call for greater co-operation and we are finding common solutions which can greatly increase efficiency."

Mr Duguid said EnerMech had witnessed a drop in activity in harder hit regions during 2015, including the UK sector, but was continuing to invest in infrastructure and extend market share in other regions where growth opportunities existed.

He added: "We expect it will be the latter part of 2017 at the earliest before the downturn eases but we have plans in place to address this and as we enter 2016 we are fortunate that we have an international infrastructure and strong back-log of projects in the pipeline.

"We have identified growth potential in Africa, Middle East, Caspian and the Americas and will draw upon lessons and expertise gained in mature areas such as the UK and Norway to maximise those opportunities."

EnerMech employs 2300 people and operates from 35 UK and international bases, providing seven main business lines to the oil and gas sector, including cranes and lifting, hydraulics, equipment rental, training, valves, industrial services and process, pipeline & umbilicals.



**Tel:** +44 (0)1224 723 300  
**Fax:** +44 (0)845 638 6441  
**Web:** [www.enermech.com](http://www.enermech.com)



# Innovative Hydraulic Tester Shortlisted for Industry Award

**A new generation in portable hydraulic testers** that talks wirelessly to your mobile phone designed by Webtec, the Cambridge (UK) based hydraulic measurement and control manufacturer, has recently been shortlisted as a finalist in the inaugural Motion Control Industry (MCI) Awards.



**L**aunched in April 2015, Webtec explains that, "the DHM4 is aimed at field service engineers in the mobile machinery industry to carry out diagnostic testing or preventative maintenance and differs from other portable hydraulic testers. It not only allows the user to carry out a pump test on a mobile machine in-the-field, but also logs flow, pressure, and temperature readings and, uniquely, allows the user to produce and email their customer a test certificate within seconds, without needing to return to the office. The DHM negates the need for a computer to analyse and

print the results, instead the tester pairs seamlessly with the user's iPhone, via low-power Bluetooth, and then uses the free-of-charge QuickCert™ App."

The Webtec DHM is shortlisted as a finalist for the award for "Technical innovation of the year", the winner will be announced at the MCI Awards Dinner held at the National Conference Centre, near Birmingham on Tuesday 12th April 2016. For further information on the DHM4 Series hydraulic tester, visit the Webtec website. Alternatively to view the MCI Awards visit [www.mci-awards.co.uk](http://www.mci-awards.co.uk).



**Tel:** +44 (0)1480 397 400

**Email:** [information@webtec.co.uk](mailto:information@webtec.co.uk)

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



## BVAA's Technical Hot Spot



## METAL BALL VALVES FOR PETROLEUM, PETROCHEMICAL AND ALLIED INDUSTRIES BS EN ISO 17292

### What is it?:

BS EN ISO 17292 The purpose of this International Standard is the establishment, in ISO format, of basic requirements and practices for flanged, butt-welding, socket welding, and threaded end steel ball valves having flow passageways identified as full bore, reduced bore, and double reduced bore seat openings suitable for petroleum, petrochemical, and allied industries applications.

It is not the purpose of this International Standard to replace ISO 7121 or any other International Standard that is not identified with petroleum refinery, petrochemical, or natural gas industry applications.

In this International Standard, flanged end Class-designated valves have flanges in accordance with ASME B16.5. Flanged end PN-designated valves have flanges in accordance with EN

1092-1. Valves with ends threaded may have threads to either ISO 7-1 or ASME B1.20.1.

### Why is it important?:

This standard is applicable to metal ball valves suitable for petroleum, petrochemical, natural gas plants, and related industrial applications in size range DN8 to DN600 and pressure class PN16 to PN100, Class 150 to Class 800.

### Supersedes:

Supersedes BS EN ISO 17292:2004.

This standard is available from BSi Publications at a price of £182.00 (members price £91.00). Those people that are members of PSE/18 or PSE/18/3 committees are able to download the standard for free.

# EnerMech Sign Up to Distribute Parker Hannifin Technologies

**EnerMech** Australia has signed a distribution agreement with Parker Hannifin, the world's largest motion and control technologies company.

**T**he agreement will see mechanical engineering group EnerMech act as Specialist Parker Distributor in the Australian oil and gas sector.

Covering a broad spectrum of technologies, EnerMech will use Parker products for client requirements in hydraulics, pneumatics, filtration, instrumentation, fluid connectors and seals.

EnerMech will recruit additional staff across the country to support the new service and has invested in stock and hose manufacturing equipment in key locations across both eastern and western coasts. Both companies are working together to develop product-specific training programmes for staff to enhance expertise in Parker's portfolio.



EnerMech Hydraulics Manager in Australia, Grant Marson, said: *"We are delighted to align EnerMech with the world's market leader in motion and control technologies and this agreement adds value to our clients in the Australian oil and gas industries."*

*"Having engaged with our clients and listened to feedback from the market, we recognised an opportunity to provide specialist expertise in the specification and application of fluid power and control technologies to the oil and gas sector in Australia."*

*"This agreement ensures that EnerMech is well placed to support existing and potential clients as the industry transitions towards an operational and maintenance environment, where quality products supported by service excellence will become essential elements in providing value for money."*

EnerMech has operations in eight Australian cities stretching from Perth to Gladstone, Darwin and Melbourne, and employs more than 500 staff in its Australian region, with numbers expected to grow to more than 700 in the next year.

The company has operations in 20 countries and is represented in all of the global oil and gas hubs where it provides a broad range of mechanical services, including cranes and lifting, valves, hydraulics, industrial services, process, pipeline and umbilicals (PPU), equipment rental and training services.



**Tel:** +44 (0)1224 723 300  
**Fax:** +44 (0)845 638 6441  
**Web:** [www.enermech.com](http://www.enermech.com)



# Parker Bestobell Secures Contract to Supply Valves for Canadian Tankers

**Parker Bestobell Marine** part of the Instrumentation Products Division of Parker Hannifin – the global leader in motion and control technologies, has received its first order to supply its cryogenic fuel gas valves for new build tankers.

**T**he two 15,000-dwt ice-class 1A asphalt and bitumen tankers have been ordered by Groupe Desgagnés of Canada and will be built at Besiktas shipyard in Turkey. The ships will be equipped with dual-fuel engines allowing them to operate on LNG (Liquefied Natural Gas) and fuel oil, via 600 cbm gas storage tanks on the decks. Once built, the vessels will serve the Great Lakes and Canada's St. Lawrence River.



Because of the low winter temperatures in Canada, the valves and actuators have been specified to operate in temperatures as low as -40 Deg cent. This is not an issue for Parker Bestobell's cryogenic valves, which are designed to operate to temperatures as low as -196 Deg cent. The actuators were modified by the supplier to be able to operate down to -40 Deg cent.

Parker Bestobell Marine has experience of supplying cryogenic valves for extremely cold climates. The company has been appointed to supply its cryogenic globe and check valves for the cargo handling system on the Yamal series of LNG carriers being built at DSME shipyard in South Korea. The valves used in these vessels will be required to withstand winter temperatures as low as -54 Deg cent, as well as excessive build-up of ice.

The company is becoming renowned for its high quality valves for fuel gas systems, which has so far included over 30 LNG fuel gas projects. The most high profile of these was to supply the cryogenic globe and check valves for the high profile Harvey Gulf offshore vessels being built at Trinity Shipyard, Louisiana. These ships are the first LNG fueled vessels to be built in America.

Parker Bestobell Marine provides full firesafe valves based on a proven design that has been used for over a decade for LNG shipping applications. In low pressure fuel gas systems the company's valves are fitted in the tank room space between the LNG fuel tank and the engine and are a critical part of the piping system that feeds the LNG fuel to the vapourisers, which convert it back to a gas. The company is committed to promoting the use of LNG as



a fuel to help owners reduce both cost and emissions of CO<sub>2</sub>, NO and SO<sub>2</sub>.

The company has developed a brand new range of high pressure globe valves that are fitted in fuel gas systems for MAN ME-GI engines where natural gas is injected into the engine at over 300bar pressure. MAN has sold over 100 of this type of engine and this is driving a rapid increase in demand for Parker Bestobell Marine's high pressure cryogenic valves for these fuel gas systems.

Parker Bestobell Marine is a world leader in the manufacture of LNG cryogenic valves, with over 50 years' experience. Its valves are widely used on LNG Carriers, FSRUs (Floating, Storage & Re-gasification Units) and LNG fuel gas systems. The company designs and produces valves to meet specific requirements in the marine sector and has supplied cryogenic valves to a majority of the major shipyards building LNG Carriers.

 **Bestobell Valves**

**Tel:** +44 (0)1142 240 000

**Email:** [sales@bestobellvalves.com](mailto:sales@bestobellvalves.com)

**Web:** [www.bestobellvalves.com](http://www.bestobellvalves.com)



# T-T Flow: The Number One Choice



**T-T Flow**, specialists in bespoke valve solutions, have recently secured a number of custom jobs which has made them the number one choice when it comes to out of the ordinary commissions within the water industry.

**T**-T Flow shall be supplying a United Utilities site with two 700mm recoil check valves, these valves are suitable for systems where rapid flow reversal exists. Also with this order are two 700mm gate valves which are used for pipeline isolation. Both valves traditionally are supplied at a standard working pressure of 16 bar, however T-T Flow have customised to suit a 25 bar pressure rating.

When Gatwick Airport were constructing a new cargo tunnel they needed specially commissioned valves with a strict colour coating requirement, from a supplier they could rely on, T-T Flow have supplied a range of 25 bar valves suitable for their

fire suppression system in the bespoke red coating that was essential to their project.

Additionally, a number of high pressure reducing valves have been supplied to a scheme, whereby the client was looking to reduce down from 40 Bar. T-T Flow offered their pressure reducing valve featuring a unique self-cleaning technology to ensure longevity.

T-T Flow, formerly Aquaflow, have re-branded in line with their parent brand T-T which under one roof provides a one-stop-shop for Pumps, Valves, Controls, Pumping Systems and Agricultural products. For more information, visit their brand new website or call their experienced team.



**T-T Flow<sup>®</sup>**  
**Valves**

**Tel:** +44 (0)1630 647 111  
**Email:** [response@ttpumps.com](mailto:response@ttpumps.com)  
**Web:** [www.ttflow.com](http://www.ttflow.com)

# Roto Hammer Chainwheels On the Rotork Valvekits Menu

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

---

**T**he well-established Roto Hammer range of chainwheel products enables hard to reach and stubborn manually operated valves to be safely operated without risk of injury. During the company's 50 year history its range of products has grown to now include valve extensions, floor stands, gear operators and customised solutions.

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

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

---

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

---

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

---

**rotork<sup>®</sup>**  
**Valvekits**

**Tel:** +44 (0)1623 440211  
**Email:** [sales@rotorkvalvekits.com](mailto:sales@rotorkvalvekits.com)  
**Web:** [www.rotorkvalvekits.com](http://www.rotorkvalvekits.com)



Roto Hammer CL Series valve chainwheel



# Have you received **valveuser** 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 (0) 1295 258 893.

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







I wish I had a reliable position indication device for the safety related valves in my nuclear plant. Increased maintenance, exposure, replacement and repair is really effecting cost, down time and safety.

**YOU CAN DO THAT**



**GO Gets It! Globally Qualified Nuclear GO Switches take the toughest challenges and bring predictable success anytime, anywhere.**

Designed for long-life and dependability, GO™ Switch technology offers a better alternative to mechanical switches. The GO™ Switch is a non-contacting, maintenance free position sensor without levers or springs. The completely sealed design prevents ingress points for steam and moisture, providing a longer life. These features allow you to increase predictable reliability while decreasing rad exposure and maintenance cost in high problem applications like MSIV.



**Visit us at the World Nuclear Exhibition! Booth #G16**



Visit [www.topworx.com](http://www.topworx.com) for more process industry solutions.

Contact: [topworx-sales.eu@Emerson.com](mailto:topworx-sales.eu@Emerson.com)  
+44[0] 161 406 5241



**EMERSON**  
Process Management

The Emerson logo is a trademark and service mark of Emerson Electric Co. ©2015 TopWorx.

**EMERSON. CONSIDER IT SOLVED.™**