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FISHER

EMERSON
Process Management

Emerson wins US$30 million Qatar contract

Emerson Process Management has won a US$30 million contract for the Qatar Petroluem and ExxonMobil joint venture to install Fisher® control valves at the Ras Laffan Industrial Complex in Qatar for the expansion of the Qatargas II Liquefied Natural Gas (LNG) Plant.

The world's first and largest twin mega train LNG plant, the Qatar II expansion will involve the construction of two of the largest LNG liquefaction trains in the world, with a production capacity of 7.8 million tons per annum of LNG each. The trains will utilize the natural gas resources from the world's largest non-associated gas reserve (900 trillion cubic feet) in Qatar's North Field.

For this project, Fisher® control valves will be custom-made to meet specific requirements relating to process noise, temperature, flow capacity and pressure, with valves varying between 1-in to 36-in and pressure ratings measuring up to ANSI Class 1500. In total, 1200 control valves, including the Fisher® Optimized Antisurge control valves, high pressure valves and valves featuring patented cryogenic sealing technology will be supplied. All valves will also be equipped with the FIELDVUE® DVC6000 digital valve controller.

To meet the plant's stringent noise requirements, Emerson will deploy its WhisperFlo® low noise trim while the Fisher® Optimized Antisurge valves will be used for compressor recycle applications. All valves will be equipped with the FIELDVUE® digital valve controllers with advanced diagnostics capability. Emerson will also be supplying its PlantWeb® digital plant architecture, which will be integrated within this state-of-the-art valve solution.

Coupled with the extensive range of high performance Fisher valves, technical excellence and exemplary general service, Emerson's expertise in distribution automation, production and processing, and combining technology with engineering was the key reason that Emerson was the choice for this project.

Emerson secures US$1.4million contract in Thailand

Emerson has secured a US$1.4 million contract to provide Fisher® control valves to the Indorama Petrol purified terephthalic acid (PTA) project in Thailand.

Under this contract, Emerson will supply Fisher® digital control valves with FIELDVUE® Instruments, high pressure globe valves, Vee-Ball® rotary valves and Baumann general service control valves. 30 Fisher® control valves on critical application with advanced diagnostics will also be offered. Emerson's in depth knowledge of the PTA process and applications, and Emerson's quality pre and after sales service are the main reasons for winning this project.

The Indorama PTA project, valued at US$385 million, has a production capacity of 704,000 tons per annum. The figure is projected to increase to 805,000 tons per annum. This is more than half of Thailand's annual PTA production.

This project, which was regarded by Thailand's Industry Minister as one of extremely high importance under the Thai-Indian FTA agreement, is an initiative of an Indian joint venture, involving three major partners: Dupont Ltd, Krung Thai Bank and Asia Industrial Estate Co Ltd.

Emerson displaces competition

Emerson's quality products and good service have once again won recognition from its customer.

Qinbei Power Plant, the first 600MW Supercritical boiler plant in China, turned to Emerson to resolve control valve problems. Their existing equipment supplied by a key competitor was suffering from vibrations and leakage, resulting in frequent maintenance.

Emerson provided the solutions to Condensate Recirculation and Deaerator Level Control applications using 12-in EUD control valves. After one-and-a-half years of service, Emerson's 12-in EUD valves were disassembled and the valve trim was found to be in immaculate condition.

This success with Qinbei resulted in another purchase of two 12-in EUD control valves.

Emerson is supplier of choice for Santos Australia

Emerson Process Management is proud to announce that its Fisher® division is the official 'supplier of choice' for Santos Ltd, Australia.

Success came after much dedication and determination from the team at Centralian Controls in South Australia led by Mr Peter Faulkner. With the signing of this agreement, Fisher® control valves will be supplied to Santos for the next three years.

"Santos is a major player in the Australian oil and gas exploration. It is a production company with operations in every major petroleum production area in Australia. This appointment has definitely enabled Fisher® valves to expand further and establish itself in Australia," commented Mr Faulkner.

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Baumann introduces the new 24000CVF

The latest product to join the 24000 series family of valves, the new Baumann 24000CVF carbon steel flanged control valve is an extension of the 24000SVF valve and is currently available.

Incorporating some of the latest features in control valve technology, the new 24000CVF complements the 24000SVF and Fisher® Design GX. It is designed for the control of pressure, temperature, level and flow. The valve is suitable for use in a wide range of markets, including aerospace, chemical, life sciences and waste water management. This new design also aims to deliver reliable high performance in a compact package by incorporating the best-in-class technologies.

EMERSON'S FIELDVUE® DVC6000 qualifies for nuclear applications

Fisher® FIELDVUE® digital valve controller DVC6000 has been validated for highly critical valve applications within nuclear power generating facilities.

The product has achieved commercially-dedicated status and its success lies in the dedicated testing process, conducted in accordance with the industry sponsored Electric Power Research Institute (EPRI) guidelines. This process qualifies the use of commercial grade digital equipment for safety-related applications.

The instrument was tested to more than 11,000 rads total integrated dose which includes an extreme-temperature elastomer package. In addition to mounting it directly on the valve, customers can also choose to remote-mount its electronic and pneumatic module in order to move the more sensitive DVC components to a safer location, helping to avoid any impact on the instrument's operation due to temperature, radiation and vibration on the valve.

To date, over 600,000 units of FIELDVUE® DVC6000 are sold worldwide, reinforcing the superiority of the FIELDVUE® instrument technology. The instrument provides highly accurate valve positioning as well as high-speed, stable valve response. For nuclear use, FIELDVUE® DVC6000 incorporates the top-tier performance diagnostic capability that analyzes valve and instrument operation while the valve remains in service. These help to avoid unplanned shutdowns, eliminate unnecessary maintenance work and ensure the safety of technicians. Most importantly, it provides an accurate picture of valve performance.

Emerson supplies Severe Service control valves to Taiwan's Olefin 3 plant

Emerson has delivered the largest Fisher® Optimized Antisurge control valve to Taiwan-based Formosa Petrochemical Olefin 3 plant.

Assembled in the Nippon Fisher Sakura facility by engineers from Nilai, Malaysia and Sakura, Japan, this 1.8m tall, 24-in (inlet) x 42-in (outlet) angle valve is equipped with a WhisperFlo® noise attenuation trim. It features Fisher® Optimized actuation system with two-second stroking speed and fine modulating control through 23-7/8-in of travel. This is achieved through fully balanced trim, enhanced FIELDVUE® digital valve controller, robust instrument mounting, reduced number of accessories and patented tuning capabilities.

Emerson delivered 10 other Antisurge control valves, sizes ranging from 4-in to 24-in. These valves will be protecting the critical compressors of this Ethylene cracker plant.

Emerson also supplied a 20-in Fisher® Design V260B Ball Valve with the Hydrodome™ designed for the quench oil application. To prevent coke from forming inside the valve and to reduce noise and vibration, a two-stage Hydrodome™ attenuator is furnished in the valve. The two-stage attenuator not only meets the high flow requirement for this application, but also eliminates cavitations and minimizes the damage by managing the pressure drop.

600MW Supercritical Boiler start-up valves makes debut in China

Emerson is supplying 600MW Supercritical Boiler start-up valves for the first time in China.

Eighteen units of 12-in ANSI Class 2500 Fisher® Design EHD globe-style high pressure control valve for supercritical boilers start-up applications have been supplied to 18 blocks of power plants in China: Fuyang in Anhui, Shouyangshan in Henan, Wushashan in Zhejiang, Changzhou in Jiangsu, Chaozhou in Guangdong, Jiangyin in Fujian, Yiyang in Henan and Zhuanghe in Liaoning.

Emerson's supply also includes 8-in EHD valves for Flash Tank Level Control, 3-in EHT valves for Attemperator Spray Water Control and 12-in EHD valves for Boiler Feedwater Recirculation Control applications.

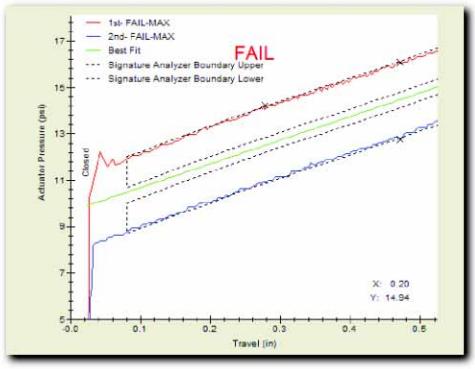
FIELDVUE® DVC6000 firmware 7 enhancements

A firmware enhancement has been released for Fisher® FIELDVUE® digital valve controller DVC6000 HART® and DVC6000 SIS.

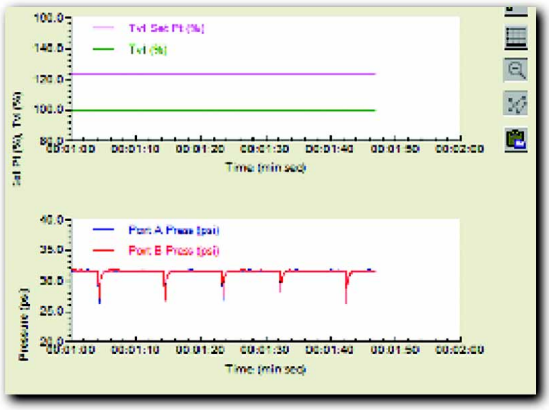
The DVC6000 HART firmware 7 enhancements include the following:

- **Pressure Control fallback to travel control:** All higher tier (AD, PD and ODV) DVC6000 can be configured to work with pressure feedback when the travel feedback fails. An alert will be generated to the user informing them of the travel sensor failure & recommending appropriate action.
- **Triggered Profile:** The DVC6000 is now capable of storing one data set prior to a trigger event. A trigger event can be configured as a travel or pressure deviation or the set point being driven to 4mA. This will be stored in the device.
- **Communication:** The DVC6000 with firmware 7 will be able to communicate with AMS ValveLink® 7.3 or higher. All host Device Descriptors have to be upgraded to communicate with firmware 7. e.g. AMS Device Manager, 375 Communicator.
- **Relay:** We will be introducing a new relay type C. With the introduction of relay type C, we will have Relay A for double acting actuator, Relay B for single reverse acting and Relay C for single direct acting. The DVC6000-SIS relay will be a low bleed version of the relay type chosen.

- **USB licensing:** Both AMS ValveLink® software v7.3 and instrument tier will have the option of using USB dongle in the place of the traditional parallel port dongle.
- **Signature Analysis:** AMS ValveLink® software has the capability to configure boundaries around Valve Signature plots. If a Valve Signature or partial stroke test is performed, and the new data points go outside the set boundaries, the test will indicate failure.



On the other hand, enhancements to DVC6000 SIS firmware 7 include the following:



- **Solenoid Testing:**
  - Existing SIS installations with solenoid valves wired to the logic solver can enable the DVC6000 SIS to verify that the solenoid valve is able to vent actuator pressure in addition to being able to diagnose the performance of the SIS valve by performing a partial stroke test.
  - The solenoid valve can be pulsed long enough so that the solenoid vents can verify that solenoid valve is functional. It can also be pulsed short enough so that the actuator doesn't bleed enough pressure to make the SIS valve move.
- **Local Control Panel (LCP):** Allows the customer to perform the following actions locally at the valve
  - Three buttons - open, close, test
    - Manual reset of a tripped valve
    - Manual shutdown
    - Partial stroke testing at the valve
  - Three lights - green, red, amber
    - Indicates when valve is open, closed, or somewhere in between.
    - Indication that the valve is ready to be reset to its normal operating position after a shutdown event.

- **Triggered Profile for DVC-SIS:** When a safety demand occurs the DVC6000 is capable of playing back one point of the valve set point, valve travel and DVC6000 output pressure before the demand as well as multiple points after the demand. This functionality will help the customer establish the set point and the valve travel just before and after a demand.

Fisher® BaoAn's Extraordinary Development Mirrors Emerson's Brilliance

Emerson Machinery Equipment (Shenzhen) Co., Ltd, also known as Fisher® BaoAn, is yielding remarkable output. Since it was established in 1994, production lines and labor strength have increased three-fold from five to fifteen, and thirty to ninety-seven. Together, with repair kits and spare parts sales, its total revenue stands at a staggering US$20 million. In addition, it is certified with the ISO9000:2000 quality management system, Europe Explosive Atmospheres Directive (ATEX), Factory Mutual (FM), and the Canadian Standards Association (CSA). Some of the products are also certified for use in nuclear applications.

BaoAn's growth was given a boost in 2000, when the plant implemented LEAN manufacturing, a resource-maximizing strategy that advocates doing more with less time, inventory, space, people and money. Following in the footsteps of Japanese automobile manufacturing leaders, expenditure on resources that appended no value to the product was reduced. Productivity saw an improvement by 20% and floor space utilization augmented by 30%.

In 2002, the facility introduced 5S activity to improve its working environment and efficiency. It is currently in the Lean V (fifth) stage. It provides customer satisfaction by calibrating its services to ensure speedy response and short ordering lead time. On Time Delivery (OTD) is maintained at 99%.

The extensive list of products that BaoAn manufactures, coupled with consummate customer service, is testimony of the company's remarkable development. The following is a modest and succinct log of products, comprising positioners, transducers, controllers, transmitters and switches, all of which the company prides itself on.

1. Type i2P-100 Electro-Pneumatic Transducers: Receives a 4-20 mA DC input signal and transmits a proportional user field-configurable pneumatic output pressure to a final control element;
2. 4200 Series Electronic Position Transmitters: Senses valve. positions and transmits a standard (4-20mA) output signal.
3. Type 646 Electronic-Pneumatic Transducers: Receives a 4-20 mA DC input signal and transmits a proportional (3-15 psig) pneumatic output pressure to a final control element.
4. Type 4660 High-Low Pressure Pilot: Maintains full output pressure when the process pressure is within the set point range. If the process pressure is outside this range, the pilot switches from full output pressure to zero output pressure.
5. Type 377 Series Trip Valves: For control applications where a specific valve/actuator action is required when the supply pressure falls below a specific point.

Products approved for nuclear applications:

6. Type 3582 Series Pneumatic Valve Positioners and 3582i Electro-Pneumatic Valve Positioners: Receives an input signal from a control device and modulates the supply pressure to provide an accurate valve stem position that is proportional to the input signal.
7. Type 546NS Electro-Pneumatic Transducers: Receives a dc input signal and transmits a proportional pneumatic output pressure to a final control element.

Fisher BaoAn's progress is exemplary and certainly lends to Emerson's achievements.

Fisher DVC2000: The Best Product of the Year 2005

Emerson's Fisher® FIELDVUE® DVC2000 Digital Controller was recently presented with the coveted Best Product of the Year 2005 award, by the Control Engineering China Magazine Reader's Choice Awards held on 12 May, 2006.

An annual competition for new products launched for the manufacturing industry, it encourages companies to submit nominations for their more efficient and favourable products. This year, Fisher submitted entries for the GX and DVC2000 products, with the DVC2000 beating 54 suppliers and 104 products to win the coveted award.

The DVC2000 series of digital valve controllers has also achieved the ATEX certification to EEx ia 11C T4/T5, making it suitable for use in potentially explosive atmospheres.

Emerson emerges as the choice for Frost & Sullivan

Emerson Process Management has been honored as the Industrial Automation & Process Control Company of the Year Award 2006 by Frost & Sullivan, for the third consecutive year.

The award is presented each year to the company that has exhibited consistent growth, demonstrated outstanding management and customer service and attained positive social and economic impact on local and national communities and customers. This year, Emerson is specially chosen by Frost & Sullivan for their excellence in business development, competitive strategy and leadership.

FROST & SULLIVAN

Emerson comes out tops again at Control Readers' Choice Awards

At the recent annual 14th Readers' Choice Awards held by Control Magazine, USA, 18 Emerson business divisions were named excellent service providers. Thirty-nine other products also achieved excellence awards, a feat that few companies can follow.

The reason for Emerson's success is simple: consistent, well-run management that impacts the company's standing and strength of the brand, combined with good marketing, public relations and good customer service worldwide since the 1990s.

Walt Boyes, Editor-in-chief of Control magazine adds that there are similar attributes shared and routinely practised by the winners of CONTROL's Readers' Choice Awards.

He said that winners do not wait for users to call with problems, instead they go out, find potential difficulties, and provide the genuine, real-time partnering that's always far easier to promise than actually delivering.

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