

Fisher Focus

Fisher Serves You Better Throughout Asia-Pacific



Fisher is undisputedly number one in control valves for the process control industry. Not only does it command the largest market share, the company is also at the forefront of technology and innovation. Fisher's Asia-Pacific regional headquarters is located within the Emerson Process Management office in Singapore.

The Singapore office houses the Regional Sales Development and Support department that manages a network of direct sales offices and exclusively appointed Representatives throughout 17 countries in the Asia-Pacific. A team of fully-trained and experienced personnel ensures that Fisher provides the best control valve solutions for every application.

The same office also oversees Marketing, Product Research and Development and Operations Management for the entire Asia-Pacific region. This includes the manufacturing facility of the world-renowned FIELDVUE® instruments as well as the state-of-the-art Dynamic Performance Loop.

In order to bring its products closer to customers, Fisher owns and operates several world-class manufacturing facilities in Australia, China, India, Japan, Malaysia and Singapore.

For more than 120 years, employees worldwide take great pride in the esteemed brand name. The Fisher brand stands for the values that have driven and sustained them to this day. In the process control business, the brand embodies the X-factor that Fisher has come to be known for - quality products that are time-tested and performance reliable.

Together, Fisher in Asia-Pacific delivers a product and service edge that is unparalleled in the market.

A Digital Valve for a Digital Plant

More and more process plants across the globe have become digitally controlled. Changes in the world economy have led to the need for reducing costs and increasing profits.

Fisher addresses this need by introducing the Digital Valve, which is a combination of a Fisher valve and a Digital Valve Controller (DVC). The Digital Valve tightens process control while providing valuable diagnostic information to the user.



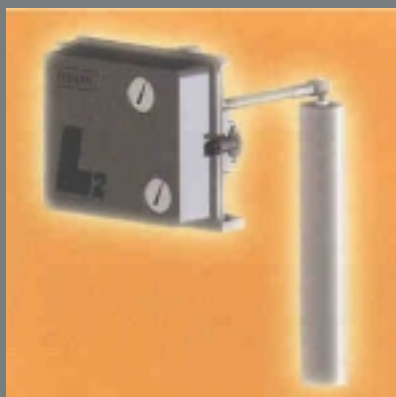
Fisher-Rosemount Is Now Known As Emerson Process Management

With effect from April 15, 2001, Fisher-Rosemount was officially renamed Emerson Process Management. Since the mega-merger in 1992, Emerson Process Management has been part of Emerson, a Fortune 500 company.

With this move, Fisher is poised to reap synergistic benefits by leveraging on process consultancy expertise of Emerson Process Management to complement its superior design and manufacture of valves.

Superior Valve Technology for the Oil and Gas Market

Type D2 FloPro™ Control Valve and Type L2 Liquid Level Controller - A Winning Combination



L2 Liquid Level Controller

Fisher is pleased to announce the release of two new products targeted specifically at the upstream oil and gas production and processing industry. These products are part of a program referred to as FisherExpress, Oil and Gas Patch Control Products.

Fisher is introducing a winning combination, the Type D2 FloPro™ Control Valve and the Type L2 Liquid Level Controller. Both products are manufactured in Asia using the latest world class manufacturing strategies delivering price competitive products with excellent delivery integrity.

D2 FloPro™ Control Valve

The D2 is everything you can ask for in a single construction one-inch high-pressure dump valve. The valve is equipped with field-selectable flow rates and long life erosive service trim to minimize maintenance costs and improve uptime. The valve's feature-packed single-construction means less inventory and up-front costs. Numerous patents are pending on the feature-packed product.

Standard Construction of the D2 FloPro™ control valve offers:

- 1 inch NPT end connections
- ASME Class 900 pressure rating
- FloPro™ field selectable flowrate for three port sizes
- Solid Alloy-6 erosive service trim
- Full 2250 psig pressure drop capability



D2 FloPro™ Control Valve

- NACE service ready
- ENVIRO-SEAL™ packing system
- Low temperature material capability
- Field reversible actuator

L2 Level Controller

Hand-in-hand with the liquid level valve is the L2 level controller. The L2 instrument is an improved product over its predecessor, the 2680-268T. Re-designed in the Fisher Singapore Asia design centre, the L2 offers all these features in two construction variations:

- Snap acting or throttling control
- Two-inch NPT vessel connection
- ASME Class 1500 pressure rating
- NACE service ready
- Low bleed environmentally friendly relay
- Field configurable vertical or horizontal displacer
- Field reversible output
- Vent away case
- Low temperature construction

Both products allow users to keep inventory, purchasing and handling costs to a minimum. The quality construction and manufacturing ensure minimal maintenance requirements. For better gas production, compression and processing equipment uptime, choose the new D2/L2 Fisher products.



Emerson Process Management Reports Power-Full Performance

Emerson Process Management is proud to report worldwide sales of US\$3.3 billion in 2001 despite the economic crisis. This was largely credited to the strong sales growth from PlantWeb® and solutions activities. New product sales, from products introduced in the past five years, represented 35% of sales.

Fisher's achievements for 2001 include:

- Sales for FIELDVUE® were up 14% year-to-year.
- North American field sales offices, particularly those serving the Oil and Gas industries, enjoyed good growth.
- Fisher clinched about 65% of the total generating capacity purchased in 2001 (without bids) in the key Power accounts.

Power Training: AP Power School

Held from January 21 to 25, the Fisher Power School for Asia-Pacific drew an enthusiastic response of 24 participants. The majority of them were account sales and application engineers with more than two years' experience in this field.

The objective of the school was to provide the necessary knowledge for the calling salesmen and application engineers to understand the power plant process and the available Fisher solution to these applications. The five-day training programme covered:

- Basic Power Plant Knowledge
- Severe Service Solutions to Power plants
- Power Specifications and Applications
- Con-Tek Technology
- FIELDVUE® / AMS ValveLink® and FSE (Field Service Engineering) approach for Power
- Tour of the new Fisher Dynamic Performance Loop in Singapore

The participants also took the opportunity to discuss and explore international power projects that will be jointly co-ordinated with the Japan Power EPC Sales Manager, Mr C Hatakeyama. The discussion has helped to garner better project hit rates and installed bases for Fisher.



Valve Innovation

New additions to the FIELDVUE® product FAMILY

Fisher has made four additions to its well-accepted FIELDVUE® range of products and also made significant improvements to the existing product range. The FIELDVUE® Digital Valve Controller (DVC) has been setting standards in the industry over the last seven years. With over 250,000 installations worldwide, the DVC is one of the most widely used positioners in the Hydrocarbon, Chemical and Power industry.

The DVC6000, DLC3000, DVC5000fFL and DVC ESD have been added to the existing DVC5000 and ValveLink® software to enhance the range of the FIELDVUE® Instrumentation.

DVC6000: Digital Valve Controller DVC6000 is a double-acting smart positioner that retains all the popular diagnostic features like detection of valve seat wear and actuator leak, etc. This HART®-based instrument can be used to improve the overall performance of valves in terms of positioning accuracy and speed of response. These positioners can be mounted on both FISHER and non-FISHER valves. The benefits include improved control, enhanced safety, ease of operation and maintenance, faster commissioning and rugged construction.

DLC3000: Digital Level Controller DLC3000 is a multi-variant, HART®-based instrument. DLC3000 is used with a displacer type level sensor to measure liquid level and interface level between two liquids or specific gravity. The DLC3000 has the capability to dynamically

compensate for variations in the specific gravity of the process fluid with changes in temperature using a RTD input. The DLC3000 is suitable for upgrade of conventional pneumatic and electronic level transmitters, including the FISHER type 2390.

DVC ESD: The Digital Valve Controller, when used in an Emergency Shut Down application (DVC ESD), lowers the risk factor. DVC ESD helps lower the testing time, initial investment, improves system performance, delivers diagnostic capability and helps reduce the testing frequency. The DVC ESD can perform a partial stroke test to check the valve movement. This test can be performed remotely while the plant is running normally.

DVC5000fFL: The DVC5000fFL is an On-Off version of the DVC5000f. The DVC5000f has been offering the power of valve diagnostics to the FOUNDATION™ fieldbus protocol users. Step positioning is an added functionality built into the DVC5000fFL.

Both the DVC ESD and the DVC5000fFL can be upgraded to a full capability Digital Valve Controller on the field.

Enhancements in ValveLink®: The new, enhanced ValveLink® 4.3 can interface with the DVC ESD, and has the added feature of trending using a HART® Modem (except for the Lite version). A single platform for FF & HART® communication became a reality with the introduction of the ValveLink® 4.0. Batch runner, trending, valve histogram, data synchronisation and on-



line performance diagnostics were some of the features added to the ValveLink® 4.0 software in addition to a new user interface. The batch runner provides the capability to run multiple tasks back to back with no intervention required from the user. The data gathered is saved for future reference and analysis.

Performance Diagnostic tier: The performance tier addresses the need to diagnose control valve problems whilst the process is running normally. Customers do not have to take the DVC out of service to determine deadband and total friction data. The ability of ValveLink® VL2041H to trend this information over time can assist the customer in maintaining their equipment reliably with more awareness of its condition. The performance diagnostic tier is a step above the advance diagnostic tier. The existing DVC5000 with firmware 5 and above & DVC6000 can be upgraded to the performance diagnostic tier.

Shell Philippines Utilizes Emerson's PlantWeb® Architecture for \$10 million Automation of Malampaya Deepwater Gas Project

Emerson receives Shell Philippines' Technical Innovation Award for its commitment and technically advanced products



“Emerson has been a key player in the success of the Malampaya project from the early stages,” stated David Greer, managing director, SPEX. “The open standards incorporated into their PlantWeb architecture and its DeltaV™ digital automation system will allow us to reach the high performance levels we have set for this project, and allow us to operate both our offshore and

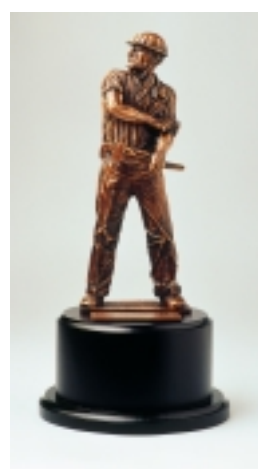
onshore facilities safely, efficiently and reliably.” enables certified field instrumentation to communicate real time diagnostics and control information to users throughout the automation systems. For this project, Emerson's certified FOUNDATION fieldbus devices include Fisher® valves with FIELDVUE® DVC digital valve controllers, Rosemount® pressure and temperature transmitters, magnetic flowmeters, and vortex flowmeters and Micro Motion® Coriolis flowmeters. Extremely critical valves and controllers on the platform were provided with Fisher's innovative trim wear and erosion diagnostics to supplement the robust valve predictive maintenance diagnostics. The intelligence from field devices is delivered to PlantWeb's DeltaV system and AMS Asset Management software where it is used for control, configuration, and maintenance management. For the offshore platform there are 870 fieldbus devices with 1716 input/output points and 900 fieldbus devices with 1700 input/output points at the onshore gas plant facility.

Emerson Process Management's PlantWeb® digital plant architecture with FOUNDATION™ fieldbus is playing a key role in the success of the Malampaya deepwater gas-to-power project located in the Philippines. Developed by Shell Philippines Exploration B.V. (SPEX), the Malampaya project includes the largest integrated deck offshore platform in Asia Pacific and an onshore gas processing plant, all automated with PlantWeb architecture from Emerson. SPEX successfully began delivery of Malampaya gas in September 2001, meeting the targeted October 2001 schedule.

onshore facilities safely, efficiently and reliably.”

functionality with the DeltaV system. And other suppliers had a 489 percent higher lifecycle cost.”

Ken Jones, SPEX executive who oversaw the entire installation and commissioning of the project, remarked, “We began with technologies that were both innovative and robust. We viewed PlantWeb architecture as best in class, and the Emerson team in Singapore/Philippines and around the world displayed expertise and commitment. This kind of support enabled us to bring the project in ahead of schedule and under budget.”



SPEX and its suppliers demonstrated leadership and innovation in the platform technology used on the Malampaya project, setting a new pathway for how deepwater production facilities are designed and tested, operated, and maintained. In recognition of the five-year effort leading to successful startup and operation, Emerson was awarded Shell Philippines “Technical Innovation Award”

inscribed with “Delivered as Advertised” for its technically advanced PlantWeb products and overall commitment to the ongoing success of the Malampaya project.

Dick Wismeijer, former SPEX executive who sponsored PlantWeb and its fieldbus implementation for the project, commented about high performance: “Based on our SPEX model for lifecycle costs, we gain 47 percent

The Malampaya project delivers natural gas from an offshore gas-processing platform through a 504-km long 24-inch gas pipeline to a gas treatment plant in Tabangao, Batangas. Emerson's DeltaV digital automation system is a major component of both the offshore platform and onshore systems and is designed to ensure that the stringent performance standards established for the project are met.

Because the gas produced will be a critical resource to the area, SPEX set stringent uptime requirements for the project. This motivated the company to incorporate PlantWeb digital plant architecture with FOUNDATION fieldbus technology for both the offshore and onshore process automation systems.

PlantWeb architecture uses the innovative DeltaV digital automation system within a network of intelligent field devices to enable better measurement, more robust process control, and improved process availability. FOUNDATION fieldbus communications protocol



“Malampaya is one of the most advanced and largest projects of its kind in the world,” observed Steve Sonnenberg, President of Emerson Process Management in Asia Pacific. “We were delighted to have been selected originally, and we are gratified that our ability to support SPEX locally in Singapore, and to draw upon Emerson expertise around the world, has validated the Emerson vision of global and local technology and expertise.”

For more exciting news about Emerson Process Management and Fisher products, please visit our website <http://www.emersonprocess.com>