Flowserve is pleased to announce the latest release of Performance!Nxt (P!Nxt), the industry’s foremost Control Valve Sizing, Selection and Project Management Software. Following are details about new products, features, enhancements implemented and issues resolved in this release.

**New Product: Logix 3800 Positioner**

The new Flowserve Logix 3800 digital positioner is now selectable in Performance!Nxt and available to quote and supply to customers.

The Logix 3800 helps plant owners and operators maximize production while minimizing operating costs. It’s the oil and gas and chemical industries’ choice for applications that require a balance between technological sophistication and long-lasting reliability in tough environments.

This high-precision positioner simplifies installation through easy configuration and calibration. It also facilitates improvements in process uptime, reliability and process throughput. Advanced diagnostics not only identify developing problems in the control valve, but also help guide corrective actions to ensure reduced return-to-operation times.

Compatible with linear and rotary valves and actuators, the Logix 3800 digital positioner offers industry-leading embedded measurement, data reduction and diagnostic functionalities. Its control system-independent user interface facilitates performance configuration, operation and diagnosis with a single view.

**Robust** – The standard Logix 3800 is SIL 3 capable and designed to work in the harshest conditions for temperature, vibration, dirt, moisture, etc.

**High Performance** – Sensitive non-contact feedback sensor coupled with poppet style relay provides precision control of the process.
Performance! Release

**Simple to use** – One button setup automatically configures the zero, span and gain of the positioner for most valves in less than 60 seconds

**Adaptable** – Configurable to interface with valve, process and control system needs using HART, Foundation Fieldbus, 4-20 or discrete I/O signals.

**Powerful diagnostics** – Predictive algorithms continuously monitor the health of the valve and actuator. Partial stroke tools allow remote, local, or automatic scheduling.

**Reliably versatile by design**

The Logix 3800 digital positioner features a position-insensitive modular design, allowing for ultra-high, double-acting flow or optimal single-acting performance with minimal air consumption. Its broad application versatility is made possible by a flexible design that features pneumatic ports on either side and allows direct mounting to VDI/VDE standards without the need for external tubing.

For further questions, please contact:

**Ken Beatty** - Director Product Management, Control Valves
KBeatty@flowserve.com
Performance! Release

New Product: FlowTop (V742 and V744; FOR CHINA ONLY AT THIS TIME)

The FlowTop V742 and V744 control valve is a fully integrated valve-actuator-instrumentation package for continuous process flow loop control throughout the plant. Designed from the ground up, the FlowTop has achieved optimum performance at minimum total cost. It does this by pursuing the simple design philosophy of building an instrumented control valve package that is “exactly what it needs to be,” providing the breadth and depth of engineered control within the Valtek trusted name.

Based upon technology and experience, the FlowTop integrated control valve packaging consists of the FlowTop globe body assembly, the FlowAct pneumatic diaphragm actuator, and the Logix digital positioners (with automatic calibration). The FlowTop package is more compact because of the integral yoke and bonnet flange design. Its clamped seat ring ensures tight shut-off and easy maintenance. Overall, its integrated design makes it a low total cost value to buy, install, operate, and maintain. Yet, it delivers best-in-class performance with:

- Excellent rangeability and repeatability and high flow rates
- Finite flow control accuracy
- Direct mounted digital positioner without tubing (air-to-open)
- Trim and material options to handle virtually all general service requirements
- Quick installation and simple setup by maintenance technicians without the need for instrument or process engineering skills

The FlowTop integrated control valve package provides process plant operators that perfect balance of performance versus cost without compromise to product quality or integrity.

**Maximum Capacity Flow Rates**: The FlowTop handles a wide selection of process control applications for high-flow, general service applications in the oil and gas, chemical, power and general service industries.

**Smaller, lighter, cost effective**: Achieves maximum-flow capacity that outperforms competing brands with a smaller, lighter, and more cost-effective control valve.

**Deep Packing Box**: Permits a variety of packing configurations in addition to the standard ISO 15848-1. The packing set is positioned far enough away from the flow in the body to avoid damage from the flowing medium.

**Double Top-stem Guides**: Ensures accurate plug and seat ring alignment. Widely spaced guides provide superior guiding over broad temperature ranges.
Performance! Release

Contoured Plug Design: Modified equal percentage characteristic comes standard. And can be matched to a variety of trim sizes, providing excellent rangeability, repeatability and resolution.

FlowTop Features and Options

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<td></td>
<td>direct mounted without tubing on air-to-open</td>
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For further questions, please contact:

Eric Anthony – Product Manager, Control Valves
fanthony@flowserve.com
Summary of resolutions covered under 7210 release

Related to Linear Product line

26011: New Product ‘FlowTop (V742/V744)’ is now available for sizing & selection under SUZ site (Suzhou, China) in P!Nxt. – See release notes above.

26817: Updated rules for 6 body materials - A995 4A Duplex 22%Cr, A995 5A Duplex 25%Cr, A494 M35-1 Monel 400, A352 LCC (low temp), A217 WC6 (Cr-Mo WC6) and A217 C12A (Cr-Mo C12A) - for Villach site while using Mark One with standard applications.

25576: Added 6 additional body materials to Mark 100 valve - Low Temp LCC;LF2, 316L SS, 304 SS, Duplex SS 22% Cr, Duplex SS 25% Cr(>40), Cr-Mo WC6;F11, Cr-Mo C12A;F91.

25571: Modified the VL-ES spring data and spring force calculation to accurately consider the short stoking in spring-can used for specific strokes.

25508: Modified specific face-to-face rules for Mark 200 valve to match the design standards.

21940: Modified the P/B O-Ring material options available for Mark One, Mark 100 and Mark 200. The temperature limits for all options have been improved to match process conditions.

26748: A correction has been made in gasket rules. With this fix, user selected option will be retained properly.

23980: Users can now size a FlowAct actuator even if valve size is user defined.

23747: Additional strokes for specific sizes have been added under Valtek Lin-Act Sub.

23007: Modified the logic of specifying stem diameter while sizing user defined valve size.

23141: A rule has been added for ‘Tag Language’ attribute for all Kammer products. With this fix, the tag language will be set based on Air Supply Unit.

27388: Added new trim material options and corresponding rules for SPR, BGL, SIN, ESS & PAS sites for Multi-Z standard design.

26086: Added new trim sizes for Multi-Z standard design.
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27306: A refresh issue on actuator detail screen has been fixed for FlowAct Lin-Act Sub Mk1 with on-off service selected.

26586: The FlowAct actuator under FlowAct Lin-ActSub MK1 has been moved under Valtek Lin-Act Sub with the list reduced sizes.

26468: A display issue caused due to rounding of spring range value has been fixed.

Related to Rotary Product line

23857: An informative section about MAST (Max. allowable stem torque) value has been added for few Valtek Rotary models to help users make better selection. Future releases will have this section added for more products.

23626: Max. Allowable Air Supply field has been added for Rotary actuators. This will be used for MAST calculations.

27058: A correction has been made on Yoke selection from Actuator detail screen for RG actuators. With this fix, user selected option will be retained properly.

24200: For Valdisk TX3, packing friction torque calculation has been corrected to consider double the value when "Twin" set option is selected under packing.

26659: A correction has been made on Bearing selection on sizing screen for ShearStream HP valve. With this fix, user selected option will be retained properly.

26765: Added new LPS actuator sizes which will be available only for certain sites.

26764: When LPS/LPC actuators are sized, a message box will appear if no suitable actuator is found for the given process and valve configuration. This feature has been removed from P!Nxt as per request.

Related to Positioners


26886: A rule has been added for Logix 3400 positioner to set default option as ITK 5
25995: A new option “Positioner Ready” has been added for Kammer site products.

26012: A print issue in German language for Kammer positioner has been fixed.

**Related to P!Nxt Application features**

10174: New options to select “Customer furnished equipment” has been added in P!Nxt that will help users correctly consider the price for customer furnished equipment.

22934: Additional option to display Cv-values in 10% steps has been implemented on flow curve printing.

23833 & 23841: Added templates specific to Air Liquide customer with SPR site selection.

26387: New site specific options to select “Actuator Cleaning” has been added in P!Nxt.

26210: New option “Shell Offshore Paint” has been added for selection only for shell alliance projects.

26381: A logic has been added to show price as CF (contact factory) for trim part materials that are not valid for Shell Alliance to prompt correct pricing.

20741: A correction has been made for the density calculation for liquid oxygen.

26541: Added a validation while defining custom fluids which will ensure that the user entered values are in-line with the unit system.

26525: A printing issue under ‘Remarks’ section was corrected. This fix will avoid overlap of remarks with one another on spec printout.

22427: With this fix, shutoff pressure will now be printed on the actuator detail printout.

26699: A refresh issue on the stroke time curve has been fixed.

26644: Streamlined the warning message display logic for FlowAct/KP/KA/KF diaphragm actuators, for cases where stroke time calculation is not applicable.

26643: A print issue under ‘Deviation summary’ section was corrected. With this fix, overridden valve details would print correctly.
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27367: A refresh issue was corrected on the warning section on sizing screen. With this fix, the random warning prompts regarding trim type selection would not come.

27032: A specific print issue for Act Sub has been fixed.

26922: Batch printing has been streamlined to improve speed of report generation for big projects with many records.

Thanks to all who contributed to this release.

Please continue to report all issues in our tracker: http://www.flowserveperformance.com/performtracker

Flowserve - Performance! Team
performance@flowserve.com

Disclaimer: Flowserve’s audit of Performance!Nxt Version 12.7210 determined that the resulting software output is consistent with industry standard calculations and Flowserve product design data. Flowserve welcomes reports of any error that might be discovered in the software and will promptly address each issue.

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