

## Flowserve's ValveSight Helps Maximize Profits through Increased Reliability

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### Keywords

Flowserve, Valve, Plant Asset Management, Diagnostics; ROI; Training

### Summary

The global economic downturn and ongoing retirement of the baby-boomer generation are straining manufacturers' remaining operators and maintenance staff. Historically, manufacturers relied heavily on in-house control valve expertise. As manufacturers continue to lose increasing amounts of this in-house expertise, organizations are struggling to remain profitable while cutting costs. Flowserve's recently released control valve diagnostic

Plant Asset Management (PAM) solution; ValveSight, was designed specifically to meet the evolving needs of manufacturers struggling to do more with less.

### Analysis

As we look toward a new "Reset" global economy, the valve management needs of manufacturers are evolving. Manufacturers are looking for valve management solutions that provide support to

help them install, commission, and integrate the solution quickly and effectively. Manufacturers are increasingly looking for practical online solutions that require little human intervention with intuitive controls enabling them to benefit from a proactive maintenance strategy with a minimal amount of training and in-house valve expertise. Finally, manufacturers are looking to invest in low-cost modular solutions that offer a quick ROI at the local level today but still offer the flexibility to grow to plant-wide integrated solutions in the future.

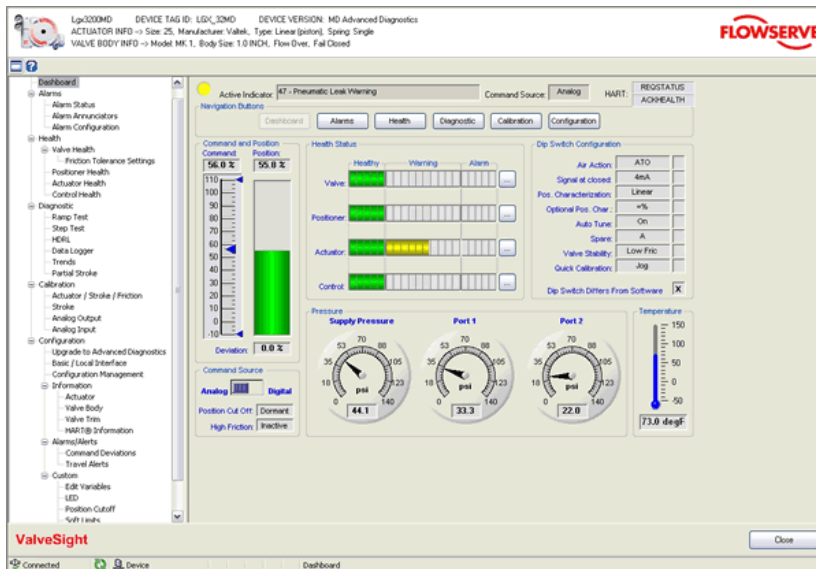
#### **Evolving Valve Management Needs of Manufacturers**

- Help overcoming staff cutbacks
- Minimal installation and commissioning times
- Quick ROI
- Practical solutions requiring minimal training and infrastructure investments
- Expandable designs that provide room to grow



## ValveSight Empowers Your Dwindling Workforce

In the new "Reset" economy, the roles of operators and maintenance personnel are being redefined. As manufacturers continue to lose increasing amounts of in-house valve expertise, they are being forced to reduce their dependency on individual operator and maintenance skill level. As a result, manufacturers are seeking valve management solutions that empower their workforce by giving them a window into what is going on within control valves across their plant and offers corrective measures they should take to avoid potential failures.



### ValveSight Monitors Your Control Valves 24/7 and Alerts You Before a Problem Develops into a Failure

ValveSight provides manufacturers this empowerment by continuously monitoring the health of control valves in real-time, sending alerts when problems arise, and recommending corrective actions to operators and maintenance staff in time to avoid the majority of valve failures. Flowserve designed ValveSight as a means of providing manufacturers a tool that leverages the decade's worth of knowledge Flowserve gathered design-

### Easy Installation and Commissioning Help Justify Investment

ing, manufacturing, and maintaining control valves across various process industries. As such, ValveSight not only helps manufacturers deal with the ongoing loss of in-house valve expertise, it also provides them a means of maximizing operating profits through increased reliability. With the increasing scrutiny on capital expenditures, manufacturers are finding it difficult to justify investments in any valve management solutions requiring long installation and commissioning times. Manufacturers are looking for valve management solutions that provide quick and easy installation and commissioning times, minimizing the up-front investment necessary.

By basing ValveSight on open standards, Flowserve has minimized the up-front customization investment on the part of users; thereby allow manufacturers to begin realizing the benefits of a proactive maintenance strategy quickly and efficiently. ValveSight also supports the ability to “cut and paste” configurations between control valves, which reduces the effort required to get each valve on-line. By making it easy for manufacturers to get ValveSight up and running quickly and efficiently, Flowserve has positioned the solution well for manufacturers to take advantage of during the current global economic downturn.

### **Low Entry Cost and Ability to Leverage Existing Installed Base Provides Fast ROI**

Proposed capital investments today must stand up to the effects of the economic conditions resulting in a reduction of spending across the board. Manufacturers are now required to turn small capital investments into quick ROI in order to gain approval. A one year benchmark for ROI, which was once considered a “no brainer”, is increasingly considered a long-term payback as manufacturers strive for paybacks of less than a year. While the true benefits of valve diagnostic systems are realized over the life of the control valve, a greater emphasis is being placed today on the initial cost of the system, since available capital is becoming increasingly scarce. It is also more important today than ever for manufacturers to leverage as much of their installed base as possible, to minimize up-front capital investments.

The low-cost modular pricing model of ValveSight helps manufacturers justify the expenditure by significantly lowering the entry price point, while shortening the approval process, and leveraging the existing installed base.

The low-cost modular architecture of ValveSight helps manufacturers justify the investment by significantly lowering the entry price point, while shortening the approval process, and leveraging the existing installed base. In many cases, a simple software upgrade is all that is required for manufacturers that already have a Flowserve digital

positioner installed to begin benefiting from ValveSight's diagnostic capabilities, and this upgrade can often be performed in the field, thereby minimizing downtime. Manufacturers can also take advantage of ValveSight's diagnostic features on valves from other manufacturers simply by installing a ValveSight-enabled digital positioner. ValveSight's low entry cost and ability to leverage the manufacturers' installed base of valves provides customers a quick ROI, which significantly increases its likelihood of acceptance in today's economic climate.

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## A Practical Solution Requiring Minimal Training and Infrastructure Investments

Surveys have indicated only a small percentage of manufacturers have adopted even the most basic form of proactive valve maintenance, and most continue to use traditional manual labor-intensive methods to maintain their valves. Valve management solutions continue to be predominantly offline systems that require manual data collection in lieu of online wired or wireless system. The benefits of an online system are well known but the complexity and infrastructure investments required to effectively implement on-line systems have scared off the majority of end users.

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With this in mind, Flowserve designed ValveSight as an intuitive online solution that can be used by operators, plant engineers, maintenance, and production management alike without requiring any detailed knowledge of control valves or the ability to interpret complicated diagnostics data. Flowserve has long held a company

philosophy of focusing on the maintenance and operations department, carrying a message of ease of installation, ease of integration, and ease of use for its valve and digital positioner products. As part of this philosophy, the company has long prided itself in offering the most user-friendly valve positioners on the market. In line with this strategy, Flowserve designed ValveSight to be intuitive enough to allow manufacturers to quickly begin using the solution with minimal training or instruction and provide advice in the form of easy-to-understand corrective actions manufacturers can take to prevent potential failures.

For organizations just beginning to deploy PAM solutions, ValveSight can be installed at a local level, using little more than a Windows-based computer connected to the network. This allows operators to familiarize themselves and validate the benefits of ValveSight before taking-on the cost of added infrastructure necessary to integrate the system into a plant-wide asset management solution. Local installations also minimize plant disruptions and reduce financial and personnel resources required to implement the solution. ValveSight's intuitive controls allow manufacturers to benefit from a proactive maintenance strategy with a minimal amount of training and in-house valve expertise, while its modular nature helps manufacturers justify the upfront capital investment during the current economic crisis.

## Expandable Design that Grows with Your Organization

Although manufacturers are forced to look for small capital investments that provide a quick ROI in the short-term, they have not lost sight of their long-term integration needs. Manufacturers today are savvy enough to realize plant-wide integrated asset management solutions are going to be the norm in the future. This long-term vision provides a huge opportunity for low-cost modular valve management systems that can be implemented easily today but leave manufacturers room to grow in the future. Modular solutions allow manufacturers to begin benefitting from proactive maintenance strategies today and, when ready to upgrade, provide the foundation to expand to a plant-wide integrated PAM solution without making their previous investments obsolete.

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Use of standard FDT technology provides manufacturers the room to grow and expand to plant-wide integration once the economic recovery takes hold because ValveSight can be seamlessly integrated into any FDT-based host control and/or

plant asset management system. By basing its solution on open standards, Flowserve has positioned ValveSight to be a viable diagnostic tool for the process industries for the foreseeable future, regardless of the valve brand and asset management tool selected, as long as the asset management solution is FDT-based and the manufacturer installs a Flowserve digital positioner. Flowserve also designed ValveSight's pricing model so that manufacturers own all the data collected by the diagnostics engine. The solution does not require an on-going maintenance contract or fee-for-service arrangement in order to realize its full functionality and benefits. The modular design and pricing structure of ValveSight significantly reduces the risk of investment obsolescence for manufacturers, while reducing the long-term TCO of the solution.

*This paper was written by ARC Advisory Group on behalf of Flowserve. The opinions and observations stated in the paper are ARC's. For further information or to provide feedback on this paper, please contact the author.*