FLOWSERVE

ValveSight

Prevention Delivered

ValveSight

Experience In Motion

ValveSight
It's all about increasing your bottom line

ValveSight represents our conception of a proactive maintenance strategy for critical equipment. It improves output at lower cost without sacrificing safety and reliability issues.

The ValveSight diagnostic system can be used on any control valve using Logix digital positioners.

In the challenging economic environment of business today, performance, health, safety and environmental considerations are paramount.

Control valves are a critical component of your plant that can significantly impact safety, uptime and maintenance costs if they are not properly managed. However, understanding the true health of these assets requires complex analysis that draws on the experience of the manufacturer itself. ValveSight from Flowserve helps makes this goal achievable today.

What is ValveSight?

ValveSight is a diagnostic solution for control valves that can be seamlessly integrated into a host control and/or plant asset management system.

The power of ValveSight is the intelligent diagnostic engine—which is constantly monitoring the valve, actuator, positioner and control signal for patterns of behaviour that may indicate a problem—that provides actionable advice PROACTIVELY. More than just "predictive diagnostics."
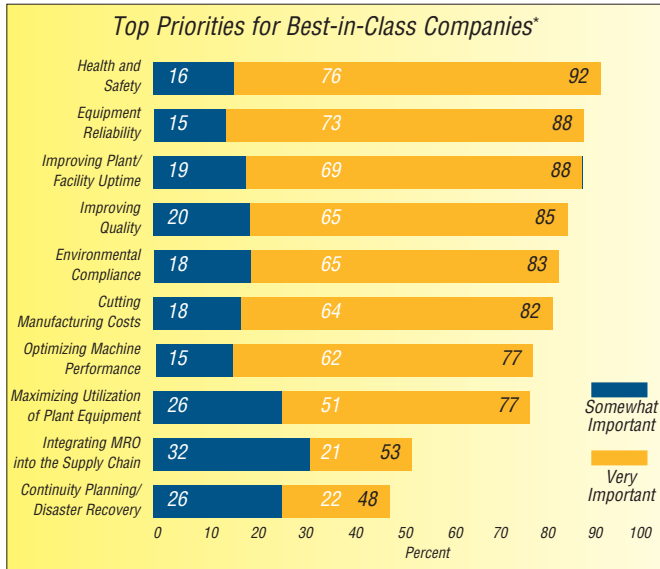
- Focus on device health, not alarms. Alarms can be confusing and difficult to interpret, so ValveSight uses the manufacturer's experience to translate alarms into an overall assessment of health so you don't have to.

- Focus on "why," not just "what." ValveSight helps you to identify root causes, not just symptoms, so you can fix the problem the first time.

- Understand proactive steps that can be taken to keep your process running longer, and what you need to do NOW.

While other diagnostic software providers maintain ownership of your data, ValveSight puts all the information you need right at your fingertips.

ValveSight is very simple to use and is meant to be used by operators, plant engineers, maintenance, production management and maintainers alike. It does not require any detailed knowledge of integrated control valves or the interpretation of complicated diagnostics data.

ValveSight integrates seamlessly with your existing host system using open standards and can even be retrofitted with existing control valves.
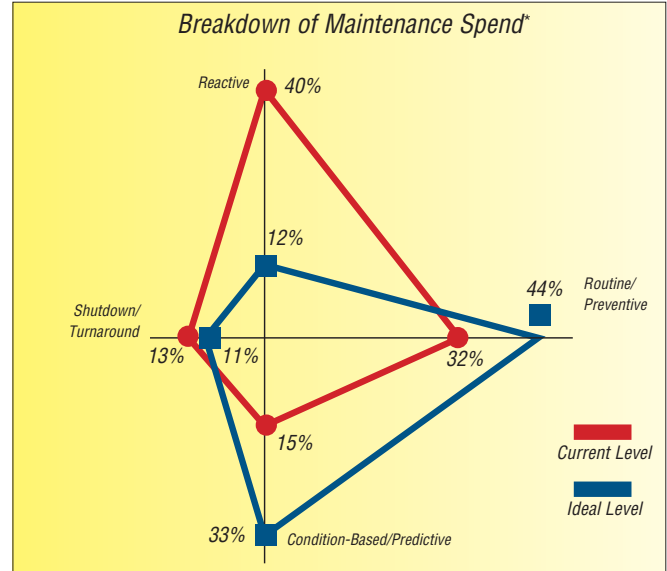
Designed by Our Customers

Top Priorities for Best-in-Class Companies*

	Somewhat Important	Very Important	Total
Health and Safety	16	76	92
Equipment Reliability	15	73	88
Improving Plant/ Facility Uptime	19	69	88
Improving Quality	20	65	85
Environmental Compliance	18	65	83
Cutting Manufacturing Costs	18	64	82
Optimizing Machine Performance	15	62	77
Maximizing Utilization of Plant Equipment	26	51	77
Integrating MRO into the Supply Chain	32	21	53
Continuity Planning/ Disaster Recovery	26	22	48

Percent: 0 10 20 30 40 50 60 70 80 90 100

Somewhat Important / Very Important

Fact:

Best-in-class companies recognize the importance of improving uptime and reducing maintenance costs as a means to improving plant profitability.

- ValveSight helps plants achieve these aims without compromising safety or environmental compliance!

Common Barriers to Predictive Maintenance*

	Major Barrier	Insurmountable Barrier	Total
Limited Manpower	45	8	
Budgetary Restraints	38	9	47
Too Busy Reacting to Machine Problems to be Proactive/Strategic	27	7	34
Lack of Management Understanding of Maintenance Strategies	22	7	29
Level of Maintenance Employee Training	21	3	24
Not Sure How to Justify Improved Best Maintenance Practices	20	3	23

0 10 20 30 40 50 60

Source: Maintenance Technology magazine, October 2002

Breakdown of Maintenance Spend*

Reactive: 40% (Current Level) / 12% (Ideal Level)
Routine/Preventive: 44% (Ideal Level) / 32% (Current Level)
Condition-Based/Predictive: 33% (Ideal Level) / 15% (Current Level)
Shutdown/Turnaround: 13% (Current Level) / 11% (Ideal Level)
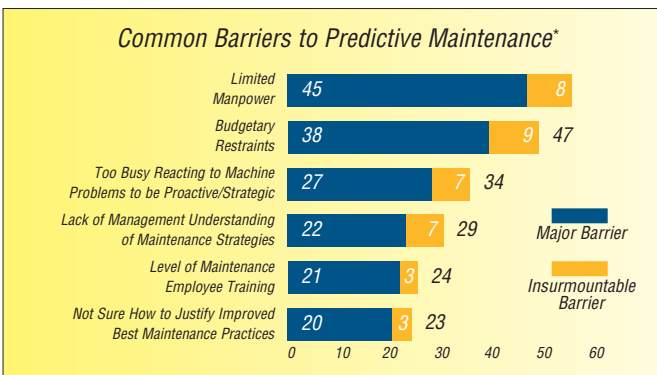
Current Level
Ideal Level

Fact:

It's not about how much you spend on maintenance. It's how you spend the maintenance resources you have!

- ValveSight helps plants increase predictive and proactive maintenance and reduce overall spend without increasing downtime.

Fact:

Organisational barriers often get in the way of allowing companies to move away from reactive maintenance patterns.

- ValveSight is a critical enabler to predictive and proactive maintenance strategies. By overcoming staff limitations with the know-how of the manufacturer, you can realize benefits quickly.

Proactive Solutions

ValveSight recognizes the issues that companies face in trying to increase the effectiveness of their plant assets. With ValveSight, data is collected from plant assets 24/7 and is analysed to show the health of each asset. Maintenance is aware of developing issues before they cause unplanned shutdowns. ValveSight indicates which components are failing and suggests corrective action. Time spent performing maintenance is used most efficiently because a specific problem has already been identified.

Improving Profitability

ValveSight improves process uptime.

- **Increase means time between failures (MTBF).** ValveSight reduces the number and frequency of unscheduled shutdowns by pinpointing developing malfunctions while the control valve is still in service.

- **Reduce mean time to repair (MTTR).** ValveSight provides direction on the correct maintenance procedure to be followed, including parts and/or tools required, in order to reduce repair time and effort. In preparation for a turnaround, ValveSight helps staff prioritize activity so that only "bad actors" get serviced (and those that can be left alone, are), and thus reduce the turnaround interval.

ValveSight improves the effectiveness of preventive maintenance.

- **Prioritize maintenance based on condition.** Instead of managing to a time-based maintenance plan that services valves whether they need it or not, ValveSight focuses maintenance activity on units that need attention, which can reduce the overall workload and associated costs.

- **Eliminate non-value-added work.** Our customers have shown how up to 40% of maintenance trips result in a "no problem found" report. ValveSight can eliminate these trips to make more time available for other things.

ValveSight reduces the cost of corrective maintenance.

- **Address root causes—not symptoms.** It is not uncommon for maintenance staff to have to attempt corrective actions two or more times before a problem with a control valve is resolved completely. ValveSight makes sure that maintenance engineers know what they have to do before they even see the valve, so they can focus on fixing the real problem on the first attempt.

- **Guidance on "how" to fix, as well as "what" to fix.** If a problem surfaces, ValveSight shows you precisely where it is and recommends how to resolve it before the problem progresses into an unscheduled plant shutdown.

ValveSight reduces commissioning costs and start-up time.

- **Reduce commissioning and configuration times.** ValveSight is based on open integration standards and has been exhaustively tested for interoperability with numerous hosts and communication protocols. ValveSight also supports the ability to "cut and paste" configurations between control valves to reduce the amount of effort required to get each valve on-line.

- **Fast, fault-free parameterization.** Since ValveSight is made by Flowserve, it already understands the characteristics of our valves, actuators and positioners so you don't have to. When ordered as part of an integrated control valve, ValveSight comes preset with all the necessary baseline and limits to make it effective out of the box.

ValveSight Is Unique

Know-how of the valve manufacturer

- Nobody knows Flowserve control valves better than Flowserve. From design to manufacturing to service and repair, our know-how has been accumulated over decades of experience. With ValveSight, you can put that experience to work in your plant. The diagnostic algorithms and advice within ValveSight is the embodiment of our know-how and is now available to you.

Open standards

- ValveSight is based on open standards for integration and interoperability from the FDT Group, so you can rest assured that it will work with any FDT/DTM-compliant host or asset management solution.

- In addition, ValveSight has also been exhaustively tested with major host providers so you can be confident that it will work for you.

- Finally, ValveSight has been designed to work over a variety of protocols and has received independent certification from the relative standards associations for each.

You get it all

- While some other vendors may charge an additional fee or require a service contract to interpret results or use all functions, ValveSight does not. All output from ValveSight is provided in plain language to the end-user and does not require additional interpretation.

Compatible with valves and actuators from other manufacturers

- End users can take advantage of ValveSight's unique features on equipment from other manufacturers simply by installing a ValveSight-enabled digital positioner.

Retrofittable

- ValveSight can be retrofit to a large installed base of existing Flowserve control valves.

- In most cases, a simple software upgrade is all that is required and can be performed in the field. In some cases, an upgrade to the digital positioner may be required.

Unique Graphical User Interface (GUI)

- ValveSight allows users at all levels of experience or technical sophistication to be able to use the solution—no matter what kind of control valve is being used.

- ValveSight uses a dashboard-like interface that does not require the user to navigate alarms to understand the health of the device. It has been specially designed to communicate complex information simply and quickly.

Host-agnostic

- ValveSight provides the same end-user experience no matter which host system is being used.

- If desired, ValveSight can be used without a large host or asset management solution. It is fully compatible with many free third-party stand-alone "frames" that can be run via any Windows-based computer connected to the network, without sacrificing any of ValveSight's unique features.
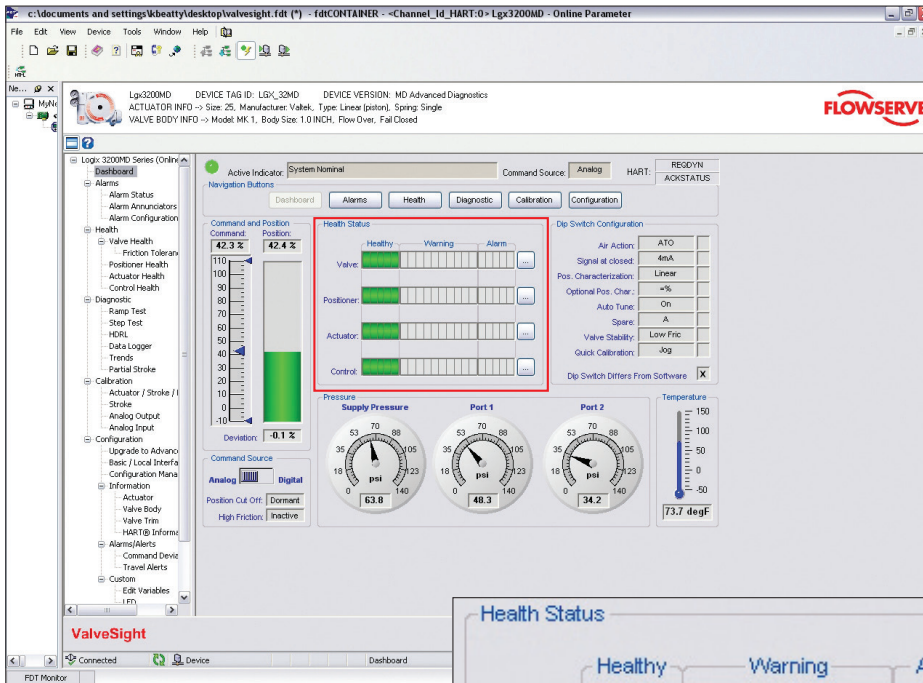
Little or no training required

- ValveSight was designed for busy people who don't have the luxury of spending time in a classroom. With minimal instruction, any user can quickly begin working with ValveSight and realize the benefits of a proactive maintenance strategy.

- Since the end-user experience and functionality are consistent regardless of the host or asset management solution being used, ValveSight supports the development of company-wide best practices and methods across plants, further accelerating time to benefits.
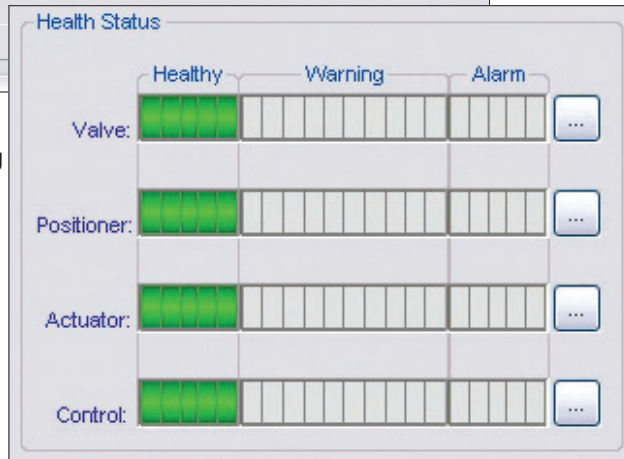
Powerful, but Easy to Use

ValveSight was designed with operators in mind. The graphical user interface offers these features:
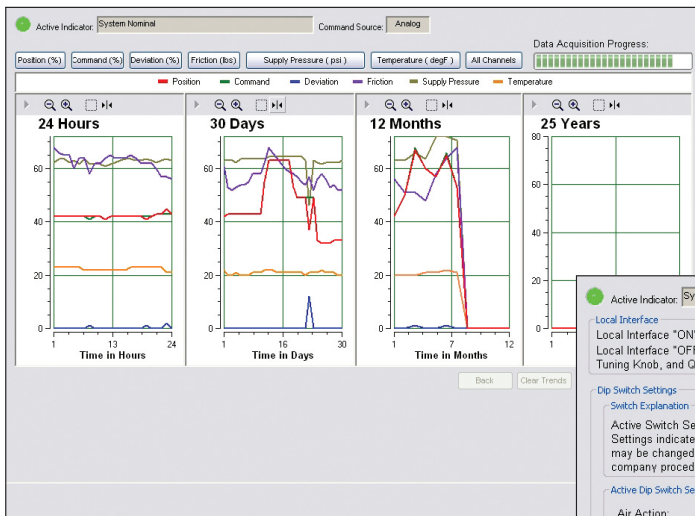
- An intuitive navigation between functions

- Easily understandable names for views and parameters

- Online self-contained help functions and manuals to speed up the maintenance and repair process

- A common look and feel between different types of control valves and systems

Thanks to ValveSight's colour-coded health status, you can check the four key health parameters in one easy glance at the main dashboard: Green = healthy; Yellow = warning; Red = alarm. Plus, on the yellow bar, you'll find several stages, or degrees, upon which the warning and alarm reports are based.

ValveSight provides at-a-glance understanding asset health—not alarms.

An integrated historian keeps track of critical data and provides information on trends—all without additional software or tools.

The onboard toolset speeds setup and parameterization.

ValveSight allows maintainers to understand the root causes of device problems—not just symptoms—as well as what proactive steps can be taken to keep the process running longer.

Both on-line and off-line diagnostics allow users to benchmark the combined performance of valve, actuator, positioner and control signal. Current performance can be compared to stored values as well as the original factory "birth certificate."

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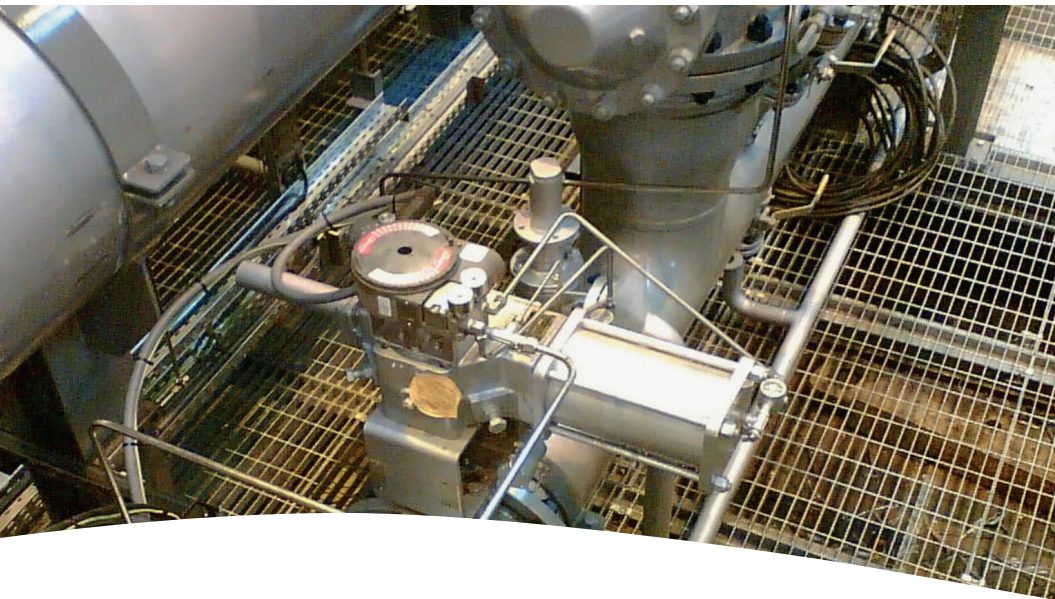Fax: +65 862 4940

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The ValveSight system can be used on any control valve.

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flowserve.com