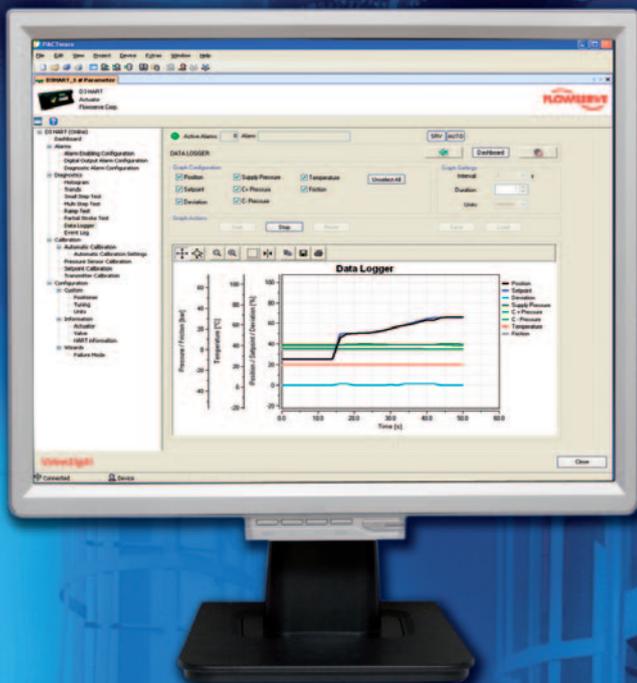


ValveSight

Prevention Delivered





ValveSight. **It's all about increasing your bottom line.**

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

Proactive maintenance strategies for critical equipment improve output and lower cost without sacrificing safety and reliability.

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 behavior that may indicate a problem—that provides actionable advice PROACTIVELY.

More than just “predictive diagnostics.”

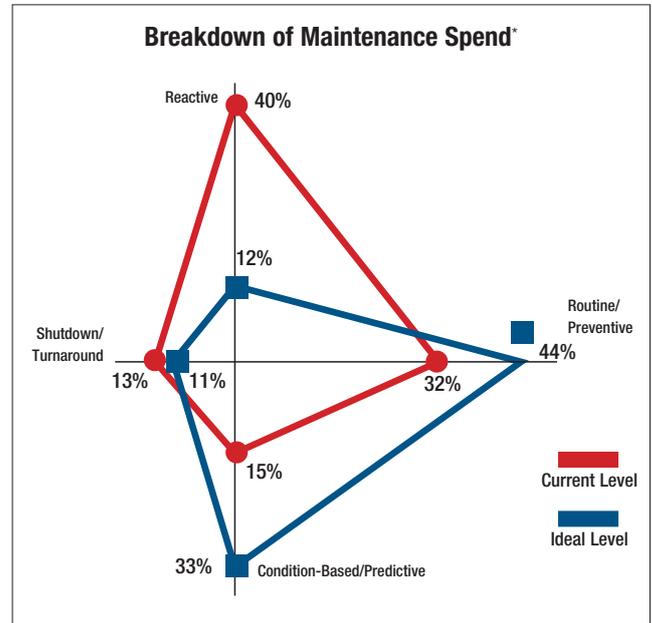
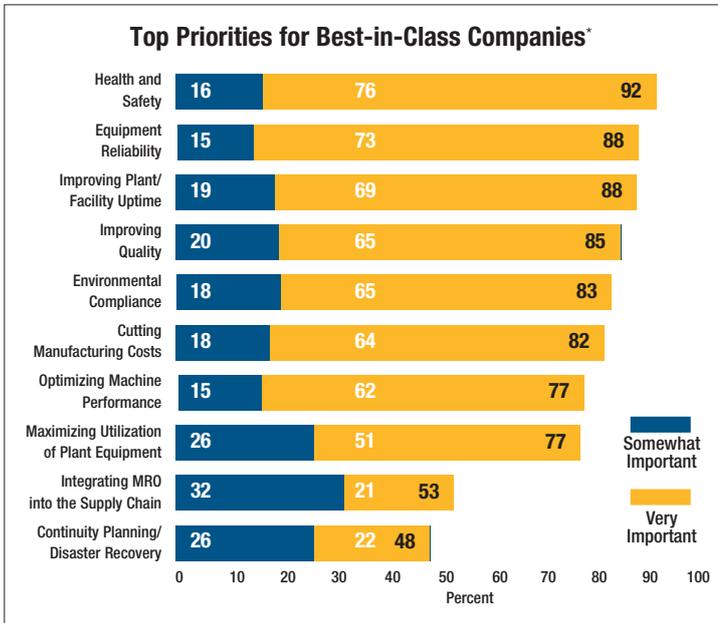
- Focus on device health, not alarms. Alarms can be confusing and difficult to interpret, so ValveSight uses the manufacturer’s experience to translate alarms into an overall assessment of health so you don’t have to.
- Focus on “why,” not just “what.” ValveSight helps you to identify root causes, not 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 control valves or the interpretation of complicated diagnostics data.

ValveSight integrates seamlessly with your existing host system using open standards and can be retrofitted with existing control valves.

Designed by Our Customers.



Fact:

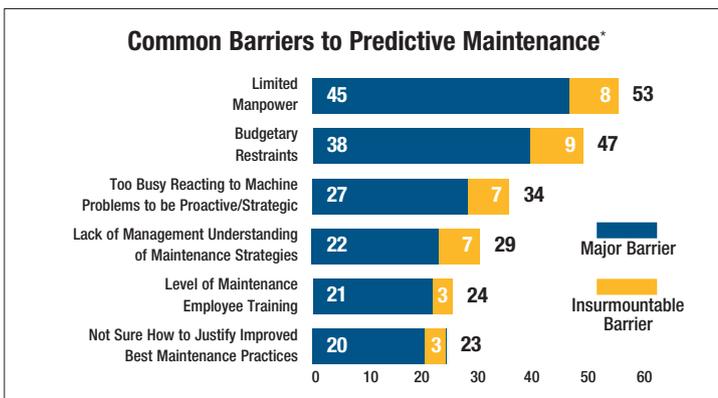
Best-in-class companies recognize the importance of improving uptime and reducing maintenance costs as a means to improving plant profitability.

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

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 spending without increasing downtime.



Fact:

Organizational 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 analyzed 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.

* Source: *Maintenance Technology* magazine, October 2002

Improving Profitability.

ValveSight improves process uptime.

Increase mean 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 reduces the cost of corrective maintenance.

Address root causes—not symptoms.

It is not uncommon for maintenance staff 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 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 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.

Using the vast experience and knowledge of Flowserve, ValveSight understands the characteristics of valves, actuators and positioners.

Default parameters can be easily turned on or off with one mouse click. Or, they can be quickly tailored to what you want!

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 all manufacturers

End users can take advantage of ValveSight's unique features on equipment from all manufacturers simply by installing a ValveSight-enabled D3 digital positioner.

Retrofittable

Using the Flowserve D3 digital positioner and our enormous selection of mounting brackets and hardware, the D3 with ValveSight can retrofit to almost any application you have.

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 FDT "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 color-coded health status, you can check the four key health parameters in one easy glance at the main dashboard: Green = normal; 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.

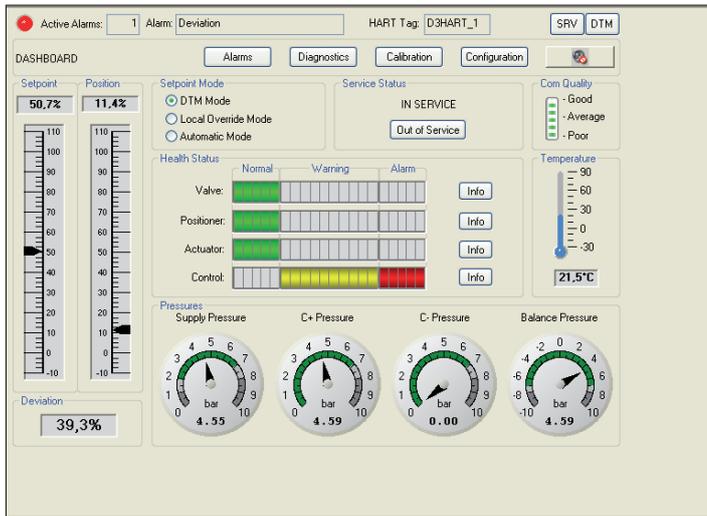
The screenshot shows the PACTware interface for a D3HART_1 actuator. The main dashboard includes:

- Active Alarms:** 0
- Setpoint:** 49.3%
- Position:** 48.5%
- Service Status:** IN SERVICE
- Health Status:** A grid showing the status of Valve, Positioner, Actuator, and Control. All are currently in the 'Normal' (green) state.
- Com Quality:** Good
- Temperature:** 21.3°C
- Pressures:** Supply Pressure (5.82 bar), C+ Pressure (5.26 bar), C- Pressure (1.90 bar), Balance Pressure (3.36 bar)
- Deviation:** 0.8%

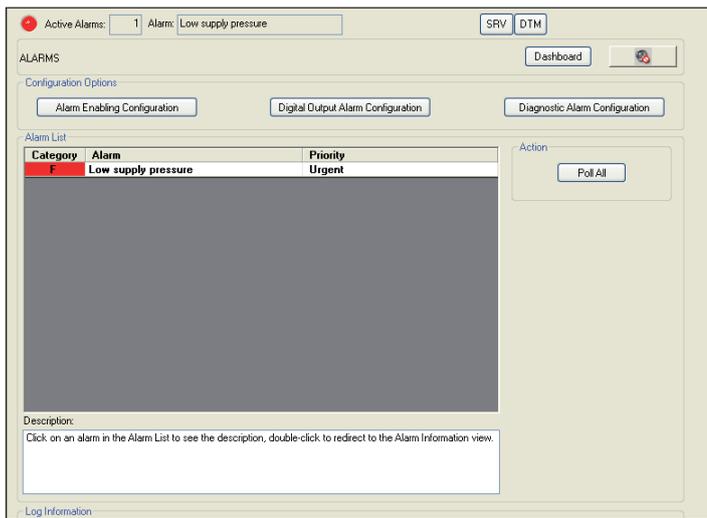
A callout box provides a detailed view of the Health Status grid:

	Normal	Warning	Alarm
Valve:	██████████	██████████	██████████
Positioner:	██████████	██████████	██████████
Actuator:	██████████	██████████	██████████
Control:	██████████	██████████	██████████

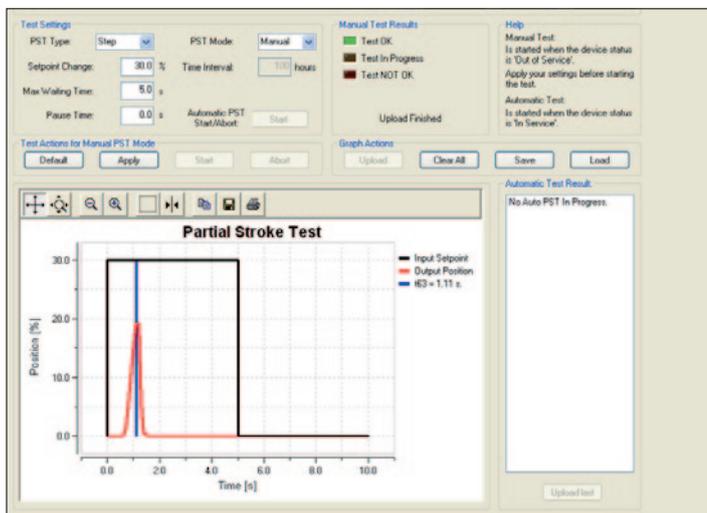
ValveSight provides at-a-glance understanding of asset health – not alarms.



A glance at the dashboard gives all necessary information.

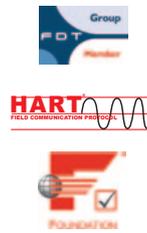


Alarms are clearly indicated.



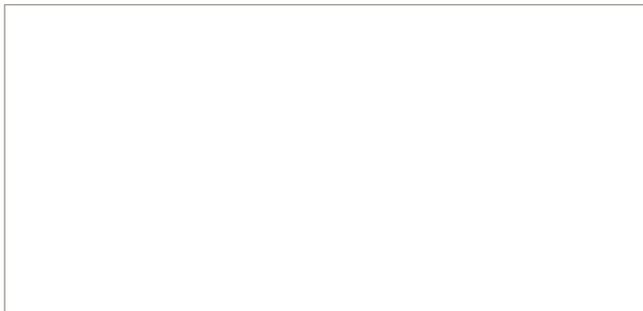
D3 and ValveSight allows "Parial Stroke Tests" to be performed and recorded.

ValveSight Is Compatible with Most Hosts.





FCD PMENBR0016-01



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The ValveSight diagnostic system can be used on any control valve using D3 digital positioners.

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