



# Masoneilan\* Valve Aware\* Service

## Control Valve Health Monitoring for Improved Plant Performance

Valve Aware is a service offered by General Electric and our local service partners to better help understand the health of all pneumatic control valves by utilizing complete maintenance records and monitoring control valve performance during normal process operations, plant integrity, efficiency and uptime can be improved—reducing operating expenses and helping to increase plant profitability.

### With the tool you can:

- Improve plant safety by diagnosing fluid leaks and control valve seating issues
- Improve plant uptime by diagnosing and validating the health of control valves without disturbing the process
- Improve plant performance with key performance indicators that show valve or system tuning issues
- Verify proper installation and calibration
- Diagnose control valves equipped with SVI\* series products as well as any control valves equipped with HART® or FOUNDATION™ fieldbus positioners
- Enable flexible implementation such as point-to-point or integrated solutions with leading asset management software
- Conduct long-term performance trending with automated data collection and analysis
- Enhance information management with a built-in database
- Better manage your resources with quarterly health reports
- Access all valve maintenance completed by Masoneilan Authorized Repair Centers (MARC)\*
- Build reports for regulators documenting valve maintenance

### Key Features

- Read-only field device data capability for internet safety
- HART® and FOUNDATION fieldbus support for any digital valve positioner (1)
- Modern user friendly interface
- Non-intrusive for normal process operation

- Configurable schedule for valve monitoring
- GE expertise along with GE Global Research Center with all analytics
- Patented data analysis with valve trend analysis
- Facilitated planning of shutdowns with MARC
- Automatic saving and logging of results into a database
- Stand-alone implementation or integration
- Historical view of key performance indicators (KPI)
- Complete historical maintenance records



### Communication Protocol support

- HART (revision 5, 6, 7)
- FOUNDATION fieldbus (H1, HSE)

### External Hardware for Stand-alone Application Support

- HART Modem (USB, Serial, Bluetooth)
- MTL Multiplexer
- P&F Wireless Gateway
- FOUNDATION fieldbus PCMCIA card and USB interface

## Key Performance Indicators (KPI) with Pass/Fail Criteria (2)

Valve Friction	Response Time
Spring Initial	Setpoint Offset
Sprint Final	Setpoint Error
Setpoint Error	Position Overshoot
Lag	Oscillation Frequency
Tight Shutoff	Stick Slip

## Digital Valve Positioners Support

- Any FOUNDATION fieldbus positioner
- Most digital valve positioners with HART Command #3
- GE's Masoneilan SVI FF Valve Positioner
- GE's Masoneilan SVI II Valve Positioner (Standard and Advanced Diagnostics)
- GE's Masoneilan SVI II AP Valve Positioner (Standard and Advanced Diagnostics)
- GE's Masoneilan SVI1000 Valve Positioner
- GE's Masoneilan FVP Valve Positioner (Standard and Advanced Diagnostics)
- Fisher® DVC5000/DVC6000 (Does not require PD tier) (3)
- Valtek® Logix Series (3)
- Siemens SIPART (3)
- Support

## Integration

- GE Mark\* Vle Control System
- AMS™ from Emerson Process Management™ (AMS OPC server required) (3)
- PRM® from Yokogawa® Corporation (3)
- PKS® from Honeywell® Corporation (3)

## Supported Software

The software has been designed to support multiple sources for devices.

### Supported Device Sources

- Direct HART
- Direct FF (NI FOUNDATION fieldbus)
- Honeywell PKS R400
- Yokogawa PRM 3.05, 3.10
- Emerson AMS 11.1, 11.5

## Languages

Valve Aware Services has been designed to support multiple languages.

### Supported Data Languages

- English (United States)
- Portuguese (Brazil)
- French (France)
- Dutch (Netherlands)
- Spanish (Spain)
- Chinese (PRC)

## Specifications

### Supported Browser Requirements

Valve Aware Services supports the following browsers:

- Microsoft Internet Explorer 8
- Microsoft Internet Explorer 9
- Mozilla FireFox
- Google Chrome

### Servers 32 or 64 bit

- Intel Core™ 2.7 GHz processor or above
- 4 GB memory or above
- 500 GB hard disk drive
- Ethernet Network Interface Card

### Operating System

- Microsoft Windows® 2008 Server R2 Standard Edition 32/64 bit
- Microsoft Windows Server 2003 R2 SP2 32/64 bit
- Microsoft Windows 7

### Software

- Microsoft IIS 6.0 (Windows 2003 Server)
- Microsoft IIS 7.0 (Windows 2008 Server)
- Java JRE 1.7u25
- Tomcat™ 7.0.37 Application Server
- PostgreSQL 9.2 Database
- Advosol OPCDA.NET 3.00.105
- High Soft High Charts Version 3

### Security

- Transport Layer Security (TLS) Certificates
- Integrated Windows Authentication

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