



SmartValve®

SmartValve® Use Cases — Problem and Solution

June 2025



SmartValve®

1. Elimination of Transient Pressure Events (Water Hammer)

PROBLEM:

Transient pressure events, commonly known as water hammer, occur due to improper opening and closing of valves or hydrants. These events cause bursts, leaks, water quality deterioration, and premature wear of network assets.

SOLUTION:

SmartValve®'s patented real-time monitoring system guides technicians to precisely control valve operations, virtually eliminating water hammer incidents and significantly enhancing asset lifespan and system reliability.

2. Consistent and High-Quality Network Operations

PROBLEM:

Inconsistent execution of isolations, flushes, and leak detection operations results in suboptimal water quality and unreliable asset performance due to variability in technician practices and data collection.

SOLUTION:

SmartValve® empowers water companies with customizable best-in-class workflows, ensuring technicians follow uniform processes and collect consistent data, facilitating continuous operational improvement and reliability.



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3. Enhanced Operational Efficiency

PROBLEM:

Manual data entry and administrative tasks slow down field operations, increase human error, and often result in incomplete or inaccurate data collection.

SOLUTION:

SmartValve® provides digital data capture tools including photos, videos, notes, voice recognition, and operational histories, significantly reducing technician administrative tasks and enhancing operational accuracy and efficiency.

4. Advanced Asset Management

PROBLEM:

Asset management struggles with incomplete, inaccurate, or outdated information leading to asset downtime, inefficient maintenance scheduling, and poor resource allocation.

SOLUTION:

SmartValve® integrates seamlessly with GIS platforms, maintaining accurate, up-to-date asset records. Technicians update asset information easily and in real-time, ensuring optimal asset performance and improved predictive maintenance capabilities.



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5. Skill Development and Licence to Operate

PROBLEM:

Water companies face challenges accurately assessing technician skills, identifying training needs, and implementing effective performance management systems.

SOLUTION:

SmartValve® systematically records operational activities, enabling objective assessment of technician performance. Companies can easily identify skill gaps, tailor targeted training interventions, and create structured performance-based incentives to drive technician development and operational excellence.

6. Robust System Integration for Strategic Decision Making

PROBLEM:

Critical operational decisions and incident responses are delayed by fragmented and inaccessible real-time data across multiple systems.

SOLUTION:

SmartValve®'s API integration provides immediate, real-time operational and asset data accessibility across systems. Decision-makers can swiftly and effectively respond to incidents, significantly reducing operational downtime and enhancing network reliability.