

Achieve Optimal Pipeline Operations

With Artificial Intelligence Enabled Tools for Real-Time Decision Support



Pipeline operators all over the world are recognizing the importance of operational efficiency. SentientQ™ Decision Support is our artificial intelligence tool that provides operators with real-time support for optimal pipeline flow.

SentientQ™ Decision Support helps you aim higher and increase your operational efficiency objectives.



Minimize Operational Costs



Maximize Throughput



Reduce Volatility

Proven Results: Monthly Power Savings between 17% and 34%

Why SentientQ™ Decision Support?

Oil and gas pipeline operators are under constant pressure to meet delivery targets of their products based on numerous variables, including market supply and demand. The operator must balance the delivery target with the need to minimize the cost of inputs (e.g. DRA, electricity), maximize pipeline life, reduce spill potential, and reduce greenhouse gas emissions.

Add to this, the complexity of the pipeline network configuration,

including: elevation changes, a variety of pump stations, control systems, hundreds of kilometers of pipe, ongoing repairs, maintenance, network additions, and shutdowns. These variables can quickly morph into millions of possible permutations of necessary control settings to achieve delivery objectives.

During the last twenty years, the cost of computing power has plummeted, and there are now mountains of system data available.

This data can be mined to gather insights into how a pipeline network reacts to different control settings.

Through the application of machine learning, SentientQ Decision Support can mine through terabytes of historical and current pipeline network data to detect patterns and make subsequent predictions on what control settings would be necessary to achieve a specific throughput objective.



How Does SentientQ™ Decision Support Work?

Our machine learning engine reviews hundreds of pipeline process variables in the client's historical pipeline data.

SentientQ™
Decision Support

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SentientQ Decision Support analyses millions of possible permutations of component configurations (e.g. pumps: push/pull, DRA, sour/sweet injection, pipeline length, elevations, pressure, power, energy prices, etc.) to achieve specific flow rates for a particular product.

Based on this analysis, SentientQ Decision Support can build an optimized flow model, which is further informed by real-time data. Operators can use this model to improve pipeline life by setting pipeline configurations to consistently

achieve flow rate targets, minimize input costs, and reduce the carbon footprint.

SentientQ Decision Support's intuitive design, and calculator like feel, allows any operator to augment their decisions in real-time with recommendations to consistently achieve their throughput targets, while minimizing costs and extending asset life.

Our models have shown that SentientQ Decision Support can provide overall annual cost savings of 28.5%.

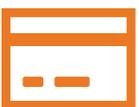
SentientQ™ Decision Support Will Allow You To:



Increase the Lifespan
of your Pipeline Assets



Reduce Preventative
Maintenance Efforts



Reduce Leak
Detection Costs
& Spill Response Costs



Reduce your Carbon
Footprint