

PRODUCT DATASHEET

AVEVA™ Pipeline Operations for Gas

Optimize pipeline performance with real-time monitoring

It can be daunting to reconcile upstream delivery with downstream receipt. You need accurate, up-to-the-minute flow data to track product quality and quantity. How can you obtain the exacting data that is critical to improving operational efficiency, customer service and your bottom line?

AVEVA brings more than 25 years of experience building gas pipeline applications for major names in the gas and oil industry. We serve customers on six continents and manage more than 60 percent of total hydrocarbon movements in both North American and Latin American pipelines.

Overview

AVEVA Pipeline Operations for Gas works with the proven AVEVATM Enterprise SCADA to centralize delivery of key gas pipeline information, enhancing your company's operational environment. You receive the critical data you need to improve pipeline operations and meet your business goals. AVEVA Pipeline Operations for Gas offers up-to-the-minute metering and flow totaling. It also calculates and monitors line pack, storage and compressor performance in real time.

Metering and analysis

AVEVA Pipeline Operations for Gas continuously calculates corrected volumes, heating values and specific gravity, giving you a stream of the most current data. The system easily integrates with AVEVA Enterprise SCADA to measure corrected flow and corresponding energy content. Even when not required, and without the benefit of a field flow computer, the system calculates billable-quality flow rates. AVEVA Pipeline Operations for Gas can also use telemetry pressures, temperatures and composition data to determine advanced parameters such as hydrocarbon dew point.

Real-time flow totals

AVEVA Enterprise SCADA uses multiple measurement criteria to provide precise flow totals. Summary values are gathered from real-time metering flow rates, SCADA analog or rate values, or other contributory flow totals. The flow total value updates every minute based on sample input values. The system also identifies average and integrated flow totals for the current and previous hour and gas day. Each input to flow total contributes according to a configurable multiplying factor, allowing the system to generate various key operational performance indicators.

Linepack management

You need effective line pack measurements to regularly validate, correct and optimize inventory levels. AVEVA Pipeline Operations for Gas constantly calculates current line pack and pack/draft values using field pressure and temperature and gas composition values.

As new line pack values are calculated, they are compared toprevious line pack values for the hour and gas day providing SCADA displays with updated information. AVEVA Pipeline Operations for Gas also sends periodic line pack and delta line pack records to AVEVATM Measurement Advisor.

Monitor storage pool volume

SCADA system operators can also monitor storage pool inventories in realtime using AVEVA Pipeline Operations for Gas. Real-time inventory data enables informed decisions that keep storage pools at ideal levels and reduce storage costs. The system tracks the current gas volume of each storage pool within the system and updates totals as injections and withdrawals are made. The application can easily be configured to trigger draw down alarms when pools reach dangerous levels, or flow rate alarms when flow is too great. When the pool pressure exceeds a deadband, the system automatically recalculates the storage pool inventory.

Track compressor performance

AVEVA Pipeline Operations for Gas regularly monitors compressor unit performance, allowing operators to draw on current unit statistics for better maintenance planning. The system also stores fault data to identify minor issues before they escalate. Operators can view historical data to detect compressor degradation and set operating points for optimal efficiency. Over time, careful monitoring of compressor fleet performance can improve operational energy efficiency and significantly reduce costs.

Depend on real-time data

With AVEVA Pipeline Operations for Gas, operators make better decisions that improve your operation at many levels. Depend on AVEVA Pipeline Operations for Gas, working with AVEVA Enterprise SCADA, to deliver the real-time information your organization needs to increase efficiency, safety, customer satisfaction – and your bottom line.

