



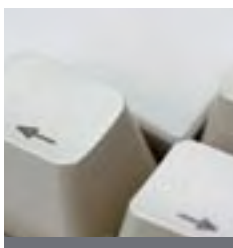
Pipeline monitoring and control

Pipelines carrying liquid fuels, gas or water are usually monitored by SCADA systems from a centralised control facility.

Each product carried has its own characteristics which require distinctive handling within the control environment. Specific operational needs, coupled with environmental legislation, demand that value-added features are provided to support monitoring and control of the valves, flows and pumps.

Our pipeline monitoring systems can be tailored to your individual needs to offer fast reaction to incidents and detection of leaks.

performance



Solution

In conjunction with a reliable SCADA system, the following are typical of the features that may be required:

- Major leak detection based on rapid pressure changes
- Small leak detection from pressure decay in closed-off sections or line balance of product at the entry and exit points after allowance for line packing
- Batch tracking on lines carrying several products, or where control of product batches is needed
- Product accounting, particularly where product is transported for different users or where the product is bonded
- Meter proving if accurate measurements are needed for fiscal purposes
- Pig tracking (a pig travels through pipelines clearing any residues)
- Optimisation of operations by the most efficient pumping configurations and schedules
- Product quality control

These features are implemented in centralised control systems, both for manual supervision and automated control. Where necessary, local automation at pipeline sites may be provided either to accommodate loss of communications, or to provide fast local control loops.

Benefits

In addition to the generic benefits provided by a SCADA system, a full suite of pipeline oriented features offers:

- Faster reaction to incidents and safety related issues
- Detection of small leaks
- Compliance with environmental requirements
- Better control and recording of product batches
- Optimum pumping schedules to save energy costs

Our capability

Schneider Electric has designed and implemented pipeline systems from the simplest SCADA projects through to the largest with a full range of additional features.

We can provide solutions from a standard SCADA package to full turnkey implementation with industry specific algorithms. If required, we can offer complementary services to support your in-house design of pipeline control.