



PRODUCT DATASHEET

Pipeline Trainer

The Best Tool for Pipeline Operations Training

Pipeline Trainer allows the pipeline operator to practice normal and abnormal operating scenarios in a safe and realistic environment on his or her own schedule.



Overview

The more complex your pipeline becomes, the more challenging it is to manage problems that drain your bottom line and expose your business to painful publicity and regulatory scrutiny. Leading pipeline operators know their best defense is a good offense: establish the best possible predictive, preventive, and protective measures – and then make sure you have a highly trained operations staff in place to implement those measures.

Advanced modeling and simulation tools are essential in both developing your safety plan and in training your staff. Many leading pipeline operators have found the answer to their training needs in Pipeline Trainer.

Pipeline Trainer brings together a suite of applications focused on making sure that the pipeline control room operator has the required qualifications to manage and operate the expensive pipeline assets they have been designated to operate.

Features

Generic Pipeline Trainer

The Generic Pipeline Trainer allows regulators and students in general to get generic natural gas, crude, and product pipeline operational training. Built upon the environment that a pipeline controller lives in every day, this new system is designed to provide hydrocarbons pipeline professionals with a realistic environment for training and qualification. It helps develop employee knowledge and expertise to support good decision-making, mitigate risks, and increase operational efficiency. The Generic Pipeline Trainer also supports pipeline operator compliance with government and industry qualification requirements – such as those defined by the Office of Pipeline Safety Operator Qualification.

In addition, the feature-rich Generic Pipeline Trainer bridges the gap between basic generic trainers and full-scope training systems for effective training at the highest value. Its high fidelity, standardized training experience is beyond what is possible with generic trainers – without a costly, full-scope training configuration. As a single source solution, it offers reliability, comprehensive vendor support, and minimized maintenance costs.

Full-Scope Pipeline Trainer

The Full-Scope Pipeline Trainer provides a very realistic operator experience using a copy of the same SCADA screens as in the pipeline control room. The Full-Scope Pipeline Trainer can be used for any type of pipeline, due to the state-of-the-art 2-phase simulation engine used for simulating hydraulic behavior and the ability to model accurately the control logic associated with field devices and SCADA sequencing.

Full-Scope Pipeline Trainer contains the following components:

- Virtual Pipeline Model to accurately replicate thermo-hydraulic pipeline transient behavior and to provide field data to the SCADA
- Virtual Control System to simulate the major control loops, system interlocks, and other logical control behavior
- Scenario Composer allows instructor to create normal or abnormal scenarios
- Scenario Navigator helps instructor in organizing, creating, scoring, and executing training scenarios
- Qualification Information System is a database for managing the historical records related to operator training
- Copy of production SCADA system including same type of screens as operator would use on production SCADA

The Full-Scope Pipeline Trainer allows the training officer to define and impose specific normal or abnormal scenarios on which the pipeline control room operator is to be trained.

An Integrated Approach

Pipeline Trainer is one of the offerings based upon a common advanced application development environment for building advanced software applications for the pipeline industry. This allows Pipeline Trainer to have common configuration tools, common database, common pipeline model connectivity, and common runtime environment with other offerings from creating a unique integrated solution.

Training Made Easy

Humans are one of the most critical factors in operating pipelines and for that reason more and more pipeline companies utilize flight simulator technology such as Pipeline Trainer to make sure that the pipeline control room operator has the required experience to manage normal and abnormal operational activities.

For more information on Pipeline Trainer, please visit: sw.aveva.com/engineer-procure-construct/operator-training/pipeline-trainer