

AFT Fathom™

Add-on Modules



Take Your System Designs to a New Level

Building on the foremost modeling software for incompressible pipe flow systems, the AFT Fathom add-on modules extend your design, analysis and simulation capabilities. These modules have been designed specifically and can work with any AFT Fathom model.

- **Goal Seek & Control** - automates identification of input parameters that yield desired output values and simulates control functions
- **Extended Time Simulation** - models dynamic system behavior
- **Slurry Modeling** - models the effects of moving settling slurries in pipes



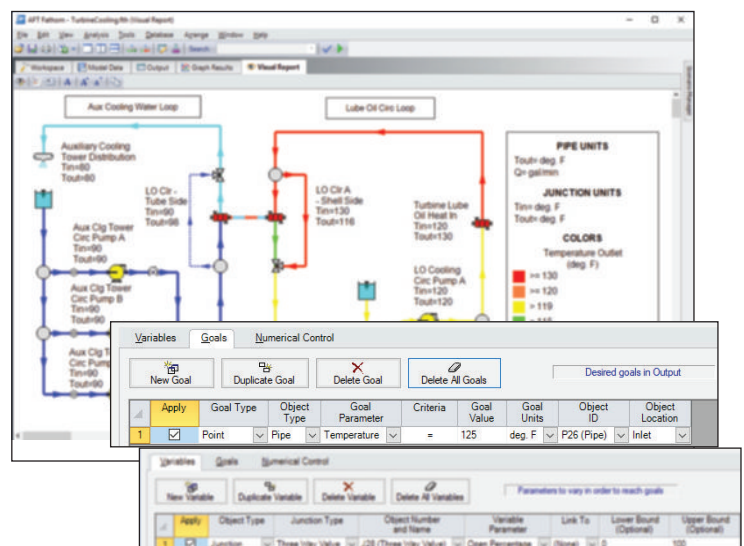
Goal Seek & Control GSC Module

Benefits

- Evaluate the effects of changing system parameters
- Save time by avoiding manual iterative analyses
- Simulate control system behavior

Capabilities

- Define multiple variables and goals at multiple locations
- Define goals as single point, differential or sum
- Calibrate models by automatically adjusting pipe friction and scaling to match measured data
- Modeling parameters for variables or goals include
 - Control valves - setpoint, open percent
 - Pumps - speed, flow, head rise
 - Valves - open percent, Cv/K, delta P, flow
 - Reservoirs - pressure, temperature
 - Orifice - diameter, area
 - Heat exchangers - heat rate, temperatures, area, U value
 - Spray discharge - area, K value, discharge coefficient, exit pressure



Extended Time Simulation

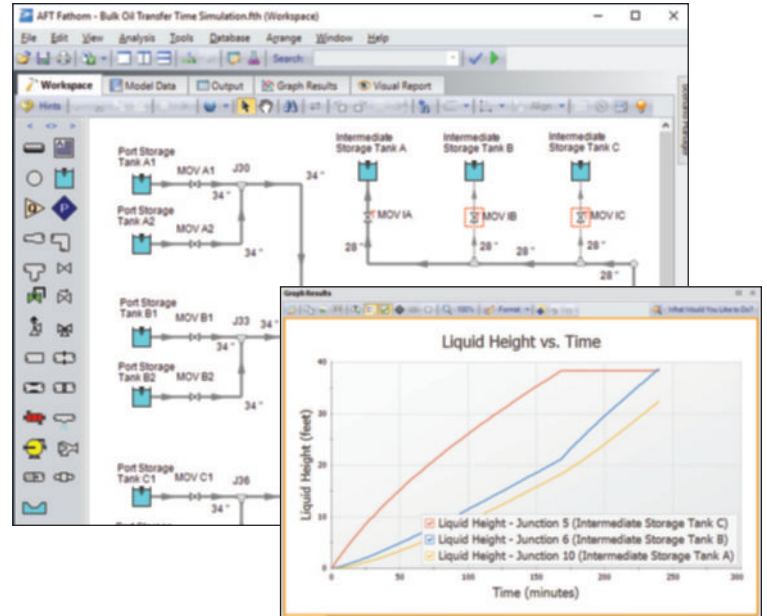
XTS Module

Benefits

- Understand how critical system parameters vary over time
- Automatically change variables for a dynamic simulation of your system

Capabilities

- Define a wide range of actions to occur during the time simulation including:
 - Tank volume and liquid level tracking
 - Pump start/stop and speed variation
 - Valve position changes
 - Control valve setpoint variation
- Text and graphical output
- Unique animation feature dynamically displays time varying parameters along selected flow paths



Settling Slurries

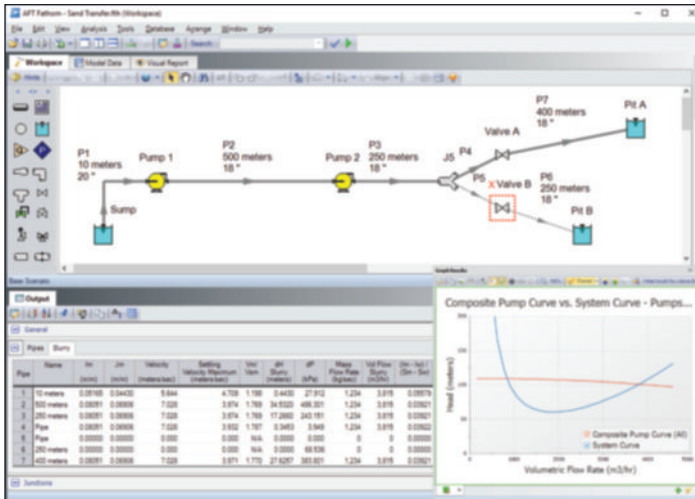
SSL Module

Benefits

- Expertly handle slurry system challenges
- Avoid system failures and excessive operational costs
- Prevent plugged pipes and misapplied pumps
- Reduce energy usage
- Improve system performance
- Reduce operating and maintenance costs

Capabilities

- Solutions from the leading Wilson/GIW method
- Shareable database of solid particle properties
- Slurry pump de-rating using Warman or ANSI/HI methods
- Produces output reports with settling velocity, slurry volume/mass flows and other slurry parameters
- Generates slurry systems curves critical to understanding system velocity limits



World Class Support

Your software includes one free year of product upgrades and technical support. Additionally, AFT offers a variety of training for all levels of knowledge.



Training Seminars

This classroom style setting teaches you how to be an AFT analysis and simulation expert.



Free Webinars

Hosted & recorded webinars talk about products and solutions-based uses.



Flow Expert Package

Utilize our experts to help you with projects or simply supply expert analysis.



Tips & Tricks

Each month, an AFT engineer gives newsletter readers tips & tricks to keep you up to date.