

# AFT Fathom Modules

## Extended System Modeling for AFT Fathom 7.0



Building on the most comprehensive system modeling software for incompressible flow systems, the *AFT Fathom™* modules extend the modeling capabilities into three areas:

- **XTS-eXtendedTimeSimulation** to model transient events over time
- **GSC - Goal Seek and Control** to automate the determination of input values that will yield desired output values and simulate control functions within systems
- **CST - calculate CoST** based on your system model

Each of the *AFT Fathom* Modules can work individually within *AFT Fathom* or in conjunction with the other modules. And, of course, since they're add-on modules to *AFT Fathom*, they can work with all of your existing *AFT Fathom* system models.

### AFT Fathom XTS

While the 'snapshot in time' results of steady-state analysis answers many design and operating simulation questions, some questions simply cannot be answered without knowing how critical variables vary over time. The *AFT Fathom XTS™* module extends your modeling capabilities into the fourth dimension of time by performing a time transient analysis as a series of steady-state solutions, with changing variables automatically transferred from one time step calculation to the next.

More than simply calculating time varying values, though, *AFT Fathom XTS* lets you define a wide range of actions to occur during the time simulation, including:

- Pump start/stop and speed variation
- Valve position changes
- Control valve setpoint variation
- Tank liquid level and surface pressure changes

Extensive text and graphical output clearly displays time varying parameters such as liquid height in tanks, flow and pressure in pipes, pump operating conditions, valve position and more. Graph Results even includes a unique animation feature dynamically displaying time varying parameters in pipes.

**Whether you're designing a new system, a modification to an existing system or need to evaluate operating scenarios, when time varying performance is important to your project, you will find *AFT Fathom XTS* uniquely suited to your requirements.**



