

AFT Arrow Add-on Module Tutorial Training

Duration:

1 Day

9:00 am - 6:00 pm

1 hour lunch break

Min 4 pax to start an onsite privacy training course

Focus:

To provide an immediate experience with hydraulic pipeflow solutions by using AFT Arrow add-on module. It is primarily for people who are interested in starting up with Arrow Add-on modules now but have little or no experience with the Arrow add-on module. The examples are arranged in order of increasing complexity.

Prerequisites:

- Basic literate in Windows 98 or Win ME or Win2000 or similar.
- Basic understanding in fluid dynamic, thermodynamic and heat transfer.
- AFT Arrow tutorial course.

Agenda:

ARROW GSC MODULE

- AG1. Introduction to Arrow GSC Module
- AG2. Using Arrow GSC
- AG3. GSC Module Interface with Arrow
- AG4. Troubleshooting
- AG5. Special Topics
- AG6. Arrow GSC Hands-on Modeling

ARROW CST MODULE

- AC1. Introduction to Arrow CST Module
- AC2. Using Arrow CST
- AC3. CST Module Interface with Arrow

- AC4. Special Topics
- AC5. Arrow CST Hands-on Modeling

Selective Tutorial Examples:

Arrow GSC Examples:

- 1) Heat Transfer in a Pipe: In-depth discussion of setting up a GSC module model, including variables and goals.
- 2) Steam Relief System: This example demonstrates how to use the GSC module to determine the relief valve CdA required to achieve a specified minimum relief system capacity.
- 3) Natural Gas Burner: This example demonstrates how to use the GSC module to determine the heat rate required to achieve a specified minimum gas delivery temperature.
- 4) Compressed Air System: This example demonstrates how to use multiple variables and goals. The example varies valve loss factors to achieve specified delivery flowrates.
- 5) Process Steam System: This example demonstrates how to use multiple variables and goals, and how to link variables together. The example varies the steam supply pressure to ensure a minimum delivery pressure to multiple users at specified flowrates.

Arrow CST Examples:

- 1) Compressed Air System: Demonstrates the fundamental concepts of the Cost (CST) add-on module by using the CST module to determine the cost of the compressed air system over a 10-year period. Include material, installation, and energy costs.
- 2) Process Steam System: Demonstrates how the CST module can be used to calculate initial system costs for a process steam system, including material and installation. The example walks through creating cost databases, and cost scale tables.