

## Process Instrumentation Flow Technologies

### General Information

Course Code: PIA-PRT3C1A  
Length: 4 Days

### Audience

This course is for service personnel and customers unfamiliar with flow meter technologies and the proper use of these process instruments.

### Profile

Using hands-on tutorials and theory sessions, this course gives participants a comprehensive overview of several flow measurement technologies using the PI Coriolis mass flow, electromagnetic volume flow, Vortex flow measurement, and ultrasonic flow measurement technologies. Covering commonly used flow product lines and common applications, participants learn the principles of flow measurement, product features, product selection, understanding and meeting customer requirements, and basic troubleshooting of applications and installations.

### Topics

1. Introduction to flow measurement and why it is a critical process variable
2. Theory, history, and terminology
3. Flow markets and key applications
4. Working principles, installation, commissioning, common errors, and unique selling points of:
  - a. Coriolis MASSFLO flow meters
  - b. Electromagnetic flow meters
  - c. Ultrasonic flow meters - Transit time and Doppler
  - d. Vortex flow meter
5. Product selection by application
6. Installation guidelines
7. Hands-on exercises on each type of technology presented