# Tube Bending



### **Course Agenda**

#### INTROUDCTION ►

- Bending Components
- Bending Terminology
- Types of Bends

#### METHODS -

- Bending Methods
- Bend Offsets
- Types of Bends

#### EXERCISE ►

Hands-on Tube Bending Exercise

## **Course Objectives**

Upon completion of this class, attendees should be able to:

- explain the basic concepts of the theory and practice of tube bending
- demonstrate essential tube bending concepts necessary to complete quality 45°, 90°, 180° and offset bends
- practice the measure-bend method through a variety of hands-on exercises using the Swagelok<sup>®</sup> hand tube bender
- describe springback, how it affects the bending process, and ways to compensate for it
- bend tubing into a shape as specified by a template using the measure-bend method of tube bending, bend data, and tube bender



Cost of training includes class materials: tubing, templates, bend calculators, fittings, etc. All tools needed for class instruction will be provided by Swagelok® unless otherwise notified.