



## **Tube Bending Fundamentals Seminar**

2 Hour Lecture-Lab | Hands-on Bending Exercises

## **Don't Just Learn By Trial and Error** We offer this seminar to provide a training resource that demystifies one aspect of a fluid system

Tube bending, for the most part, is a skill that is normally passed from a craftsman to his apprentice. It is often not a skill that tube fitters learn in schools or through textbooks. Many individuals who are considered expert tube benders have learned the craft through years of hands-on experience.

It is a skill you learn by doing. Why? Because many craftsmen tell us they have never seen the published instructions that come packaged with a new tube bending tool. So the only way they could learn was through trial and error. Good tube fabrication techniques can improve system performance.

Good layout and execution can enhance the esthetics of a system and reflect on the quality of the product. Knowledgeable, skilled technicians help increase productivity and reduce waste and scrap.

## **How Can Swagelok Training Help?**

The seminar is a hands-on, lecture-lab that presents Tube Bending in an easy to understand format. Students gain practical experience using tools-of-the-trade. We focus on tube bending fundamentals providing the student with a foundation upon which he can build his expertise.

The following topics are covered:

- Introduction to tube preparation, care and handling.
- Familiarization with the tube cutter, tube deburrer, and tube benders.
- Discussion of the impact workmanship has on total system performance.
- A glossary of tube preparation and handling terminology.
- Exercises that teach techniques for determining the "exact" length of tubing needed to complete a job.
- Exercises that demonstrate time saving fabrication techniques.
- Exercises that explain the use of expansion loops and off-sets.

## **Who Should Take This Seminar?**

The seminar is designed for anyone who works with tubing, including but not limited to, the fabricators, contractors and technicians who assemble the systems. Engineers and draftsmen who design tubing systems have profited from a better understanding of the capabilities and limitations of bent tubing systems.

Where: Swagelok Northern California Or At Your Location 3393 West Warren Ave Fremont, CA 94538

(Book It For 5 Or More Associates)

**Price: Varies by Number of Associates and Location** 

Register at northerncal.swagelok.com/events

