

Swagelok ADVANCED TUBE BENDING



✓ Learn **TWO** proven and trusted Bending methods: **Measure-Mark-Bend** and **The Swagelok Master Technique**

✓ **Training that Meets Your Schedule:** Select a 2.5-day, 3-day, OR 3.5-day learning event

✓ **Train at our leading-edge Pittsburgh Training Center OR enroll at least FOUR students and we'll bring our training course to your venue**

BENDING METHODS

The Measure-Mark-Bend



The traditional basic way you've employed or heard about.

The Swagelok Master Technique

For superior accuracy and aesthetics. You'll learn how to precisely mark all the locations of all bends in a tubing run – to determine the overall length of tubing required – prior to actually making any bends.

Best of all: This process works for all bend angles.



Types of bends we demonstrate, immediately followed by YOUR hands-on exercises:

- **Offsets** – Learn how to change the centerline of a tubing run.
- **Custom Offsets** – Figure out a bend angle less than 22.5° to enable you to make an offset bend.
- **Off-Plane** – For those times when bends must be rolled to a particular angle. See how to mark the tube before positioning it in the hand bender – to drastically reduce mistakes/waste.
- **Rolling Offset** – Know what to do if your tubing run is offset in the horizontal plane AND, at the same time, in the vertical plane? We can help you solve such a seemingly difficult challenge!
- **Segmented** – Have any idea how to bend a 1" tube around a 6' tank? See how to calculate equal leg lengths so you can ultimately make a 90° bend using four 22.5° bends. Yes, that certainly sounds complicated; we'll show you why it's not.



SO, WHICH TIMEFRAME IS BEST FOR ME/MY CREW?

2.5-Day Course

Learn at a comfortable pace, with plenty of time for hands-on exercises and personal tutoring.

3-Day Course

Everything described in the 2.5-day course, but with our renowned **Tube Fitting Installation Safety** primer.

3.5-Day Course

Your best overall value... Everything from our 3-Day course, but with added practice time to make challenging bends within a large electrical box to simulate real on-the-job conditions.



Meet your instructor:
MIKE GAGEL

- Swagelok Company veteran
- Strategic Services Specialist
- Certified tube-bending expert



REGISTER TODAY – Hurry, our training schedule is filling fast!

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Swagelok

Swagelok Pittsburgh | Tri-State Area