

## Advanced Tube Bending Training (2-day course) Swagelok Los Angeles — Torrance Training Center August 19-20, 2019 *or* August 21-22, 2019

This comprehensive and hands-on 2-day class, taught by Swagelok expert, Mike Gagel, will provide instruction on both the proper use of tube bending equipment and multiple methods to bend tube. Students will be challenged with a variety of exercises designed to improve their abilities with both basic and advanced bending techniques.

### This training will provide you with:

- A detailed, mathematical approach that will improve accuracy, allowing for better quality prototypes and output
- Improved system performance and enhanced aesthetic qualities of your tubing system
- Reduced scrap and rework time caused by inaccurate tube bending practices
- An emphasis on operational issues, overcome through hands-on experience

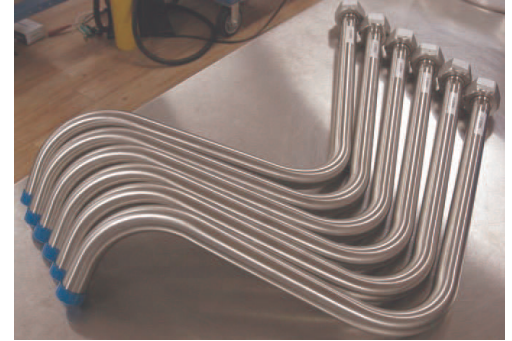
### Primary topics will include:

- Using the Swagelok Hand Tube Bender
- The Measure-Bend Method of Tube Bending
- The Swagelok Method of Tube Bending
- How to make both simple and custom offset bends
- Making both segmented bends and rolling offsets
- Understanding constraints of tube bending, such as minimum distances between bends
- Hands-on experience constructing a peg board (shown at right)

### Tuition is \$1595 per attendee

Which covers all course materials, including equipment and training materials and lunch/snacks/beverages. Attendees keep the comprehensive course workbook and will receive a signed certificate of completion.

**For more information: Contact Rich Sweeney at (562) 755-0184  
or [richard.sweeney@swagelok.com](mailto:richard.sweeney@swagelok.com)**



### WHO SHOULD ATTEND?

- Hands-on personnel who need to learn the art of tube bending or upgrade their skills
- Engineers who design systems that include bent tubing
- Supervisors of operations associates
- Quality assurance and quality control personnel

