



Tube Fitting Installation Essentials

learn online with a Swagelok-certified trainer

Best Practices for Effective Installation

Gain a thorough understanding of safe, effective tube fitting installation, as well as important design features. This course has been accepted by a number of manufacturers and contractors as a way for engineers and technicians to learn long-lasting best practices to their work.

Upon completion of this course, you will be prepared to:

- Properly cut and deburr tubing.
- Correctly assemble a Swagelok tube fitting.
- Gauge a tube fitting assembly.
- Remake a tube fitting assembly.
- Identify thread types and installation practices.
- Properly prepare threaded installations.
- Learn bending terminology.

Add-On: Tube Bending Essentials

With the addition of **Introduction to Tube Bending**, your associates will gain the understanding necessary to correctly introduce bent tubing, while reducing work time and improving your system performance.

- Properly set up and use a hand tube bender.
- Learn bending terminology.
- Learn the measure-bend method using the Swagelok hand tube bender.
- Tube bending concepts necessary to complete quality 45°, 90°, 180° and offset bends.
- Includes hands on and practical exercises.



Swagelok®



Tube Fitting Installation Essentials – Online Training Checklist

For online training with hands-on practice to be effective, there are a few important considerations for participation. These steps were collected from past training experiences and will set you up for successful comprehension and course completion.

Technology required for participation:

- **Multiple trainees:** Room must be equipped with computer to project MS Teams meeting to the class. Computer camera or external camera should be turned on so that instructor can view the class and see attendees should they need to approach the camera and show their work.
- **Single trainee:** Computer with camera turned on in order for instructor to view trainee and their work.
Note: If a camera is not available at your facility, we may loan one for this purpose.
- **Audio:** The room should have computer audio that effectively lets all trainees hear the instructor. You may consider a Bluetooth speaker or use the conference call number by phone if that works best for your company.



Onsite facilitation during class:

- We provide one kit per trainee of sample material for practice and the practical exam, tools and literature to be used.

Day of class:

- Classrooms with multiple trainees should plan to log in to the Teams meeting link 15 minutes ahead of the course start time to check for audio and video. In our experience, any later set up time will result in a late start and less time for attendees to complete their practical and written exams.
- We keep class sizes manageable and strongly encourage speakers are kept on for back and forth communication with the instructor during the class. Chat may also be used if preferred.
- After class, facilitators will please gather kits with tools, extra sample material, sign in sheets, written exams, surveys and a good practical exam submission with their name from each attendee to be returned to us. Attendees will keep course catalog, additional literature and gap inspection gauges for future use.

WHAT'S IN YOUR KITS?

You have received a comprehensive training kit for effective course completion. Many of these materials are for your personal use. Tools and the kit itself will need to be returned according to coordinated shipping arrangements.

Printed Materials

- Tube Fitters Manual
- Tubing Data Sheet
- Thread End Connection Guide
- Tubing Tools & Accessories Booklet
- Leak Detector, Lubricants, and Sealants
- Swagelok Tube Fitter Pocket guide
- Training Book(s)
- Sign in Sheet (Complete & return)
- Survey (Complete & return)

Tools

- Gap inspection gauge (Keep this)
- Gripper pad (Keep this)
- Sharpie and pen (Please return)
- Vice grip hand tool (Please return)
- Hand tube benders (Please return)



Please note that these tools must be returned with the kits in accordance with previously agreed-upon arrangements or within 7 business days of the class completion. If they are not returned, the company ordering the class will be responsible for the current replacement cost of the tools.

Sample Fittings and Tubing

You have received a number of brass tube fittings and tubing that will be used throughout the duration of the class.

Please return:

- Your made-up fitting/ tubing assembly in the plastic bag with your name signed on the bag. This is used to verify course comprehension.
- Unused fittings and tubing, so they can be used in future trainings.
- **All requested materials to:**
Swagelok Southern California
9170 Camino Santa Fe
San Diego, CA 92121

Call (619) 517-2515 with questions or concerns related to training materials.

REQUEST FOR QUOTE

Tube Fitting Installation (4 hours)

Tube Bending (2.5 hours)

Contact your account manager,
(800) 252-7087 or (858) 320-4000

Students receive a certificate of completion, manuals, course guide, and gap inspection gauge.