Tubing System Training Program for Hydrogen Best Practices for Building High-Integrity Tubing Systems

Hydrogen Tubing Systems

Hydrogen (H2) is a small-molecule gas that can easily escape through the tiniest of crevices and diffuse into the materials designed to contain them.

Building fluid systems that are designed to overcome this challenge requires the right materials, the right expertise, and the right training. That is why Swagelok® developed the **Tubing System Training Program (TSTP)**.

This is a globally standardized 2-day course that is designed to provide in-depth, comprehensive focus beginning with a foundational understanding of hydrogen. The class progresses through critical aspects of H2, such as materials science, installation, inspection, tube bending, fitting technologies, and other relevant topics specific to hydrogen applications.

Fitting Products for Hydrogen

This course provides foundational knowledge in preparation and installation of several types of fitting products. Standard Swagelok tube fittings are addressed in detail, in addition to cone and thread fitting preparation and installation. This class will also prepare you for safe, optimal performance of FK-series fittings and related products in medium- and high-pressure systems. Maintenance and troubleshooting techniques will be established for each.

Who Should Attend

Tubing system hands-on training is ideal for installers, technicians, engineers, designers, QC/QA inspectors, and others responsible for designing, installing, maintaining, and/or inspecting tubing systems in hydrogen and small molecule gas delivery systems.



Topics Addressed

- What Is Hydrogen?
- Hydrogen Compatible Materials
- Risk Mitigation and Best Practices
- Tube Fitting Installation
- Tube Bending
- Tube Fitting Installation Inspection
- Higher Pressure Applications
- FK-Series Medium-Pressure Fittings
- Cone and Thread Fittings
- Leak Testing
- Testing for Comprehension



This course is taught by a Swagelok global subject matter expert and includes hands-on practice activities and testing for comprehension. Classes are available at your location or hosted at one of our facilities.

Attendees will receive a certificate of completion and the course includes all work materials, daily snacks, and lunches.

- Length of Class: 2 days, approx 8 hrs each
- Class Size: Up to 10 attendees
- Prerequisite: Tube Fitting Installation Essentials is strongly recommended.

Contact Us

Contact your account manager or email us for current schedule or registration.

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