

The  
Swagelok®  
Tube  
Fitting  
Advantage

**for the  
Refining and Petrochemical Industries...**



*Today, everyone is being called upon to “do more with less” and to recognize value. You want to concentrate on what is important, be proactive versus reactive, and install components that you can forget about—without wasting time on unnecessary maintenance and rework.*

If you are an instrumentation and control professional in a refining or petrochemical facility, you understand the value of high-quality, reliable connections to avoid critical and costly issues from:

- Leakage
- Vibration
- Thermal Shock
- Improper Installation

The Swagelok tube fitting was patented and brought to market in 1947, resolving problems the refining and petrochemical industries were experiencing in making repeatable, reliable leak-tight connections on process instrumentation systems. Swagelok developed the original two-ferrule tube fitting and continues to improve its leak-tight design for use in thousands of diverse applications. The patented case-hardening process and back-ferrule geometry produce an excellent colletting grip of the tube, minimizing the effects of vibration. Because this design uses consistent geometry instead of torque for gaugeable make-up, the Swagelok tube fitting can be used on a range of thick- or thin-walled, hard or soft tubing, while resisting the effects of pressure and thermal cycling. Contact your authorized Swagelok sales and service representative to see Swagelok's exceptional results in an energy-emission survey.

The  
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Tube  
Fitting

**Solutions  
for the Refining  
and Petrochemical  
Industries...**



**Industry Concerns** **Swagelok's Solutions:**

- 1. Leakage** **Excellent gas-tight sealing and consistent reassembly** help ensure tight process control to maximize operating efficiency and product output. Moreover, Swagelok tube fittings minimize fugitive emissions, as well as reduce process fluid leakage and operation costs.
- 2. Vibration** **The patented case-hardening process and back-ferrule geometry** provide excellent vibration fatigue resistance—even in harsh environments or stressful applications, such as compressor and process impulse lines.
- 3. Thermal Shock** **The elastic, live-loaded design** compensates for changes in temperature during system start-up and shutdown and helps eliminate leakage related to rapid thermal expansion or contraction in steam and other systems.
- 4. Installation** **Simple installation**, combined with consistent gaugeability upon initial installation, minimizes installation error.

Swagelok tube fittings are available in sizes from 1/16 to 2 in. and 2 to 50 mm in a variety of materials, including controlled 316 stainless steel for enhanced corrosion resistance. All Swagelok products are backed by the Swagelok limited lifetime warranty.

For more information, such as laboratory leak-test data, contact your authorized Swagelok sales and service representative or visit [www.swagelok.com](http://www.swagelok.com).