



Tube Bending Essentials

■ Target Audience

Technicians, maintenance, and engineering personnel looking to gain valuable knowledge and experience in the theory and practise of tube bending. The course covers hand tube bending from 1/8" to 1" OD (3mm to 12mm OD) plus an additional module is available for the Swagelok Bench Top Tube Bender (BTB) covering tubing sizes up to 1 1/4" OD (30mm OD).

■ Course Length

½ Day

■ Practical Content

50%

■ Theoretical Content

50%

■ Course Aims

To provide delegates with a comprehensive understanding of the various methods of tube bending. Utilising the Swagelok Hand Tube Bender each delegate will complete a variety of exercises comprising of 45°, 90°, and 180° bends on different planes using offset calculations. Each delegate will measure then bend tubing to fit out an enclosure internally & externally with tubing runs.

■ Course Content

- Understanding tube bending terminology
- Variables – springback, stretch & gain
- Bend layout calculations: measure bend, pre- measure, then bend & The Swagelok Method (BTB only)
- Overall length calculation to avoid wastage
- The three marks used in tube bending
- Troubleshooting – tube bending defects
- Swagelok Hand Tube Bender – Practical activities
- Swagelok Bench Top Tube Bender – Practical activities

■ Course Delivery

Classroom and Training Workshop

**PART NUMBER:
TSG-SCRVA**

■ Certification

Swagelok® Certificate of Completion – valid for 3 years

■ Instructor

Swagelok® certified trainers.

■ Times of Training

08:30 – 12:00 (+ BTB Module 13:30)

■ Swagelok Training Academies

Swagelok Scotland, Aberdeen

Silvertrees Business Park, Silvertrees Drive, Aberdeen, AB32 6BH

Swagelok Scotland, Motherwell

19 Glasgow & Edinburgh Road, Newhouse, Motherwell, ML1 5GJ

Swagelok Teesside

Unit B, Boho 8, Albert Street, Middlesbrough, Teesside, TS2 1AR

■ Contact

Onsite and offshore courses are available. For further details, please contact our training team at scots.training@swagelok.com or call +44 (0)1224 759916.