

Training: SOLIDWORKS Routing - Piping and Tubing (2 days)

Prerequisites: Before taking this SOLIDWORKS training course, you must have completed the SOLIDWORKS Essentials Training.

Description: Routing - Piping and Tubing explains how to create, edit and manage Piping and Tubing routes, from the critical routing components and their design requirements to the subassemblies that contain the routes.

Introduction

- About This Course

Lesson 1: Fundamentals of Routing

- What is Routing?
- Routing Setup
- Routing Library Manager
- General Routing Settings

Lesson 2: Piping Routes

- Piping Routes
- Pipes and Piping Components
- Routing Assembly Templates
- Creating a Piping Route
- Auto Route
- Route Specification Templates

Lesson 3: Advanced Piping Routes

- Advanced Piping Routes
- Editing a Route
- Routing Along Existing Geometry

Lesson 4: Piping Fittings

- Drag and Drop a Fitting
- Creating Custom Fittings

Lesson 5: Tubing Routes

- Tubing Routes
- Tubes and Tubing Components
- Flexible Tubing with Auto Route
- Orthogonal Tubing Routes with Auto Route
- Bend and Spline Errors
- Tubing Drawings

Lesson 6: Piping and Tubing Changes

- Piping and Tubing Changes
- Pipe Penetrations
- Flange to Flange Connections
- Pipe Spools
- Copying Routes

- Adding Slope
- Editing Piping Routes
- Editing for Obstructions
- Piping Drawings

Lesson 7: Creating Routing Components

- Routing Library Parts
- Libraries (Piping, Threaded Piping, Tubing, Fittings, Cable Trays, Electrical Ducting, HVAC)
- Creating Routing Library Parts
- Pipe and Tube Components
- Copying Routing Components
- Routing Library Manager
- Fitting Components
- Routing Functionality Points
- Routing Geometry
- Part Validity
- Design Table Check
- Component Attributes
- Elbow Components
- Valve Components

Lesson 8: Electrical Ducting, Cable Tray, and HVAC Routes

- Electrical Ducting, Cable Tray, and HVAC Routes
- Electrical Ducting Routes
- Cable Tray Routes
- HVAC Routes

Lesson 9: Using SOLIDWORKS Content

- Adding Content
- Content Files
- Custom Library Naming
- Virtual Clips
- Components Used in the Routes

Appendix A: Review Section

- Review of Configurations
- File References
- Design Tables
- Review of Top-Down Design
- Editing Options
- Review of Design Library
- Review of 3D Sketching

