



INVENTOR TUBE AND PIPE DESIGN TRAINING

Objectives

The main objective of this course is to teach users the advance commands and tools necessary for professional 3D design focusing on Tube and Pipe Design using Inventor. After completing this course users will be able to:

- ✓ Describe the tube and pipe environment and why you would use it.
- ✓ Set up routes and runs and place the initial fittings in your tube and pipe design.
- ✓ Create, edit, and manage routes for rigid pipe, rigid tube, and flexible hose designs.
- ✓ Manage/publish custom content to content libraries; create new styles that use custom content.
- ✓ Document tube and pipe designs through the creation of 2D drawings and parts lists and export the 3D design data

Pre-requisites

This guide is designed for an Inventor User. It is recommended that you have a working knowledge of:

- Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10
- Have completed the Fundamental of Autodesk® Inventor® 2018
- Have an equivalent understanding of the Autodesk Inventor 2018 user interface and working environments.
- Knowledge of part modeling, assembly modeling, and drawing view creation and annotation, is recommended.

Chapter 1: Introduction to Tube and Pipe

- Introduction to Tube and Pipe
- Examine a Tube and Pipe Design

Chapter 3: Routes and Runs

- Creating Rigid Routes
- Sketching Rigid Routes
- Create a Tube Route
- Create a Self Draining Pipe Run
- Editing Rigid Routes
- Edit Tube Routes
- Working with Fittings in Rigid Routes

Chapter 2: Setup for Routes and Runs

- Setup for Routes and Runs
- Activate a Tube and Pipe Style
- Placing Initial Fittings

- Place and Edit Fittings
- Edit Routes and Fittings
- Flexible Hose Routes
- Create a Flexible Hose Route
- Edit a Flexible Hose Route
- Leveraging Routes and Runs
- Reuse a Run
- Create Tube and Pipe Configurations

Chapter 4: Fittings and Components

- Managing Libraries
- Create a Custom Library
- Creating Library Content
- Author a Fitting
- Publish to the Content Center
- Place Library Fittings
- Managing Library Content
- Add a Column to a Part Family
- Creating Tube and Pipe Styles
- Create Custom Styles
- Create Self Draining Styles

Chapter 5: Documenting Tube and Pipe Assemblies

- Representing Tube and Pipe Designs
- Activate and Create LOD Representations in a Tube and Pipe Design
- Create Substitute Levels of Detail
- Documenting Routes and Runs
- Exporting Tube and Pipe Design Data