



SOLIDWORKS Sheet Metal Training

Prerequisites: SOLIDWORKS Essentials

Description: Sheet Metal teaches you how to build sheet metal parts using SOLIDWORKS mechanical design automation software. Building standalone sheet metal parts and converting conventional parts to sheet metal, including in assembly context, are covered.

Length: 2 Days

Introduction

- About This Course
- Windows 7
- User of Color
- More SOLIDWORKS Training Resources
- Flat Pattern Drawing Views
- Flat Pattern View Properties
- Drawing Documents Properties
- Sheet Metal Tables
- Cut List Properties as a Note
- Exporting the Flat Pattern

Lesson 1:

Basic Flange Features

- What are Sheet Metal Parts?
- Sheet Metal Methods
- Unique Sheet Metal Items
- Flange Method
- Base Flange/Tab
- Sheet Metal Parameters
- Editing Sheet Metal Parameters
- Sheet Metal Bend Features
- Flat-Pattern Feature
- Additional Flange Features
- Edge Flange
- Editing the Flange Profile
- Edge Flanges on Curved Edges
- Miter Flange
- Hem Features
- Tab Features
- Cuts in Sheet Metal
- Summary of Flange Features

Lesson 2:

Working with the Flat Pattern

- Working with the Flat Pattern
- Flat Pattern Settings
- Features for Manufacture
- Corner-Trim Feature
- Corners in the Formed State
- Closed Corner
- Corner Relief
- Break Corner/Corner Trim
- Producing the Flat Pattern
- Sheet Metal Cut List Properties

Lesson 3:

Additional Sheet Metal Techniques

- Additional Sheet Metal Methods
- Designing from the Flat
- Sketched Bend Feature
- Jog Feature
- Adding Features in an Unfolded State
- Unfold and Fold
- Swept Flange
- Swept Flange Flat Pattern Options
- Lofted Bends
- Lofted Bends in the Design Library

Lesson 4:

Converting to Sheet Metal

- Sheet Metal Conversion
- Insert Bends Method
- Imported Geometry to Sheet Metal
- Adding Rips
- Insert Bends
- Making Changes
- Welded Corner
- Converting Cones and Cylinders
- Convert to Sheet Metal

Lesson 5:

Multibody Sheet Metal Parts

- Multibody Sheet Metal Parts
- Multibodies with Base Flange
- Sheet Metal Parameters for Multibodies
- Cut List Item Properties for Multibodies
- Flat Pattern Drawing Views for Multibodies



- Cut List Balloon Annotations
- Exporting to DXF/DWG with Multibodies
- Convert with Multibodies
- Hiding and Showing Bodies
- Using Split with Sheet Metal Parts
- Patterning for Multibodies
- Using Edge Flange to Merge Bodies
- Interfering Bodies
- Combining Sheet Metal with Other Bodies

Lesson 6:

Forming Tools and Gussets

- Sheet Metal Forming Tools
- Standard Forming Tools
- Form Tool Features in the Flat
- Part Document Properties
- Custom Form Tools
- Split Line
- Forming Tool
- Form Tools in Drawings
- Sheet Metal Gusset

Lesson 7:

Additional Sheet Metal Functions

- Additional Sheet Metal Functions
- Cross-Breaks
- Vent Features
- Mirror Part
- Process Plans
- Sheet Metal Costing

Appendix A:

Sheet Metal Tables

- Tables
- Customizing Tables