



SolidWorks Mold Design

Prerequisites	Length	Description
Advanced Part Modeling or equivalent experience.	2 Day	Mold Design Using SolidWorks teaches you several manual mold creation techniques and how to use the Mold Tools in SolidWorks mechanical design automation software.

Core & Cavity

- Mold Analysis Tools
- Analyzing Draft on a Model
- Draft Analysis Colours, Options
- Adding Draft
- Scale the Part to Allow for Shrinkage
- Determine the Parting Lines
- Manual Selection of Parting Lines
- Modeling & Smoothing the Parting Surfaces
- Surface Bodies
- Creating, Interlocking the Mold Tooling

Multiple Parting Directions

- Trapped Molding Areas
- Side Cores, Lifters, Core Pins
- Electrode Design and Clearances
- Keeping the Sharp Edges

Importing & Repairing Geometry

- Importing Data, Solids and Surfaces
- 3D Model Types
- Geometry vs. Topology
- Creating Solids From Surfaces
- Decomposing a Solid into Surfaces
- Understanding Modeling Systems and File Translation
- How to diagnose and repair failed imports
- Checking Solid Bodies, Repairing Gaps
- King Copies of Faces
- Repairing Faces

Parting Lines & Shut-Off Surfaces

- Shut-Off, Core & Cavity Surfaces
- Tooling Split
- Seeing Inside the Mold

Repairs & Surfaces

- Creating New Drafted Faces
- Interlock Surfaces

Using Surfaces

- Surfaces in Mold Making
- Creating Surface Bodies From Faces
- Organizing Surfaces
- Manual Shut-off Surface
- Side Cores with Surfaces
- Partial Parting Lines

Reusable Data

- Library Features, Smart Components
- Task Pane, Design Library
- Library Features
- 3D ContentCentral

Alternate Methods for Mold Design

- Using Combine & Split
- Creating a Cavity
- Using the Up To Surface Method
- Manually Creating Shut-off Surfaces

Making a Complete Mold

- Modeling Repairs
- Mold Split Folders, Runners & Gates
- Side Cores, Ejector Pins, Core Pins
- Organizing the Assembly
- Creating Individual Parts
- Mold Base
- Modifying the Lifters
- Cooling the Mold
- Making the Drawing
- Making Changes
- Completing the Process

