



SolidWorks Plastics

Prerequisites	Length	Description
Knowledge of SolidWorks and basic mechanical engineering concepts is required.	1.5 Days	This course will provide an in-depth coverage on how to predict the melted plastic that flows during the injection molding process. This will help give you a better prediction of manufacturing defects such as weld lines, short shots, sink marks, and air traps.

Basic Flow Analysis

- Basic Flow Analysis
- Element Types
- Gates
- Stages in the Process
- Flow Results
- Meshing
- Input Options
- Injection Location
- The PlasticsManager Tree

Detecting Air Traps

- Detecting Air Traps
- Stages in the Process
- Air Traps
- Switching Modes for Design Changes
- Design Changes
- Parts Created Using Mold Design Tools

Detecting Short Shots

- Detecting Short Shots
- Stages in the Process
- Fill Settings
- Flow Front Central Temperature

The Mold Manager

- The Mold Manager
- Stages in the Process
- Batch Manager
- Using the Mold Manager

Injection Locations and Sink Marks

- Injection Location Rules
- Sink Marks

Multiple Cavity Molds

- Stages in the Process
- Mirroring Cavities
- X-Y Plots
- Sketching Runner

Runner-Balancing

- Runner-Balancing
- Local Refinement of Mesh
- Using Runner-Balancing
- Stages in the Process

Optimizing Cooling Time

- Multiple Injection Locations

Gate Freeze

- Solid Mesh
- Pack Settings
- Flow and Pack Analysis
- Gate Freeze

Using Inserts

- Materials for Inserts
- Cavities and Inserts

Thermal Stress Analysis

- Bimetallic Strip
- Examining Results in Local Coordinate Systems
- Saving Model in its Deformed Shape

Mesh Repairs

- Element Issues
- Edit Mesh

Warpage Analysis

- Warp Settings
- Flow, Pack and Warp Analysis
- Shrinkage and Warpage

