

Autodesk® Moldflow® Insight Basic



Course Overview

Duration:

3 days

Who Should Attend?

New users of Autodesk Moldflow Insight Basic, Advanced, or Performance.

Prior mold analysis experience is not necessary.

What will you learn?

- How to complete fill and pack analysis
- Evaluate an injection molded part for manufacturability
- How to evaluate your simulation results

To register for upcoming classes Email:

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Course Description

In this course, students learn features, functionalities and workflows in Autodesk Moldflow Insight Basic through hands-on exercises. Students learn how to become more efficient at creating digital prototypes, running analysis and interpreting results of most analysis types available in the Basic package.

Course Outline - Autodesk Moldflow Insight Basic

Introduction to Synergy (User Interface)

- Learn how to navigate and use the Interface

Quick Cool - Fill - Pack - Warp Analysis

- Complete a Cool, Fill +Pack + Warp analysis
- Step through the general process typically used for analysis projects

Analysis Workflow

- Discusses Moldflow design philosophy and design procedures
- Uses flow charts to discuss optimization of filling, packing and warpage of a part

Model Requirements

- Discusses the mesh characteristics necessary to have a good mesh for a digital prototype
- Discusses mesh errors and mesh density requirements

Model Translation and Cleanup

- Discusses workflows necessary to import, mesh and repair all 3 mesh types digital prototypes for
- Use of local refinement and meshing options

Gate Placement

- Discusses gate placement guidelines
- Uses of the gate location analysis

Molding Window Analysis

- Describes the procedures to follow to complete and interpret a molding window analysis

Results Interpretation

- Discusses results types
- Discusses results manipulation and interpretation

Gate & Runner Design

- Describes typical gate and runner designs and how to model them
- How to conduct a runner balance analysis

Basic Packing

- Review of definitions
- Procedures to set a packing profile
- Review of how to interpret results

Flow Analysis Process Settings

- Discusses the advanced options for a flow analysis
- Covers all solvers and capabilities

Autodesk Moldflow Communicator

- Review features and capability of Autodesk Moldflow Communicator
- Review how to create MRF and criteria files in Synergy

Guided Project

- Steps through in detail the entire Flow analysis process, from cleaning up a mesh, finding a gate location, solving flow issues, optimizing processing conditions, modeling and sizing the feed system and packing

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Appendixes - Autodesk Moldflow Insight Basic

Thermoplastic Overview

- Review polymer definition and classification
- Review key polymer properties
- Review of thermoplastic material families & abbreviations

Injection Molding Overview

- Review of the injection molding process

Finite Element Overview

- Review of finite elements types used within Autodesk Moldflow Insight
- Mesh types combinations used within Autodesk Moldflow Insight

Moldflow Design Principles

- Review of the Moldflow design principles and how to apply them

How to Use Help

- Shows how help is accessed and used

Creating Reports

- Shows ways to create reports
- Discusses the different formats available

Modeling Tools

- Concentrates on modeling regions, some work with beams
- Use of local coordinate systems

Material Searching and Comparing

- Shows how to use the material searching capabilities of Synergy

Job Manager

- Review of the job manager features and capabilities

Flow Leaders and Deflectors

- Discusses how to use flow deflectors and flow leaders to move the location of weld lines and other defects

Using Valve Gates

- Discusses valve gate control methods, and how to set up
- Briefly discusses valve gates on 3D models