Autodesk Moldflow Insight Basic Learning Autodesk Moldflow Insight Basic

Description

In this guide, 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.

Pages: 430
Trial CD: No
Onscreen Exercises: No
Prerequisites: Before attending this course, it is recommended that students complete the tutorials.

Class Information

Suggested Duration: 3 days
Objective: The primary objective of this guide is to provide students with hands-on exercises of the different features of Autodesk Moldflow Insight Basic.
Who Should Attend: This guide is designed for any Autodesk Moldflow Insight users.
In this Guide

Introduction to Synergy (User Interface)
- Learn how to navigate and customize the Interface

Quick Cool - Fill - Pack - Warp Analysis
- Complete a Cool, Fill + Pack + Warp analysis
- Step through the general process typically used for any analysis project

Analysis Workflow
- Discusses Moldflow design philosophy and design procedures
- Uses flow charts to discuss optimization of Filling, Flow and 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
- Uses flow charts to show the import and cleanup process applicable for all 3 mesh types
- Use of local refinement and detailed description of 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 general interpretation

Gate & Runner Design
- Describes typical gate and runner designs and how to model them

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

Flow Analysis Process Settings
- Discusses in detail all 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
Appendixes:

**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 incorporate them into each analysis case

**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
- Uses 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

*Note:* The suggested class duration is a guideline. Topics and duration may be modified by the instructor based upon the knowledge and skill level of the class participants.

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