



AUTODESK MOLDFLOW ADVISER TRAINING

Objectives

The main objective of this course is to learn features, functionalities and workflows in Autodesk Moldflow Adviser also to become more efficient at evaluating digital prototypes, running analysis, and interpreting the results for all analysis. After completing this course users will learn about:

- ✓ Use of the interface and job manager
- ✓ Customize databases
- ✓ Complete Fill +Pack + Warp analysis
- ✓ Step through the general process used for analysis projects
- ✓ Learn to import, and check models from CAD systems
- ✓ Check models for draft, thickness and undercuts
- ✓ Gate placement and uses of the gate location analysis
- ✓ Procedure to complete and interpret gate location analysis
- ✓ Procedure to complete and interpret molding window analysis
- ✓ Review part design guidelines
- ✓ Learn about analysis sequences (Fill, Cooling Quality & Sink Marks)
- ✓ Results visualization tools
- ✓ Cost Adviser tool
- ✓ Input parameters/result interpretation for filling, sink mark and cooling quality analyses
- ✓ Review features and capabilities of Autodesk Moldflow Communicator
- ✓ Create MFR in Autodesk Moldflow Adviser
- ✓ Create reports and review available formats
- ✓ Review and model typical gate and runner designs
- ✓ Review the importance and how to balance runner systems
- ✓ Review concepts of pack/hold for injection molds
- ✓ Review and interpret packing results
- ✓ Model cooling circuits with various cooling geometries
- ✓ Review concepts of cooling for injection molds
- ✓ Review and interpret cooling results
- ✓ Compare results when running different analyses.

Pre-requisites

Working knowledge on Microsoft® Windows®.

Chapter 1: User Interface Review

- Familiarize yourself with the interface
- Canceling an Analysis using the Job Manager
- Customizing Databases

Chapter 2: Quick Cool-Fill-Pack-Warp Analysis

- Saw Housing (Dual Domain)
- Pivot_Base (3D)

Chapter 3: Design Adviser Analysis

- Clamp
- Saw-housing
- Filter cap
- Card holder

Chapter 4: Gate Location Analysis

- Basic gate location analysis procedure
- Gate location analysis on the Cluster
- Gate location analysis using Fill Preview
- Gate location analysis on the Saw housing
- Gate location analysis on the Pushfit (3D)Setup

Chapter 5: Molding window Analysis

- Basic Molding Window Procedure
- Molding window analysis on the Saw housing
- Evaluate the saw housing with a bottom gate
- Evaluating the gate location selection on the Pushfit
- Evaluating thickness changes on the Phone
- Evaluating alternative material on the AC Motor Cover

Chapter 6: Evaluating the Part Design

- Clamp - Evaluating weld lines
- Clamp - Alternative material including cost
- Alternative material analysis setup
- Cover - Evaluating wall thickness changes
- Desk-insert - Evaluating sink marks
- Bracket - Reducing material and production costs
- Bracket - Alternative material including cost
- Pedal - Evaluating gate location effects on part quality

Chapter 7: Autodesk Moldflow Communicator

- Creating results files in Autodesk Moldflow Adviser for Autodesk Moldflow
- Communicator
- Using Autodesk Moldflow Communicator

Chapter 8: Report Generation

- Report generation
- Mouse

Chapter 9: Material Search and Comparing

- Searching for materials
- Customizing Databases

Chapter 10: Modelling Runners

- Typical runner modeling workflow
- Sander - Single cavity
- Toothbrush - Multi-cavity
- Phone handset - Family mold
- Create Runners
- Communication Device - Family mold

Chapter 11: Runner Analysis

- Typical runner analysis workflow
- Runner Analysis
- Conclusion

Chapter 12: Modeling Cooling Circuit

- Typical Cooling modeling workflow
- SGI Base

Chapter 13: Cooling Analysis

- Cooling Analysis on the SGI Base
- Speaker – Evaluating design changes

Chapter 14: Pack and Wrap Analysis

- Cap - Packing Analysis
- Continued work
- Housing - Warpage Analysis
- The Second Analysis
- The Third Analysis
- The Fourth Analysis
- Continued work

Chapter 15: Effect of Cool Over Pack and Warp

- SGI Base - Cooling Quality
- SGI Base – Warpage

Chapter 16: Advance Modeling Tips

- Filter-cover
- Cap-Importing runners from another study