cadmicro SOLIDWORKS TRAINING

ENABLING INNOVATION
CHALLENGE THE STATUS QUO

MOLD DESIGN USING SOLIDWORKS

PREREQUISITES	LENGTH	DESCRIPTION
▪ SolidWorks Essentials, Advanced Part Modeling or equivalent experience.	2 Days	▪ Mold Design Using SolidWorks teaches you several manual mold creation techniques and how to use the Mold Tools in SolidWorks Mechanical design automation software.

► SURFACE CONCEPTS & IMPORTED GEOMETRY

- Hide/Show Tree Items
- Accessing Commands
- Importing Data
- 3D Model Types
- Case Study: Solids vs. Surfaces
- Creating Solids from Surfaces
- Decomposing a Solid into Surfaces
- Additional Surface Concepts
- Importing and Mold Design
- File Translation
- Case Study: Importing a STEP File
- Comparing Geometry
- Addressing Translation Errors
- Case Study: Repairing and Editing Imported Geometry
- Procedure for Rebuilding Fillets
- Exercise l: Import Diagnosis
- Exercise 2: Using Import Surface and Replace Face

► SIDE CORES & PINS

- Additional Mold Tooling
- Case Study: Power Saw Housing
- Side Cores and Core Pins
- Case Study: Mixer Base
- Modifying Shut-Off Surfaces
- Exercise 6: Towing Mirror
- Exercise 7: Completing the Mixer Base
- Exercise 8: Electrode Design

► CORE & CAVITY

- Core and Cavity Mold Design
- SolidWorks Mold Tools
- Case Study: Camera Body
- Mold Analysis Tools
- Analyzing Draft in a Model
- Using the Draft Analysis Tool
- Draft Analysis Options
- Adding Draft
- Scaling the Model
- Establish the Parting lines
- Shut-Off Surfaces
- Creating the Parting Surface
- Surface Bodies
- Creating the Mold Design
- Seeing Inside the Mold
- Interlocking the Mold Tooling
- Creating Part and Assembly Files
- Exercise 3: Casting
- Exercise 4: Ribbed Part
- Exercise 5: Dustpan

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► **ADVANCED PARTING LINE OPTIONS**

- Case Study: Manual Parting Line
- Case Study: Splitting a Part
- Exercise 9: Peeler

► **CREATING CUSTOM SURFACES FOR MOLD DESIGN**

- Surface Modeling for Mold Design
- Case Study: Drill Bezel
- Case Study: Router Bottom
- Exercise 10: Power Strip
- Exercise 11: Router Top

► **ALTERNATIVE METHODS FOR MOLD DESIGN**

- Alternate Methods for Mold Design
- Case Study: Using Combine and Split
- Creating a Cavity
- Case Study: Using Surfaces
- Techniques for Mold Design
- Exercise 14: Handle
- Exercise 15: Filter

► **REUSABLE DATA**

- Reusing Data
- Task Pane
- SolidWorks Resources
- Design Library
- File Explorer
- Case Study: 3D ContentCentral
- Library Features
- Case Study: Create a Library Feature
- Configurations in Library Features
- Case Study: Water Line
- Smart Components
- Exercise 16: Smart Components
- Exercise 17: Complete Mold Insert Project
- Customizing a Sheet Format
- Defining the Title Block
- Update Sheet Formats

► **COMPLETING THE MOLD BASE**

- Case Study: Mold Base
- Organizing the Assembly
- Modifying the Lifters
- Lifter Motion
- Ejector Pins
- Cooling the Mold
- Making the Drawing
- Making Changes
- Completing the Process

CAD MicroSolutions Inc.

www.cadmicro.com

GTA: 30 International Bvd. #1, Toronto, ON, M9W 6L9, Canada
TRI-CITIES: 225 Pinebush Rd, Suite 102, Cambridge, ON, N1T 1B9
Phone: (416) 213-0533 | **Toll-Free:** I (888) 401-5885
contact@cadmicro.com | sales@cadmicro.com

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