

# Moldflow Mold Adviser

Moldflow Mold Adviser™ is an easy-to-learn, 3D solids-based plastics flow simulation product that allows mold designers to assess manufacturing feasibility and optimize mold layouts, even before the part design is final and before steel is cut.

## Avoid Costly Problems

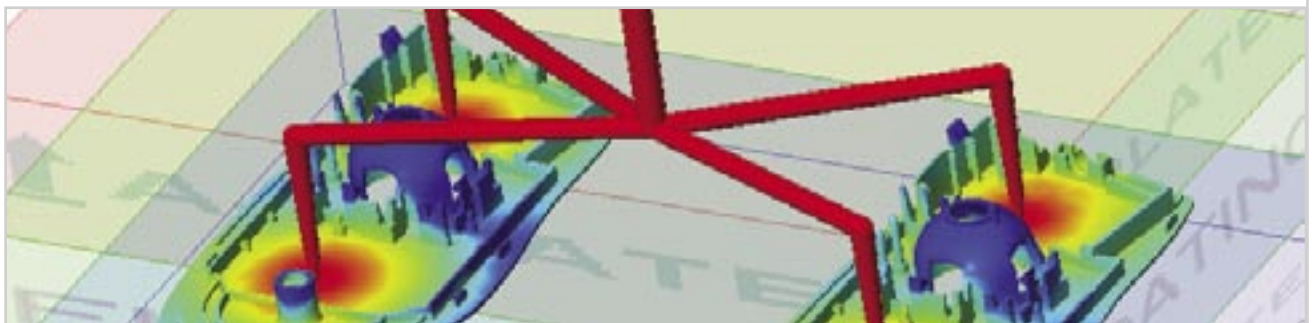
There is no need to go through a lengthy trial and error process to verify manufacturability of a part design or optimize the mold design. Don't wait until the trial runs to find out whether the runner system is balanced and the gates are sized properly, discover areas where mold cooling is less efficient, or determine that the job could be run on a smaller machine.

## Analysis Driven Design

Moldflow Mold Adviser provides rapid analysis results and detailed design advice as well as convenient tools that can be used to create and optimize designs for single-cavity, multi-cavity and family molds. Optional Moldflow Mold Adviser add-on modules extend analysis capabilities beyond the cavity filling phase, allow users to simulate more phases of the injection molding process to evaluate molded part performance and cooling circuit design.

With Moldflow Mold Adviser you can analyze plastic flow in the mold cavity and optimize gate type, size and location as well as runner layout, size and cross-sectional shape. You can also evaluate cycle time, clamp tonnage and shot size to more accurately size the injection molding machine, minimize cycle times and reduce manufacturing waste. Moldflow Mold Adviser also offers the world's largest material database of its kind, with more than 7,800 materials characterized specifically for use in plastics injection molding CAE analysis.

Optional Moldflow Mold Adviser add-on modules extend analysis capabilities beyond the cavity filling phase, allowing you to simulate additional phases of the injection molding process to evaluate molded part performance and cooling circuit design.



# Moldflow Mold Adviser

## Analysis Capabilities

### Plastic Filling Analysis

- ❑ Identify areas of the part geometry that pose manufacturability and quality problems and obtain practical, design-specific advice on how to address these issues

- ❑ View distributions of pressure, flow-front temperature and polymer orientation and predict weld-line and air-trap locations

### Runner Balance Analysis

- ❑ Automatically size runners to balance flow in multi-cavity and family mold layouts

### Runner Adviser Analysis

- ❑ Automatically determine the best sprue, runner and gate dimensions for single-cavity, multi-cavity and family molds

### Sink Mark Analysis

- ❑ Predict sink mark locations and the associated depths to determine their severity

### Cooling Quality Analysis

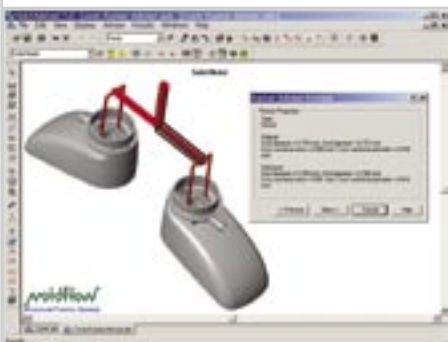
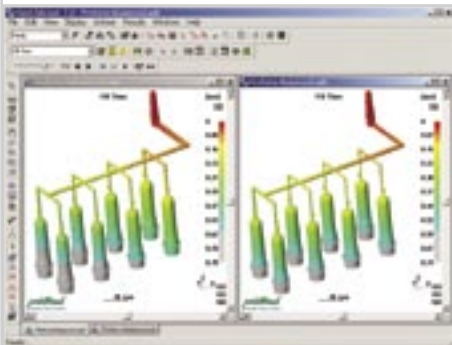
- ❑ Identify and compensate for areas where heat is concentrated on the part to avoid longer cycle times and the formation of sink marks

### Gate Location Analysis

- ❑ Determine the best gate locations for a given part design and avoid undesirable gate locations

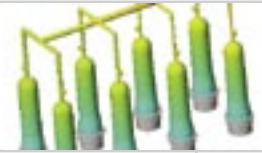
### Molding Window Analysis

- ❑ Determine optimum processing conditions and evaluate the sensitivity of the part design to the molding process
- ❑ Use the size of the molding window to compare material grades, evaluate gate locations and gain a measure of part design quality



## Benefits

- ❑ Design and analyze virtually all types of hot and cold sprues and runner systems
- ❑ Obtain automatically sized runners to balance flow in multi-cavity and family molds
- ❑ Determine the best gate locations and the optimum number of gates
- ❑ Predict estimated cycle time, clamp tonnage and shot volume
- ❑ Assess the manufacturing feasibility of the mold design layout
- ❑ Identify the most suitable plastics material candidate
- ❑ Identify and eliminate cosmetic issues such as sink marks, weld lines and air traps
- ❑ Obtain practical, results-specific advice on improving the part and mold design
- ❑ Visualize the orientation of the plastic to aid in maximizing part strength, especially in the vicinity of weld lines
- ❑ Perform a detailed part cost estimation
- ❑ Communicate valuable information to plastics part designers, mold makers and manufacturing engineers



## Additional Capabilities

### Connect to Consultants

- This innovative, e-mail based tool facilitates collaboration between the user and a designated plastics simulation expert. Based on specified criteria, this tool monitors analyses and displays an alert if criteria are not met, allowing the expert to assist the user with results interpretation, problem troubleshooting and identifying design alternatives

### Material Database

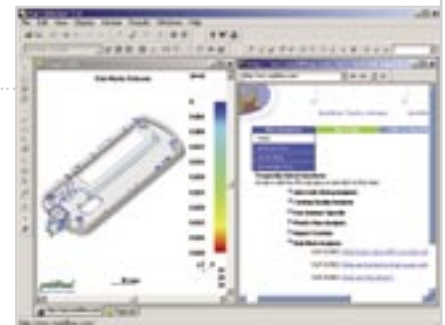
- Access the world's largest and most complete material database for plastics flow simulation, with more than 7,800 fully-characterized thermoplastic material grades to choose from
- Easily compare the properties of two or more materials, import, edit, copy and delete materials, and create local, user, project and company databases

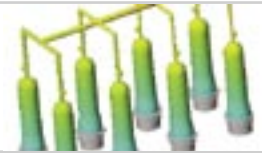
### Results Comparison Tool

- Synchronize model orientation, result selection and result plot scale to simultaneously compare analysis results from two or more part models
- Quickly identify optimized combinations of part geometry, material selection, gate locations and processing conditions

### Moldflow Community Center

- Interact and collaborate with other users through the online Moldflow Community Center
- Read product usage hints and tips
- Submit product enhancements
- Review frequently asked questions (FAQs)
- Report product issues
- Participate in discussion groups
- Download product revisions
- Access training resources





## Available Configurations

Moldflow Mold Adviser supports node-locked or floating license options. It is available in English, French, German and Japanese language versions.

Moldflow Mold Adviser does not require extensive training or plastics expertise to achieve successful results. With the power of Moldflow's patented Dual Domain™ technology, you can work directly from 3D solid CAD models without the need to manually create or even view a finite-element mesh, saving hours to days to even weeks of model preparation time.

### Geometry Import Options

STL  
 CATIA® V5\*  
 Parasolid®\*  
 Pro/ENGINEER®\*  
 IGES\*  
 STEP\*

\*Requires optional Moldflow Design Link add-on module.

### CAD Integration

CATIA®  
 Pro/ENGINEER®  
 SolidWorks®

## Technical Specifications

To install and run Moldflow Plastics Advisers® (MPA®) software, you should have at least 200 MB of free disk space and 256 MB of RAM.

### Platform Support

Processor	Operating System
Intel® Pentium®	Microsoft® Windows® XP Microsoft® Windows® 2000
AMD Athlon™	Microsoft® Windows® XP Microsoft® Windows® 2000

### System Requirements

Main Memory (RAM)	256 MB minimum
Disk Space	200 MB minimum
Web Browser	Internet Explorer 6.0 (or higher)

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For further information on the complete range of Moldflow® Corporation design optimization and manufacturing solutions, services and global office locations, visit our Web sites:

[www.moldflow.com](http://www.moldflow.com) and  
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