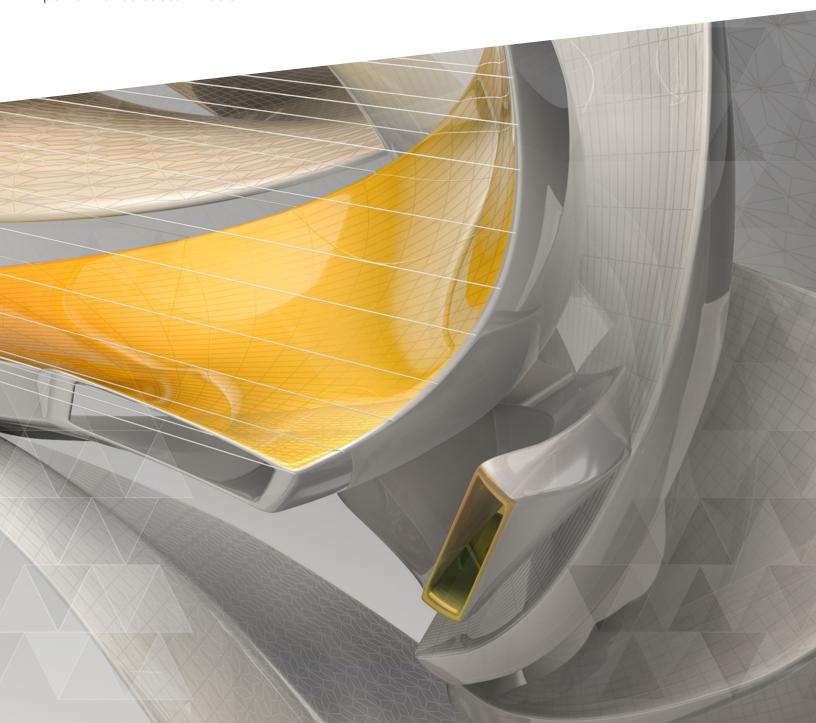
# Plastics made perfect

Achieve precision through comprehensive material data and process performance customization.





# Simulation for specialized molding processes

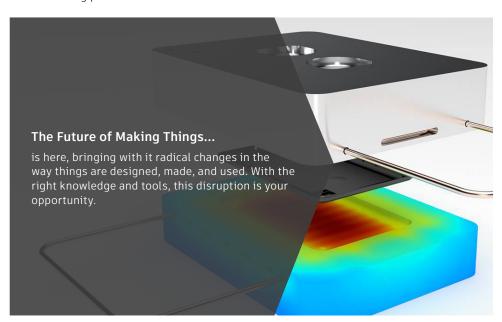
#### Achieve success with...

- Predict and correct part defects
- Simulates the most advanced molding processes
- Provides the highest degree of confidence in simulation results, for even the most complex geometry
- World's largest material database for plastics simulation

## The Standard for injection molding simulation

Moldflow Insight gives top manufacturers the tools needed to overcome the unknown challenges of developing plastic injection molded parts. Through the validation and optimization of plastic parts and injection molds early in the design phase, it is possible to bring innovative products to market faster. Moldflow Insight guides you through the simulation setup and results interpretation to show how changes to part design, mold geometry, and processing conditions will affect manufacturability.

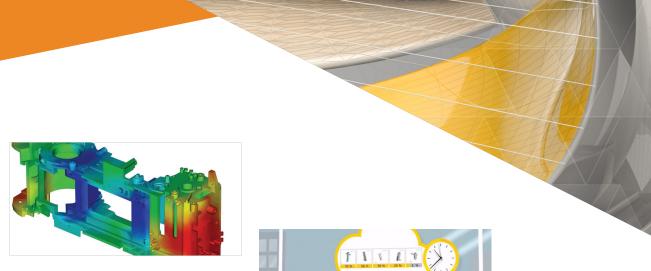
Simulation provides the ability to experiment with "what-if" scenarios before cutting steel and molding parts. This ability to evaluate different scenarios throughout the entire product development cycle results in higher quality products. Autodesk Moldflow Insight software allows manufacturers to "get it right the first time," to help avoid mold rework, reduce physical prototypes, and minimize both cost and time delays that could occur during the manufacturing phase.



"It is important to know the locations of weld lines and air traps to take appropriate actions in the mold design."

#### -Roland Hölz

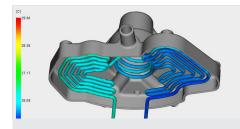
Dipl.-Ing. (FH) Automotive Lighting Reutlingen GmbH



#### Advanced processes

Access specialized processing methods to for improved accuracy for non-standard injection molding capabilities. A few examples are:

- Overmolding
- Compression & injection compression molding
- Gas-assisted injection molding
- Thermoset/reactive molding
- Chemical foaming (including reactive polyurethane foaming)
- Co/Bi injection molding
- RTM/SRIM
- Microchip encapsulation
- Underfill encapsulation
- and more...



#### Advanced cooling

Capture advanced cooling techniques and layouts, such as conformal cooling and transient heat calculations.

Optimize cooling designs and identify the impact cooling has part quality. Simulate advanced cooling technologies, like rapid heating and cooling and conformal cooling. Evaluate the effect of highly conductive materials, as well as heating elements and thermal pins, on the cycle time and product quality.



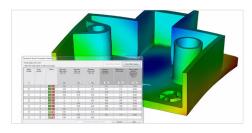
The extended solving options of Autodesk Moldflow Insight allows you to simulate on your local machine, a remote server, or on the secure cloud server, depending on your needs. If you are testing the setup of an analysis, use your local machine to iterate and optimize. When analyses are more computationally intense, or you need some extra compute power to run multiple simulations, use the power of the cloud, saving local resources for other tasks.



#### **Integrated Automation and Scripting**

Simplify common tasks to speed up your setup time with an embedded macro recorder and player in Autodesk Moldflow Synergy.

More advanced capabilities can be performed with the Application Programming Interface (API) scripting capability. Create custom scripts or use any of the pre-loaded scripts for both user interface and solver commands. Examples include custom result plots, customized modeling of cooling or feed systems, and custom report generation.



#### Part optimization

With the automated Design of Experiments (DOE) and parametric analysis capabilities, Autodesk Moldflow Insight can identify optimized values for process settings and geometry modifications. Visual results combined with data tables provide insights to optimizing your plastic part's quality to reduce production costs.

Identify the optimized process to save time and material during tool trials. Minimize tool rework by identifying the best

feature placement or wall thickness.
Understand the stability of your
manufacturing process, and identify the
major factors that influence your product
defects or machine molding limits.

#### Make Great Products

Autodesk manufacturing software helps you make better quality products, faster. Machine, print, inspect, and fabricate parts efficiently.

- · Complete modular manufacturing solutions CAM, additive, composites
- Manufacturing expertise to automate, optimize and integrate your manufacturing processes, in addition to your software
- · Cloud-connected so you can collaborate and manufacture anytime, anywhere.

Learn more at www.autodesk.com/MAKE.

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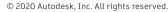
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