



Moldflow Summit 2018 Schneider Electric Implementation of Upfront Simulation with Moldflow Adviser

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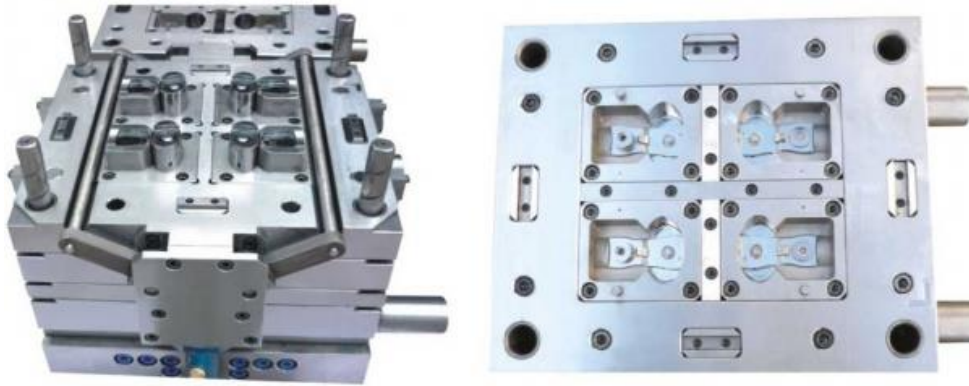
A 3D CAD model of a complex mold assembly is shown. The mold is rendered in a light grey color. Overlaid on the model are several semi-transparent colored regions representing flow simulation results. A large blue region is visible in the upper left, a green region in the upper right, and a large orange region in the lower right. These regions likely represent different flow paths or material properties within the mold. The text "Moldflow at Schneider Electric" is centered over the model.

Moldflow at Schneider Electric

When to use simulation?

Historically, simulation has been used to drive troubleshooting and validation, rather than design.

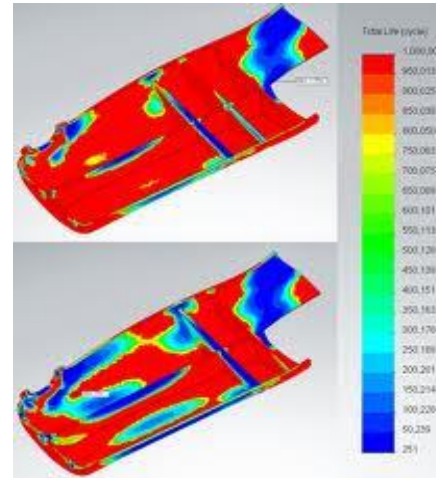
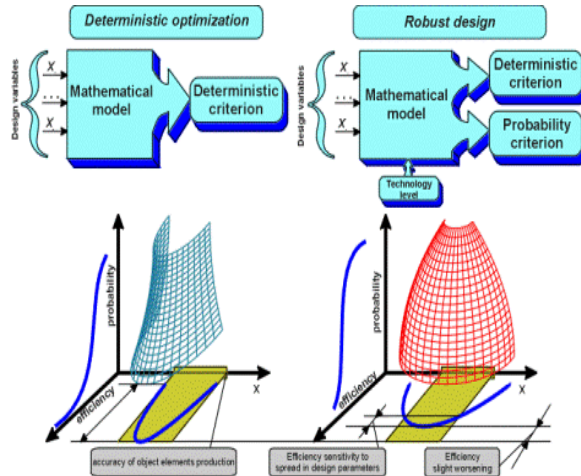
It has been focused on problem fixing and problem avoidance rather than trying to create truly optimized designs.



Why to use simulation ?

Simulation can be used from the beginning of the design process to predict and optimize how components will perform throughout each phase of the design and manufacturing process.

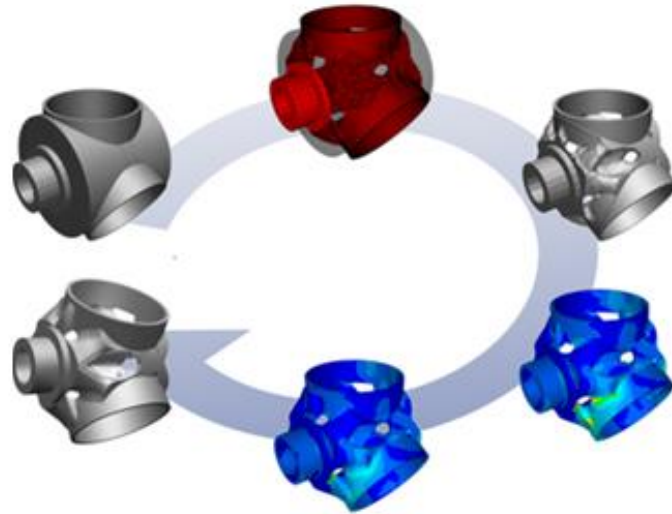
Digital prototyping aims to bring simulation into the process much earlier, so designs can be optimized



How to use simulation?

Changes are much cheaper to make digitally on a computer than on a piece of steel that has already been cut.

By implementing simulation earlier in the development stages potential problems can be solved previous to releasing



Rheology Rules in PMP

Project Open

Project Manager

Discuss potential risks in plastic parts.
Make a plan of Rheology analysis in the project

Part Design and Optimization

Design Engineer

Optimize part structure for function & manufacturability

Mold Design and Optimization

Industrialization Engineer

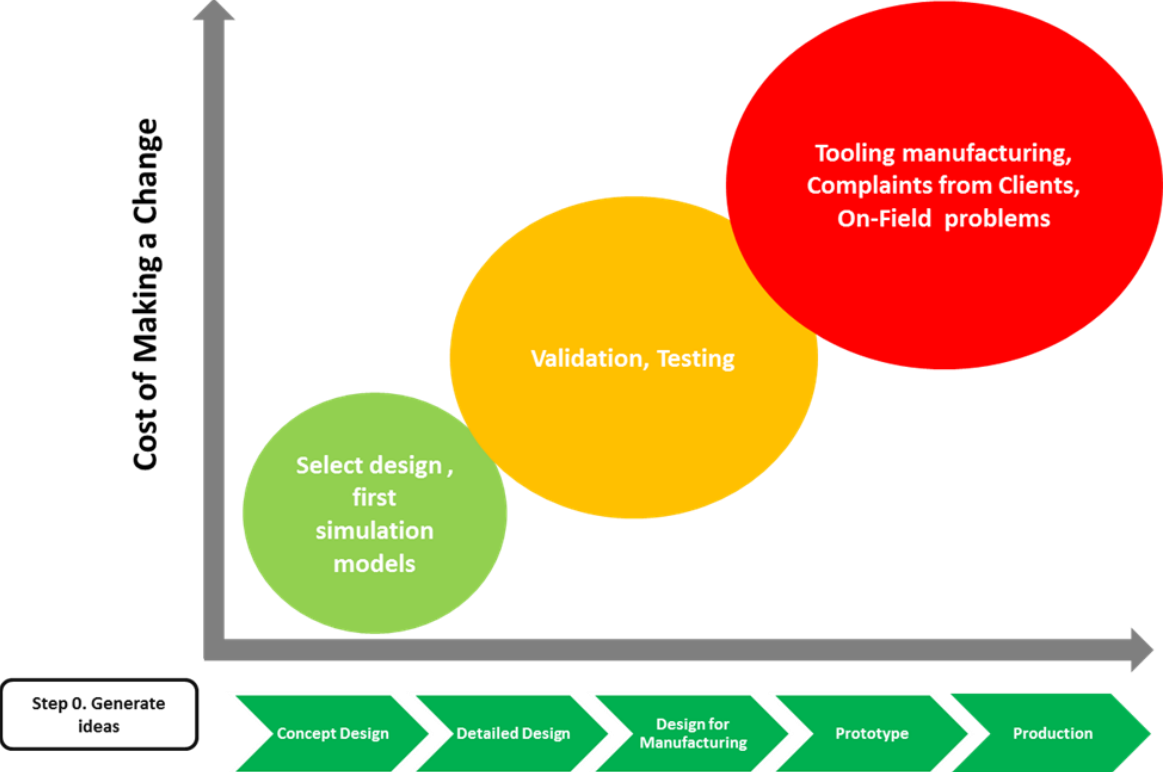
Optimize mould design for potential molding issues

Mold Trial & Problem resolution

Moulding Part Indus Engineer

Check the actual molding condition
Resolve issues in time

Project Life Cycle



A 3D CAD model of a mechanical part, possibly a housing or bracket, rendered in a light gray color. The model is shown in a semi-transparent view, revealing internal features and structures. A semi-transparent white rectangular overlay is positioned in the center of the image, containing the text "Enterprise Priority Involvement". The text is in a bold, black, sans-serif font. The background of the image is a light gray gradient, matching the CAD model's color scheme. The overall composition is clean and professional, typical of a technical or corporate presentation.

Enterprise Priority Involvement

Enterprise Priority Support

Traditional Support



Break/Fix

- Generic
- Transactional
- Reactive
- Fix Problems

Enterprise Priority



Relationship

- Personalized
- Managed
- Proactive
- Reduce Risk

Enterprise Priority Support Can Help You...



Leverage Technology
More Effectively



Better Manage Costs
& Avoid Issues



Stay Ahead
of the Curve



Increase
Productivity

Maximize the Business Value
of Your Technology Investments

Problem Identification

Lack of expertise across global team was delaying design validation as central points of contact had to both validate designs from other teams while also working within their own roles

Validation process could often involve a great deal of back and forth between design group and validation experts before consensus on design changes necessary for manufacturability, causing unnecessary delays in product life cycle

Missed issues could cause downstream problems that could require shop floor troubleshooting, wasted material, or at worst tool rework

Confidence issues with usability of Moldflow Adviser due to lack of experience

Building a Plan

Identify design groups that could benefit from simulation and determine level of expertise and readiness.

Introduce relevant product (Adviser) and work towards building confidence and competence to allow validation to exist directly in design group.

Holistic approach focusing on all parties involved to provide learning content, training, constant support, development feedback, partnerships, etc.

Increase exposure to new tools and capabilities for expert users within Moldflow Insight to leverage saved times in validation

Continue identifying new groups across the globe to understand pain points, determine ideal practices and products to leverage and ensure capabilities

Executing to Drive Change

1. Trainings (develop online training)
2. Webinars
3. Workshops
4. Guided Projects
5. Presentations for communicating benefits of simulation
6. Sessions for letting engineers and designers know what is available.
7. Support group
8. Follow up discussions on new pain points
9. New group identification to continue impact of Autodesk tools

The Enterprise Priority Difference

Challenge

Schneider Electric wanted to:

- Reduce testing cycles and the number of design iterations during product development
- Achieve these improvements by helping global engineering team fully adopt Autodesk® Moldflow® Adviser software

Solution

Autodesk® Enterprise Priority (EP) Support helped Schneider Electric:

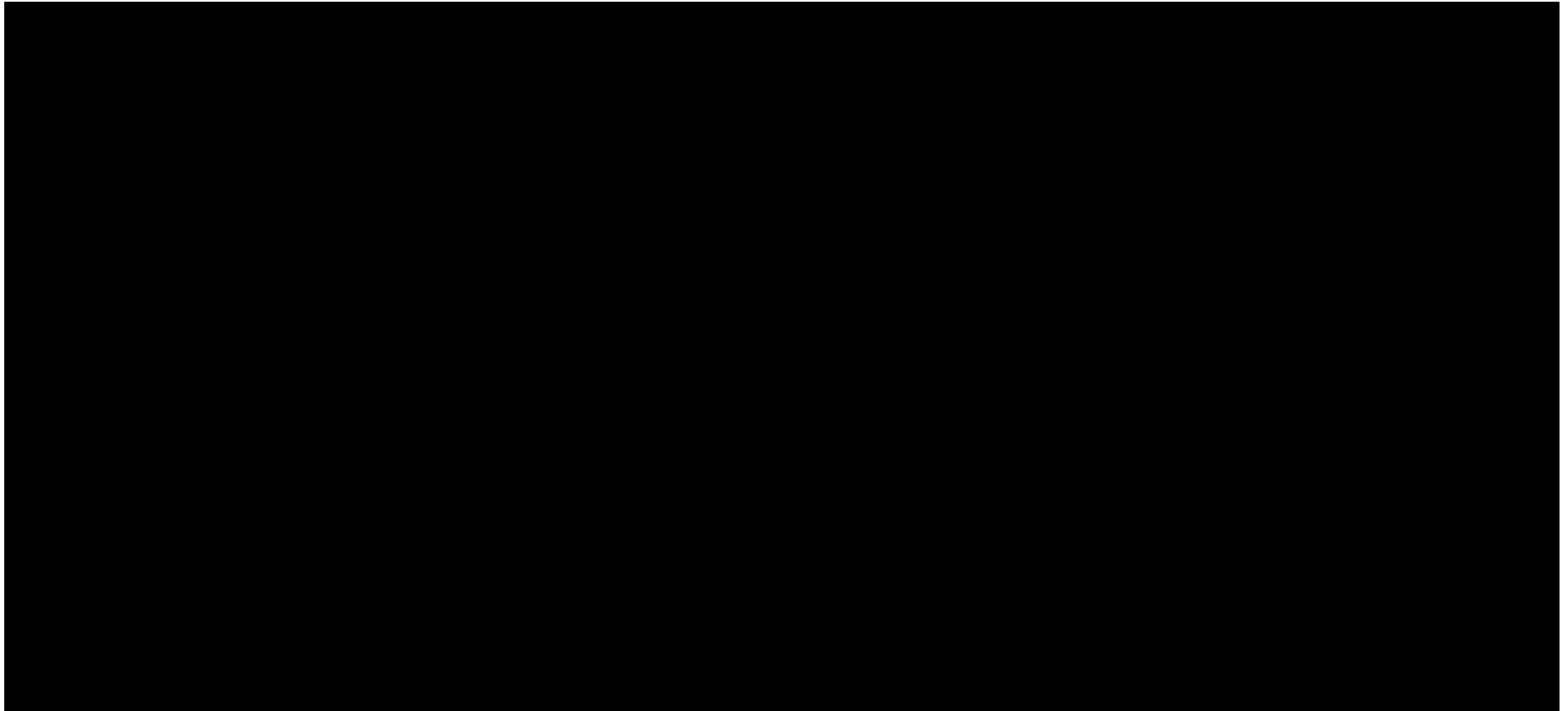
- Implement instructional videos and knowledge checks to increase Moldflow Adviser expertise worldwide
- Strengthen its ability to support Moldflow Adviser users around the globe through Schneider Electric's e-learning catalog

Results

Using Moldflow Adviser early in the design process, Schneider Electric:

- Reduced tooling development time from an average of 5 weeks to 3 weeks
- Is now able to test and optimize design concepts more easily
- Improved the cost-effectiveness of the design process by reducing the number of changes

Hear it from Schneider





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