

Moldflow Simulation For Product Optimization

Objective:

Injection Molding Simulation Was Performed To Evaluate Possible Solutions.

Analysis Performed:

✓ Mold Filling Analysis

Want To Solve Crack Issue, and Any Potential Filling Issues



Breakage in Side Panel near lock area.

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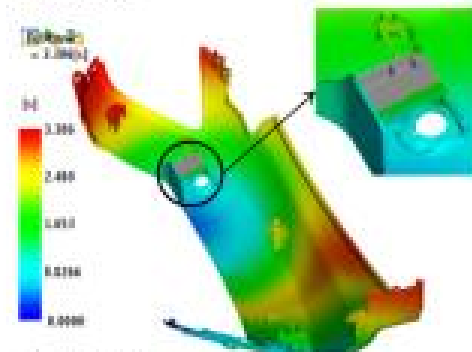
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Pre Processing:

Mesh Type: 3D

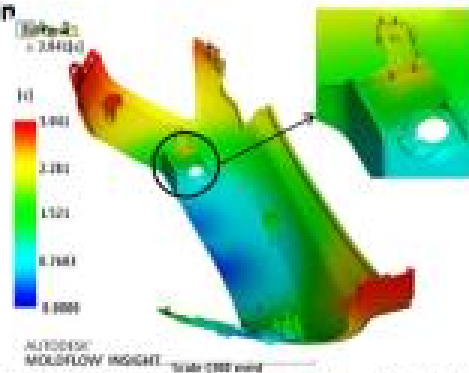
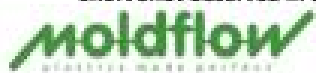
Material : ABS Unfilled.

The initial iteration shows there is higher temperature drop and Short shot in the concern area.



AUTODESK
MOLDFLOW INSIGHT Scale (200 mm)

Short Shot observed in the component.



AUTODESK
MOLDFLOW INSIGHT Scale (200 mm)

Part is completed filled without any flow related problems

Moldflow Simulation of Side Panel Showed the serious crack issue in the component as Side panel is aesthetic parts, crack is the major defect in the component.

The initial couple of iteration shows the higher shear stress value at the concern area. Our expertise have suggested a CAD Modification increasing the base thickness of Ribs with a proper draft angle.

Using Autodesk Moldflow Flex 2016, we have solved the crack issue by increasing the base thickness of Ribs which also increase the structural stability of the component.