

Moldflow Simulation For Product Optimization

Objective:

Injection Molding Simulation Was Performed To Evaluate Possible Solutions.

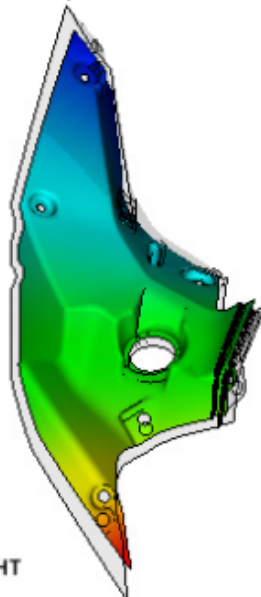
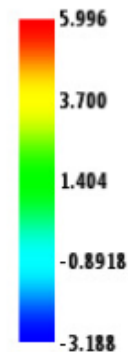
Analysis Performed:

- ✓ Mold Filling Analysis
- ✓ Pack Analysis
- ✓ Warpage Analysis

Want To Solve Warpage Issue, and Any Potential Filling Issues

Deflection, all effects:Y Component
Scale Factor = 5.000

[mm]



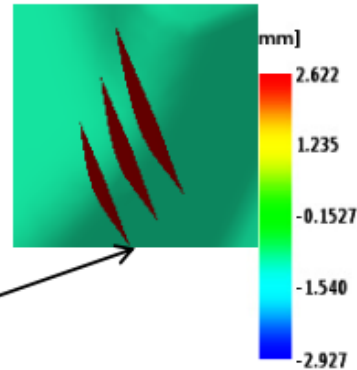
Deflection, all effect: Y Component.

Bottom View

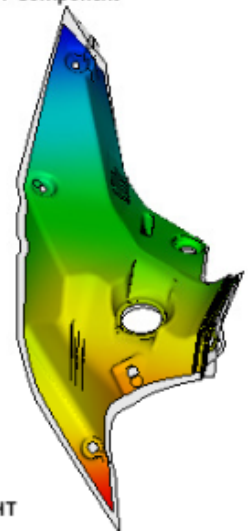


Pre Processing:
Mesh Type: Mid Plane
Material : PP Unfilled.

Deflection, all effects:Y Component
Scale Factor = 5.000



AUTODESK
MOLDFLOW INSIGHT



CAD Modification

Final Deflection, all effect: Y Component

Moldflow Simulation of Automotive Tank Spoiler Showed the warpage issue in the component as Tank Spoiler is assembled part.

The initial iteration shows the maximum warpage 5.996mm in Y axis. Our expertise have suggested a CAD Modification addition of Ribs with a proper draft angle.

Using Autodesk Moldflow Flex 2016, we have reduced the warpage upto 2.62mm by adding the Ribs and Changing the Packing Profile.