

## Avoid Weld-line Visibility by Design Optimization

### Objective:

Avoid Weld-line Visibility.

- Weld lines are observed on A surface and these weld line are visible due to two flow fronts meet at low temperature.
- To avoid this Part beam & Gate dimensions are increased.

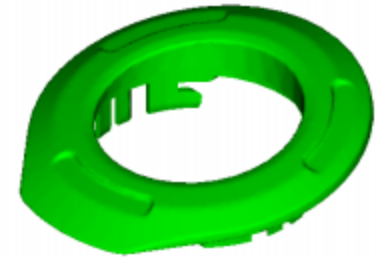
### Part Description:

Part Dimension: 112\*104\*32

Part volume: 45.1708 cm<sup>3</sup>

Material: POM

Analysis Type: Fill +Pack +Warp



**Before**

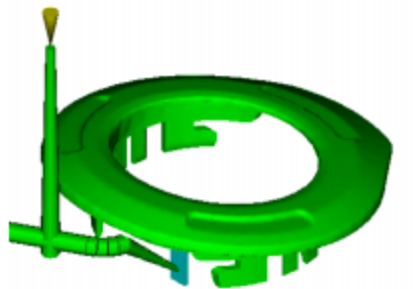


Fig.1 : Part View

Weld lines

Temperature at flow front = 203.3[C]

Temperature at flow front[C]



Temperature during weld line

**After**

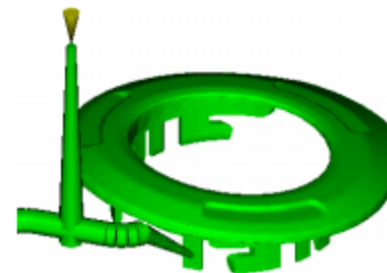


Fig.2 : Part View

Weld lines

Temperature at flow front = 209.2[C]

Temperature at flow front[C]



Temperature during weld line

### Before

Part Beam : Width:6.0 mm  
Thickness:1.5mm  
Gate opening : Dia.: 1.5mm

### After

Part Beam : Width:6.0 mm  
Thickness: 1.8mm  
Gate opening : Dia.: 2.0mm