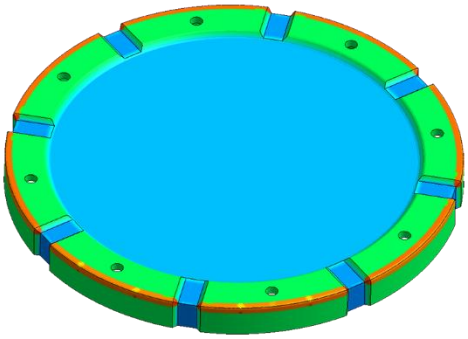
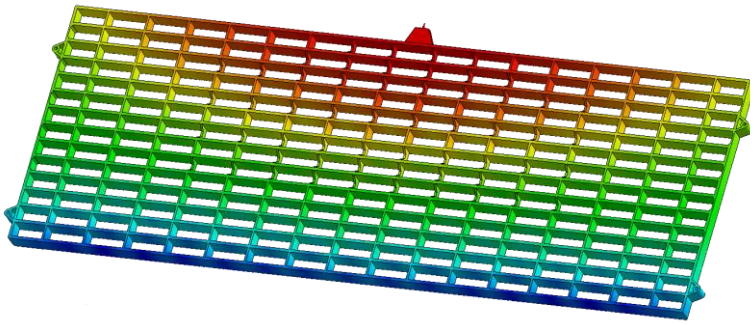
Section 3: Part Design

Lesson 3: Flow Restrictors





Lesson Overview:

Designing parts with nominal wall thickness is ideal yet not always possible. In the previous lesson you learned that flow leaders or internal runners can be used as a design feature to achieve uniform filling and packing. In this lesson we will introduce flow restrictors, another design feature that serves a similar purpose.

Lesson Objectives:

- Learn how flow restrictors can be used to redirect and restrain material flow and achieve uniform filling patterns
- Learn how flow restrictors can help avoid air entrapment issues
- See how flow restrictors influence flow hesitation and racetrack effects

Lesson Conclusion:

The examples in this lesson show that by adjusting wall thicknesses and adding flow restrictors to a part design, flow patterns can be adjusted to achieve desired fill patterns. An important difference between flow leaders and flow restrictors is that flow leaders always start at the gate for proper processing while flow restrictors do not. As we've seen, both options can be used to design and mold high quality parts.