



## **Cooling Technology For Cycle Efficiency**

*January 2013*

A 3D simulation study helps quantify the effects of mold cooling design choices on cycle cooling time, which moldmakers can then use to make smarter design cost versus part production cost decisions at the earliest possible tool design stage.

All original equipment manufacturers (OEMs) design product with specific performance characteristics and aesthetic qualities in order to generate sales—be it a new product or a revision of an existing one. One of the earliest phases of product development is prototyping, during which samples are created. These sample products are used to determine consumer/user acceptance and to test for actual product performance. During this testing and marketing stage, it is learned which product features work well and are well received by the consumer, including look and feel. Often target price is also established during this stage. Once consumer approved, the product geometry with accompanying features becomes non-negotiable for the remaining steps leading to full production. Whether it is a flawlessly shiny surface resulting in a mirror-like gloss, a second-shot of TPE adding a soft-touch grip or a ribbed wall section adding stability and strength, the OEM paying the bill is unlikely to concede to design changes to the very features that tested well and gave the program the green light towards full production. [Click here to read the article](#)