The Victor Reinz® Thermoplastic Cylinder Head Cover was created using the MuCell® process to reduce weight. By applying MuCell® – a microcellular foam injection molding process that injects nitrogen in a super critical state to create microscopic gas cells within plastic structures – Dana was able to successfully reduce component weight while still maintaining durability and stability. The resulting foamed structure replaces what otherwise would need to be a solid plastic part, creating improved product design flexibility and decreased use of plastic material for overall weight reduction.

Dana Holding Corporation
Cylinder Head with MuCell®

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Category: Enabling Technology
Application: 2015 Ford F-250 through F-550
Weight Savings: 29% lighter than traditional magnesium counterpart
Methodology: Part Replacement