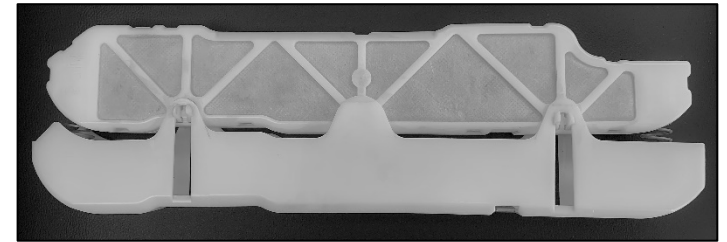


AGS TECHNOLOGY CASE STUDY

INJECTOBLEND™ SOUND ABATEMENT FUEL TANK BAFFLES HELP REDUCE NOISE AND COST

PRODUCT PROFILE

Industry: Automotive (Fuel System)
Application: Sound Abatement Fuel Tank Baffle
Material Description: Acetal Copolymer
Requirements: • Hydrocarbon Resistance • Rigidity • Toughness



CUSTOMER ISSUE

For each new vehicle platform a different fuel system architecture is developed to optimize the use of available space. For General Motors three row crossover SUV Lambda program the tank geometry was causing an unacceptable “slosh” sound during braking on a partial tank of gas. A sound abatement baffle was needed inside a narrow channel of the fuel tank to silence this noise.

AGS INJECTION MOLDING SOLUTION

A baffle was designed using a thick filter media encased between plastic parts in a spring activated assembly. It was determined that acetal copolymer was required for the plastic parts given its toughness, rigidity, as well as hydrocarbon and swell resistance in a gasoline immersed environment. Since this issue was identified late in the program, the additional cost for the baffle was not anticipated. To help keep this cost down, the plastic parts were designed, molded, and validated using AGS Injectoblend™ FPOM110.



Traverse

Acadia

Enclave