

AGS TECHNOLOGY CASE STUDY: MAZDA 3 CAPS COST AND PROMOTES SUSTAINABILITY

PRODUCT PROFILE

Industry:	Automotive
Application:	Mazda 3 Fuel Vapor Canister-Retaining Cap
Material Description:	Acetal Copolymer
Requirements:	• Toughness • Environmental Stability • Fuel Vapor Resistance

CUSTOMER ISSUE

A German based Tier 1 supplier was investigating cost effective, recycled content solutions to help lower component costs on their fuel vapor canisters. The Mazda 3 retaining cap, specified in virgin Celanese Celcon™ M90, was identified as a good target part for substitution. The retaining cap ensures a proper seal is maintained to prevent vapor leakage and optimal system performance. The retaining cap features integrated ribs and gussets to enhance structural integrity, accommodating the stresses from installation and prolonged use. A snap-fit design ensures easy assembly, eliminating the need for additional fasteners and simplifying the manufacturing process.

AGS INJECTION MOLDING SOLUTION

AGS replaced Celanese Celcon™ M90 with Injectoblend™ FPOM110, a recycled acetal copolymer, offering excellent impact resistance and stability under varying environmental conditions. Its chemical resistance protects against fuel vapors, extending its service life and reliability. Injectoblend™ cost savings, recycled content, and precision engineering helps further support the Mazda 3's reputation for affordability, sustainability, quality, and performance.

