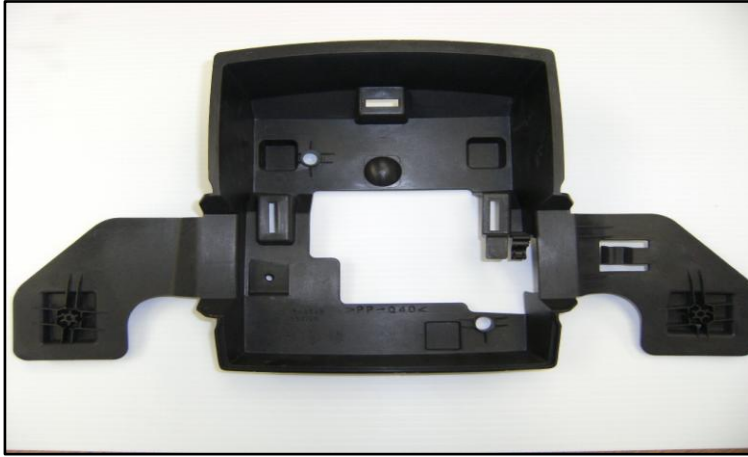


# AGS TECHNOLOGY CASE STUDY: INJECTOBLEND™ RISES ABOVE ALL CHALLENGERS



SPECIFICATIONS	
PERFORMANCE:	MUST MEET FMVSS 302 ∇
MATERIAL:	ASTM D4000, ODD BOX APPROVED INJECTO BLEND FPP-DP3 40% SILICA MODIFIED POLYPROPYLENE
FINISH:	N/A
NAME	RETAINER, OVERHEAD CONSOLE
PROJECT/CUSTOMER	LC23/CHRYSLER



## PRODUCT PROFILE

**Industry:** Automotive (Interior)  
**Application:** Challenger LC23 OHC Substrate  
**Material Description:** 40% Glass PP with Automotive Headliner Scrap  
**Requirements:** • Heat Resistance • Rigidity • Lower Cost

## CUSTOMER ISSUE

A Tier 1 supplier to Chrysler was looking for a lower cost alternative to replace a discontinued grade of glass reinforced SMA (Dylark™) on a structural, non-appearance, headliner component.

## AGS INJECTION MOLDING SOLUTION

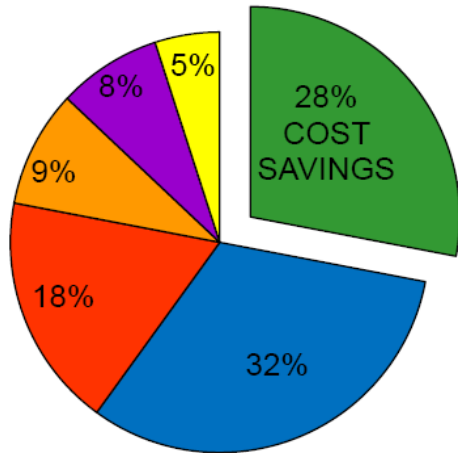
AGS Technology developed Injectoblend™ DP3 glass reinforced polypropylene to replace the specified Dylark™ 480P16. In addition to significant piece part cost savings, the Injectoblend™ DP3 incorporates recycled automotive headliner scrap into its formulation. The Injectoblend™ DP3 material meets FMVSS302 and Chrysler part specific outside design and development (ODD) performance criteria.



**LC23 OHC SUBSTRATE COST SAVING EXAMPLE**

Piece Part Cost Savings= \$0.45  
 Piece Part Percent Cost Savings= 28%  
 Raw Material Percent Cost Savings= 47%

Challenger LC23 OHC Substrate Piece Part Price  
**AGS Injectoblend™ DP3**



- Cost Savings
- Recycled Raw Material
- Machine
- Labor
- SG&A
- Profit

**AGS Technology Inc.**

To find out more about how you can take advantage of AGS Technology's unique injection molding capability using Injectoblend™ materials call (847) 534-6600.

Typical Properties of AGS Thermoplastics

**INJECTOBLEND™ FPP-DP3**  
 40% Silica Modified Polypropylene  
 Chemically coupled  
 Further information and details are available upon request

Properties	Test Method	English (U.S.)	Units (System)	Metric (S.I.)	Units (System)
<b>PHYSICAL</b>					
Specific Gravity	D 792	-	1.21-1.28	-	1.21-1.28
Melt Flow	D 1238	g/10 min	30-40	g/10 min	30-40
Silica Filler	D 2584		36-44%		36-44%
<b>MECHANICAL</b>					
Tensile Strength @ Yield, 73°F (23°C)	D 638	psi	6,400	MPa	45
Tensile Elongation @ Yield, 73°F (23°C)	D 638	%	4	%	4
Flexural Strength, 73°F (23°C)	D 790	psi	10,100	MPa	70
Flexural Modulus, 73°F (23°C)	D 790	psi	746000	MPa	5,140
Izod Impact, notched, 73°F (23°C), 0.125" (3.2mm)	D256	ft-lb/in	.87	J/m	46
<b>THERMAL</b>					
Deflection Temperature, unannealed	D 648				
		°F	310	°C	154
		°F	268	°C	131

The values shown on the data sheet are typical values that have been obtained on typical AGS materials, are not intended for specification purposes and are provided without any warranty or guarantee. Each user of the material should make his own test to determine the suitability of the material for his use. Therefore, it is understood and agreed that the customer assumes and hereby releases AGS Technology, Inc. from all liabilities, incurred in connection with the use of AGS products, technical assistance and information.