application **profile**

cylinder head cover

In the automotive industry, you need PA66 products that perform to a higher standard. Vydyne® resins and compounds help you get the most out of every part you produce. For under-the-hood applications, Vydyne products deliver superior chemical and heat resistance. For exterior and interior components, Vydyne offers versatile, reliable and customizable resins. Our quality and consistency make the difference in your production efficiency.

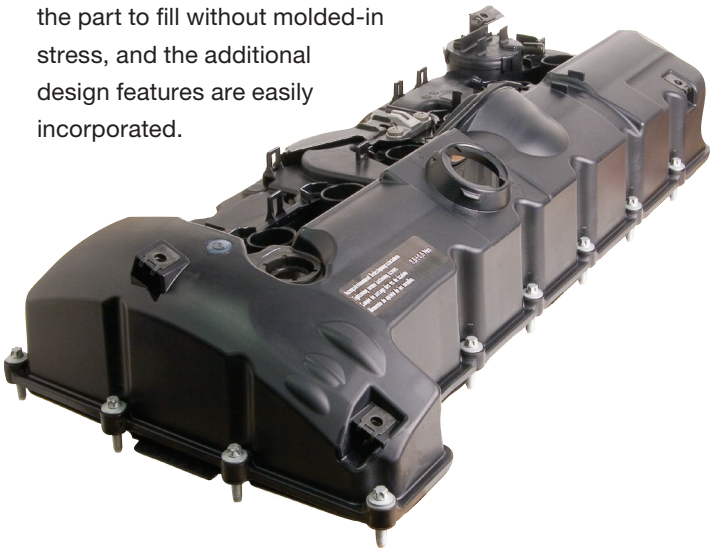
Products Used: R860
Benefits: Low Warping • Chemical Resistance • Superior Mold Flow • Temperature Resistance • Stiffness

Application Description

This cylinder head cover is currently in production for an I-6 engine. The cover seals the engine from oil leaks and water or dirt intrusion. Additionally, it has provisions for oil fill and the introduction of EGR gases.

The Challenge

Cylinder head covers must perform in a severe environment of high temperature and oil contact. R860 provides the critical low warping that maintains a good seal over this long part. The superior mold flow of R860 allows the part to fill without molded-in stress, and the additional design features are easily incorporated.



The Vydyne Difference

Ascend's Vydyne R860 is ideal for this application because of its superior temperature resistance and chemical resistance. The high flow of the product allows the complex design features to be molded with ease. This part also provides a significant weight reduction over the aluminum design. The Ascend automotive team uses mold flow analysis and years of automotive experience to create optimal parts for Ford,® General Motors,® Chrysler® and Toyota.®

For more information, see your Ascend representative or visit www.ascendmaterials.com.

R860			
Property	Method	Units	DAM
Specific Gravity	ISO 1183	none	1.45
Tensile Strength	ISO 527	MPa	119
Flexural Modulus	ISO 178	MPa	6,900
Notched Izod	ISO 180	kJ/m^2	4
DTUL @ 1.8 MPa	ISO 75	°C	225