

## Engine Underhood Protector

### **inquiry**

Vehicles are exposed to numerous road hazards from weather elements like water and ice to dirt and kick-up of foreign objects like rocks or other hazards. Auto manufacturers have begun more and more frequently adding engine underhood protectors to their vehicles which not only protect the engine from foreign objects, but also add an aerodynamic advantage and offer additional noise insulation to the vehicle. Traditional materials like steel and aluminum can add significant weight and can quickly degrade in the harsh environment of an engine compartment.



**SMC Engine Underhood Protector**

### **idea**

IDI Composites International's Thermoset Sheet Molding Compound (SMC) is an ideal solution for large parts that require high strength and low shrinkage. Available with impact resistance comparable to that of aluminum, SMC also provides significant weight reduction and maintains its shape and protective qualities during the wide temperature fluctuations of an engine and environment. Furthermore, SMC is corrosion-resistant, an important factor to consider when manufacturing a part to be used in an automotive application.

### **innovation**

Increasingly, designers and engineers are finding great value in converting traditional materials previously used in part design and creation to address the needs of harsh environments, with higher strength, and lower density products. IDI Composites International's SMC can be custom formulated to impart numerous performance characteristics to meet the unique needs of each application. The IDI 3i Composites Technology Center can help identify and evaluate the viability of material conversion and determine the best solution for your application.



The IDI 3i Composites Technology Center is the research and development division of IDI. It will generate and prove new ideas, approaches and materials to address the engineering and performance challenges of both our customers and the industry. It will design, develop and manufacture thermoset composite compounds for innovative customers seeking to go beyond the value limitations of conventional materials.

## IDI Composites International®

IDI Composites International (IDI) is the premier global custom formulator and manufacturer of thermoset molding compounds for molders and OEMs. The company provides customized polyester/vinylester-based bulk molding compounds (BMC), sheet molding compounds (SMC), and a new line of Structural Thermoset Composites (STC®) that are manufactured in both sheet and bulk formats for the most demanding applications.

# Global Solutions – Global Locations



**Ideas For Meaningful Results.**

[idicomposites.com](http://idicomposites.com)

**North America**  
Noblesville, IN

**Europe**  
Vineuil, France

**United Kingdom**  
Oldbury, UK

**Asia/Pacific**  
Shanghai, China

**Caribbean & South America**  
Aguirre, Puerto Rico

**Mexico**  
Mexico City, Mexico