IDI Composites International thermoset bulk molding compounds (BMC) exhibit an outstanding mix of physical, chemical, and thermal properties, making them an ideal replacement for metals such as steel and die-cast aluminum. BMC exhibits superior strength-to-weight ratios, and is suited for high stress, high humidity, and high temperature environments, as they will not rust or corrode. And because many components can be molded along with the part, and require little to no final finishing, they are often more economical from a total manufacturing standpoint.

BMC is a thermoset plastic resin blend of various inert fillers, fiber reinforcement, catalysts, stabilizers, and pigments that form a viscous, ‘puttylike’ compound. BMC is highly filled and reinforced with short fibers. Glass reinforcement represents between 20% and 45%, with glass length typically between 1/32-inch and 1/2-inch (12.5mm).

Depending on the end-use application, compounds are formulated to achieve close dimensional control, flame and track resistance, high dielectric strength, corrosion and stain resistance, UV resistance, superior mechanical properties, low shrink, and color stability. Its excellent flow characteristics and electrical and flame resistant properties make BMC well-suited to a wide variety of applications requiring precision in detail and dimensions.

In addition to performance, BMC is also aesthetically appealing. The material can be molded in a wide variety of colors. Alternately, BMC can tolerate powder-coat or water-based paint.

BMC is available in various grades and flow ranges for compression, injection, transfer, and runnerless injection compression molding. Teaming with IDI early in the design process will yield the many benefits of molding parts and sub-assemblies from thermoset BMC. Find out why BMC is fast becoming the material of choice for design engineers looking to reduce cost in new high-performance applications.
Over Forty-Five Years of Leadership in Thermoset Composites

IDI Composites International (IDI) is the premier global formulator and manufacturer of thermoset molding compounds for custom 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 Compounds that are manufactured in both sheet and bulk formats for the most demanding applications in markets such as Military & Aerospace, Transportation, Safety, Medical, Electrical, Oil & Gas, Alternative Energy, and Marine.

Headquartered in a 120,000 square foot manufacturing facility and research center in Noblesville, IN (USA), IDI has a strong presence in the international thermoset composites market. With more than 45 years of leadership experience, IDI works closely with customers to identify the optimal thermoset molding compound for each application. The company has substantial R&D resources, plus excellent chemical engineering, ISO-certified manufacturing, and comprehensive quality control.

To support a growing customer base worldwide, the company operates multiple, wholly owned manufacturing facilities in North America, Puerto Rico, the UK, France, and China.