



IDI Composites Announces New Line of High-Performance Structural Thermoset Compounds

November 8, 2011, Noblesville, IN (USA) – – IDI Composites International, the premier global formulator and manufacturer of thermoset SMC (sheet molding compound) and BMC (bulk molding compound), announces a new line of high-performance **structural thermoset compounds** for high-reliability applications, such as military, transportation, and industrial, among others.

IDI's new line of structural thermosets builds on the most popular properties of the company's standard thermoset products, such as corrosion resistance and durability, but adds to that exceptionally light weight and superior mechanical strength. In addition, these new structural compounds experience little or no degradation in extreme hot and cold temperatures, making them ideal for the most demanding industrial and outdoor environments.

IDI's **structural thermoset compounds** consist of single and hybrid chemistries using polyester, vinyl ester, polyurethane, and epoxy resins. This hybrid technology combines the best properties of the individual resins to create a unique product line with enhanced properties. Whether in its native state or built into a hybrid chemistry, this structural thermoset line will always yield exceptional strength relative to its weight. As a result, structural thermosets are substantially superior to standard thermoset products, and dramatically less expensive than metal alternatives. The hybrid technology also allows for green resins to be incorporated, enhancing the customer's position on renewable feed stocks.

The following are key features of IDI's new line of **structural thermoset compounds**:

Flex and Tensile Strength: Structural thermoset compounds offer higher tensile strength per unit weight than most metals, and higher flexural strength than many thermoplastics. Structural thermosets maintain excellent rigidity and other physical properties during prolonged exposure to harsh environments.

Dimensional Stability: In high-temperature applications, a structural thermoset part is far less susceptible to relaxation or creep failure. Structural thermosets experience little or no shrinkage, ensuring close tolerances in molded parts and often eliminating the need for secondary operations, such as drilling or machining.

Corrosion Resistance: Parts made from structural thermoset compounds do not rust or corrode when used outdoors or in harsh environments. In fact, structural thermosets provide long-term resistance to both moisture and chemicals.

Cost-Effective Alternative: Structural thermosets have a very long life span and feature low maintenance requirements. They also reduce manufacturing costs by enabling parts consolidation and virtually eliminating final finishing and coloring.

Design Flexibility: Structural thermoset compounds can be molded using a variety of standard processes and tools, including high-volume and prototyping systems. And, due to their superior molding properties, they enable the creation of complex shapes and intricate details that are impractical or even impossible to produce with metals.

“We’re very excited about our new structural thermoset compounds,” said company Vice President and General Manager Tom Flood. “Not only do they complement our existing thermoset products, but they open the door for many new and challenging applications.”

IDI’s new product line is available as **Structural Thermoset SMC** and **Structural Thermoset BMC**. Reinforcement fibers for structural thermoset SMC consist of traditional fiberglass materials, plus carbon fiber reinforcement for applications that require exceptional strength coupled with severe weight restrictions.

Applications for IDI’s new structural thermoset compounds center on high-strength, lightweight, and thin (down to 0.060” thickness) alternatives to sheet metal. Markets include Military & Aerospace, Transportation, Industrial, Safety, Medical, Electrical, Automotive, Energy, and Marine for components such as heat shields, skip plates, safety helmets, and much more.

About IDI Composites International

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 continuous impregnated compounds (CIC) for the world’s most demanding markets, including automotive/truck, electrical, food service, alternative energy, and appliance. IDI also offers a new line of high performance Structural Thermoset Compounds™ (STC) that are manufactured in both sheet and bulk formats for the most demanding applications in markets such as Military/Aerospace, Transportation, and Industrial.

Headquartered in a 120,000 square foot facility in Noblesville, IN (USA), IDI has a strong presence in the international thermoset composites market. To support a growing customer base worldwide, the company operates multiple wholly owned manufacturing facilities in Europe, Asia, and The Americas. For more information, please visit www.idicomposites.com.