

## **FOR IMMEDIATE RELEASE**

### **Composiflex Develops Process to Meet Fire, Smoke, Toxicity Standards with Non-Phenolic Composites**

*An advance by Composiflex allows selection of the optimal composite material based upon performance needs while still meeting fire, smoke, and toxicity requirements.*

ERIE, PA (February 2, 2009) - - Fiber reinforced plastic employing phenolic resin systems have commonly been used to meet FST (fire, smoke, toxicity) requirements as defined by Federal Aviation Administration standard FAR 25.853. However, formaldehyde and phenol, toxic chemicals present in phenolic resin, sometimes disqualify these materials from being applied. Further, because its density is higher than other matrix materials, phenolic is not necessarily the ideal choice for weight-conscious military and aerospace applications.

Composiflex, global supplier of highly-engineered composite products, recognized that phenolic-based composites were often specified for aerospace applications simply because of their well-known ability to pass FAR 25.853 FST tests. Engineers sought a method by which composite material selection could be first based upon performance needs for the application and then FST requirements.

Composiflex engineers devised an innovative wrap system, applying a skin of two different materials to the outside of the composite part during lay-up. The result is a component that is optimized for performance under specific application conditions but also passes FAR 25.853 testing. "The difference," says Marty Matthews, Composiflex sales and marketing executive, "is that mechanical performance can be considered first in the design without compromising compliance with fire, smoke, and toxicity specs."

The process has already been successfully proven with Composiflex customers in both the commercial and military sectors, most notably in the production of vehicle and aircraft armor. This capability is gaining even more significance as today's aerospace and military engineers seek to minimize vehicle weight by converting existing components from metal to composite materials, as well as incorporating a higher percentage of composites into new designs.

About Composiflex: For more than 20 years, Composiflex has been an innovator in the design and manufacture of advanced high-performance composites. Specializing in custom designs, Composiflex serves the military, aerospace, ballistic protection, medical, industrial, and recreational markets. The company is characterized by its "art-to-part" projects made possible by its knowledgeable engineering staff, broad materials expertise, cost-effective rapid prototyping methods, and range of modern manufacturing technologies. Certified to ISO 9001:2000 standards, Composiflex conducts operations in Erie, PA, USA and is presently expanding its facilities by more than 60%, from 34,000 to 55,000 sq. ft.

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