

Greene Tweed Accelerates Customer Innovation with Rapid Prototyping Capability for Thermoplastic Composites

New process cuts prototype lead times in half, helping customers move faster from concept to testing

LANSDALE, PA, UNITED STATES, June 25, 2026 /EINPresswire.com/ -- Greene Tweed, a global leader in advanced materials and high-performance solutions, has developed a rapid prototyping process for its [Xycomp® DLF™](#) material that helps aerospace customers accelerate metal replacement development projects through faster testing and validation. The process significantly reduces lead times and costs, expanding access to high-performance composites in new markets, including Advanced Air Mobility (AAM) and Defense.

Xycomp® DLF™ components are high-performance thermoplastic composites engineered to replace metals while delivering weight savings, stiffness, and strength. The new process cuts prototype lead times by nearly 50% compared to traditional production methods through a proprietary approach that optimizes the tool design and balance between machine and net-molded features, while maintaining production-representative material and part



Robot arm-ko



MLE Vane-ko (1)

properties. The result is quicker access to functional parts, with lower upfront tooling costs and greater design flexibility before production.

“Greene Tweed recognized the need for a faster, more cost-effective way to support the development of lightweight, high-performance components for customers,” said George Rawa, General Manager, Structural & Engineered Components at Greene Tweed. “This process expedites the timeline to evaluate Xycomp composites in real-world applications by putting production-quality parts in engineers’ hands in a fraction of the time.”

Key innovations behind Greene Tweed’s rapid prototyping breakthrough include:

Optimized Mold Design: A balance of machined and net-molded features reduces tooling complexity and speeds up production.

Streamlined Parallel Processes: Completing part, tool, and fixture designs concurrently significantly compresses timelines.

In-House Expertise: A hands-on approach ensures precision and quality, with mold fit-ups completed in one to two days.

Rapid, Low-Cost Iteration: Customers can test, refine, and optimize components through phased evaluations with lower cost, readily modifiable tools.

Rapid prototyping is helping expand composite adoption across aerospace, AAM, defense, mobile robotics, and energy as demand grows for lightweight, durable components. In AAM, customers are using Xycomp® DLF™ components for lightweight, custom-engineered electric vertical take-off and landing (eVTOL) applications, with rapid design iteration and close technical collaboration between customers and Greene Tweed engineers fast-tracking the path from concept to reality.

Greene Tweed representatives will be available at the Farnborough Air Show 2026 (Hall 0, Booth #0640) to discuss Xycomp® DLF™ and metal replacement opportunities; attendees can [register here](#) to schedule a meeting. Greene Tweed will also host the webinar, “Solving Aerospace Weight and Prototype Bottlenecks with Xycomp® Thermoplastic Composite Components,” on September 30, 2026. [Register here to attend.](#)

About Greene Tweed

Greene Tweed is a leading global manufacturer of high-performance thermoplastics, composites, seals, and engineered components that outperform and outlast in the world’s harshest environments. For 160 years, we have served clients in semiconductor, oil and gas, aerospace, defense, chemical and pharmaceutical processing, and other industries where failure is not an option. Greene Tweed products are sold and distributed worldwide. For additional information, call +1.215.256.9521, or visit our website at www.gtweed.com.

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