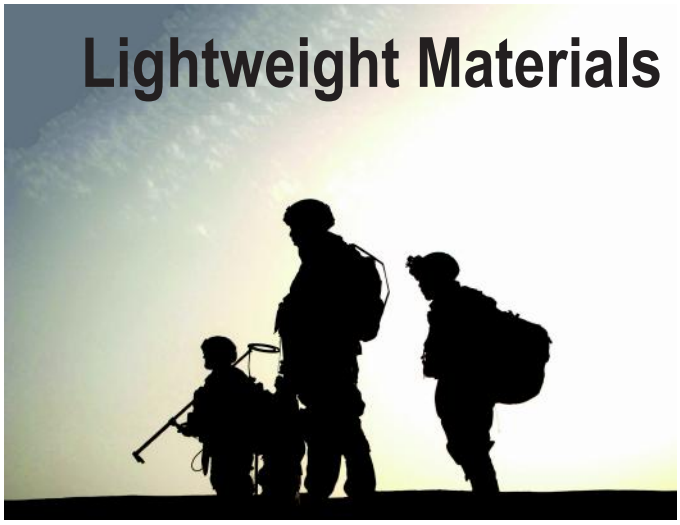
Lancer System's specialty is in providing lightweight solutions for upgrades, modifications and new equipment designs. Our goal is to provide total engineered solutions; application assessment, component develop, design and manufacturing.

Lancer engineers are experts in lightweight material design and application. Our breadth of materials and processes give us the ability to design and select the most economical solution for your application.

We have access to a mixture of in-house manufacturing capabilities along with an extensive network of niche partners that empower our engineers to solve the toughest problems. Lancer Systems processes include:

- Injection Molding
- Extrusion
- Thermoforming
- Compression Molding
- Abrasive Water jet
- CNC machining
- Bladder Inflation Molding
- Fiber Placement and Fiber Winding
- Hand Layup
- Pultrusion
- Rapid Prototyping
- Electro-Mechanical Assembly



Collaboration

Our expertise in the full spectrum of polymer-materials technology and an intimate understanding of their unique attributes and benefits allows Lancer Systems to properly match the best possible polymer-materials solution for your specific application's requirements.

We strive to be a partner of your engineering team to help achieve weight and cost goals. Our expansive list of available materials and processes enable our engineers to select the right solution for your mission.

Lancer's in-house engineering services, such as 3D modeling and our FEA expertise, provide for our customers a precise and accurate fit of all components and hardware, with the performance to match. This technical capacity combined with our solid supply chain enables us to provide customers with a variety of production-process alternatives.

Lancer Value

- Application Assessment
- Material Selection
- Component Design
- Manufacturing Process Development
- Supply Chain Managemant
- Assembly
- Quality

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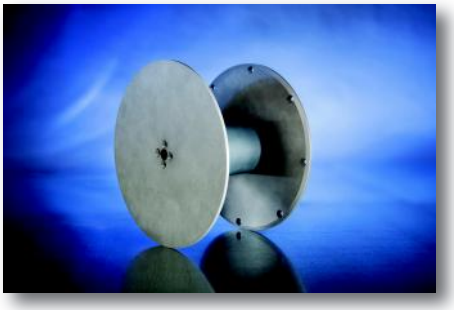
LANCER SYSTEMS

Total Solutions
Our focus is on providing total solutions, components and assemblies. We have the flexibility and capability to procure, manufacture and provide quality on time assemblies for our customers integration.

Engineered Lightweight Materials
Lancer's materials engineers have an extensive range of products to select from, ensuring the best performing, economical solution is developed for your application. Below is a short list of commonly used materials and their typical properties. Other materials; inexpensive plastics or engineered thermoplastics can, and will, be used depending the particular application.

Supporting Your Mission
Lancer Systems is a world-class team of engineers and manufacturing experts committed to providing engineered lightweight and harsh environment solutions to the Warfighter. We are ready to help the development of the right lightweight solutions for upgrades, modifications and new equipment designs.



Lancer Materials - TYPICAL PROPERTIES

Material	Filler System	Specific Gravity	Flexural Modulus (psi)	Tensile Strength (psi)	Max. Operating Temperature (°F)
PEEK	30% Carbon	1.41	2,750,000	33,400	550°F
PEI	30% Glass	1.50	1,450,000	26,000	420°F
LCP	30% Glass	1.61	2,100,000	28,000	428°F
PA	30% Glass	1.24	800,000	15,500	300°F
PPS	30% Carbon	1.45	3,100,000	27,000	450°F
Composite Tow	Carbon / PEEK	1.57	19,100,000	300,000	550°F
Composite Fabric	Carbon / PEI	1.55	9,500,000	124,000	420°F
Composite Fabric	Carbon / PPS	1.59	9,300,000	126,000	450°F
Composite Tow	S2 Glass/ PEEK	2.10	6,100,000	190,000	550°F

Statements and recommendations in this publication are based on our experience and knowledge of typical applications for this product and shall not constitute a guarantee or warranty of performance nor a modification or alteration of our standard product warranty which shall be applicable to such products.
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