Material Challenges and Opportunities for Urban Air Mobility

Composite materials will be at the heart of Urban Air Mobility (UAM) to provide energy efficient, reliable, and cost-competitive transportation vehicles.

Make it Green
- Reduced structure weight reduces energy consumption
- Additive manufacturing reduces material waste
- Materials can be repaired, repurposed and recycled

Make it Safe and Comfortable
- Proven safe and reliable through years in the aerospace industry
- Non-corrosive and fatigue resistant
- Honeycomb core materials can dampen noise to provide a quieter ride
- Tunable for electromagnetic frequency leading to reliable and safe communications between sensors and air traffic

Make it Affordable
- Requires minimal capital equipment and tooling allowing you to scale economically
- Manufacturing automation through robotic lay-up and assembly, infusion, compression molding and additive manufacturing
- Faster cure and processing times leading to higher production rates

Scan the QR code to access a full report on Material Challenges and Opportunities for Urban Air Mobility
What makes Hexcel composites your ideal materials solution?

Benefits of Hexcel’s Advanced Composites:

• Lightweight
• Non-corrosive
• Available in quick-cure & out-of-autoclave solutions
• Advanced manufacturing methods
• Noise-reducing solutions

Broad Legacy of Experience

www.hexcel.com