ADVANCED COOLING TECHNOLOGIES

COMPOSITE STRUCTURES & ASSEMBLIES

ADVANCED COMPOSITE SOLUTIONS FOR SPACECRAFT, ROCKETS, AND AEROSPACE MISSIONS

Engineered for Extreme Environments

We deliver a comprehensive portfolio of advanced composite structures optimized for the most demanding aerospace, space, and defense applications. Our composite solutions extend our thermal management expertise into lightweight, high-strength structural components engineered for extreme thermal and mechanical loads.

KEY BENEFITS

Lightweight, High Strength-to-Weight Ratio. Engineered for mass-sensitive space and aerospace applications without compromising structural integrity.

Exceptional Dimensional Stability. Maintains precision in harsh thermal and vibrational environments encountered during launch and in orbit.

Custom-Engineered Solutions. Tailored designs to meet exact mission, performance, and interface requirements.

Seamless Integration with Thermal Systems. Structural solutions that complement ACT's thermal technologies for spacecraft platforms.

APPLICATIONS

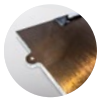
- Earth-orbit and deep-space spacecraft
- Launch vehicle structures
- Reflectors and communication dishes
- Satellite deployable systems
- High-precision instrument platforms
- Rocket fairing and payload support interfaces
- Missile and defense components

SPACE & ROCKET COMPOSITE SOLUTIONS

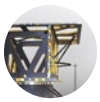
Spacecraft Structures

Designed for satellite, deep-space probe, and orbital vehicle platforms where reliability and low mass drive performance:

Aluminum-Honeycomb Radiators. Lightweight thermal control panels that support heat dissipation with structural strength.



Solar Array Substrates. Precision composite panels engineered for thermal and mechanical stability across extreme temperature cycles.



Bus & Payload Structures. Custom primary and secondary spacecraft structural components.

Tubes, Booms & Center Cylinder Assemblies. High-stiffness deployable or fixed members for instruments, antennas, and sensors.

Backing & Reinforcement Structures. Optimized local support for critical loads with minimal mass.

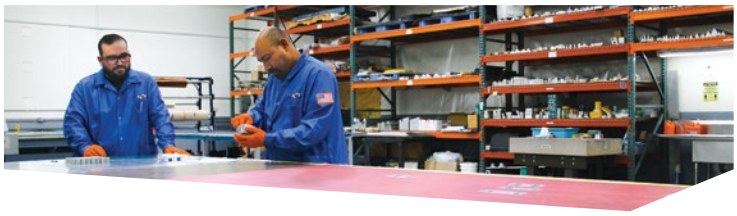
Launch Vehicle & Rocketry Components

ACT composites are suited for advanced rocket and payload integration structures where mass, stiffness, and thermal performance are critical:

Structural Panels & Frames. Lightweight skins and reinforcements for launch vehicle airframes.

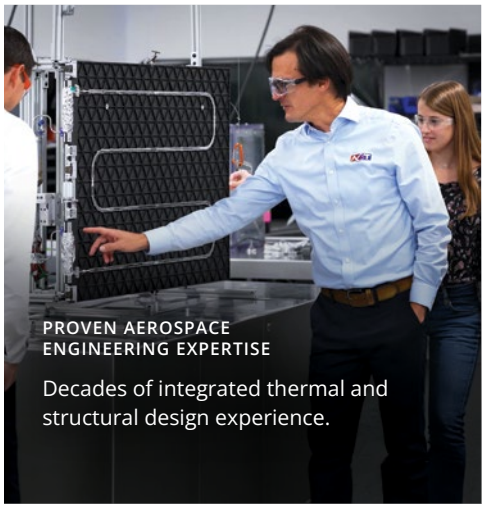
Instrument & Electronics Support Platforms. Dimensionally stable composite bases for avionics and guidance systems.

Deployable Composite Assemblies. Engineered support for deployable systems such as fairings, booms, and secondary structures.



WHY ACT?

ACT delivers composite structures that perform in the real world — where reliability, precision, and low mass are mission-critical.

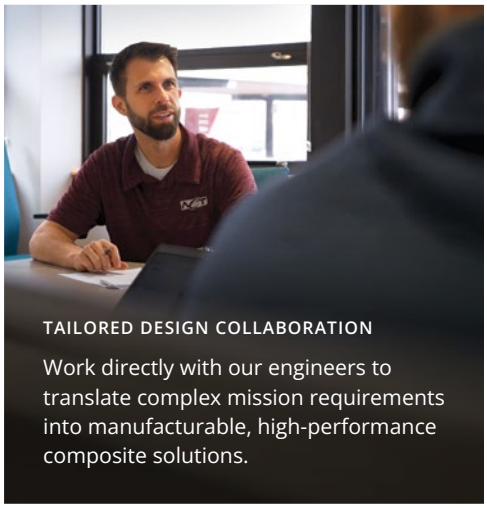


PROVEN AEROSPACE ENGINEERING EXPERTISE

Decades of integrated thermal and structural design experience.

IN-HOUSE MANUFACTURING & QUALITY CONTROL

Single-source delivery reduces risk, simplifies supply interfaces, and accelerates production timelines.



TAILORED DESIGN COLLABORATION

Work directly with our engineers to translate complex mission requirements into manufacturable, high-performance composite solutions.

Partner with ACT

From concept through qualification and delivery, ACT is your partner for composite structures designed to meet the toughest aerospace challenges.

TALK TO AN EXPERT

Scan the QR code or visit **1-act.com/contact** to discuss your next mission.

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ISO 9001 & AS9100 Certified
ITAR & EAR Compliant

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