Composite Curing for Aviation Use

State of the art technology to repair composite structures and surfaces in the aviation/aerospace industry

Application

Today’s aviation & aerospace industry is utilizing the strength and weight benefits of composite materials more and more. Unfortunately damage to these composites often occurs from weather conditions, rocks, bird strikes, military activity, and more. Special equipment and technique is necessary to repair damage or even to make structural alterations and modifications.

Resins and epoxies within the composite material layers often require heat to fully cure. In addition to heat, the application often times requires vacuum pressure to be applied over the repair area to debulk and compact the repair patch per the aircraft manufacturer’s recommended maintenance procedures.

Solution

The portable ACR®3 hot bonder and heating blankets provide a cost effective tool for repairing composite materials with precision and efficiency. The ACR®3 hot bonder has a state-of-the-art touch screen user interface that allows for quick and easy ramp & soak programming. The ACR®3 records all pertinent temperature and vacuum pressure data for quality assurance and compliance.

The BriskHeat heating blankets are the most durable and flexible heating blankets on the market today. They provide extreme versatility with an impressive operating radius of ¼” (6mm) while maintaining uniform curing temperatures up to 450°F (232°C). For high temperature needs, Briskheat’s cloth series heaters accommodate up to 1100°F (593°C).

Key Features & Benefits

• State-of-the-art touch screen with built-in vacuum system.
• Flexible, durable, and uniform temperature heating blankets designed and built to fit the application.
• Custom sized heaters and accessories for large surface area cures or complex 3D shapes.
• Standard and custom heaters, including Radome heaters for all the major aircraft models.

Examples of Applications

• Leading/Trailing Edge Wing Repair
• Radome Repair
• Composite Surface Repairs (Aircraft Fuselage, etc.)
• Reverse Thruster Repair
• Engine Cowling Repair/Rebuild
• Helicopter Blade Repair

Products

• ACR®3 Hot Bonders
• Composite Curing Heat Blankets

Industry/Customers

• Airlines
• Aviation MRO
• Aviation OEMs
• Composite Repair Facilities
• Technical/Vocational Schools

Types of Users

• Composite Repair Technicians
• Training Instructors
• Engineers/Designers of Repair Techniques/Processes
• Production Personnel