

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 techniques are necessary to repair damage or even 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 oftentimes 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 ACR³ hot bonder and heating blankets provide a cost-effective tool for repairing composite materials with precision and efficiency. The ACR³ hot bonder has a state-of-the-art touchscreen user interface that allows for quick and easy ramp/soak programming. The ACR³ records all pertinent temperature and vacuum pressure data for quality assurance and compliance.

The BriskHeat SR heating blankets are the most durable and flexible heating blankets on the market today. They provide extreme versatility with an impressive operating radius of 0.25 in (6 mm) while maintaining uniform curing temperatures up to 450°F (232°C). For high-temperature needs, BriskHeat's cloth series heaters accommodate up to 1,100°F (593°C).

Additional Uses

The ACR³ can be used to record up to 10 temperatures per zone with thermocouples provided even if the vacuum is not used. Use the USB port to download the data and import into Excel for your records.

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.

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
Radome Heaters	Heat Blankets

Industries

Aerospace/ Aviation Aviation OEMs	Composite/Epoxies/ Resins
---	------------------------------

Types of Users

Composite Repair Technicians Vocational School Instructors	Engineers/Designers of Repair Techniques/ Processes Production Personnel
---	---