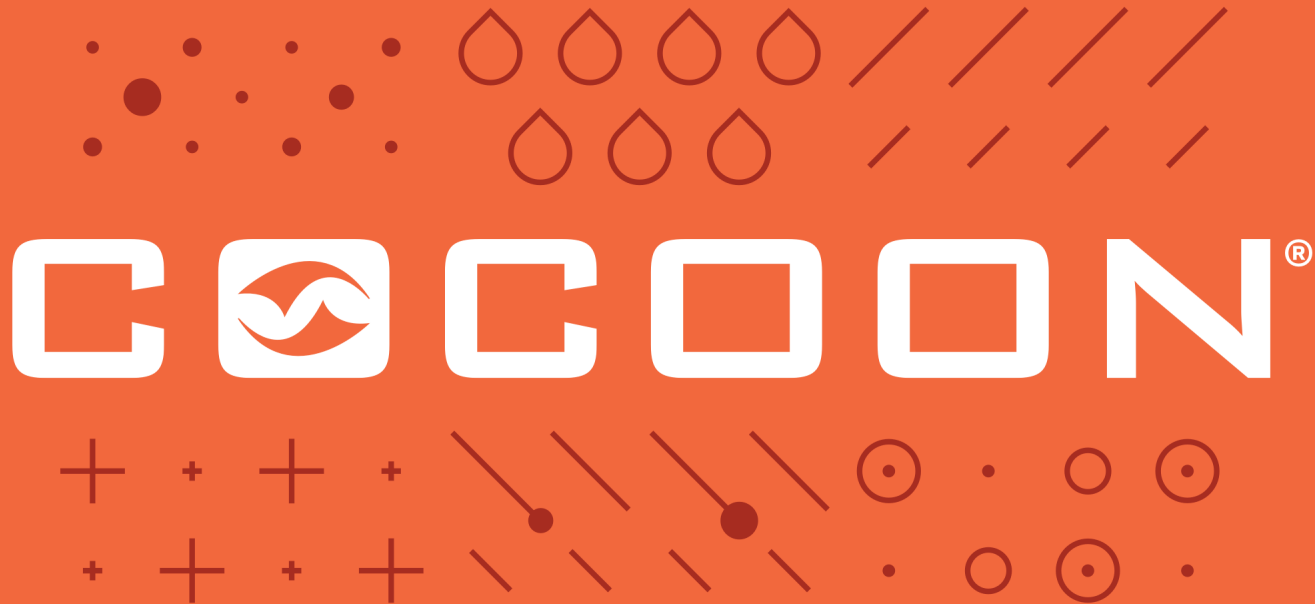


INTRODUCTORY BRIEF



C-130 Aviation Insulation

Improved Batting (IBAT) & Blankets (ITAB)

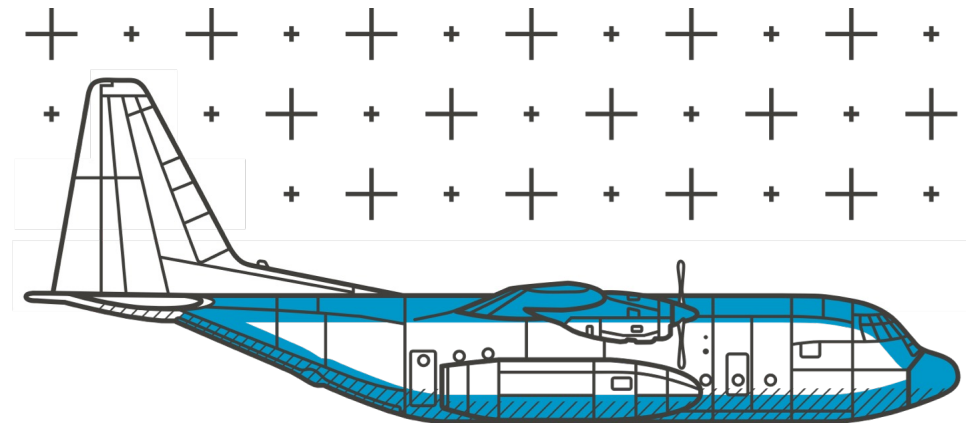
POC

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Modernizing Interior Insulation

Cocoon hasn't just modernized the C-130 interior insulation system, it has revolutionized it.

Thanks to advancements in technology, the new system provides better protection from corrosion, inclusion of insulation in the tail section, and a supply chain that makes replacement simple and easy.





Problem Statement



Old Insulation Deficiencies

- + The old insulation traps moisture against the airframe, creating corrosion, mold, and mildew
- + Fiberglass batting breaks down, degrading performance
- + Without a supply chain, insulation is difficult, if not impossible, to replace
- + Poor attachment system is a FOD risk and prevents tail section insulation
- + The old system does not include any drawings, documentation or part numbers





The Challenge



Aviation Insulation

The Air Force was looking for a modernized insulation system that would:

- + Prevent moisture build-up against the air frame to mitigate corrosion.
- + Be waterproof and resist oils & lubricants while remaining highly air-permeable.
- + Filter out contaminants to 1 micron but retain air-permeability.
- + Be durable but lightweight.
- + Be washable and repairable in the field.

- + Stay firmly attached but keep moisture from building up against the airframe.
- + Stay firmly attached but be easy to remove and install.
- + Be inherently fire-resistant (no chemical treatments).
- + Prevent static build-up in order to protect avionics and ordnance.



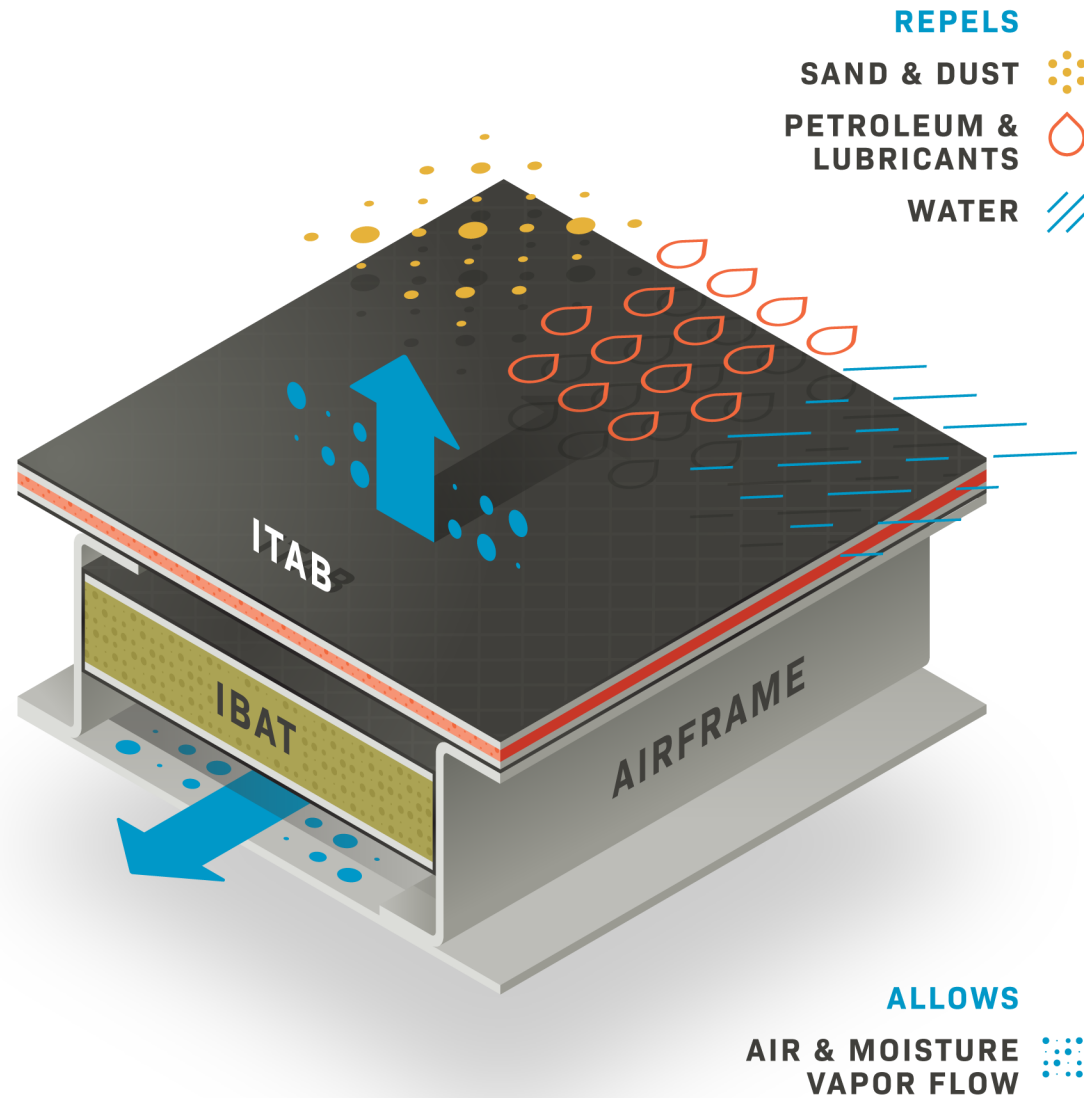


The Breakthrough

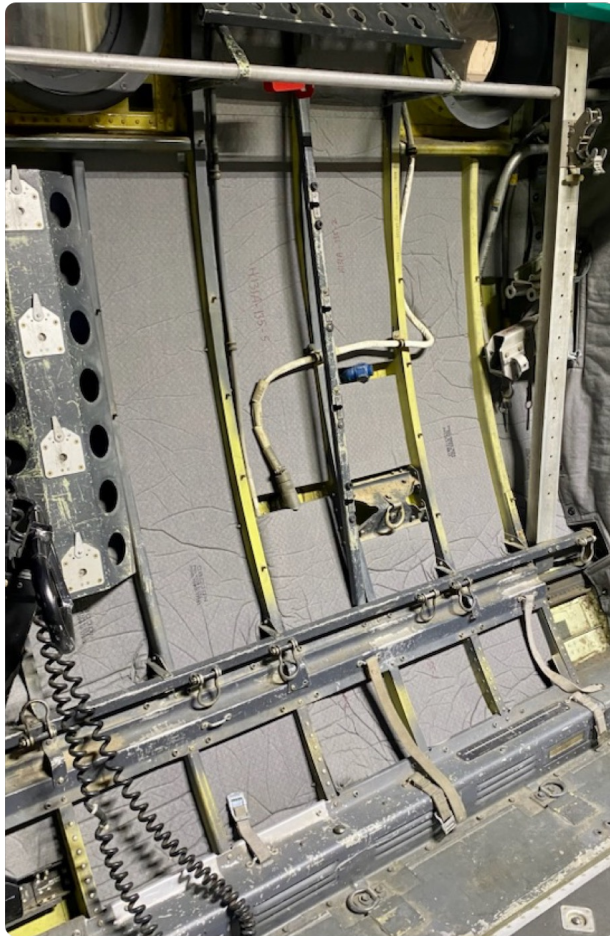


Tech Meets Textile

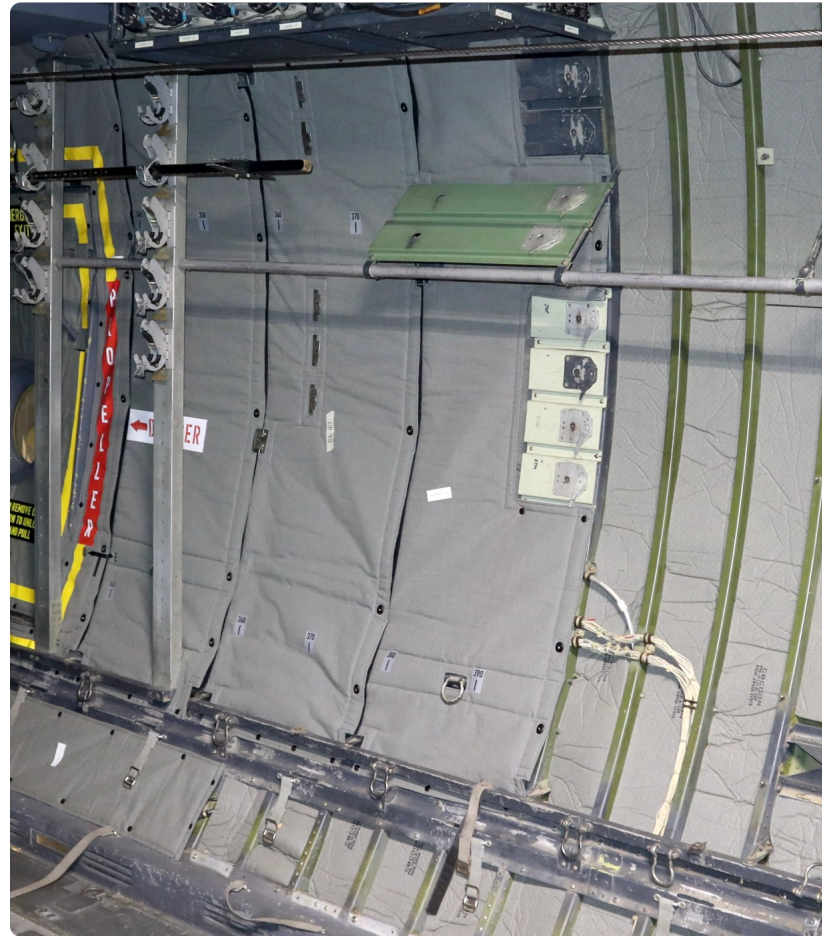
- + The modernized insulation system is a fully integrated combination of batting, blankets, and attachment hardware.
- + Utilizing the latest technical textiles, the system can best be described as advanced technology in the form of a textile.



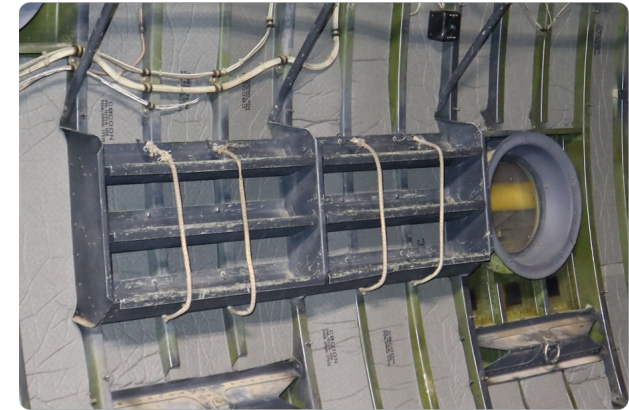
Insulation System in Place



Compression-fit batting allows for easy install, removal, and inspection



A combination of patented textiles mitigates corrosion, mold, and mildew



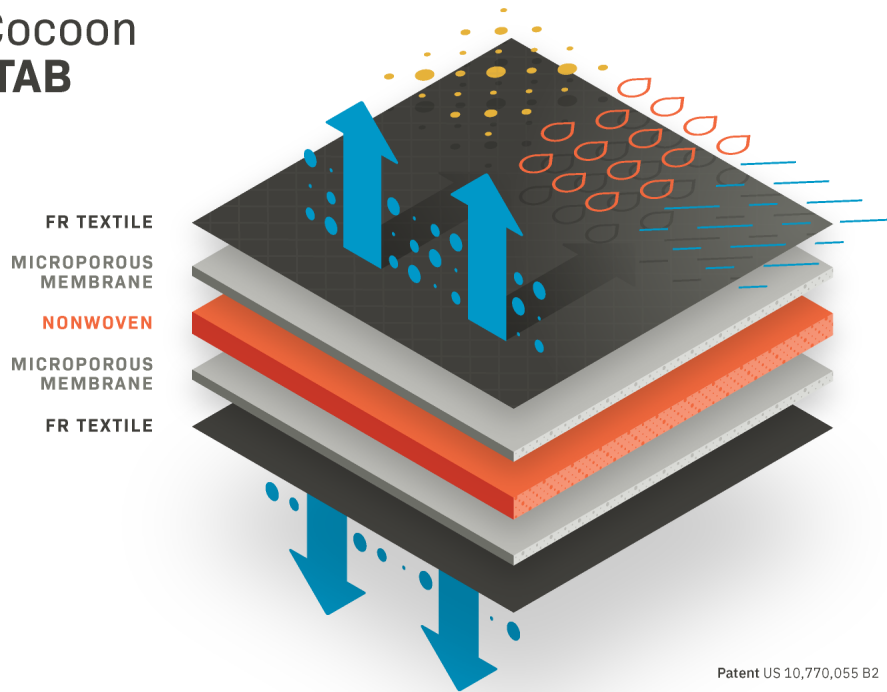
The improved attachment system keeps blankets in place and reduces FOD risk



Tech Meets Textiles

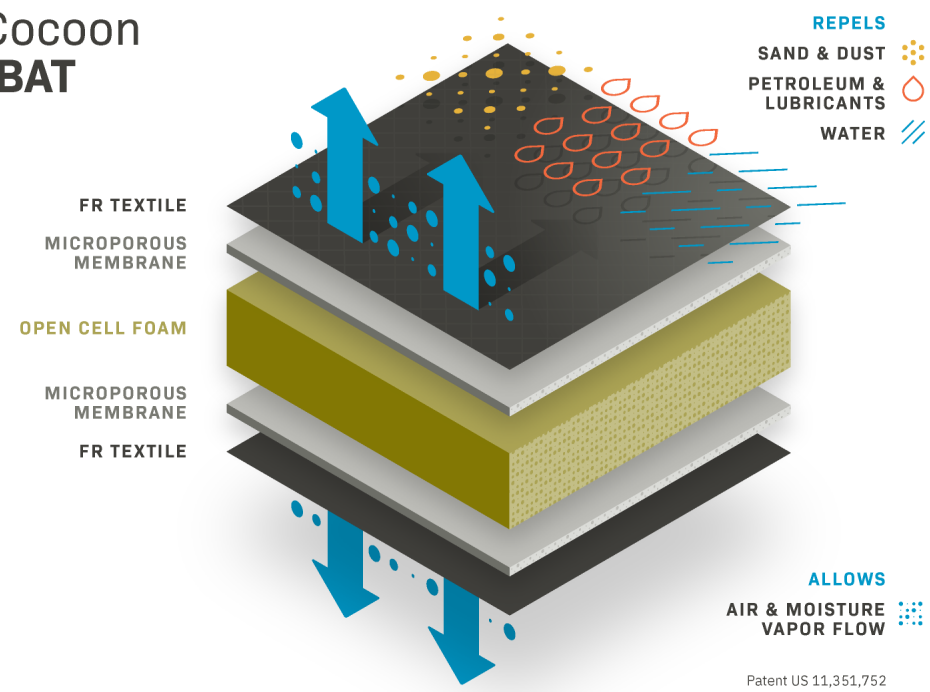


Cocoon ITAB



Patent US 10,770,055 B2

Cocoon IBAT



Patent US 11,351,752

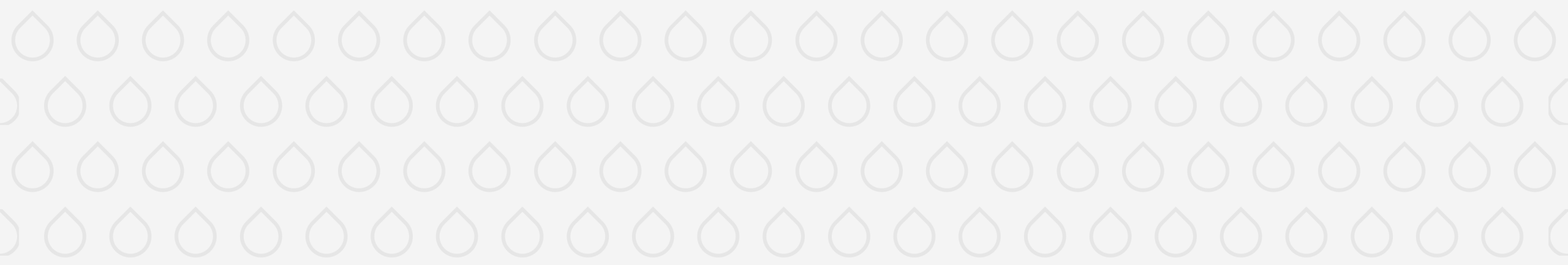
It took many years of research, development, and testing to find the combination of textiles that could repel water, fluids, sand and dust, etc., while remaining air-permeable, durable, fire resistant, and inherently anti-static. Equally challenging was laminating the layers without impeding air-permeability. The result is the equivalent of advanced technology in the form of a textile.

Before & After Modernization





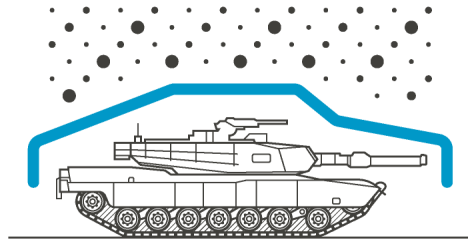
Conclusion



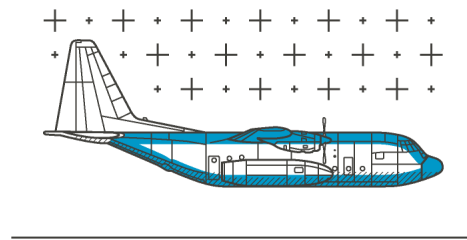
C-130 Aviation Insulation **Features & Benefits**

FEATURE	BENEFIT
HIGHLY AIR-PERMEABLE TEXTILES:	Mitigates corrosion, mold, and mildew by preventing moisture buildup
COMPRESSION-FIT BATTING:	Allows for easy install and removal, greatly improving ability to inspect hull
HYDROPHOBIC:	Will not absorb liquids; wet-weight = dry-weight; eliminates weight-gain
OLEOPHOBIC:	Repels oils, lubricants, and fuels, eliminating weight-gain and contamination
INHERENTLY ANTI-STATIC:	Safe for use with munitions and sensitive electronics (embedded within fabric for durability)
SAND & DUST PROOF:	99.7% filter efficiency for particulates down to 0.3 microns
WATERPROOF:	Liquids will not penetrate blankets or batting
FREEZEPROOF:	Insulation materials won't freeze; or freeze to surfaces
FIRE-RESISTANT:	Inherently nonflammable (no chemicals added); prevents spread of fire
DURABLE:	Meets or exceeds applicable tensile and tear strength standards
IMPROVED ATTACHMENT SYSTEM:	Reduces FOD risk and allows installation of insulation in the tail section
IMPROVED PLACARD SYSTEM:	Emergency information and signage is easier to read and more durable
FIELD REPAIR KIT:	Repairs can be easily made in the field
DRAWINGS & DOCUMENTATION PACKAGE:	Batting and blanket sections can be easily replaced

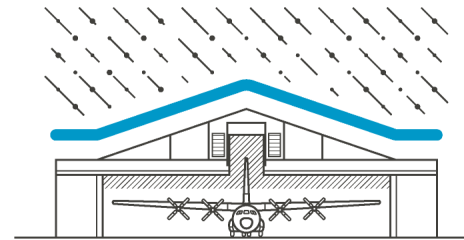
Increase readiness while reducing maintenance costs.



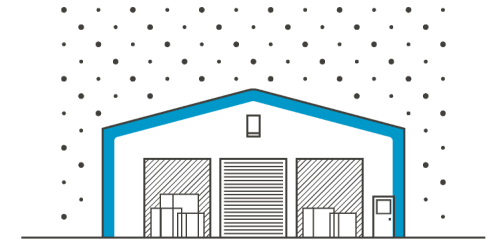
 PROTECTIVE COVERS



 AVIATION INSULATION



 FABRIC STRUCTURES



 CORROSION-FREE ENVIRONMENTS