# **CAPABILITIES**

#### **FABRICATION**

- Sewing
- Edge Taping
- Sealing
- Riveting
- Ultra-sonic Welding
- Cleanroom Material Handling
- Electrical Ground Assembly (NASA Certified)

#### **MATERIAL CONVERSION**

- Roll-to-Roll Laminating
- Slitting
- Reinforced Fabric Combining

#### **FIELD SERVICE**

- Custom Shape Determination
- Fit check
- Installation

### **ENGINEERING SERVICES**

- Analysis
- Thermal Performance
- Material Capabilities
- Pressure/Load Factors
- Concurrent Engineering
  - CAD software (AutoCAD, SolidWorks, CREO)
- Gerber CNC Cutter
- Testing
  - Electromechanical Universal Testing
  - Cryostat Boil-off Calorimetry

# **COMPANY PROFILE**

Kgktape designs, manufactures, and installs Multi-Layer Insulation (MLI) Blankets and associated passive thermal control parts for aerospace and cryogenic applications. Our team of experts is ready to assist you in fulfilling your thermal control needs. We provide a wide array of services that can be matched to your project requirements. From large to small, engineering intensive to build-to-print, we work to create win-win partnerships with our clients. Let us help guide you through the process of completing your project.

## **QUICK FACTS**

- Established in 1999
- 33,000 sf Corporate Headquarters
- > 4,500 sf of Class 10,000/ISO 7 Cleanroom Space
- Workforce Average Tenure >10 Years

# LISTEN. EVALUATE. INNOVATE.

## Our team LISTENS to your needs.

Kgktape has decades of industry experience designing passive thermal control solutions with films, foils, and fabrics for an array of projects. Our background and unparalleled focus on multilayer insulation blanket solutions have made us the trusted source for this type of passive thermal control system. We customize designs and products to meet your specific needs, while collaborating closely with your scientists and engineers to create a smooth and successful project.

## We EVALUATE your requirements.

We are experienced in completing projects that require everything from material selection and testing to design and development and finally manufacturing and installation. Our engineering staff is available to support, test, analyze, and design thermal control products as needed. We review your requirements and analyze potential solutions to not only meet but exceed your product expectations. Our engineering group uses cutting-edge cryogenic research and practical first principle approaches to better design your product.

## We INNOVATE unique solutions for mission success.

The managers, engineers, inspectors, and fabricators at Aerospace Fabrication & Materials have an exceptional record of templating, manufacturing, and installing MLI blankets and thermal control products. Our expertise has been utilized on a variety of spacecraft and cryogenic structures not only across the United States but also internationally. Our track record represents our commitment to innovation in the aerospace industry.

We bring your designs to life through 3D modeling, on-site fit checks, and mold fabrication. Utilizing a variety of CAD software, including AutoCAD, Solidworks, and CREO, we generate patterns that are flattened for manufacturing use. Molds can also be utilized in the design phase to help innovate a finished part solution to minimize heat loss. These molds are crafted from detailed drawings or CAD files. We can service IGES, DWG, DXF, PRT, SLDPRT, and STP formats. These patterns are then brought on-site to ensure a tailored fit. With the verified flat patterns, we fabricate finished part assemblies following our ISO9001/AS9100 certified procedures providing detailed quality assurance data packs. Finally, our team of experienced installation specialists make sure the parts are integrated properly and perform in your intended environment.





