



Case Study

Drone Calibration Target



Summary: Acme Mills partnered with Group 8 Technology, Inc., a leader in drone and satellite imaging, to develop a specialized fabric for drone calibration targets. The goal was to create a high-quality material with an ultra-smooth surface that could be painted without

revealing any weave patterns, ensuring exceptional calibration accuracy for advanced imaging systems.

Project Specifications

- ⚙️ **Material Supplied:** Custom-developed fabric with a meticulously smooth surface, suitable for painting without any weave shadows.
- ⚙️ **Application:** Integrated into drone calibration targets to enhance the precision of drone and satellite imaging systems.
- ⚙️ **Quantity:** Sufficient material provided to produce calibration targets aligning with Group 8 Technology's operational requirements.
- ⚙️ **Delivery Schedule:** Coordinated with Group 8 Technology's timeline to ensure seamless integration into their calibration processes without delays.

Capacity and Scalability

Acme Mills demonstrated the ability to scale production efficiently, accommodating Group 8 Technology's requirements within the agreed timeline. The company's advanced manufacturing capabilities enabled it to handle substantial orders while maintaining stringent quality standards.



Manufacturing Details

MATERIAL SELECTION AND PREPARATION

Leveraged Acme Mills' extensive expertise to select high-quality fibers and develop a fabric with the required smoothness and paint compatibility.



PRODUCTION PROCESS

Weaving: Utilized advanced weaving techniques to achieve the desired surface smoothness and structural integrity.

Surface Treatment: Applied specialized treatments to enhance paint compatibility and ensure no weave patterns are visible.

Customization: Tailored the fabric to specific widths and lengths to meet the design requirements of the calibration targets.



QUALITY CONTROL

Material Testing: Conducted tests to ensure surface smoothness, durability, and paint compatibility met stringent standards.

Visual Inspection: Checked for defects such as uneven surfaces or impurities.

Dimensional Checks: Verified fabric dimensions to match Group 8 Technology's specifications.

Lot Tracking: Implemented batch numbering for traceability and quality assurance.





Uses and Applications

The custom-developed fabric offers several advantages in drone calibration applications:



ENHANCED CALIBRATION ACCURACY

Provides a uniform and smooth surface for calibration targets, ensuring precise readings for high-tech drones and satellite imaging systems.



PAINT COMPATIBILITY

Allows for painting without revealing any underlying weave patterns, maintaining the integrity of calibration targets.



DURABILITY

Engineered to withstand environmental factors, ensuring long-term reliability in various operational conditions.



SCALABILITY

Designed for cost-effective production, facilitating scalability to meet increasing operational demands.

Through the development and integration of a specialized fabric, Acme Mills successfully enhanced Group 8 Technology's drone calibration targets by improving calibration accuracy and reliability. This collaboration underscores Acme Mills' commitment to providing high-performance, customized materials for the aerospace and technology industries, contributing to operational efficiency and setting new industry benchmarks.

Contact Acme Mills

Need assistance in maximizing manufacturing efficiencies to ensure quality and optimize costs? Call or email us today and one of our skilled team members will lead the way. (800) 521-8565 ~ info@acmemills.com