



# HIGH TEMPERATURE Material Solutions

## Longtime Industry Partner

With a legacy dating back to the 1960s, we are committed to supplying, supporting, and developing high-quality materials that advance space launch and exploration programs.

We pioneered the world's first processing site for carbon cloth, and our commitment to developing industry-leading, high-temperature solutions remains today.

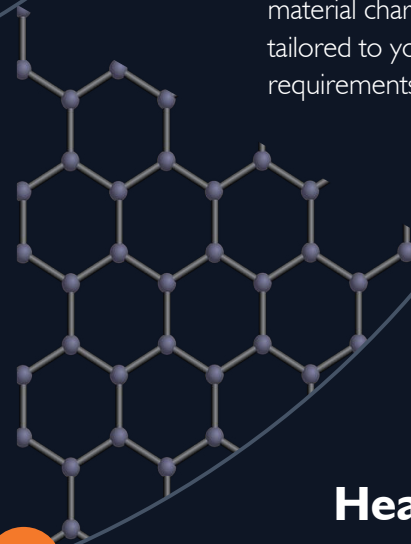
Our extensive processing expertise and deep materials science capabilities enable the development of customized processing designs and comprehensive material characterization tailored to your specific requirements.



## Custom Engineered Solutions

Leveraging a diverse technical team, we deliver solutions that progress seamlessly from concept design through small-scale trials and ultimately to full-scale production.

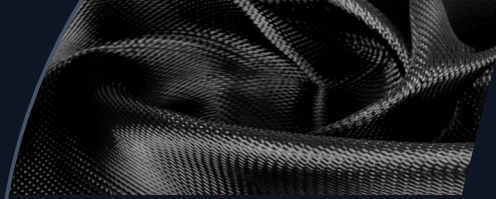
- **Center of Excellence**  
Materials Scientists
- **Manufacturing Sites**  
Development Engineers  
Process Engineers



## Heat Treatment Capabilities

At our core, we are materials scientists specializing in high-temperature heat treatment and advanced material solutions development. Our capabilities encompass both batch and continuous operations within inert atmospheres that enable us to perform controlled carbonization profiles, ultra-high-purity cleaning, and graphitization with process temperatures up to 3200°C.

In-house analytical lab with testing capabilities including carbon assay, electrical resistance, tensile strength, moisture content, specific gravity, ash content, sodium content, and ITGA.



## Carbon and Graphite Cloth and Felt

End-use applications:

- Carbon ablatives
- High-temperature insulation
- Structural reinforcement
- Brake pads

Our carbon and graphite fabrics are processed through world-class heat-treatment equipment to produce a superior material, enabling consistent performance in even the most unforgiving of environments.

Full-service or toll processing of carbon and graphite fabrics:

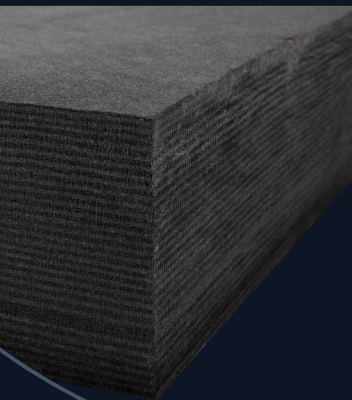
- Rayon fiber precursor
- Polyacrylonitrile (PAN)
- Pitch-based fiber

## Rayon Felted Billets

Developed in partnership with leading industry experts, we produce rayon felted billets used as a carbon ablatives in heat shields.

Our expertise in heat treatment and material handling ensures we produce a consistent, defect-free product. We are equipped to produce billets ranging in size, density, and shape to meet any customer specifications.

High-temperature insulation materials, including rayon-based graphite felt and rigid graphite board, are engineered for extreme thermal environments. These materials provide exceptionally reliable performance in vacuum and high-temperature conditions. Felt offers lightweight, flexible insulation, while rigid graphite board delivers structural stability and precise insulation for critical components. Helping to enable the reliability required for next-generation space exploration and launch systems.



ISO 9001:2015 Certified

# PRODUCT PORTFOLIO

Morgan's ISO graphite components can be precision-machined and enhanced with advanced glassy carbon coatings to provide exceptional purity, durability, and oxidation resistance in demanding aerospace environments. These coatings help minimize particulate generation and contamination, enabling ultra-clean performance in high-temperature and vacuum applications commonly found in aerospace and space exploration systems.

## Isostatic Graphite

