LIMITED DISTRIBUTION

# **Reduced Price Carbon Fiber**

# **Thermal Insulation & Rigid Board Applications**

DATED: 10/17/2011



**CONTENT OWNERS:** 





# Thermal Dominance

PAN fiber is the top performing thermal fiber without requiring any harsh chemical coatings or additives. Carbon fiber's resistance to the most extreme temperatures, coupled with ease of manufacturing, make it the ideal choice for the highest quality thermal products on the market.

# High Temp Insulation

• PAN fibers exhibit very low toxic gas generation in fire, making them ideal for the most critical thermal applications.

# Insulation by Design

• Improved thermal performance is also easily achieved using blends of PAN fiber with existing formulations or by incorporating heat shield layers in products.





Reduced Price Carbon Fiber – Thermal Insulation & Rigid Board Applications

### **Pre-Ox Carbon Fiber Inventory Summary**

#### 62% Carbon Content, Pre-Ox Fiber

- Over 2,400,000 lbs in stock
- 130,000 lbs/month ongoing acquisition

#### **Typical Fiber Properties**

Density	1.37 g/cc
Fiber Diameter	12.5 microns
Denier	1.512 grams
LOI	>40%









6

Reduced Price Carbon Fiber – Thermal Insulation & Rigid Board Applications

### **Production Capacity and Tolerances**

- Acquisition Rate: ~130,000 lbs./month (and Growing)
- 60,000 sf warehouse in Ohio, 100,000 sf of warehouse in NC and SC
- 300,000 lbs/month fiber detangling capacity
- 200,000 lbs/month precision cutting capacity (Facility #1)
- 80,000 lbs/month precision cutting capacity (Facility #2)

Fiber is precision cut to lengths ranging from 1/8" to 6" length. Cuts are available in blends (ex: 2"-3") or precision cut with  $\pm 10\%$  tolerance of customer target length. Fiber crimp also available upon request.





7

Reduced Price Carbon Fiber – Thermal Insulation & Rigid Board Applications

## **CFR Supplier Advantages**

- Discounted pricing
- Certified 'green' product
- Large ongoing supply

# **CFR Corporate Background**

- Aerospace quality fiber
- Retained virgin properties

Carbon Fiber Remanufacturing (CFR) develops alternatives to land filling of post industrial carbon fiber materials. Our carbon fiber is of the highest quality, collected from aerospace manufacturers worldwide.

The fiber recovered in CFR's proprietary process does not undergo any chemical or thermal processing. Our fibers retain 100% virgin properties while collected through a qualified supply chain to maintain product quality.

CFR is a division of AdTech International, Inc. established in 1997, which has developed efficient and desirable solutions to a wide range of excess and surplus assets and materials of industry and commerce.





Reduced Price Carbon Fiber – Thermal Insulation & Rigid Board Applications

### **Contact Information**

CFR / Carbon Fiber Remanufacturing

Division of AdTech International, Inc.

P.O. Box One

215 S. Main Street

Whitewater, KS 67154 USA

Telephone: (316) 799-2166

Fax: (316) 799-2877

Tony Guhr, Director, Program Management

Email: Tguhr@CarbonFiberRemanufacturing.com