

# GFT Graphite Felt

Flexible, conformable and ideal for any high-temperature application

GRAFSHIELD<sup>™</sup> graphite felt is a fibrous insulation material that provides ultra-low thermal conductivity with good oxidation resistance and dimensional stability. It is flexible, conformable and easily cut to shape, making it ideal for any high-temperature application. Also, our offerings include a high-purity grade for the most sensitive environments.





#### Features

- Consistent dimensions and thermal properties roll-to-roll
- Lightweight
- Low dusting
- Conformable
- Low thermal conductivity
- Can be cut with a knife for easy installation or repair
- Thermally stable

#### **Benefits**

- Easy handling
- Easy to maintain a clean environment
- Can be used in any configuration
- Low cost of ownership
- Low energy use
- Stable in working conditions at 3000°C\*

#### **Applications**



Vacuum Furnaces



Directional Solidification System (DSS) Furnaces



Czochralski (CZ) Pullers



Carbon Fiber and **DPF** Furnaces

#### **Typical Properties\* and Grade Comparison**

Characteristic	Unit	GFT-1400	GFT-2200	GFT-2500
Density	g/cm³	0.1	0.070	0.094
Linear Shrinkage	%	Negligible	Negligible	Negligible
Water Absorption	wt %	Negligible	Negligible	Negligible
Minimum Carbon Assay	%	99	99.8	99.9
Ash Content	ppm	700	1500	700
Specific Heat	J/g/ °C	0.72	0.72	0.72
Specific Heat (1400°C)	J/g/ °C	1.7	1.7	1.7
Emissivity	-	0.99	0.99	0.99
Thermal Conductivity (1400°C)	W/mK	0.26	0.44	0.44
Service Temperature	°C	1400	2200	2500

\* Will vary based on operating conditions \*\* Properties listed are typical and cannot be used as accept/reject specifications

\*\*\* Custom sizes available

### **Global Technical Support**

Our global team of Applications Engineers is knowledgeable about graphite and applications spanning multiple industries. These include metallurgical casting, electronics, chemical, nuclear, defense/aerospace, solar, LED, semiconductor, and other high temperature processes.

Regardless of your product design phase (concept, prototyping, or mass production), we offer technical answers to some of your most challenging problems with a fast response time.



#### www.graftech.com | grafshield@graftech.com

United States of America 101 N. Philippi Pike Anmoore, WV 26323-0120 Ph: +1-800-842-8805 +1-304-624-1253

Unit 2104 of International Capital Plaza 1318, Sichuan Road North Hongkou District, Shanghai China Ph: +86-21-6325-8018

lonno, Bres -463-0131

## **Redefining limits**

-33-04-79-41-45-00