



Hua Tan Advanced Carbon Material Technology Co. Ltd. & Jena Flow Batteries GmbH

Graphite Felt

Graphite felts are essential components in various electrochemical applications due to their exceptional electrical properties. In the field of energy storage, they are used as electrode materials in flow batteries. Their porous structure enhances ion exchange and facilitates efficient charge transfer, contributing to improved battery performance and longevity.

Our graphite felt is specifically designed for flow batteries. Its porous structure ensures excellent ion exchange and efficient charge transfer, key factors for boosting battery performance.

The felts are available in a variety of thicknesses to suit your system design.



Features

- ✓ High electrical conductivity
- ✓ Specifically designed for flow batteries
- ✓ Easy to handle and cost-effective
- ✓ Available in multiple thicknesses to meet specific system requirements

Performance Data

Item	Unit	Value
Thickness	mm	2.5
Bulk Density	g cm^{-3}	0.09
Surface Density	g m^{-2}	230
Electrical Resistivity	$\text{m}\Omega \text{ cm}^2$	45
Diagonal Resistance ($10 \times 10 \text{ cm}^2$)	Ω	0.8
Carbon Content	%	≥ 99.9
Hydrophilicity	-	Complete Infiltration
Fiber detachment rate	%	0.2
Fiber Diameter	μm	10
Ash Content	ppm	≤ 100
Metal Traces	ppm	≤ 50
Electrochemical activity		
CE (160 mA cm^{-2})	%	≥ 95
EE (160 mA cm^{-2})	%	≥ 83
VE (160 mA cm^{-2})	%	≥ 86