



Suqian Time Energy Storage Co., Ltd.
& Jena Flow Batteries GmbH

Composite Bipolar Plate



Features

- ✓ Low electrical resistance
- ✓ High mechanical strength and flexibility
- ✓ Over 1,000,000 m² of annual production capacity
- ✓ Available in various dimensions and thicknesses, with custom options available

ZKSD-CBP-600

Bipolar plates are a crucial component in electrochemical devices, particularly in flow batteries. They serve multiple essential functions, such as providing structural support, enabling the distribution of reactant fluids, and facilitating the collection and conduction of electrical current. In flow batteries, they separate the positive and negative electrolytes while allowing the flow of charge carriers, thus enabling efficient energy storage and conversion.

The ZKSD-CBP-600 bipolar plate is specifically designed for redox flow batteries. It has characteristics such as low resistance and high stability. The second-generation material is even more flexible and shows a higher mechanical strength than the first generation. For fast processing, the plates can be welded.

Performance Data

Item	Unit	Value
Polymer Type	-	PP, POE
Polymer Content	%	39%
Thickness	mm	1.0 ± 0.05
Length Deviation	mm	0 ± 0.5
Bulk Resistance	mΩ cm	≤77
Contact Resistance	mΩ cm ²	≤45
Tensile Strength	MPa	≥22
Flexural Strength	MPa	≥25
Density	g cm ⁻³	1.3