Eata Battery

Porous Titanium Plate (Sintered)

Catlog Number: FCSM-0083

Description

Sintered porous titanium plate used as a liquid-gas diffusion layer in PEM electrolyzers, providing high structural strength and low ohmic loss.

Basic Information

Material Composition: Pure Titanium

Thickness (μm): 1000

Density (g/cm³): 2.85

Surface Resistance (mΩ·cm²): < 8

Tensile Strength (MPa): 150

Thermal Conductivity (W/m·K): 18

Porosity (%): 45

Operating Temp Max (°C): 450

Flexural Strength (MPa): 220

Corrosion Resistance (μA/cm²): < 0.5

Contact Angle (°): 35

Gas Permeability (cm³/cm²·s): 85

Coefficient of Thermal Expansion (10^{-6}/K): 8.6

Shore Hardness: 160 (HV)

Mean Pore Size (μm): 15

Compressive Strength (MPa): 180

Electrical Conductivity (S/cm): $1.5x10^4$

Specific Surface Area (m²/g): N/A

Young's Modulus (GPa): 105

Chemical Stability: Excellent

Coating Material: Optional Pt/Ir

Surface Roughness (Ra): 2.5

Eata Battery delivers the world's battery makers a single, reliable source for every high-performance raw material—cathode to collector, catalyst to membrane—so you can design, scale and ship next-generation batteries faster.

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