Eata Battery

Pt-Coated Titanium Mesh Electrode

Catlog Number: FCSM-0051

Description

Structural titanium mesh with a platinum electroplated layer, providing high catalytic activity and structural support for PEM water electrolyzers.

Basic Information

Material Composition: Titanium / Pt Coating

Thickness (μm): 500

Density (g/cm³): 4.51

Surface Resistance (mΩ·cm²): < 2

Tensile Strength (MPa): 350

Thermal Conductivity (W/m·K): 16

Porosity (%): 55

Operating Temp Max (°C): 450

Flexural Strength (MPa): N/A

Corrosion Resistance (μA/cm²): < 0.1

Contact Angle (°): 15

Gas Permeability (cm³/cm²·s): 350

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

Shore Hardness: 140 (HV)

Mean Pore Size (μm): 500

Compressive Strength (MPa): 220

Electrical Conductivity (S/cm): $2.5x10^4$

Specific Surface Area (m²/g): 10 (Coating)

Young's Modulus (GPa): 105

Chemical Stability: Excellent

Coating Material: 2.5μm Platinum

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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