Eata Battery

Inconel 625 Expanded Metal Flow Field

Catlog Number: FCSM-0092

Description

High-temperature nickel-chromium alloy expanded metal designed for structural flow fields in SOFC and regenerative fuel cell stacks.

Basic Information

Material Composition: Inconel 625 Alloy

Thickness (μm): 400

Density (g/cm³): 8.44

Surface Resistance (mΩ·cm²): < 15

Tensile Strength (MPa): 760

Thermal Conductivity (W/m·K): 9.8

Porosity (%): 65

Operating Temp Max (°C): 980

Flexural Strength (MPa): N/A

Corrosion Resistance (μA/cm²): Excellent

Contact Angle (°): 75

Gas Permeability (cm³/cm²·s): 450

Coefficient of Thermal Expansion (10^{-6}/K): 12.8

Shore Hardness: 200 (HB)

Mean Pore Size (μm): 350

Compressive Strength (MPa): 400

Electrical Conductivity (S/cm): $0.85x10^{4}$

Specific Surface Area (m²/g): N/A

Young's Modulus (GPa): 207

Chemical Stability: Oxidation Res

Coating Material: None

Surface Roughness (Ra): 1.5

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.

Tel: 1-631-637-0420 | 1-631-533-0595
Email: info@eataray.com
Suite 103, 17 Ramsey Road, Shirley, NY 11967, USA