

Decarbonization – Hythin™ Gold



Thin film PVD coating for PEM fuel cells and electrolyzers

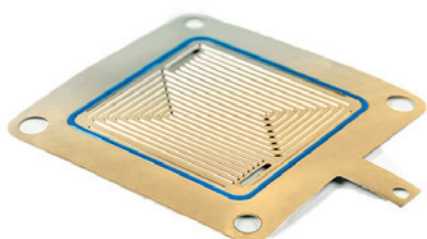
Hythin™ Gold is a thin film PVD coating developed for highly conductive and corrosion-resistant surfaces in hydrogen and decarbonization systems. The coating provides reliable electrical performance and surface protection for metallic bipolar plates, end plates and current collectors.

Hythin™ Gold is designed for demanding operating conditions in PEM fuel cells, electrolyzers, medical instruments, aerospace components, and electrical contacts. The coating achieves very low interfacial contact resistance while maintaining stable conductive performance in highly corrosive environments.

Performance

Hythin™ Gold is engineered for applications where conductivity, contact stability and corrosion resistance are critical for system efficiency. The noble metal coating supports reliable electrical contact across metallic interfaces exposed to humid and aggressive operating environments.

The thin film architecture enables precise surface coverage without affecting component geometry or dimensional tolerances. Its stable conductive behavior contributes to efficient energy transfer and long operational lifetimes in PEM-based hydrogen systems.



Technical Data

Material	Au
Technology	PVD (Sputtering)
Thickness range	10–200 nm
Process temperature	< 200 °C
Color	Metallic gold
Application reference	Highly conductive and corrosion-resistant surfaces for PEM fuel cells and electrolyzers
Lifetime potential	25.000+ hours

The values given are approximations and may vary depending on the application, environmental factors and test protocols.