

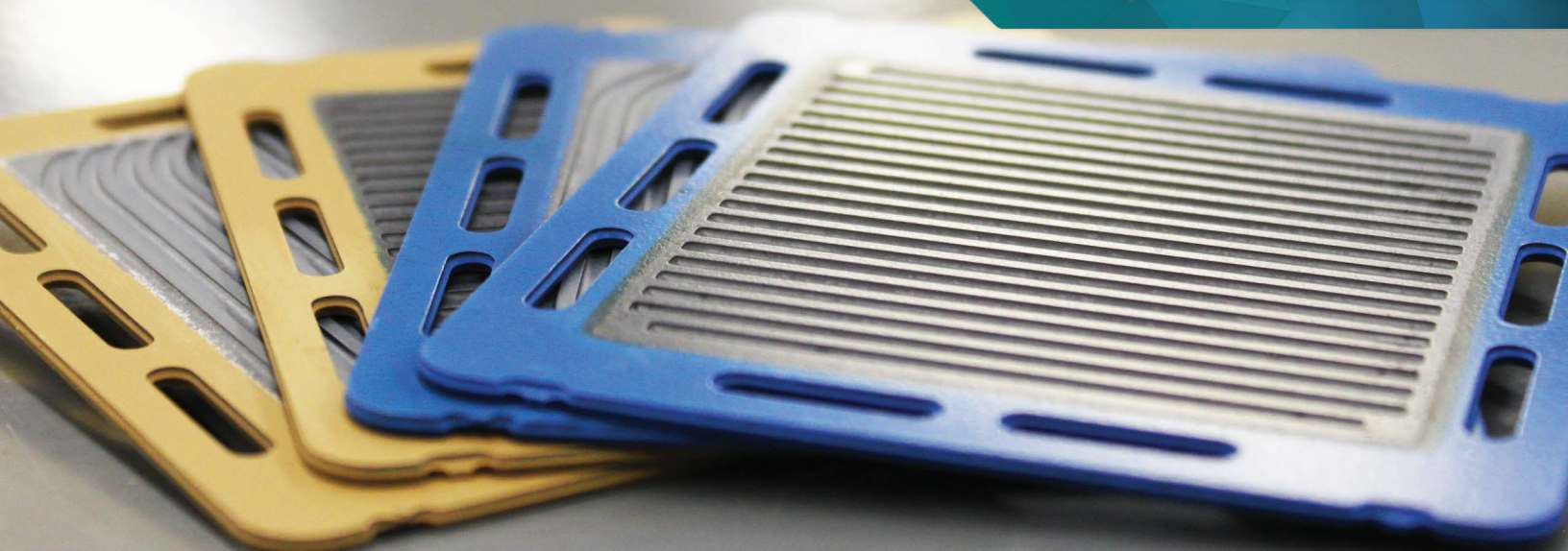
Coatings

Protection for Metallic Interconnects



fuelcellmaterials.com
PERFORMANCE AND QUALITY DELIVERED

Proven Reliability
Coatings for All Areas
Prototype to Manufacturing



Chromlok™ System

fuelcellmaterials' innovative Chromlok™ system provides metallic components used in solid-oxide fuel cell systems with the high-temperature protection they need. The Chromlok™ system includes a range of complementary oxide coatings that prevent the release of detrimental chromium species from stainless steels during high temperature operation.

Coatings include a manganese cobaltite (MCO) coating, which combines excellent protection with low resistance, ideal for the cathode active-area where electrical conductivity is critical. Additional coatings include non-active, insulating coatings compatible with common seal materials and a Ni-based anode side coating.

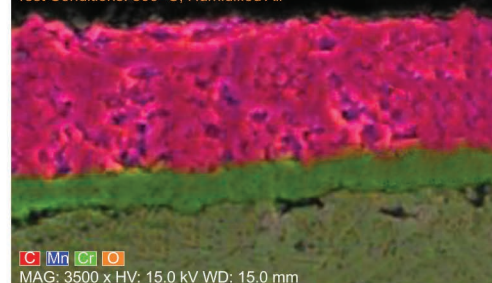
Proven Results

This coating technology has been proven over thousands of hours of testing and over 10,000 coated parts have already been delivered to the field. This success can be attributed to the high performance, service, and quality standards we have established. These standards enable us to produce the best interconnect coatings on the market with the highest level of customer service.

When working with **fuelcellmaterials**, you will have access to our state-of-the-art facility and our dedicated team of material scientists who can work with you to customize the coatings to your unique specifications.

MCO Coating After Operation

Test Conditions: 800 °C, Humidified Air



Alumi-Lok™

fuelcellmaterials offers an aluminization coating to protect the non-active area of the interconnects and critical Balance of Plant parts from the effects of high temperature corrosion. This coating is designed to be processed at the same time as the other coatings on the interconnect, ensuring an economical solution is maintained.

Our coatings provide the stability, reliability and performance needed for your demanding applications.

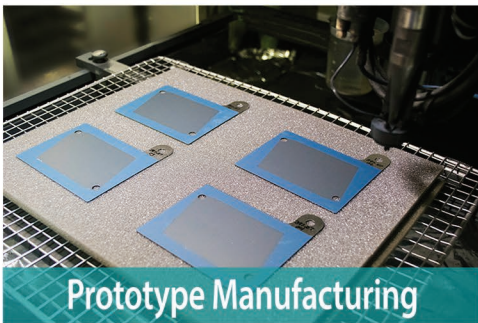
MCO protects the active area of the interconnect

Optional Ni-based protective coating for anode compatibility

Alumi-Lok™ coating prevents interaction with seal materials

Economical co-processing options available

Customizable coating specifications



Prototype Manufacturing

- Interconnect coating to your specifications
- Prototype batches for process validation and stack tests
- Parts are coated by fuelcellmaterials' dedicated coating team



Manufacturing Scale-Up

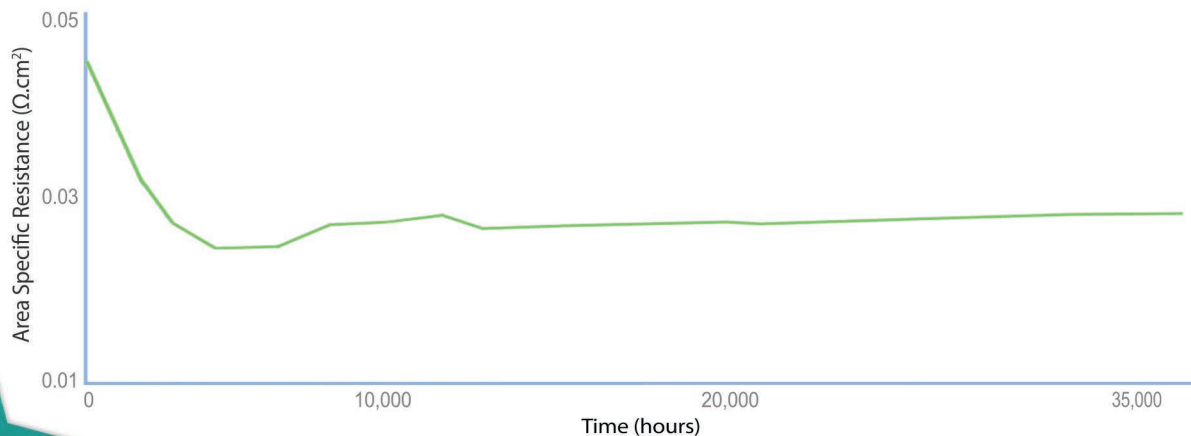
- Contract coating batches for intermediate quantities
- Early stage manufacturing to your specifications using fuelcellmaterials' established production line
- Significant cost reductions for volume orders available



High Volume Manufacturing

- License product and transfer technology
- Easily incorporate our technology into your own manufacturing system
- Materials supply agreements to ensure all your needs are met

Long Term Electrical Performance of MCO Coated Ferritic Stainless Steel



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