

Durability When You Need It

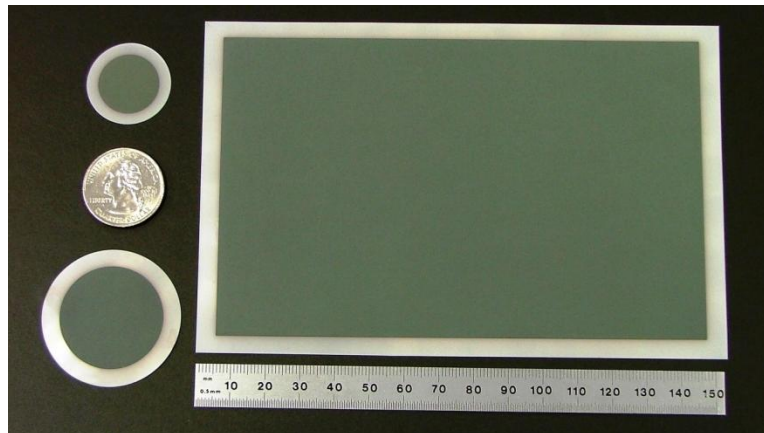
Thin ESC™

ThinESC™ fuel cells for Solid Oxide Fuel Cell technology allows for the commercialization of electrolyte-supported, thin profile fuel cells with robust structure and incredible tolerance to thermal shock, best suited for fuel cell stack designs.



The technology enables the fabrication of thin and flexible electrolyte-supported sheets providing extreme durability in a solid oxide fuel cell stack system. This thin, self-supported ceramic sheet is based on 3mol% Ytria Stabilized Zirconia (3YSZ).

- High inherent strength (>1GPa) and high toughness
- High thermal shock tolerance through flexible stress relief
- Thermal cycling capability of 2000 hours accumulated operating time
- Electrolyte thickness 45 µm or less; ≤65µm with anode, cathode coatings
- Maximum width of 146 mm



ENrG Inc.™ Takes Ideas to Reality

As a developer and manufacturer of critical ceramic components for diverse energy applications, ENrG Inc. is a technology leader in the **Power Generation, System Management and Environmental Control** industry segments.

Starting with our Thin E-Strate™ substrate material as the building block we have developed ThinESC™, a highly durable and flexible membrane integral to commercializing fuel cell systems. HEXIM™ provides insulation, a thermal transport mechanism and air manifolds in integrated packaging solutions. Separation membranes aid in the capture of CO₂, transport ions and remove contamination for improved environmental control.

Learn more about how ENrG Inc. can help you take ideas to reality.

For more information contact:

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