



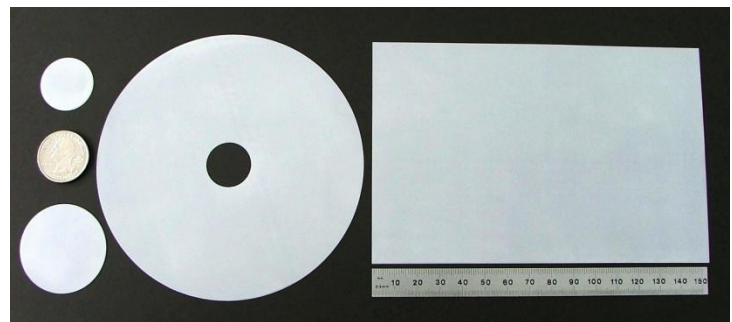
Durability Where You Need It

Thin E-Strate™

Thin E-Strate™ technology provides the basis for producing thin, flexible ceramic substrates. The density, high strength and chemically inert properties of the fired material result in gas tight membranes that are excellent choices for severe environment and/or high temperature applications.

The physical properties of Thin E-Strate™ include:

- Inherent strength (>1GPa) and high toughness
- Flexible stress relief provides high thermal shock tolerance
- Thermal cycling capability of 2000 hours accumulated operating time
- Available in widths up to 146 mm



3mol% Ytria Stabilized Zirconia (3YSZ) provides the building block for manufacturing thin ceramic sheets that are ideal candidates for oxygen separation, electrolyte-supported Solid Oxide Fuel Cells, electrolysis, pressure sensor and other sensor applications. Other applications will benefit from the ionic conductivity, superior mechanical properties and low thermal mass of Thin E-Strate™.

Functional coatings are applied using thick film, thin film, spraying, direct writing or other standard deposition methods. ENrG Inc. has the in-house capability of screen printing up to 60 mm wide patterns that have a print uniformity of 1 micron.

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.

Contact ENrG Inc. to learn how we can assist you in bringing your ideas to reality.

For more information contact:

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