

Test Fixtures

Fixtures, Furnaces, and Test Kits



fuelcellmaterials.com
PERFORMANCE AND QUALITY DELIVERED

Industry Standards
Trusted Results
Turnkey Testing

Planar Cell Test Manifold Kits

fuelcellmaterials offers three different planar cell test manifold platforms for large electrolyte or anode supported SOFC testing. All kits offer a highly effective solution for testing of individual planar solid oxide fuel cells. Each kit contains all items necessary to run five tests using our NextCells. The kits have been designed for both long and short term experiments to measure properties such as fuel utilization, thermal gradients, red-ox cycling and longevity/degradation. These kits will accelerate your research and development activities.

Furnace for Planar Test Fixtures

A custom designed furnace is available

to work with the compression seals provided with our planar SOFC test fixtures. The furnace has an adjustable mechanical loading system to apply the appropriate load for testing your samples. The compression system will deliver a gas tight seal for your fuel cell testing!

SOFC Planar Test System

fuelcellmaterials offers an integrated, turnkey solid oxide fuel cell system for the researcher ready to move beyond button cell testing. Included is your choice of manifold kits along with a customized furnace and test stand. This complete system will allow you to focus on your SOFC research and not on creating the equipment needed for your experiments.



Complete Button Cell Testing

fuelcellmaterials offers an integrated, turnkey solid oxide fuel cell system. Included are the ProboStat™ test fixture (shown on the back), an integrated furnace, and a test stand. This complete system saves you time and is versatile for many applications.

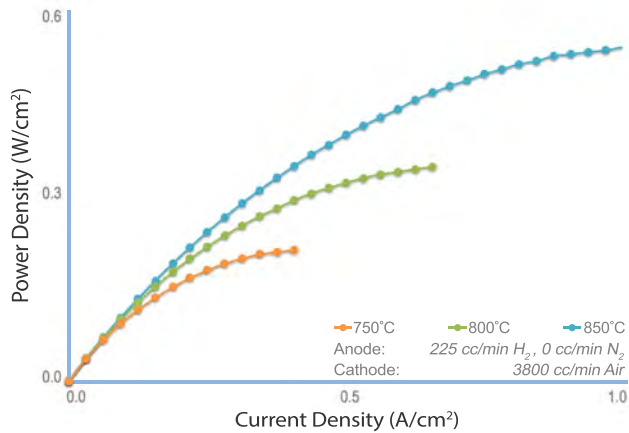
Robust testing equipment to expedite your research.

The ProboStat™ is a cell and sample fixture for measurements of electrical and electrochemical properties, transport parameters, and kinetics of materials, solid/gas interfaces and electrodes under controlled atmospheres at temperatures up to 1600 °C.

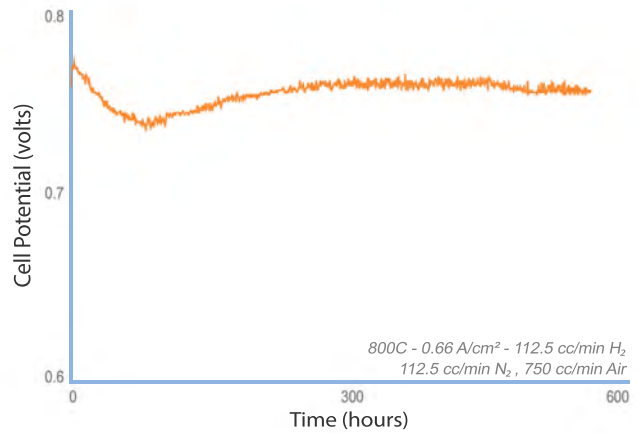
- Cost effective and industry proven alternative to developing and building your own test fixture, for repeatable and reproducible results
- Our knowledgeable technical support team is available to assist with basic setup and complex testing through video conferencing and on-site training
- Easily integrate the stand-alone unit into your existing equipment or in conjunction with a complete test station unit
- All ProboStat™ products come with complimentary NextCells and YSZ substrates for setup and testing practice



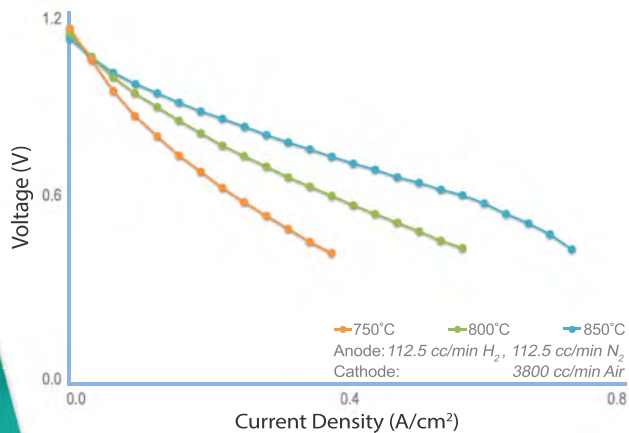
Hydrogen Power Curves



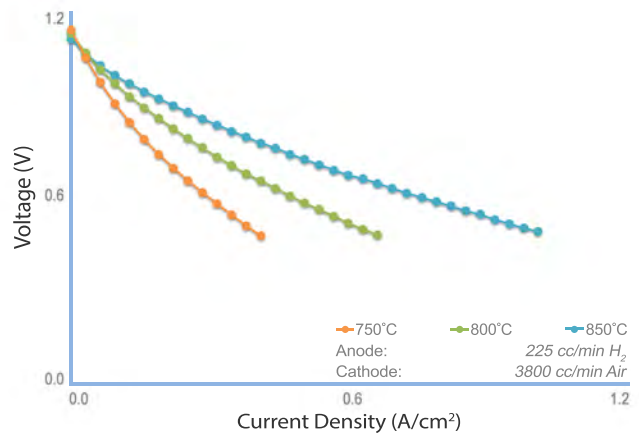
Long Term Stability Test



Polarization Curve - Half Fuel Flow



Polarization Curve - High Fuel Flow



The values reported on this data sheet are to be considered typical and do not imply essential representation of the product specification. The information contained herein is believed to be accurate and reliable but is presented without guarantee or implied warranty of merchantability or fitness. Further, nothing presented herein should be interpreted as an authorization or inducement to infringe any relevant patent. Under no circumstances shall this company be liable for direct, incidental, consequential or other damages regardless of legal theory, arising out of the use or handling of the product or products referred to herein. The sole remedy of the buyer for any claims shall be limited to the buyer's purchase price. Technical advice is accepted at the buyer's risk and is not a warranty.



fuelcellmaterials.com

404 ENTERPRISE DRIVE P: 614-635-2025
LEWIS CENTER, OH 43035 F: 614-842-6607

sales@fuelcellmaterials.com