Fuel Cell Hot Test Station
Stand-Alone Hydrogen Fuel Cell Hot Tester

- Hydrogen flow measurement
- Liquid coolant module
- Electronic load bank, back-to-grid
- Data acquisition
- CANBUS Integration with FCE controller
- Auxiliary power supply system
- 24/7 unattended operation with Emerald™ control and automation software
- Optional integrated environmental chambers
- CE certification including optional 3rd party verification
- Complete integration with facility safety systems
- Optional support with facility design / integration
- Test compliance to standards, including GB/T 24554 - 2009 and GB/T 29126 - 2012
Features

The Fuel Cell Engine Hot Tester features an open architecture design with numerous available options.

Emerald™: Our flexible control software features a user-friendly interface, and is enhanced with our proprietary automation capability. The flexible Emerald™ scripting language allows complex script assembly within minutes for all types of users; from novices to experts.

Specifications

<table>
<thead>
<tr>
<th>APPROXIMATE POWER RANGE</th>
<th>0.5 - 100+ kW</th>
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<tbody>
<tr>
<td>GAS FLOWS</td>
<td></td>
</tr>
<tr>
<td>Standard anode flow range</td>
<td>customer definable (100:1 turndown MFC’s)</td>
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<tr>
<td>Cathode flow range</td>
<td>not measured or controlled</td>
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<tr>
<td>GAS CONDITIONING</td>
<td></td>
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<tr>
<td>Gas saturation control</td>
<td>various technologies available, depending on application</td>
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<tr>
<td>Gas pre-heating</td>
<td>various technologies available, inc. exhaust heat reclamation</td>
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<tr>
<td>TEST ARTICLE INTERFACE</td>
<td></td>
</tr>
<tr>
<td>CANbus interface, 24V and 12V power supplies for system ancillaries</td>
<td></td>
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<tr>
<td>LOAD BANK</td>
<td>Various configurations available inc. resistive and back-to-grid</td>
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<tr>
<td>DIMENSIONS</td>
<td>(L x W x H) (approximate) 2.2m x 1.8m x 2.2m</td>
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</tbody>
</table>

Includes 3 levels of safety:

1. Hard-wired interlocks
2. Factory software interlocks
3. User-configurable software interlocks (warning high/low alarms and shut-down high/low alarms)
   - Safety gas purge
   - H₂ sensor
   - Manual emergency stop
   - Customizable software state model
   - Safety PLC

PERFORMANCE COMMITMENT:
At Greenlight, we pride ourselves on making the world’s best fuel cell testing equipment. We are committed to your satisfaction and we will do whatever it takes to meet or exceed your expectations.

Emerald™ Process Screen

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