

Modular SOFC test bench MHT100

MHT100 test bench is designed to test operation of short SOFC stacks (up to 100W of electrical power). It is equipped with all the functionality needed to start-up the stack, control its operation, as well as monitor operating parameters and acquire cell voltage, current and temperature data.

Test station can be used in electrochemical tests, long-term degradation tests and alternative fuel supply tests.

The most important feature of the station is its modularity.

The individual assemblies (control, fuel metering, data acquisition, etc.) working together in the device are not mechanically integrated in the enclosure space, but are separately built-in modules that can be configured with each other depending on the needs of the station user.

- water supply system for the evaporator (reforming or electrolysis)
- gas supply system for the stack
- electrical load module
- heater and temperature control module
- station control module with software
- temperature, voltage, current data acquisition
- reagent flow control (available with mass flow controllers) with control panel
- connection panels for integration of modules - one socket standard



With appropriate module configurations at the station, it is possible to test stacks on hydrogen or methane-fueled cells in internal reforming mode.

Customization

Test bench configuration is determined after prior consultation with the customer.