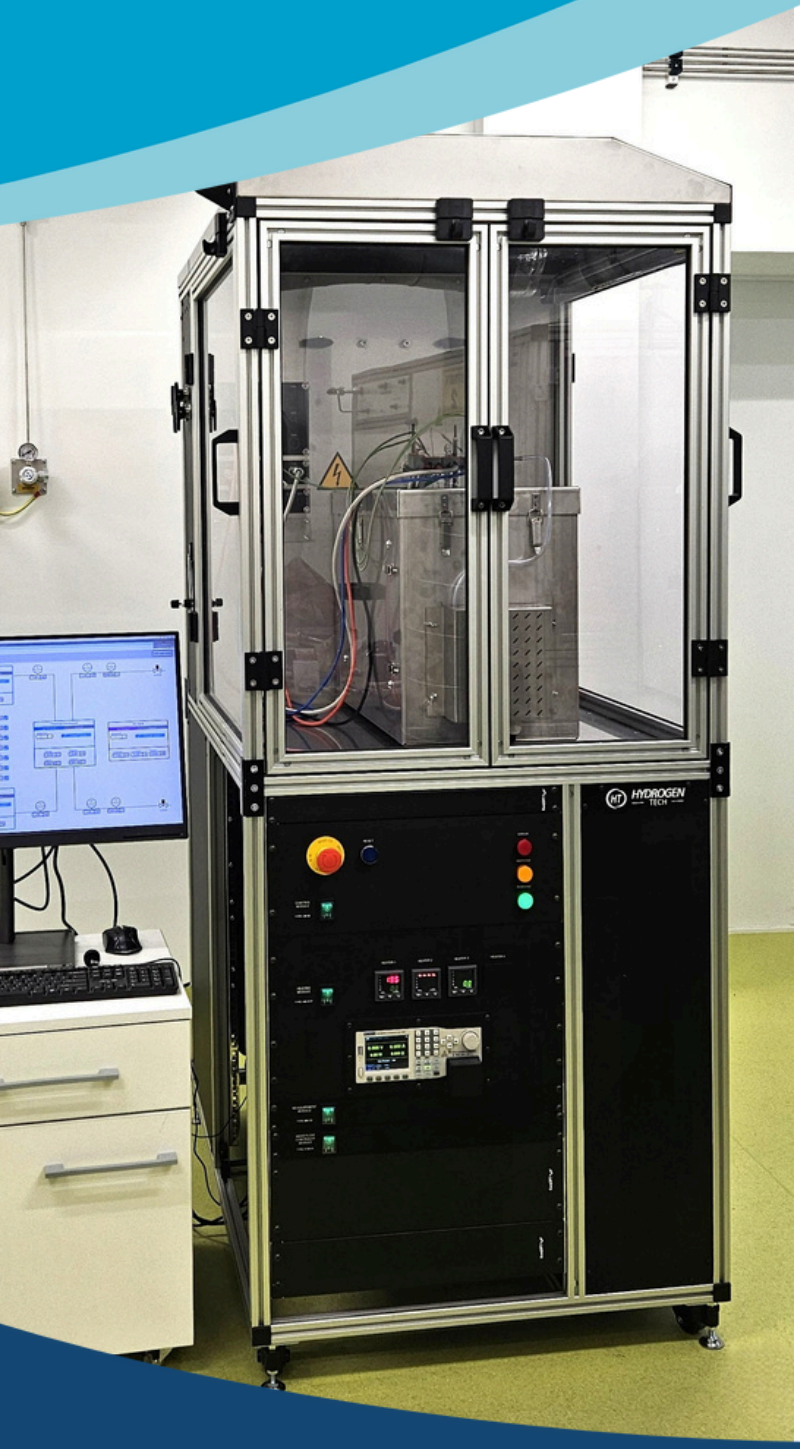
SOFC TEST BENCH
MHT100

HYDROGEN TECH
your solid future



Complete testing station for SOFC operation and measurement with optional SOEC features

- suitable for planar solid oxide cells and DSC (double-sided cells)
- programmable electronic load 0-20 V/0-25 A/0-100 W
- operation in CC/CV/CR/CP modes
- software with intuitive, user-friendly GUI for test operation and monitoring
- management of reagent flow by mass flow controlers
- controlling furnace and gas preheaters temperature up to 900 °C (3 channels)
- plug&play system with simple setup
- compatible with various furnace designs
- safety features including gas detection and alarm conditions, automatic safety shutdown and inert gas purge

Configuration can be customized to meet the specific requirements of the customer

Available with complete 100W SOFC DFC module

Optional add-ons for SOEC/SOFC testing

Programmable power supply 0-200 V/0-25 A/0-1,5 kW

Electrolysis products composition analyzer

Electrochemical impedance spectroscopy module 0-60V, +/- 49A, EIS up to 10 kHz

Steam generator

Technical data*

Fuel flow	0...5 Nl/min
Inert gas flow	0...5 Nl/min
Oxidant gas flow	0...50 Nl/min
Gas supply pressure	3-6 bar
Operating temperatures	0...900 °C, thermocouple type K/S
Supply voltage	230 VAC/~50Hz
Maximum power	3,2 kW @ 230 VAC
Electronic load	0-20 V/0-25 A/0-100 W resolution 1 mV/1 mA
Maximum stack power	100 W
Cell voltage monitoring	14 channels
Temperature monitoring	5 channels
Data acquisition	Embedded computer with SQL data base
Safety features	Emergency stop, alarming system, hydrogen sensors, ventilation airflow sensor, automatic emergency shutdown, safety gas purge on fuel line, emergency air line
Optional	Reversible load for electrolysis and fuel cell mode, embedded leakage test, UPS, EIS module 100 W SOFC DFC stack in hot box furnace with gas, CVM, and electrical connectors

The MHT100 is tailored for universities and R&D labs involved in fuel cell research, and stack developers performing testing on fuel cell generators and electrolysis.

This test station is ideal for screening materials and components, optimizing production processes, evaluating durability, and conducting endurance tests on small SOFC and SOEC stacks.

CE conformity marking according to

EMC directive 2014/30/EU
Low voltage directive 2014/35/EU

Risk assessment according to

ATEX directive 2014/35/EU
Machinery directive 2006/42/WE

FIND OUT MORE

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