DG 40 010

Conditioning & functional test bench for fuel cell stacks up to 150kW

DAM GROUP

DAM
DACTEM DÉVELOPPEMENT
DAM Shanghai

Overview

To support the hydrogen industry ramp up production rapidly, DAM Group has developed a range of benches including a new conditioning method.

From 0 to 150kW

Test application:

AERO | AUTOMOTIVE | H FUEL CELL

- For R&D/production
- Scalable and Integrable
- DAM Data Management

Key Features

- Stack conditioning
- End of line fuel cell test
- Optimized loading and connections/fittings
- Passive or active humidification (0-100%)
- Stack and gas temperature regulation
- Monitoring the voltage of bipolar plates

Benefits

- Cycle time reduction
- Conditioning of the different ranges of stacks
- Optimised form factor
- DAM Data Management (database storage)
- Intuitive interface
- Load re-injection
- Industry 4.0

STACK CONDITIONNING

OPTIMIZED CYCLE TIME

OPTIMIZED DESIGN

READY FOR HYDROGEN

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Technical Data

Measurement

Current/voltage measurement	Conductivity measurement
Hydrometric measurement	
Pressure/flow measurement :	gaz/water

Software & Safety

DAM DataManagement	Configurable sequence
TestAvenue	
Hydrogen presence sensor	Configurable sequence

Stack Testing

Power range	**Up to 10kW**	**Up to 50kW**	**Up to 150 kW**
Standard anode flow range	up to 300 Nl/min	up to 700 Nl/min	up to 4000 Nl/min
Standard cathode flow range	up to 600 Nl/min	up to 2600 Nl/min	up to 10000 Nl/min
Stack cooling (deionised water)	25°C to 90 °C	25°C to 90°C	25°C to 90°C
Load	regenerative system	regenerative system	regeneretive system
Back-pressure	0.05 to 5 barg	0.05 to 5 barg	0.05 to 5 barg
Dimensions L x W x H	2700 x 1600 x 2200 mm	2900 x 1600 x 2200 mm	6000 x 1800 x 2200 mm
Voltage	up to 2 V per cell	up to 2 V per cell	up to 2 V per cell
Current	0 to 1000 A	0 to 1000 A	0 to 1000 A

Options

- Custom spec & stack power range > 150 kW on request
- Passive or active humidifier
- Universal Cell Voltage Monitoring
- Climatic chamber
- Automatic clamping

Services

- Maintenance
- Annual calibration
- Remote control

More Info ? A Demo ? → **CONTACT US !**

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