

DG 40 010

Conditioning & functional test bench for stacks up to 120 kW



Overview

With a view to helping the hydrogen industry rapidly ramp up production, DAM Group has developed a range of benches including a new conditioning method.

From 0 to 120 kW (>120 kW on request).



Test application:

AERO | AUTOMOTIVE | FUEL CELL



- Evolutive Tooling
- Scalable and Integrable
- DAM Data Management

Key Features

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

Benefits

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



STACK CONDITIONING



OPTIMIZED CYCLE TIME



DESIGN OPTIMIZED



READY FOR HYDROGEN

DG 40 010

Conditioning & functional test bench for H2 components



Technical Data

Measurement

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

Stack Testing

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

Software & Safety

DAM DataManagement	Configurable sequence
TestAvenue	
Hydrogen presence sensor	Configurable sequence

-

Up to 50kW	Up to 120 kW
up to 700 NI/min	up to 2200 NI/min
up to 2600 NI/min	up to 8000 NI/min
25°C to 90°C	25°C to 90°C
regenerative system	regenerative system
0.05 to 5 barg	0.05 to 5 barg
2900 x 1600 x 2200 mm	6000 x 1800 x 2200 mm
up to 2 V per cell	up to 2 V per cell
0 to 1000 A	0 to 1000 A

Options

- Custom spec & stack power range > 120 kW on request
- Active humidifier
- Universal Cell Voltage Monitoring
- Climatic chamber
- Automatic clamping

Services

- Maintenance
- Annual calibration
- Remote control

More Info ? A Demo ?



CONTACT US !



dam@dam.fr



+33 4 78 26 95 83

DAM GROUP - 200, RUE LEON BLUM - 69100 VILLEURBANNE - FRANCE