PRODUCT DATASHEET

Hydrogen Supply Skid for Fuel-Cell Backup Power

Cylinder manifolds, changeover and regulation for backup fuel cells

Product page





Close-up: changeover panel and regulators

OVERVIEW

The Tech Inc. Hydrogen Supply Skid for Fuel-Cell Backup Power feeds hydrogen to fuel-cell backup systems at telecom towers, data centres and critical sites. Cylinders or bundles connect to a manifold with automatic changeover, the gas is filtered and reduced to the fuel cell's inlet pressure, and sensors report the remaining stock so refills are booked before the backup is needed.

TYPICAL DESIGN DATA

Inlet pressure	200 or 300 bar cylinders or bundles
Outlet pressure	Set to the fuel-cell maker's inlet requirement
Materials	316 stainless steel tubing and fittings suitable for hydrogen
Safety	Excess-flow valves, relief to vent stack, hydrogen detection and ventilation
Monitoring	Stock pressure and alarms to the site management system
Design code	ASME B31.12 for hydrogen piping

MODELS AND CAPACITIES

- **TI-HFB-5** – fuel cells up to about 5 kW
- **TI-HFB-100** – up to about 100 kW
- **TI-HFB-20** – up to about 20 kW
- **TI-HFB-C** – containerised, sized to the site

Indicative hydrogen delivery to the fuel cell.

ORDERING CODE

Example **TI-HFB-20-B-E**: **20** fuel-cell size served, kW; **B** supply: C cylinders, B bundles; **E** housing: E outdoor enclosure, K container, O open frame.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: containerised supply; bundle handling frame; hydrogen generator and compressor for on-site refilling; remote monitoring by SMS or SCADA; spare pigtails.

KEY ADVANTAGES

- **Always ready** – automatic duty and reserve changeover
- **Known stock** – remote pressure monitoring
- **Safe** – excess-flow valves, venting and detection
- **Outdoor-ready** – weatherproof ventilated enclosure

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