

Ground Storage Modules

High-pressure fuel storage modules maximize hydrogen availability in the industry's smallest footprint.

Ground storage modules produced by BayoTech® are ideal for long-term bulk hydrogen storage. High-pressure, high-capacity cylinders are rack mounted in secure storage pods. The number of cylinders can be increased over time, to match growing hydrogen demand. The compact container footprint makes for a flexible hydrogen storage option, suitable to support fuel cell vehicle refueling stations, backup power at critical infrastructure sites or on-site hydrogen production.

Unlike liquid hydrogen storage, there is no concern of the vaporization of the hydrogen supply. A transducer-based telemetry system remotely monitors the location and pressure of the module, eliminating the need for routine maintenance visits.

Cylinders are fitted with a proprietary 1/4-turn valve with an integrated, CG-10 thermal relief device which permits evacuation of the cylinder contents within 90 seconds after actuation regardless of the cylinder pressure. The proprietary valves allow for easy opening and closing while providing the operator an easy visual indicator of the valves condition.

Best in class safety features include thermally-activated pressure relief devices, welded manifold connections for leak prevention and rapidly venting cylinders.

FEATURES

- » Lightweight, high-capacity Type III cylinders (non-permeable, aluminum liner wrapped in carbon fiber)
- » Rack-mount, cylinder-based system is modular to scale with demand
- » Compact footprint
- » Industry-leading safety features
- » Transducer-based telemetry system for remote monitoring

APPLICATIONS

Hydrogen storage for:

- » Fuel cell backup power at critical infrastructure sites
- » Fuel cell vehicle refueling stations
- » Hydrogen production sites
- » Renewable energy micro-grid sites with electrolysis

Ground Storage Modules	GSM30-250	GSM60-350	GSM520
Working Pressure	250 bar / 3,600 psig	350 bar / 5,000 psig	520 bar / 7,500 psig
Cylinder Water Volume	275 liters / 9.72 scf	275 liters / 9.72 scf	315 liters / 11.1 scf
# of Cylinders	30	60	25
Total water volume	8,250 liters / 291.6 scf	16,500 liters / 583 scf	7,875 liters / 287.1 scf
Hydrogen capacity	146 kgs / 61,826 scf	385 kgs / 162,739 scf	251 kgs / 105,847 scf
Tare weight (lbs)	13,000	29,600	16,720
Gross weight (lbs)	13,350	30,600	17,000
Pod/Unit Dimensions (L x W x H)	118" x 96" x 104"	240" x 102" x 114"	129" x 102" x 96"

Footnotes

*Other options may be available depending on your use case, please reach out to us to determine the best product for your application.

*Bayotech Ground Storage MUST be AHJ approved and permitting/approval may vary depending on location.

FOR MORE INFORMATION, OR TO CONTACT US,
PLEASE VISIT WWW.BAYOTECH.US