

POWER TAP™

Hydrogen Station

Nuvera Fuel Cells, Inc., has developed a hydrogen station to provide fast and easy refueling of compressed hydrogen gas. Its modular design allows the system to be scaled to any application, focused initially on fuel-cell-powered material-handling equipment. Refueling is straightforward and can be performed by operators themselves. The PowerTap Hydrogen Station provides a simple and cost-effective fueling solution for fuel-cell-powered material-handling equipment – whether paired with the PowerTap Hydrogen Generator or another source of hydrogen.



Product Features

Fast and Easy Refueling

Refueling takes 60–120 seconds*

Cost-Effective

Simple and cost-effective fueling for fuel-cell-powered material-handling equipment

Safe and Proven Design

Designed to meet NFPA, CSA and SAE standards, including automatic shutoff and breakaway hose assembly

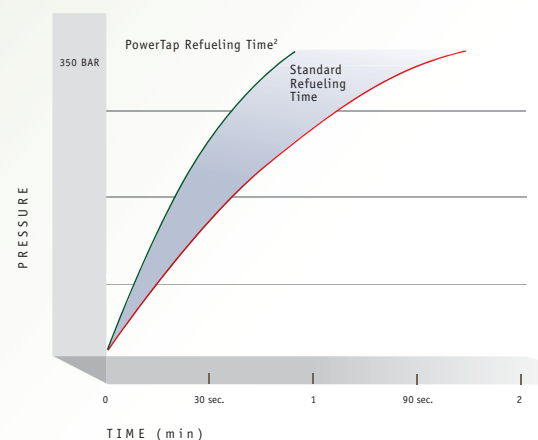
Indoor Dispensing

Pedestal or wall-mount dispensers make refueling convenient

Modular Construction

Storage and number of dispensers can be scaled to meet fleet needs

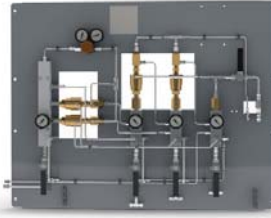
FILL TIME



*When used with Nuvera's PowerEdge Fuel Cell Systems

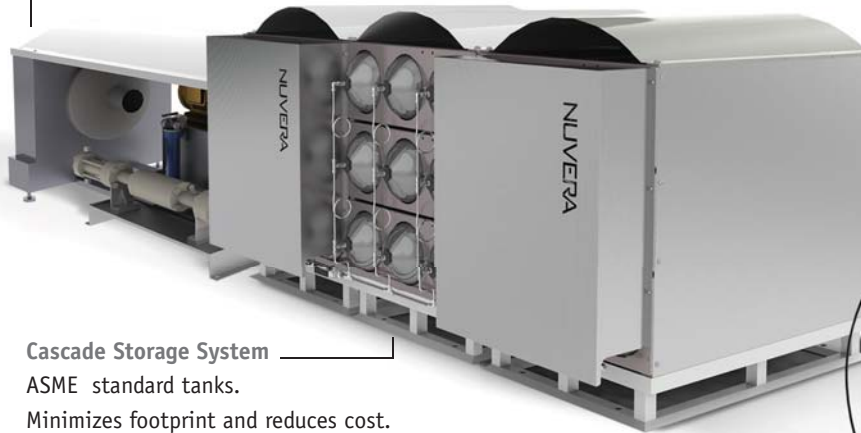
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Applications and Specifications



Priority Sequencing Panel
Fully mechanical system requiring no electrical supply.

Hydraulic Compressor
Designed for industrial use.



Cascade Storage System
ASME standard tanks.
Minimizes footprint and reduces cost.
Storage capacity can be scaled to match fleet requirements.



Hydrogen Dispenser
Indoor or outdoor installation.
Wall-mount or pedestal options available, depending on-site.
Nozzle meets SAE standard for hydrogen refueling.

What About Refueling?

In addition to the PowerTap Hydrogen Generator, Nuvera has also created the PowerTap Hydrogen Station, which allows for quick and easy indoor or outdoor refueling. When used together, the PowerTap Hydrogen Generator and Hydrogen Station provide the most cost-effective hydrogen solution for typical fuel-cell forklift fleets.

The Total Power Solution, featuring the PowerTap Hydrogen Generator and Hydrogen Station, along with Nuvera's PowerEdge fuel cell hybrid product for forklifts, is the first set of hydrogen products designed specifically for material handling. With only one vendor for both power systems and hydrogen infrastructure, the TPS offers ease of installation and service.

PowerTap Hydrogen Station

Specifications

Gaseous Hydrogen Source	Steam reformer, electrolyzer or delivered via tube trailer or liquid hydrogen
Dispensing Rate	500 – 1000 gram/minute
Dispensing Pressure	5000 psig (350 bar)
Storage Capacity	Configurable from 12 – 128 kg
Compressor	Hydraulically driven intensifier
Electrical Consumption	12 kW average
Operating Temperature	-4°F to 104°F (-20°C to 40°C)
Standards Compliance	System Designed to: CSA HGV4 & NFPA 52 Dispenser Nozzle: SAE J2600-H35 Type A Compliant
Environment	Compression and Storage: Outdoor Dispenser: Indoor or Outdoor

All specifications subject to change.



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