Hydrogen Thermal Solutions

total hydrogen solutions
A DIVISION OF PNEUMATIC AND HYDRAULIC COMPANY, LLC

A PROUD DISTRIBUTOR FOR SMC®

Optimized cooling, scalable integration

Tailored thermal solutions, accelerated deployment

Reliable chilling systems, proven performance

Tailored Cooling. Expert Integration.

- **Comprehensive design & integration:** We deliver chilling and cooling systems precisely engineered for hydrogen production, refueling, and energy generation.
- **Proven thermal expertise:** From compressor cooling to electrolyzer temperature management, we match the right SMC technology to your operational needs.
- **Custom solutions:** Our systems are sized for your specific flow rates, pressures, and duty cycles, ensuring maximum efficiency and uptime.

Solving Challenges. Avoiding Delays.

- **Thermal misalignment:** We help you select and size the right chiller to ensure your hydrogen systems operate at peak efficiency and reliability.
- **Complex integration**: We integrate thermal systems with hydrogen operations to minimize downtime and maximize performance.
- **Supply chain and support challenges:** By partnering with SMC — manufacturing over 7,000 chillers annually across 500+ global sites — we deliver dependable equipment on schedule, backed by worldwide service and support.

Your Thermal Management Partner

Having delivered thermal solutions for first-of-their-kind hydrogen projects, we understand the demands from production to refueling. Our expertise in integrating SMC chillers ensures precise cooling for electrolysis, compression, storage, and fueling operations. We simplify thermal complexity, reduce operational risk, and ensure your systems are ready for commercial deployment.

A Range of Thermal Solutions

We integrate thermal solutions across hydrogen production, storage, refueling, and energy systems, ensuring precise cooling for every application.

Comprehensive Thermal Systems

Full thermal integration capabilities including electrolyzer cooling, gas compression cooling, storage temperature management, dispenser chilling, and more.

Flexible Cooling Approach

Whether selecting air-cooled, water-cooled, or process-specific chilling systems, we integrate the right thermal solution to match your hydrogen production, storage, and fueling needs.

Talk to our team about optimizing your hydrogen production project today!

TotalHydrogen.com

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