Challenges

Fuel cell systems to power transportation, unmanned aerial vehicles and data centers must operate more efficiently to maximize output/conversion of hydrogen, while meeting the latest industry and regulatory standards to ensure safety, reliability and long cell life.

Development of optimized fuel cell solutions requires manufacturers to rapidly expand their expertise to enable them to leverage emerging gas and liquid hydrogen technology and establish best design and production practices.

Hydrogen will enable exponential growth in clean transportation, but fuel cell system manufacturers face pressure to scale up production and ensure supply chain reliability to meet growing market demand.
Emerson’s expertise and advanced pressure and flow control technology can support the development of any type of hydrogen fuel cell. This includes PEMFC, PAFC, SOFC and MCFC systems that provide 1kW to 500kW of power for applications such as transportation, unmanned aerial vehicles, forklifts and portable or backup power supplies. Our compact and lightweight solutions help manufacturers to reduce the overall footprint of their fuel cell system, ensure safe and efficient operation, and lower the risk of failure through stable pressure regulation.

**Products designed specifically for hydrogen applications enhance fuel cell safety, efficiency and reliability**

Emerson offers a wide range of products designed to meet the demands of hydrogen fuel cell applications, including extreme operating temperatures. Our proven solutions provide consistent pressure and regulate flow control of hydrogen to all kinds of fuel cell systems, helping to safely maximize hydrogen usage.

**Extensive hydrogen experience and industry-proven technology helps to reduce product development time**

Emerson is a global partner for innovative technology, providing reliable, integrated solutions. Emerson’s technology and application expertise provides solutions which deliver a path to better fuel cell design, improving fuel cell operation.

**Broad range of applications met by a single supplier strengthens supply chain reliability and supports scaled production**

Emerson’s extensive portfolio – including pressure regulators, flow control, safety junction boxes and hydrogen-specific flameproof glands – can simplify your supply chain. Save time and cost with Emerson as you scale production, freeing you to focus on developing and delivering new products.

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**TESCOM™ HV-3500 Series Hydrogen On-board Regulator**

**TESCOM™ Series 20-1200 Hydrogen Pressure Regulator**

**ASCO™ Series 238 Solenoid Valve**

**ASCO™ Series 202 Proportional Valve**

Scan code for more information.