

# PRISM<sup>®</sup> Hydrogen Generation Systems

A GLOBAL LEADER IN GAS GENERATION AND PURIFICATION, AIR PRODUCTS' PRISM HYDROGEN GENERATION SYSTEMS CAN DELIVER RELIABLE AND COST-EFFECTIVE GAS TO HELP YOU MEET YOUR NEEDS.



## proven solutions

As a world leader in the safe and efficient supply of merchant hydrogen, you can count on Air Products' expertise to take the guesswork out of your selection of which method of hydrogen generation and supply is the lowest-cost and most reliable solution for your application. Because we offer the full spectrum of on-site hydrogen generators, delivered bulk supply options, and hydrogen purification systems, we can offer the right solution for your requirement, whatever it may be. Our hydrogen gas generation options include hydrocarbon reforming, off-gas cleanup and electrolysis systems.

## superior design delivers performance

Based on advanced proprietary technology, Air Products' PRISM hydrogen generators and purification equipment use a highly efficient, robust process to meet a broad range of requirements. Packaged PRISM hydrogen generators are designed to meet requirements up to more than 40,000 standard cubic feet per hour (1,000 normal cubic meters per hour), achieving hydrogen purity levels in excess of 99.999%. Multiple systems are utilized to provide hydrogen flows greater than 40,000 scf/hr (1,000 ncm/hr).

The Air Products configurations offer a highly efficient consumption of natural gas. The systems feature a compact modular design that facilitates easy installation and maintenance and delivers high reliability. Fully integrated backup systems can also be added to help maintain uninterrupted supply.

"Our proprietary technology and design facilitates localized fabrication, allowing us to deliver superior, cost-effective hydrogen generation systems to customers around the world."

Todd Carlson  
Global Product Owner—  
Hydrogen Generation



## applications

Air Products' hydrogen generation systems currently provide the most economical hydrogen supply solution to a wide variety of applications in geographic locations around the world. Typical applications include use in the metals processing, steel, glass, photovoltaic, food, power generation, and hydrogen fueling industries.

## BENEFITS OF PRISM HYDROGEN GENERATION SYSTEMS

### | Low Capital Cost |

Fully skidded, modular design facilitates low-cost site installations

Compact plant design with small footprint

Standard, pre-engineered sizes enhance delivery

### | High Reliability |

Minimal moving parts

Robust design with quick start-up

Long catalyst life (7 years) improves maintenance

Simple catalyst replacement

### | Flexibility |

Standard 120 psig (8.27 barg) pressure

Load following design

### UTILITIES REQUIRED: PRISM HYDROGEN GENERATION SYSTEM

Natural Gas, Process Water, Cooling Water, Instrument Air, Nitrogen Purge

Electric Power 380–480 VAC, 3 pH, 50–60 Hz

Siting Requirements Class 1 Division 2 Group B (main skid); Unclassified (control area)

Controls Intrinsically safe or Class 1 Division 2 Group B inside main skid (24 VDC)

### | tell me more |

To learn more about how Air Products' PRISM Hydrogen Generation Systems can deliver reliable and cost-effective hydrogen supply to your operation, contact us at:



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