

A COMPLETE HYDROGEN GENERATION PLANT

Self-Contained, Easily Integrated and Ready For Hookup

H₂OasisTM Hydrogen Gas Station is a self-contained hydrogen plant in prefabricated shelters that can be situated anywhere that hydrogen production is required. Hydrogen gas can be produced at purities of 99.9998%*, and flow rates from 50 standard liters per minute to 1400 standard liters per minute at 10 Bar. Higher delivery pressures are available with an optional compressor. This range of operation allows the containerized systems to be used in a wide variety of industrial applications such as power plants, semiconductor, float glass, and metals fabrication.

* Subject to ambient and condenser water temperatures, as well as dissolved gas content in feedwater.

Versatile, Safe and Tested

The H₂Oasis[™] provides customers the flexibility to redeploy the unit to other locations if required. The system is designed for elimination of separate building design and construction, ease of installation, operation,



Hydrogen Generator Power Supply

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reliability, and safety.
The H₂Oasis™ is factory assembled and tested so that the entire system is integrated by engineers and skilled technicians with many years of equipment experience.

Site-Ready

The H₂Oasis™ generating station is completely self-contained requiring only utility inputs such as electrical power, cooling water, feedwater, and a properly constructed foundation. The H₂Oasis™ consists of two rooms, one for the gas generation (which can be classified as Class I, Division 2, Group B) and one for electrical equipment and other ancillary equipment.



Hydrogen Compressor



structural savings: Systems are delivered fully populated and completely serviceable. Requires no civil or capital expenditures. Only sound structural surface preparation and appropriate facility hook-ups are required.

SAFETY: Systems are integrated to meet Class 1 Div 2 Group B requirements. May include ancillary equipment such as power distribution panel to all internal equipment, explosion proof lighting and switches, proper heating and ventilation, and N_2 or FM-200 fire suppression to maintain good safety practices.

EASE OF MAINTENANCE: Periodic maintenance or repairs can be executed without dismantling equipment. Service access doors provide free access to all equipment allowing for better serviceability.

VERSATILE DESIGN: Along with our standard self-contained electrolysis

Standard Features

- Interior Lighting
- Ventilation Fans
- N₂ Purge Panel
- Interface Panel: H, Delivery/H, Vent
- Service Access Doors
- H₂ Generator
- Interface Panel: Feedwater/0, Vent
- Hydrogen Generator Power Supply
- Power Distribution Panel

- Cable Trays
- Engineered Deck, Walls, and Ceiling Load Design to Resist Wind Sheer and Snow Loading
- Exterior Wall Insulation: R-13 Rating
- Roof Insulation: R-20 Rating
- Floor Insulation: R-19 Rating
- Interior Ceiling Height: 8 ft
- Interior Deck Loading Design: 250 lb./ft²
- Interior Decking: 3/16" Carbon Steel Primed and Coated with Gray Non-skid Epoxy

shelters, our custom engineering capabilities allow for specific shelter layouts to meet your particular needs.

RELIABILITY: Systems arrive with the superb quality customers expect from Teledyne—equipment is pretested and ready for commissioning and final testing onsite.

TRANSPORTATION EASE: Teledyne's modular systems are designed to ship on normal carriage flat racks while also allowing for simplicity of handling. This design will ease the movement of the H₂ system from the manufacturing site to its final location and may reduce site preparation costs.

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+1.410.771.8600 www.teledynees.com