

930 BAR SYSTEM



OneH2's 930 bar gas system is designed and manufactured in the USA to meet the most stringent quality standards to safely transport hydrogen fuel on road.

By transporting hydrogen in a 930 bar gaseous state, OneH2 is able to provide cost effective fuel distribution without process infrastructure at the point of fueling. Patented onboard cylinder control technology allows for maximum payload of usable hydrogen in each carrier-load, further decreasing operational costs as compared to other methods of delivered hydrogen.

BENEFITS OF ONEH2 930 BAR TECHNOLOGY

- Delivered fuel is ready to use no additional compression or processing needed at the dispenser
- 930 bar trailer models decrease waste and storage expenses
- Trailers offer convenient fuel portability and a compact storage footprint

ALL OUR TRAILERS ARE

- Intended to be interconnected to hydrogen dispensers (350 or 700 bar)
- Operate under DOT permit SP 21259
- Operate with 930 bar / 13,500 psig max working pressure



930 BAR CARRIER SUB SYSTEM

930 Bar Trailers & Mobile Fuelers are configured with a modular carrier system. A single carrier consists of three (3) Type IV Cylinders with 80 kg gross capacity of hydrogen each at 13,500 psi. The carrier sub system weighs 8,500 lbs.

Our modular approach provides multiple payload options to suit your real estate requirements. Multiple carriers can network together for efficiency.

TRAILERS VS. FUELERS

Trailers are designed to transport gaseous hydrogen where the delivery and point of use destination has a dispensing interface.

TRAILER SPEC.	160 KG CAP.	320 KG CAP.	480 KG CAP.
# CARRIERS	2	4	6
# GAS CYLINDERS	6	12	18
DIM	30' L x 6' 8" W x 6' 6" H	30' L x 6' 8" W x 9' 1' H	53' L x 8' 6" W x 10' H
WEIGHT	22,000 lbs	43,000 lbs	59,000 lbs
TOW VEHICLE CLASS	3-7	5-7	8

Requires a dispensing interface at point of use, such as the OneH2 Dispenser unit.



SYSTEM SAFETY COMPONENTS

- Two FM approved Onboard Flame Detectors
- Two FM approved Hydrogen Gas Detectors
- Three E-Stop push buttons
- One Remote E-Stop push button
- Alarm and Beacon triggered by Gas and Flame Detectors
- Watchdog Timer
- Nozzle Breakaways

Mobile fuelers are essentially portable hydrogen stations. No additional infrastructure is needed.

DISPENSER SPECIFICATIONS	350 BAR / 700 BAR DISPENSER SUB SYSTEM	
DESIGN PRESSURE / OUTPUT SUPPLY	GH2 at 350 bar / 700 bar	
DIMENSIONS	12′ 6″ L x 7′ 11″ W x 3′ 2″ H	
WEIGHT	1,800 lbs	
CLASSIFICATION	Class 1 Div 2, Group B	
MAX FLOW RATE / OUTPUT SUPPLY	15 grams / sec - 45 grams / sec	
DOT CERTIFICATIONS	NFPA2, SAE J2601, NFPA79	
HOOKUP & STRUCTURAL NOTES	H35 Nozzle: Make: Nitto Kohki; Model: HHV-3SS-H35-NI-ASL H70 Nozzle: Make: Nitto Kohki; Model: HHV-3SS-H875-LW All filter sizes are 5 microns	

Dispenser module contained within additional carrier frame in bottom left of trailer array. Each 3-cylinder pack is configured as an individual cylinder manifold 'Banks'. Perfect for portable, ready-to-use hydrogen fuel for all types of hydrogen vehicles.

- DOT certified Frame & Cylinders for Compressed GH2 application at 930 Bar with a PRD on each cylinder per ASME B31.3
- Pressure Control Valve (PCV) on Dispensing system
- Interconnection Piping rated to 20,000 psi per ASME B31.1
- Fueling Connector and Dispensing Nozzles comply with SAE J 2600
- Pressure Transducers and Flow Meter to monitor excess pressure and flow
- Ambient Temperature Sensor to abort fueling outside temperature range of 0°C to 45°C

