

HLH2 VEHICLE TANKS

LIQUID HYDROGEN VEHICLE TANK SYSTEMS



LIQUID HYDROGEN VEHICLE TANKS

Since 1990, Chart has led the way in Liquefied Natural Gas (HLNG) vehicle tank engineering and manufacturing, and we have utilized our cryogenic expertise to work to develop the same state-of-the-art fuel systems for liquid hydrogen-powered vehicles.

With more than 50,000 LNG vehicle fuel tanks supplied and powering natural gas vehicles globally, Chart is bringing the same vision and solution expertise to Liquid Hydrogen (HLH2) on-board fueling systems while leveraging over 50 years of experience manufacturing liquid hydrogen bulk tanks and trailers.

INTEGRATED TANK SPECIFICATIONS

Class 8 Heavy Duty Vehicle Tank: Example Specifications*	
Diameter	26 inches (660 mm)
Length	94.5 inches (2400 mm)
Hydrogen Capacity	35 kg**
Weight (empty, incl. BOP)	750 lbs (340 kg)
Hydrogen Supply Flow Rate	≤ 5 g/s***
Refueling Flow Rate	8+ kg/min***
Optimal Operating Pressure	45 – 120 psig (3 – 8 barg)

* Available in custom sizes.

** Hydrogen capacity is heavily a function of operating pressure and of refueling station architecture and may vary by +/- 5% or more.

*** Higher H₂ supply and refueling flow rates are possible.

PRODUCT FEATURES

- 100% stainless steel, double wall tank construction endures cryogenic temperatures and resists hydrogen embrittlement
- Plumbing components – all stainless steel
- Tank Control System – communicates fuel system status to vehicle with various programmable protocols (e.g. SAE J1939)
- Vaporization using vehicle coolant
- One-hose filling process with quick-connect nozzle
- Multi-tank configurations available
- Designed, manufactured, and tested in accordance with applicable codes and standards such as DOT, ASME, SAE, and European regulations

Chart Inc.
U.S. : 1-800-838-0856
Worldwide: 1-952-243-8800



© 2023 Chart Inc.
PN 22092449
www.chartindustries.com/FuelLH2