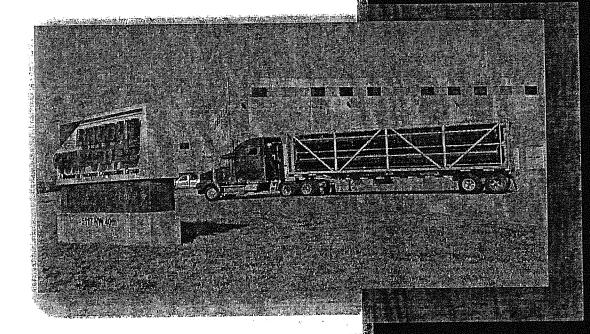


Quotation for TITAN™ Module CNG Transportation Systems



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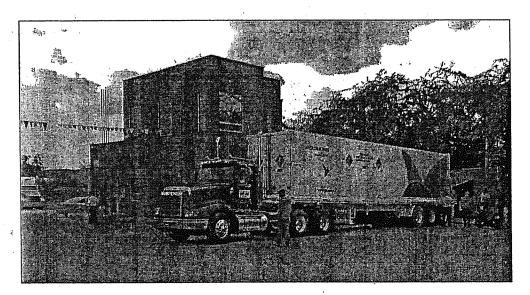
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PRODUCT OVERVIEW

- Large capacity and low weight equal transporting gas, not steel.
- Large manifolds & large line diameters equal quick fill and discharge rates
- Composite technology allows end user to transport up to three times as much natural gas as traditional solutions, reducing the number of trips.
- Lower gross vehicle weights and low inspection costs mean reduced operating costs and a quicker (ROI) return on investment.



The following table gives the technical description for Lincoln Composites 40' TITAN™ bulk-transportation storage modules.

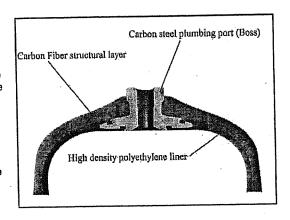
Item	CNG Storage Modules
Type	40 TITAN module
Number of cylinders/module	4
Module height (m/ft)	2.45/8
Module width (m/ft)	2,45/8
Module length (m/ft)	12.2/40
Service pressure (bar/PSI)	250 (@ 15° C)/3,600 (@59°F)
Water Volume per cylinder at 250 bar (L/G)	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Total module water volume at 250 bar (L/G)	34,000/8,980
Approximate capacity (@,15°C, 0,72 specific gravity):	10,200 SCM/355,000 SCE
Weight per cylinder (kg/lb.)	2,400/5,291
Estimated frame & cylinder weight @1 bar (kg/lb.)	16,300/35,935
Estimated total gas weight @ service pressure (kg/lb.)	7,350/16,204



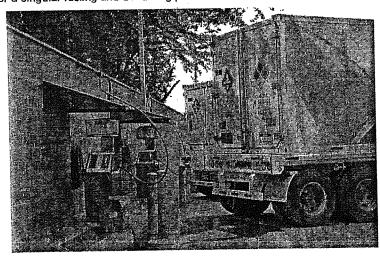
TITAN MODULE DESIGN

The TITAN™ cylinder is an all-composite structure based on over forty years of filament-winding heritage in the aerospace and defense market. This same all-composite design has been successfully employed in over 130,000 Lincoln Composites cylinders around the world. No other all-composites manufacturer can state this amount of product experience in the market.

The TITAN™ cylinder and module has been designed for a working pressure of 250 bar at 15 degrees Celsius and a maximum fill pressure of 325 bar. The 4-cylinder TITAN™ module has standard ISO corner castings and can be mounted onto trailers in the same method that standard ISO containers are mounted onto trailers. Dimensions of TITAN™ module are based on tolerances allowed per ISO 1496-3 and comply with ISO 668 rating specifics.



The plumbing components of the fuel system are integrated directly into the ISO frame and cylinders. The cylinders are mounted to allow for axial and diametric growth during the pressurization cycle. Each cylinder will have a fixed end where the interconnect plumbing will reside and a sliding end using a proven Lincoln Composites radial bearing design. The fuel management plumbing has been designed in a manner to allow for a singular fueling and de-fueling port location.



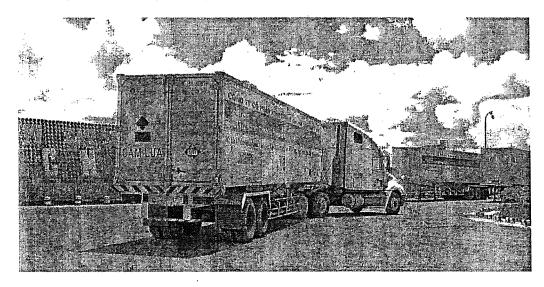


CYLINDER DESIGN DETAILS

Working Pressure, Pw	250 bar @ 15° C/3,600 PSI @ 59° F
Approved Gases	Natural Gas (49 CFR 173 115 Division-2 L. UN 1971) (4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2
Maximum Fill Pressure, Pmax	325 bar/4,714 PSI
Service Life	III5 Vears 15,000 cycles
Operating Temperature Limits (settled)	-40° C to 65° C/-40° F to 149° F
Peak Fill and Discharge Gas Temperature	40°C to:82°C/40°14to:180°L to:1/2
Cylinder Test Pressure, P _t (3/2 of P _w)	375 bar/5,439 PSI
Minimum Rupture Pressure	587/S bar/8(520PS)
Vessel Diameter (unpressurized)	1067.5 mm/42.03 in
Vessell Length (unpressurized)	111.6 m/456 69 in/38.06 ft
Empty Vessel Weight	2400 kg/5,291 lb.
Vesseli Water Volume (unpressurized)	.5.2 8384 D/2,215/G/2-1/Hz
Vessel Water Volume (at Pw)	8500 L/2,245 G
Gasoline Gallon Equivalent	2.701 GGBE 15 5 18 20 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Diesel Gallon Equivalent	2,513 DGE

TABLE 2, TITAN TANK DETAILS

The LINCOLN COMPOSITES cylinders are designed for 15 years of lifetime in accordance with the United States Department of Transportation (DOT) SP-149512.



¹ Other Division 2.1 flammable gases (e.g. Hydrogen) and inert Division 2.2 (e.g. Argon, Helium, Neon, and Nitrogen) are also approved gases for this vessel.

² Lincoln Composites is investigating the feasibility of performing mid-life testing on cylinders to extend the

allowable lifetimes in accordance with SP-14951.



PLUMBING DESCRIPTIONS:

The base TITAN™ plumbing design takes advantage of all the benefits that large tanks provide the end user.

- Quarter-turn manual shut-off valves at each tank.
- No welded plumbing connections.
- Single point fill/discharge manifold
- 1" outside diameter stainless steel lines from decanting port to tank valves for maximum flow rates;
- The Fire Protection System (FPS) that will vent the pressurized gas in the event that the module becomes engulfed in flames. The system will activate when the ambient temperature surrounding the tanks reaches approximately 150° C/302°F. When the system is activated, the contents of all four tanks will be vented to the atmosphere.

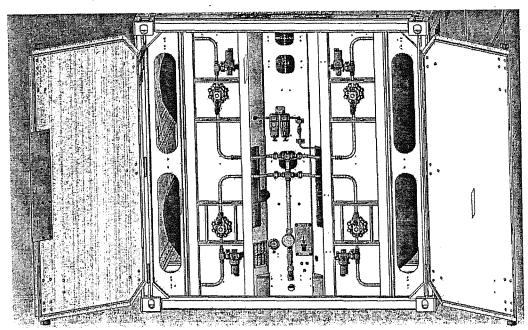


FIGURE 1, PLUMBING DRAWING



