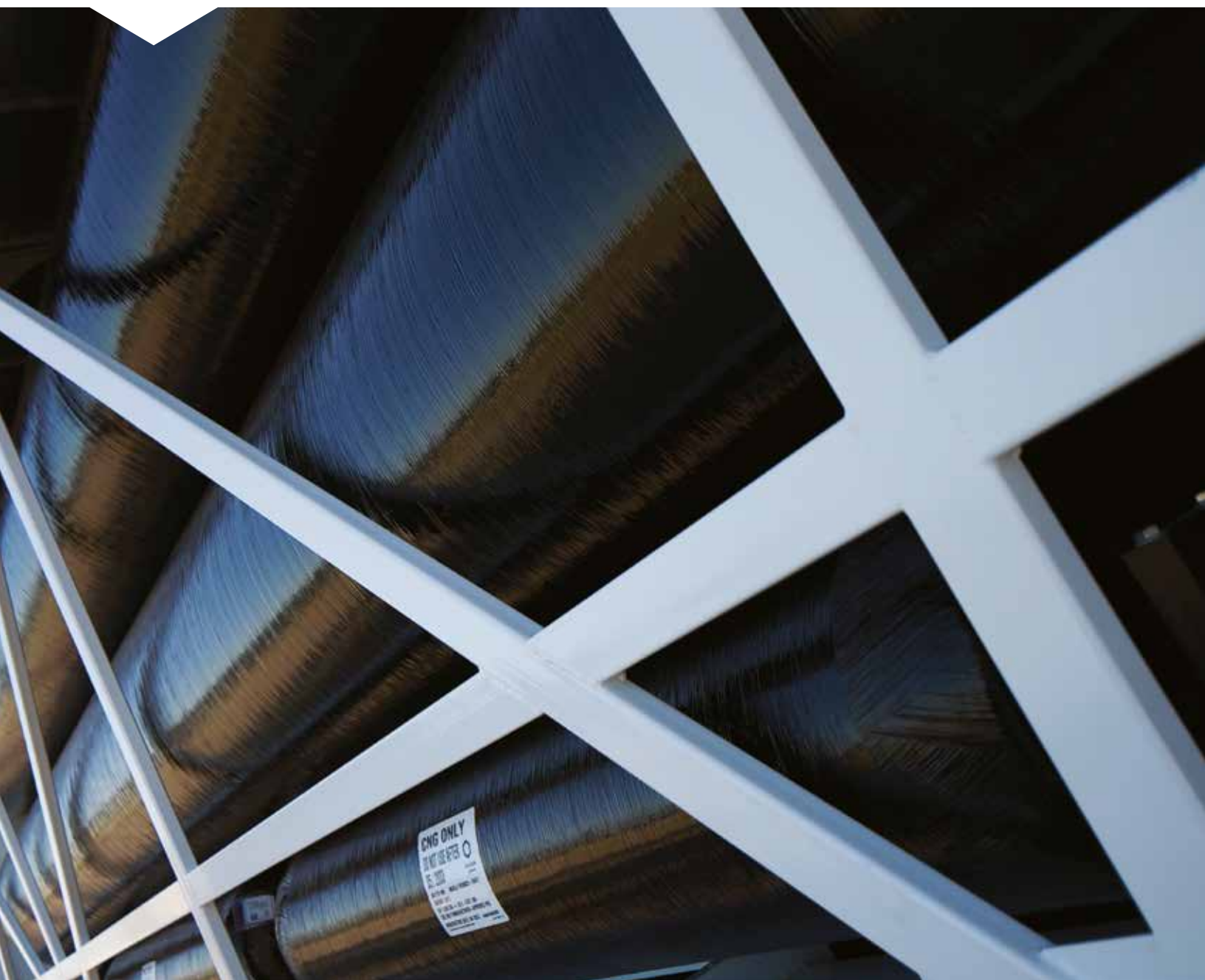




HEXAGON
COMPOSITES

MOBILE PIPELINE[®]

Bulk transportation and storage of energy gases



*An advanced pipeline to supply
energy gases over long distances
at competitive costs*



**CAPACITY
MATTERS**

YOUR MOBILE PIPELINE®

In 2006, Hexagon began development on the largest all-composite commercial pressure vessel in the world. The TITAN® trailer and storage module are designed specifically for bulk transportation of large amounts of compressed natural gas.

SMARTSTORE® is Hexagon's large capacity TUFFSHELL® cylinder storage module. This lightweight HC ISO container is easy to transport by standard trailer equipment and intermodal.

You'll find TITAN® and SMARTSTORE® in regions that are not currently served by natural gas pipelines. Industrial consumers and vehicle filling stations no longer need to wait for a real pipeline to be built before switching to natural gas.



Hexagon's TITAN® cylinders are the largest all-composite commercial pressure vessels in the world.



SMARTSTORE® offers excellent storage efficiency for regions not accessible by our TITAN® solutions.

*The largest all-composite
commercial pressure vessel in
the world*

SHIPPING CONTAINERS & TRAILERS

TITAN[®]

Our TITAN[®] line is ideal for businesses that require a large consumption of gas at a high flow rate, but are not currently served by pipeline. The modules and trailers essentially become your Mobile Pipeline[®], delivering large quantities of gas efficiently and cost effectively from a mother station to your location.

The TITAN[®] 40 ft Module is a 40 ft ISO 1496 certified shipping container, which contains four TITAN[®] tanks, weighs only 34,613 lb / 15,700 kg unpressurized, and can be transported via rail, truck or ship.

The TITAN[®] 40 ft XL Trailer configuration allows for the addition of a 30 ft TITAN[®] cylinder and optional additional TUFFSHELL[®] tanks to maximize onboard storage capabilities. The lightweight trailer ensures high weight efficiency and enables tandem operation.

- Carbon filaments perform with high strength and zero fatigue
- Polymer liner is corrosion free
- Large manifolds and tube diameters support high gas flow
- Mounted to allow for growth of the tank during pressurization cycle
- Neck mounted carbon steel boss interfaces
- Components safely incorporated directly into the frame
- No welded plumbing connections
- Single-point fill/discharge manifold with up to four receptacles
- Designed for a singular fueling and defueling manifold location
- Fixed end with interconnect plumbing
- Sliding end with proprietary radial bearing design
- Quarter-turn manual shut-off valves at each cylinder
- Optional cascade design for operation with mobile compressor stations
- Equipped with a state-of-the-art fire protection system
- Designed to be low maintenance and to reduce reinspection costs
- Full list of certifications and inspection requirements are available at hexagonlincoln.com



Hexagon's TITAN® operates around the world.



Superior plumbing delivers large quantities of gas at a high flow rate.



COMPRESSED NATURAL GAS DELIVERED

TITAN® Module and Trailer

TITAN® SIZE	30 FT MODULE	40 FT MODULE	40 FT XL TRAILER
Number of TITAN® Tanks	4 x 30 ft	4 x 40 ft	4 x 40 ft, 1 x 30 ft
Number of MAGNUM™ Tanks	0	0	7 all-carbon tanks
Water Volume	6,475 G / 24,512 L	8,993 G / 34,047 L	13,010 G / 49,250 L
Operating Pressure	3,600 psi / 248 bar	3,600 psi / 248 bar	3,600 psi / 248 bar
Gas Volume	262,105 scf / 7,422 scm*	364,059 scf / 10,309 scm*	526,612 scf / 14,912 scm**
Gas Mass	11,781 lb / 5,344 kg*	16,363 lb / 7,422 kg*	24,524 lb / 11,124 kg**
Gasoline Equivalent	1,947 G / 7,370 L	2,705 G / 10,240 L	3,913 G / 14,812 L
Diesel Equivalent	1,812 G / 6,859 L	2,517 G / 9,528 L	3,640 G / 13,780 L
Tare Weight	28,892 lb / 13,105 kg	34,500 lb / 15,649 kg	51,150 lb / 23,200 kg
Loaded Weight	40,673 lb / 18,449 kg	50,860 lb / 23,070 kg	75,674 lb / 34,325 kg
Overall Dimensions			
Length	30 ft / 9.14 m	40 ft / 12.19 m	40 ft / 12.19 m
Width	8 ft / 2.44 m	8 ft / 2.44 m	8.5 ft / 2.59 m
Height	8 ft / 2.44 m	8 ft / 2.44 m	13.5 ft / 4.11 m

*CNG @ 0.72 kg/scm, 15 °C / 0.04578 lb/scf, 59 °F **CNG @ 0.75 kg/scm, 15 °C / 0.04682 lb/scf, 59 °F

***Excellent storage efficiency
for regions not accessible by
our TITAN® solutions***

**LARGE
CAPACITY
TUFFSHELL®
STORAGE**

SMARTSTORE®

Our SMARTSTORE® large capacity cylinder storage module is ideal for areas where infrastructure is undeveloped, large containers are not permitted, storage space is limited, and surrounding roads have restricted load conditions. It's perfect for swap and tandem operations, supplying multiple customers in one trip, and onsite refueling in remote or temporary locations.

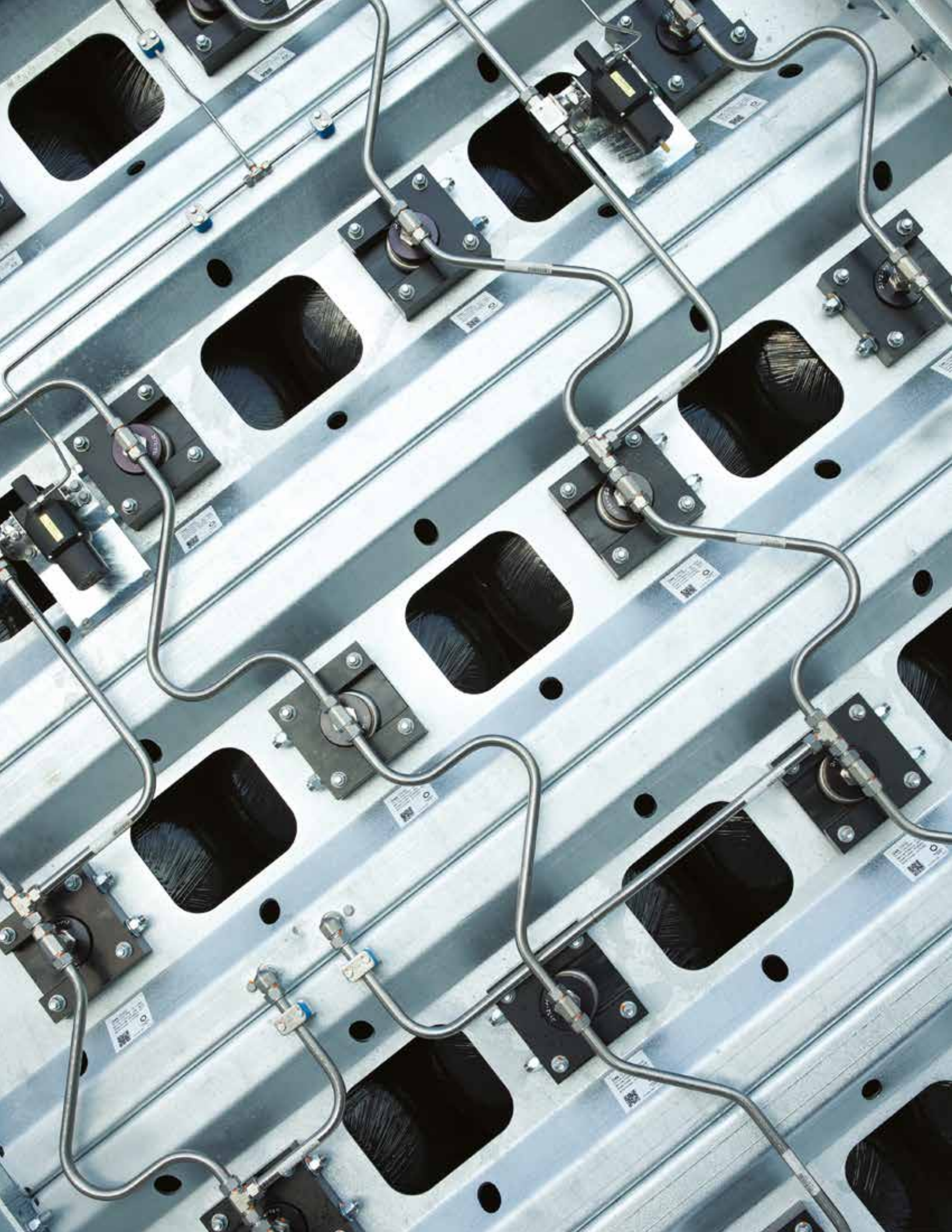
- Multi-receptacle design allows for fast fueling and defueling
- Cylinder arrangement allows for easy drainage of compressor oil and liquids
- Easy access to all piping and valves from front and backside of the module
- Robust steel frame has Swagelok® fittings, all stainless steel tubing, and no welded piping
- Boss mounting eliminates surface damage to tanks from metal straps
- Optional cascade design for operation with mobile compressor stations
- Equipped with a state-of-the-art fire protection system
- Designed to be low maintenance and to reduce reinspection costs
- Full list of certifications and inspection requirements are available at hexagonlincoln.com



SMARTSTORE® is ideal for areas where large containers are not permitted.



SMARTSTORE® features Swagelok® fittings, all stainless steel tubing, and no welded piping.



**MOVE GAS
NOT STEEL**

SMARTSTORE® Module

SMARTSTORE® SIZE	10 FT	20 FT	20 FT
Number of TUFFSHELL® / MAGNUM™ Tanks	20 x 10 ft	14 x 20 ft	15 x 20 ft
Water Volume	2,377 G / 9,000 L	5,714 G / 21,630 L	6,122 G / 23,175 L
Operating Pressure	3,600 psi / 248 bar	3,600 psi / 248 bar	3,600 psi / 248 bar
Gas Volume	94,162 scf / 2,666 scm **	227,721 scf / 6,448 scm **	243,987 scf / 6,909 scm **
Gas Mass	4,409 lb / 2,000 kg **	10,426 lb / 4,729 kg **	11,171 lb / 5,067 kg **
Gasoline Equivalent	762 G / 2,883 L	1,830 G / 6,928 L	1,961 G / 7,422 L
Diesel Equivalent	681 G / 2,578 L	1,637 G / 6,196 L	1,754 G / 6,638 L
Module Tare Weight	13,390 lb / 6,074 kg	19,070 lb / 8,650 kg	19,842 lb / 9,000 kg
Module Loaded Weight	17,799 lb / 8,073 kg	30,267 lb / 13,729 kg	31,012 lb / 14,067 kg
Overall Dimensions			
Length	10 ft / 3.05 m	20 ft / 6.10 m	20 ft / 6.10 m
Width	8 ft / 2.44 m	8.20 ft / 2.50 m	8.37 ft / 2.55 m
Height	9.5 ft / 2.90 m	9.5 ft / 2.90 m	9.5 ft / 2.90 m
Approval	ADR / TPED	ABS / ISO11439	USDOT SP / ABS / ISO11439

**CNG @ 0.75 kg/scm, 15 °C / 0.04682 lb/scf, 59 °F



HEXAGON
COMPOSITES

70%
LIGHTER THAN STEEL

Hexagon's TITAN[®] and SMARTSTORE[®] are designed specifically for bulk transportation of natural gas. Used on their own or in tandem, they create a Mobile Pipeline[®] for industrial consumers and vehicle filling stations that don't have access to an actual pipeline.

Hexagon operates one of the world's most advanced facilities for designing, testing and manufacturing composite Type 4 pressure vessels. After 50 years of fabricating advanced filament-wound composites and 20 years building Type 4 compressed natural gas tanks, we are the global leader in the industry.

- TUFFSHELL[®]
- TITAN[®]
- SMARTSTORE[®]

