



**Luxfer-GTM
Technologies**



Gas Storage and Transportation

*Meredith Webber, Vice President of Sales
Luxfer-GTM Technologies*

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Luxfer-GTM Technologies

Who We Are



- Joint venture between Luxfer Gas Cylinders, a world leader in composite and aluminum cylinder manufacturing, and GTM Technologies, a leading manufacturer of high-pressure gas transportation module systems.
- One of the first companies to offer composite cylinder gas transports to the US Market with the purpose to provide customized solutions for service industries, helping them store and transport gases in the safest, lightest and most reliable way.

GTM Transport Products

Natural Gas Utilities



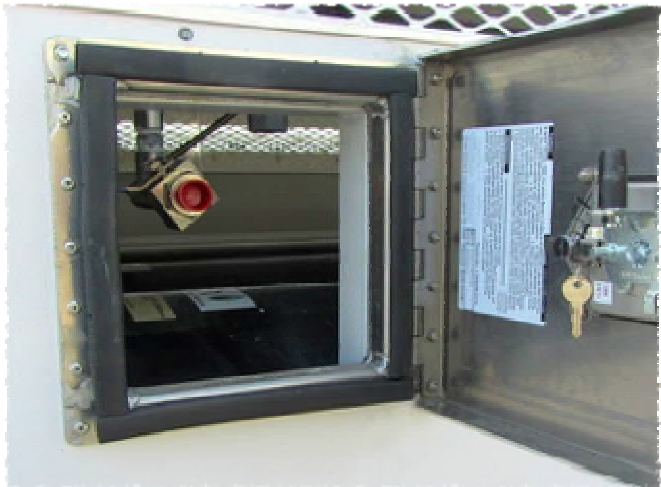
GTM G-PAK Series



GTM350



GTM700



GTM Transport Products

Natural Gas Utilities



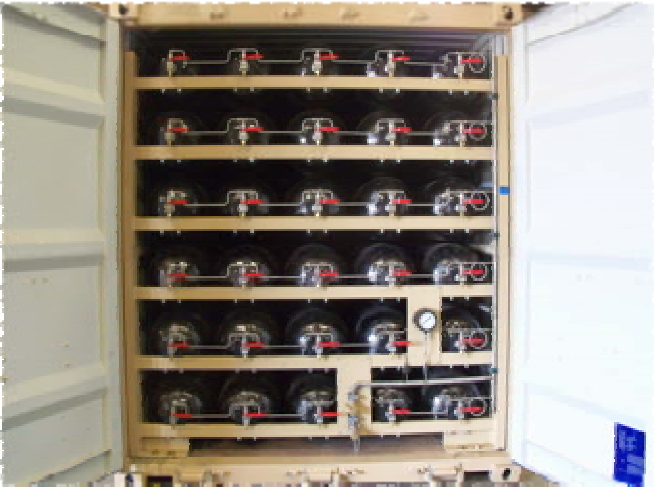
GTM1350



GTM2500



GTM5100



GTM Transports Products

G-PAK Series



- ✦ Value Proposition:
 - ✦ Lightweight, high capacity
 - ✦ Hazmat endorsement not required
 - ✦ Integrated control/pressure reduction panel
- ✦ Primary applications
 - ✦ CNG-fueling back-up
 - ✦ Filling “Hot Change” bottles for meter change outs



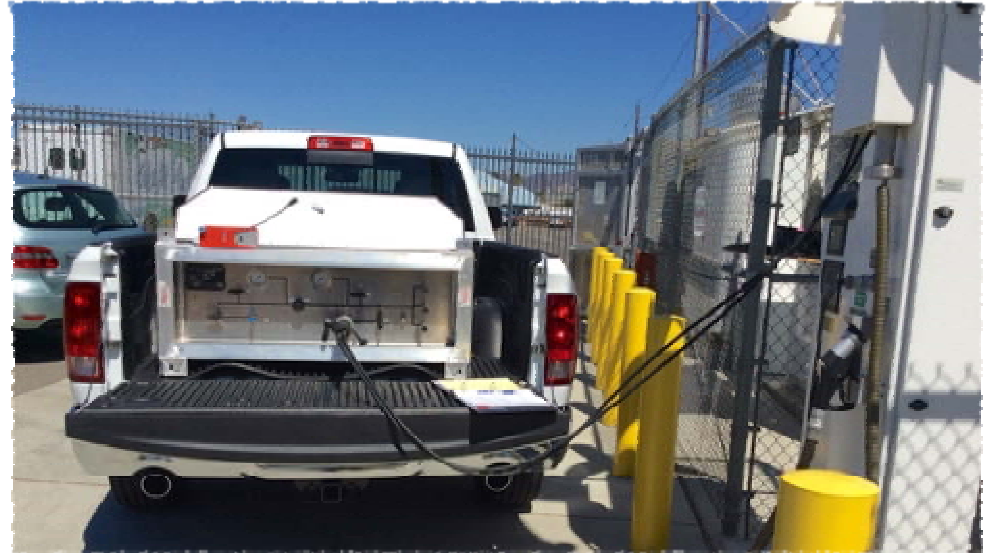
G-PAK Series

Specifications and Gas Capacities



	G-PAK 1	G-PAK 3
# of Cylinders	1	3
Max. Working Pressure	5,000psig	
Water Capacity (scf)	3.2	9.5
Tare Wt.	175lbs	520lbs
Dimensions	46-3/4"W x 29-1/16"L x 22-1/8"H	46-3/4"W x 62-1/3"L x 22-1/8"H

Natural Gas		
@5,000psig	1,130	3,391
@3,600psig	938	2,815
Helium		
@5,000psig	931	2,792
@2,640psig	526	1,579
Hydrogen		
@5,000psig	885	2,656
@2,640psig	514	1,541
Breathing Air		
@5,000psig	939	2,817
@2,640psig	562	1,687
Carbon Monoxide		
@4,000psig	783	2,348
@2,000psig	432	1,297
Nitrogen		
@5,000psig	908	2,723
@2,640psig	550	1,649



G-PAK Series

Pricing



	G-PAK 1	G-PAK 3
Without control panel	\$6,100.00	\$14,900.00
<i>Lease</i>		
MTM	\$164.70	\$402.30
1 year	\$150.98	\$368.78
3 years	\$137.25	\$335.25
5 year	\$109.80	\$268.20
With control panel	\$6,900.00	\$15,300.00
<i>Lease</i>		
MTM	\$186.30	\$413.10
1 year	\$170.78	\$378.68
3 years	\$155.25	\$344.25
5 year	\$124.20	\$275.40

GTM Transport Products

GTM350/700



- ◆ Value Proposition:
 - ◆ Lightweight, high capacity
 - ◆ Smaller version of our GTM1350 & can be towed by a pickup truck
- ◆ Primary applications
 - ◆ Filling “Hot Change” bottles for meter change outs
 - ◆ Back-up Gas supply
 - ◆ Supply for small housing division or commercial building



GTM Transport Products

GTM1350-R



GTM Transport Products

GTM1350-R

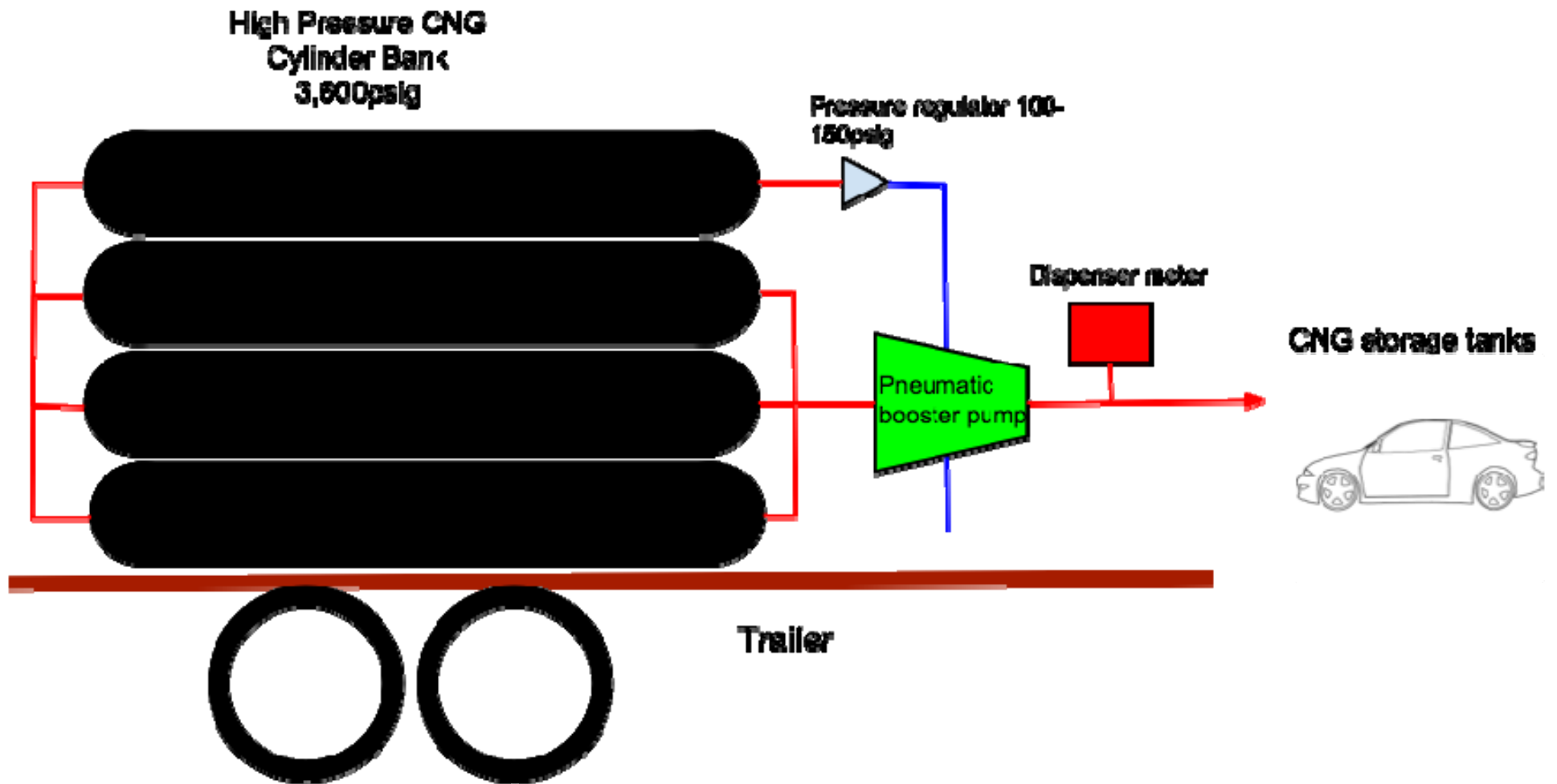


- ◆ Value Proposition:
 - ◆ Only lightweight CNG re-fueler on the market that is DOT approved.
 - ◆ Highest capacity transport on the market
 - ◆ Integrated control/pressure reduction panel
- ◆ Primary applications
 - ◆ CNG Vehicle filling: trucks, buses, cars
 - ◆ Pipeline integrity testing
 - ◆ Emergency outages
 - ◆ Maintenance operations



GTM1350-R

Flow Diagram



GTM1350-R

Mobile Refueler



Flow Rate=function of (Inlet pressure + Air drive pressure)

GAS OUTLET PRESSURE - PSI



Average fill times
Cars (15 gal): 10 min.
Trucks (20 gal): 15 min

Air drive pressure: (A) 15scfm, (B) 30scfm, (C) 50scfm, (D) 75scfm

GTM1350

Specifications and Gas Capacities



Luxfer-GTM
Technologies

# of Cylinders	16
Working Pressure	3,600psig
Total Water Volume	155.5scf
Trailer Dimensions	8'W x 17'L x 7.5'H
Tare Weight	6,300lbs
Est. Gross Weight	8,600lbs
SCF	46,000
DGE	335
GGE	370



GTM Transport Products

GTM2500



- ✦ Value Proposition:
 - ✦ Lightweight, high capacity
 - ✦ Integrated control/ heated pressure reduction panel
- ✦ Primary applications
 - ✦ Commercial outages
 - ✦ Extending station range
 - ✦ Maintenance operations
 - ✦ Back up power generation



GTM Transport Products

GTM5100



- ✦ Value Proposition:
 - ✦ Lightweight, high capacity
 - ✦ Carries as much weight as 40' steel jumbo tube trailer at half the weight
- ✦ Primary applications
 - ✦ Emergency back up power generation
 - ✦ Commercial outages
 - ✦ Maintenance operations
 - ✦ Back up power generation

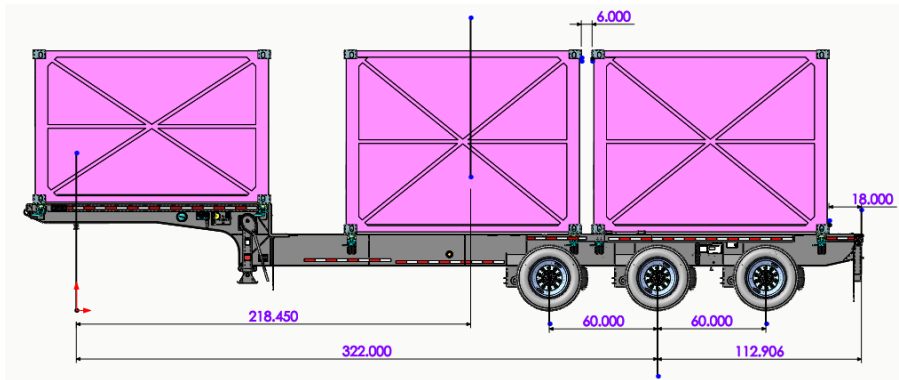


GTM Transport Products

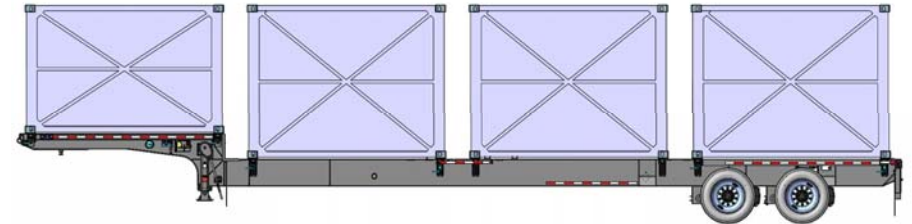
Multi-Pod Transports



TRIDUM



QUADNUM



Type III vs. Steel Cylinders *Comparison*



- Lighter weight
- Smaller footprint
- Higher capacity
- More maneuverable
- Stronger than steel, higher pressures
- Shorter lead times
- Less maintenance
- Lower cost of operations
- Easier & less expensive to retest



Benefits of a GTM1350 Transport



GTM1350

Operating Cost: 50-60¢/mile
Working Pressure: 3,600psig
Licensing Requirements: Class B
Tare Weight: 3 Tons
Dimensions: 8'W x 10'L x 7.5'H
Capacity: 46,000 scf



Steel Tube Trailer

Operating Cost: \$3-3.50/mile
Working Pressure: 2,400psig
Licensing Requirements: Class A
Tare Weight: 12-15 Tons
Dimensions: 10'W x 20'L x 9'H

40' Transport Comparisons

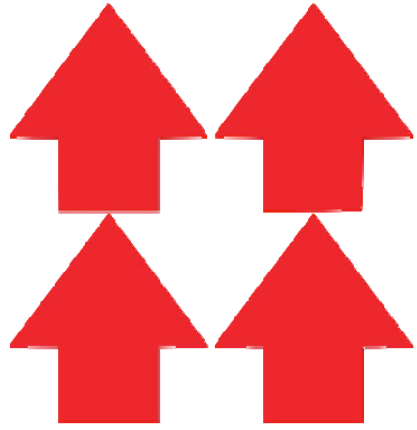
Characteristic	Type I & II	Type III-GTM Technologies	Type IV-Titan
Weight	Heavy	low	low
Fast fill capacity	80%-90%	80%-90%	70%-80%
Time fill capacity	95%-100%	95%-100%	80%-90%
Discharge rates	med	high	med to low
Permeation	none	none	yes
Heat transfer (surface to volume ratio)	0.17	0.25	0.095
Vacuum	yes	yes	no
PRD requirements	low	low	high
Safety	leak, then burst	leak, then burst	burst only
Cylinder warranty	1 year	15 years	1 year
Cylinder life	15 years	15 years	15 years
Est. Cost/ltr water volume (based on a 40' DOT transport)	\$13.34	\$15.91	\$13.22

Gas Transport Leasing, LLC *also known as G.T.L.*



- ✦ Operating leases only
- ✦ North America only (at the moment)
- ✦ Typical lease terms: MTM; 1, 3, 5 years
- ✦ Deposit 2-3 months
- ✦ Credit approval and underwriting
- ✦ Value Proposition
 - ✦ Conserve capital
 - ✦ Timing with specific projects
 - ✦ Includes maintenance, retest, etc.





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