



Moving you ahead.

Gardner Cryogenics is a world leader in the storage and transport of liquid hydrogen and liquid helium. We help you move and store molecules with near-zero loss.



**GARDNER
CRYOGENICS**



Gardner Cryogenics designs and manufactures high-performance, highly reliable, long-lasting storage containers used to transport liquid hydrogen and liquid helium around the globe. With over five decades of experience, Gardner provides customers with industry-leading technology that enables them to cost-effectively move and store molecules with near-zero loss.

The unique technology developed by Gardner provides the lowest heat-leak for the highest yield when transporting, storing, and transferring helium and hydrogen.

Our experienced team of cryogenics experts works with our customers to meet their specific storage, transportation, and budget needs, leveraging the best in equipment backed by the best in expertise. We are ISO 9001 certified and have the highest level of skilled employees to support the design, build, and repair of liquid helium and liquid hydrogen products.

- State-of-the-art equipment assures high-quality, long-term, energy-efficient, cost-effective performance
- Exceptional heat-leak performance with some equipment designed for 0.008 BTU/hr/ft² (.0000025 watts/cm²)—the lowest in the world
- Tank containers that provide the longest hold times and highest liquid yields available
- Patented “transient shield” technology
- Commitment to world-class quality confirmed by early receipt of ISO 9001 Certification
- Manufacturing facilities that feature internationally recognized expertise in precision welding, insulation, and vacuum technology
- Knowledgeable and responsive technical service with a personal touch that only a compactly structured organization can provide
- Team of multidisciplinary cryogenics experts with many years of combined experience in a variety of applications
- Specialized expertise that covers shield technology and multilayer insulation

UNMATCHED PROFESSIONAL ARTISTRY

Designing and manufacturing our tanks extends far beyond mere mechanical production. It takes the technical artistry—the eyes, hands, and minds—of highly trained and experienced Gardner professionals. Our team includes high-tech specialists in:

- Applied mechanics
- Thermal engineering
- Cryogenic processes
- Multishielded cryostats for superconducting magnets
- Multilayer insulations
- Heat transfer analysis
- Systems engineering
- Structural analysis
- Materials science
- Welding technology
- Manufacturing processes

This blend of expertise lets us give customers what they need, when they need it.



PRIMARY PRODUCTS & SERVICES



LIQUID HELIUM PRODUCTS

- 11K ISO Containers (psig/days)
 - LHe 64-30
 - LHe 91-35
 - LHe 91-45
 - LHe 151-30
 - LHe 175-40
- Storage (1.5K – 30K gal)
- Semitrailer (15K gal)
- Swap Tank (15K gal)
- Helium Purifier

SERVICES

- Accident Repair
- Rehab & Vacuum Recondition
- Certified Retest & Inspection
- Spare Parts



LIQUID HYDROGEN PRODUCTS

- 11K ISO Containers (psig/days)
 - LHy 64-30
 - LHy 91-30
 - LHy/LHe 161-30
 - LHy 161-30
 - LHy 175-30
- Storage (1.5K – 30K gal)
- Semitrailer (13K – 17.6K gal); up to 185 psig semitrailer
- Transportable (3K – 10K gal)

EXTENSIVE CAPABILITIES IN COMPLEX VACUUM JACKETED PIPING & SUPERCONDUCTING MAGNET CRYOSTATS

Gardner provides complex vacuum jacketed piping and superconducting magnetic cryostat expertise to a variety of organizations, including civilian companies, government agencies, and prime contractors of the Army Corps of Engineers. Representative project experience includes fabrication of complex vacuum jacketed piping for Brookhaven National Laboratories, and superconducting magnet cryostats for MIT.

TAKE THE NEXT STEP

You can get more information about our worldwide cryogenics capabilities—and tell us *your* needs—by calling 610-266-3700. We'd like to put our technical artistry to work for you.



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