



Looking for Engineered Vacuum Insulated Piping Solutions for LH2 Application?

With the continual demand for green energy fuels to reduce CO2 emissions, customers rely on Crane Cryogenics™ for their LH2 (Liquid Hydrogen) application needs. Crane Cryogenics provides safe and reliable equipment for the challenging transfer and storage of LH2. Our piping and components are used along the entire supply chain, including liquefaction, bulk storage, fueling, and offloading.

Crane Cryogenics Provides

- Complex System Design & Engineering.
- Single Point of Contact Project Managers.
- Complete Vacuum Insulated Pipe system fabrication.
- Modular pipe construction reducing project complexity.
- Experienced Sales Staff with Component and System Expertise that will solve system problems.

Benefits/Features

- Vacuum Insulated Pipe (VIP) insulates **50x** better than foam insulation, and **200x** better than bare pipe.
- Lean on our engineering and design expertise to reduce costly thermal expansion loops that can be eliminated with internal bellows.
- Reduce costly Boil Off Gas (BOG) and increase savings.
- Each spool section is factory evacuated prior to on-site delivery, minimizing field install time & cost.
- Designed and built to ASME B31.3 or ASME B31.12 to ensure code compliance.
- Vacuum Insulation reduces hazards associated with moisture and ice-build up that can harm employees and equipment.



Hydrogen Fueling Station - Vacuum Insulated Lines



LH2 Vacuum Insulated Pipe and Extended Trailer Fill Lines

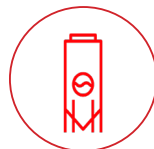
Industries Served



Transportation



Aerospace

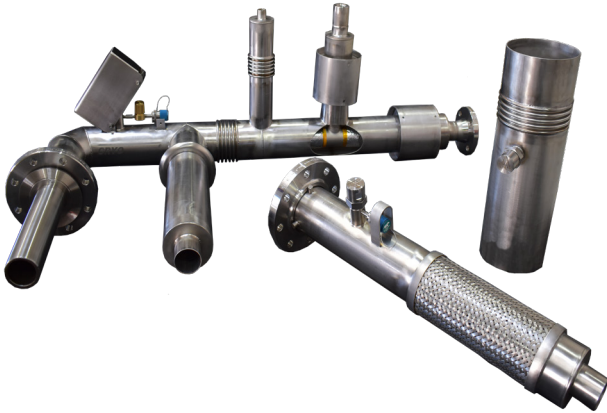


Manufacturing



Distribution

Vacuum Insulated Pipe (VIP)



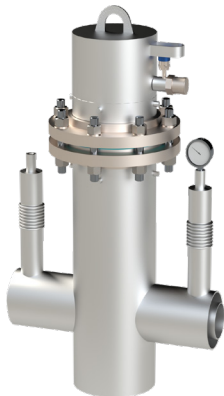
Vacuum Insulated Pipe (VIP) is the preferred method for transporting cryogenic liquids and is unmatched in safety, reliability, and cost-effectiveness. Crane Cryogenics offers many types of vacuum insulated piping systems. From our stocked prefabricated VIP assemblies, modular designed systems, flexible piping systems (static or dynamic vacuum) to our more complex engineered to order VIP piping systems.

F-Series™ Bayonet Connection



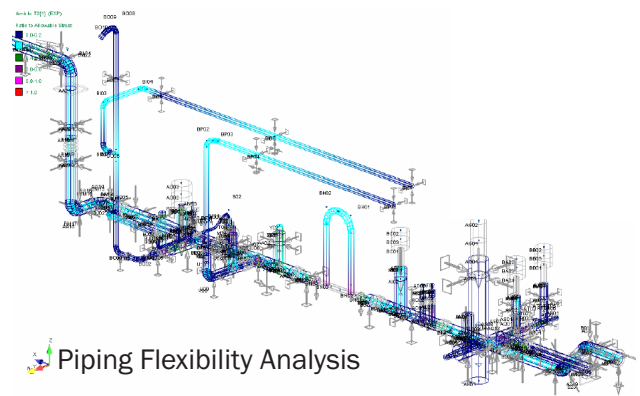
The F-Series™ bayonet connections are high efficiency cryogenic couplings designed for Vacuum Insulated Piping (VIP) systems. Crane Cryogenics has developed a proprietary treating process that provides long-term dimensional stability and allows for a closer tolerance fit that provides best in class thermal performance.

CryoFilter™



Crane Cryogenics CryoFilter™ is vacuum insulated for low heat influx while easy to maintain. Remove our industry leading F-Series Bayonet cap designed for rapid disassembly to clean or replace the filter element.

Engineering



Piping Flexibility Analysis

What you can expect from Crane Cryogenics is a skilled engineering team that designs safe, fully functional, and reliable systems. Our engineering team maintains tight quality control over detailed drawings, engineering analysis, and the manufacturing process. It allows Crane Cryogenics to quickly tackle issues and obstacles by making necessary adjustments and changes. Rest assured that during the project life cycle, your single point of contact, our Technical Sales engineers, will Make It Happen, Make It Easy, and Make It Fun!