



Solutions for:

The Chemical Industry

WHY

LGG Industrial?

Some of North America's Largest Basic and Specialty Chemical Manufacturers Trust LGG Industrial with Their Business. The Partnerships Both at the Plant and on a Corporate Level is Based on Our Ability to:



Provide In-Depth Technical Knowledge of Our Products and Their Applications to Provide Them with Unique Market Advantages.

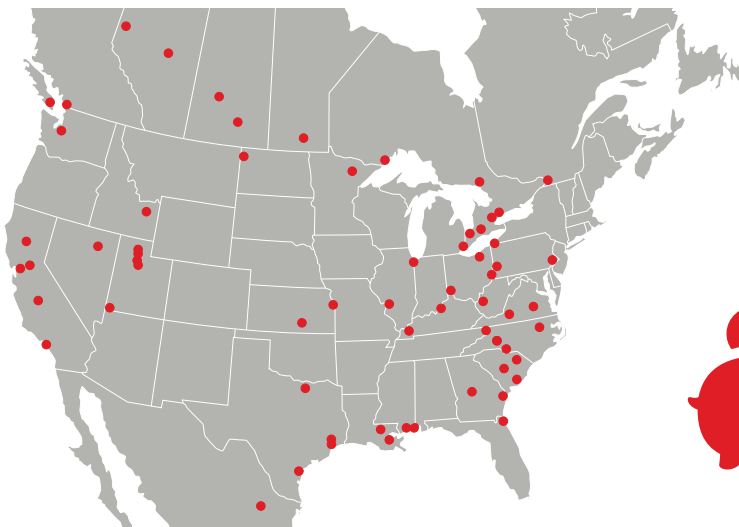


Deliver Complete System Engineered Solutions From the Most Reputable Manufacturers, Provide High-Performance Alternatives, Repair and Reclamation Services.

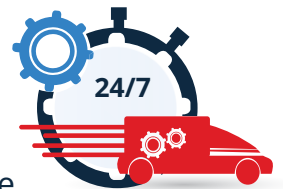


We Have the Industry Specific Knowledge and Experience to Offer More than Just Products; We Provide Assembly, Installation, Maintenance and Repair Services to Increase Uptime and Productivity. The Longtime Tenure of Our Specialists Have Proven that They Can Solve Your Problems Before They Become Emergencies.

This Proactive Service is Backed by Our North American Geographic Footprint



Allows Us to Provide 24/7 On-Site Diagnostic and Preventative Service, Local Inventory and Emergency Response.



Our Solutions Have Allowed Us to Document Savings Over the Last Five Years to Our Chemical Customers in the Amount of **\$17 Million Dollars**

Committed to Safety, Reliability and Sustainability

At LGG Industrial, we focus on assisting our customers with engineered products, engineered solutions, and application support to provide a safer, more sustainable and expected reliable outcome.

Our history of servicing the chemical industry by bringing experience and technical expertise with state-of-the-art facilities allows our customers to reduce their carbon footprint by eliminating leaks and ultimately reducing their total cost of ownership. We do this by offering engineered training programs focused on product selection, installation and application expertise (i.e. on heat exchangers, pipe flanges and hose reclamation).

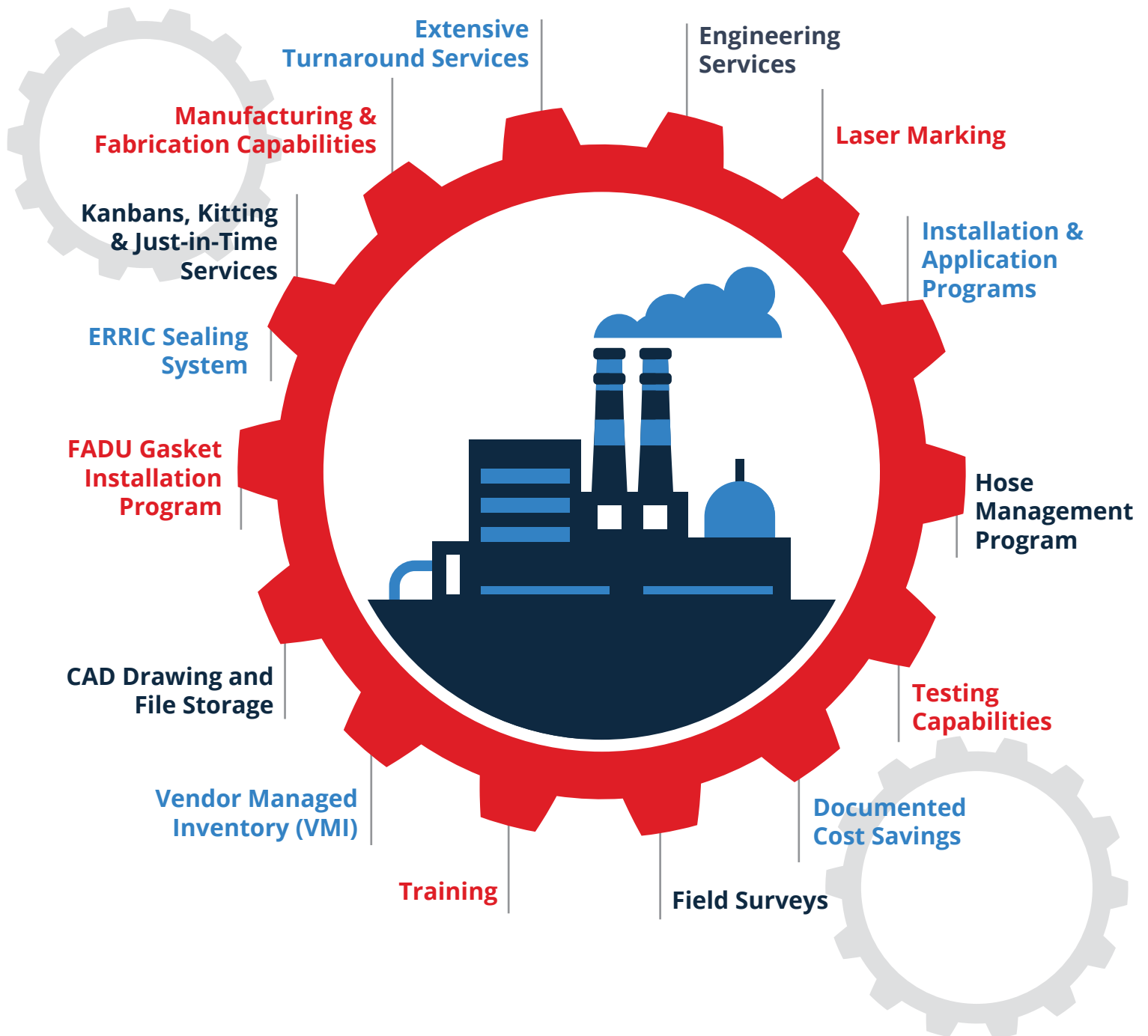
We are also Ranked as a Market Leader in Modern Distribution Management:



We provide a variety of products and services for various types of chemical processes, including:

- PVC production
- MDI production
- Sulfuric acid processes
- Chlor-Alkali processes

Value Added Solutions That We Provide to Our Chemical Customers



Our service portfolio is designed to significantly reduce our customers' total cost of ownership.

FADU Training



Boost plant safety and efficiency with LGG Industrial's FADU (Flange Assembly Demonstration Unit) training tool. This interactive program teaches maintenance, operations, and engineering teams the value of controlled bolting for optimal flange joint integrity and reduced downtime. This customized on-site gasket and bolting training, covers proper bolting techniques and pre-turnaround prep through a variety of modules:

- Mechanics Judgement
- Gasket Compression
- Ring Joint Gasket Installation
- Torque Preload
- Assembly Method Comparison

ERRIC Sealing System



Before



After

The ERRIC system is a heat exchanger protocol that has reported leak-free results. ERRIC is an acronym that stands for:

- Evaluation
- Radial Shear
- Relaxation
- Installation
- Communication

ERRIC protocols have been used in tens of thousands of heat exchangers around the world, with operators reporting leak-free results, even in the face of plant upsets and power outages.

Hose Management Program



LGG Industrial offers a complete hose management program. Hose management helps ensure that hoses are safe for employees and reduces downtime. Partner with LGG Industrial to manage all your hose asset needs. Our program includes services such as:

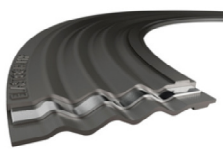
- On-Site Hose Audits
- Asset Tracking and Management System (TESSALink's CertNet)
- On-Site & Off-Site Hose Testing
- Education and Continuous Improvement Training

Gasket Products

Gasket Selection Guide

Application Type	Pipe Flanges	Pumps and Valves	Reactors	Mixers	Storage Tanks & Manways	Glass Lined Equipment	Heat Exchangers	Utilities
Corrugated Metal	■	■	■	■	■		■	■
Camprofile	■	■	■		■		■	■
LeaderTHERM NXT	■	■	■		■		■	■
CHEM-ONE	■	■						
Spiral Wound	■	■						■
Ring Joint Gaskets	■		■					
Filled PTFE	■	■	■	■	■		■	■
Expanded PTFE	■	■	■	■	■	■	■	■
Compressed Non-Asbestos	■	■		■	■		■	■
Rubber Gasketing	■				■	■		■
Braided Packing	■	■	■	■				■
Fasteners	■	■	■	■	■	■	■	■
Media Isolation	■							

Metal Gaskets



Corrugated Metal Gaskets ■■■■■■

Style: Elastagraph

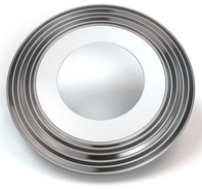
Elastagraph pipe flange gaskets are specifically engineered for low available load applications where reliability and fugitive emissions reductions are a priority. Elastagraph gaskets are made by molding layers of high purity inhibited grade flexible graphite at varying density and thickness over a corrugated metallic core. Elastagraph utilizes a unique corrugation pattern which increases the depth of the groove and the pitch at the peak of the corrugation. It is available in standard ASME/ANSI B16.21 Class 150 and 300 ring & full face with a 316L standard metal insert.



Style: Elastalon

Elastalon is a corrugated metal inserted ePTFE gasket capable of handling a wide variety of applications in Class 150 and 300 lined and metal piping systems. Elastalon is highly resistant to thermal cycling and has an extremely low leak rate fluctuation when cycling occurs. It is designed to have elevated blow out resistance and to reduce minimum seating stress. It is available in standard ASME/ANSI B16.21 Class 150 and 300 ring & full face with a 316L standard metal insert. However, it can be customized for size and design flexibility with special alloy metal inserts and non-standard gasket shapes and sizes.





Corrugated Metal Gaskets

Style: Elastagraph DS

Elastagraph DS flange gaskets are produced by adding a layer of high purity graphite over a corrugated metal core with an ePTFE seal that is applied to the ID portion of the corrugated core with an 1/8" overlap. The unique corrugated pattern of the core increases the depth of the groove and pitch at the peak of the corrugation improving sealability. The Elastagraph DS gasket can be used in a wide variety of media, i.e. a pH range varying from 0-14 and pressure from vacuum to ASME class 600 and DIN/EN class PN40.



Style: CGG®

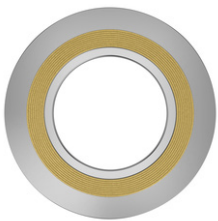
Corrugated Metal Graphite Gaskets uses high performance APX2 graphite for heat exchanger applications. The CGG molds in place by filling in irregularities of the spaces creating a superior seal. It maintains the seal even in harsh environments, including hydrocarbons and steam applications. The gasket is ideal where low bolt loads are present or where high gasket stresses are available. The thin profile is beneficial in areas where flange separation is limited. The heavy core and pitch frequency results in superior recovery and crush resistance in the most demanding applications, an economic solution for emission control. Proven Fire-Safe to API 6FB by Yarmouth Research Lab.



Camprofile Gaskets

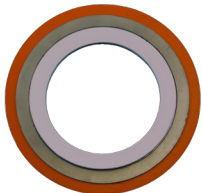
Style: KAG®

Camprofile Gaskets uses high performance APX2 graphite offering the compressibility of a sheet gasket for low sealing stress, the bolt tightness of a spiral wound gasket, along with the handling ease of a solid metal gasket and its resistance to buckling. They are designed for the most difficult sealing environments where performance is critical or sealing stresses are low, and are offered as a high-quality sealing alternative solution for emission control.



LeaderTHERM NXT

LeaderTHERM NXT is resistant to nearly all chemicals and has an 1832 °F continuous operating temperature. It can be used in all types of pipe flanges and equipment and comes in sheet form style 1020 (bonding compound available); facing on Kammpfile gaskets style 1010; and Spiral Wound filler style 1000. Best applications are Exhaust gas systems; Catalytic cracking systems; High temperature gaseous boilers and equipment; NOx containing applications and power generators.



CHEM-ONE

Based on the patented technology platform of our ALKY-ONE® gasket for Hydrofluoric Acid service, the CHEM-ONE gasket gives ID-to-OD flange protection for your most demanding services. The barrier pillow is made from 100% expanded PTFE for ultimate chemical resistance. The integral attachment ring ensures secure barrier pillow retention and boosts compressive load on the overriding pillow – all at reduced stud loads. 100% ePTFE facing on the kamprofile core – loaded to greater seating stress than standard spiral wound gaskets. Kamprofile core metallurgy to meet application requirements. (Monel 400 standard) with a carbon steel outer centering ring. This gasket services from Cryogenic to 500°F.



Metal Gaskets

Spiral-wound Gaskets



Styles: S, SRI, & SR

Spiral-wound Gaskets were developed specifically to handle the severe temperatures and pressures found in the process industries. These gaskets are engineered to be flexible and to recover when confronted with pressure, temperature fluctuations, bolt stress, relaxation and creep. These gaskets can be used with almost every known corrosive and toxic media. Spiral-wound Gaskets with an inner ring prevent inward buckling of the winding from entering the process stream.



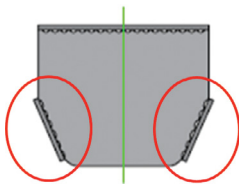
Style: HDLE (High Density Low Emission) Gasket

This proven design includes specific pressure controls to be used while winding the sealing element in order to obtain the ideal winding density, APX-2 graphite to lower oxidation rates and wider graphite material that extends above the metal winding to provide a long-term seal at lower gasket stresses, (Seals 80 times tighter than spiral wounds), the HDLE is an excellent choice for emission control.



Ring Joints

The RTJ (Ring Type Joint) gaskets are a mature technology, and are still used in many industries today. Ring joints are used in high pressure flange applications and can be used and/or made in a number of metals/alloys, depending on the flange material. All RTJ gaskets are made to an API standard.



Camprofile Ring Joint

Over time, the sealing surfaces will wear, causing the end user to have to fill-in the groove and re-machine the surface to new. The KAM-ORJ will allow the end user to extend the life of the sealing surface for octagonal joints.



Soft Gaskets



Biaxially Oriented PTFE Sheet with Silica Filler

Clipperlon Style: 2100

Biaxially oriented gaskets make for a less porous gasket and enhanced compressibility. Particularly suitable for use with strong acids (except hydrofluoric acid) and alkalis. Other applications include solvents, fuels, water, steam and chlorine.



Biaxially Oriented PTFE Sheet with Hollow Glass Microspheres

Clipperlon Style: 2110

Biaxially Oriented gaskets make for a less porous gasket and enhanced compressibility. This process also allows us to manufacture a gasket with increased bolt load retention, reduced creep and excellent sealability at low stress. They are specially designed for use in low bolt loaded constructions, and therefore, are extremely suitable for glass, ceramics and plastic lined or distorted flanges and even flanges with light surface irregularities.



Biaxially Oriented PTFE Sheet with Barium Sulfate Filler

Clipperlon Style: 2120

Biaxially Oriented gaskets make for a less porous gasket and enhanced compressibility. This process also allows us to manufacture a gasket with increased bolt load retention, reduced creep and excellent sealability at low stress. A general purpose grade for sealing applications across the whole pH-range. Particularly suitable for use with hydrofluoric acid, but not pure hydrogen fluoride. It can be used with alkalis, solvents, fuels, water, steam and chlorine. **This product is approved for use in chlorine service for Service Classes I and IV.**



Homogeneous expanded PTFE sheet

Clipperlon Style: 2130

Uses product geometry rather than fillers or binders to address concerns associated with traditional PTFE material. 2130 is designed for oxidizing applications, harsh chemical environments, and areas where contamination is a problem. 2130 is completely chemically inert and is suitable for sealing all chemicals across the pH range with the exception of molten alkali metals and fluorine gas. This gasket achieves very good stability and tightness with good blow-out resistance especially in demanding steel flange applications. The good resistance behavior of the material leads to increased operating safety, even in changing operating conditions.



Expanded/Molded PTFE Ring Gaskets

Style: UPG

GORE Universal Pipe Gasket (Style 800) provides a reliable seal for steel, glass-lined steel and fiber reinforced plastic (FRP) flanges, in the full spectrum of strong acid, alkali, and solvent process media, including the most challenging thermal cycling and elevated temperature applications. This single gasket solution can reduce the process safety and production downtime risks caused by the use of an incorrect gasket material. Highly conformable 100% ePTFE reliably seals irregular surfaces.



Compressed Neoprene/Aramid Fiber Sheet

Style: 976

The 976 is a Neoprene/Aramid fiber compressed gasket sheet made with all the great features of premium gasket materials. A universal grade material designed for Freon refrigerants and high aniline point oils but is also recommended for applications in ammonia gas, fuels, mild acids, mild alkalis, water etc.



Compressed EPDM Aramid Reinforced Fiber Sheet

Style: 986A

Style 986A is a compressed EPDM Aramid reinforced Fiber sheet. The combination of Aramid fibers and EPDM creates a sheet material that withstands the effects of aggressive acids and alkalies with minimum weight loss. In addition, the EPDM handles steam up to 400°F. 986A can be used in such demanding chemicals as caustics, dilute acids, brake fluids, silicone fluids, ketones, and phosphate esters. This sheet gasket also provides high resistance to weathering, oxygen, and ozone, and is compatible with animal and vegetable oils.



Compressed NBR/Aramid Fiber Sheet

Style: NA-60

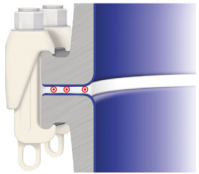
NBR/Aramid fiber is compressed gasket sheet made with all the great features of premium gasket materials without the cost. Nothing is left out, only the best raw materials are used, without compromise. It exhibits a broad chemical resistance, excellent cutability and flexibility. NA-60 is recommended for general service gaskets on all machinery and process piping and equipment.

Rubber Gasketing



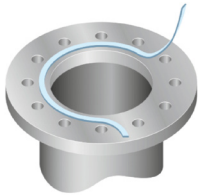
LGG Industrial stocks and fabricates all types of rubber gasketing materials. Whether you need a Fluoroelastomer (Viton®), Neoprene, Nitrile, SBR (usually red rubber), EPDM, Natural (gum rubber) we will supply it. Since rubber requires the lowest loading of all gasket materials, it's ideal for flange designs such as flat faced flange and manway applications or where inadequate fastener loading is present. Temperature range is from -32°F to 500°F and up to 150PSI.

Gasket Tape & Joint Sealant



Style - Gasket Tape

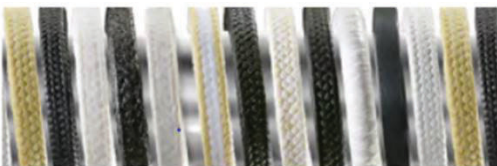
Gasket Tape addresses the challenges of reliably sealing large glass lined steel flanges. Made of 100% expanded PTFE (ePTFE), our gasket tape is chemically inert and highly resistant to creep, cold flow, and clamp-force loss. Its barrier core maintains an extra tight seal even at low loads.



Style - Joint Sealant

Joint Sealant is a time-tested sealing solution for steel flanges with large diameters, rectangular or irregular shapes, and rough or pitted surfaces. When compressed, this soft, conformable cord forms a thin yet strong seal. It can also seal applications where available bolt loads are low.

Braided Packing



We carry the below packing types. Work with your Account Manager to choose which works best for your application:

- Synthetic Fiber
- Carbon/Graphite Fiber
- Flexible Graphite
- PTFE
- Kevlar
- Die-Formed Rings

Fasteners and Kitting



Besides supplying both standard and special fasteners to the Chemical industry, we offer both standard and exchanger kitting services. This means that the right gasket comes kitted together with the right fasteners, torque requirements and a technical drawing. This solution ensures that the customer needs to only issue a single PO per exchanger, eliminates hours of material handling, provides the correct gaskets and studs for their equipment, and clearly spells out a safe and leak-free installation. This process assures the customer that they have the right materials for each application. This service can be provided for both MRO and turnaround activities.



Exchanger and Bolted Joint Kitting

- Complete "point of use" packaging of all components and supplies required for exchanger assemblies, including gaskets, custom fasteners, anti-seize and assembly instructions. All components tagged to specific flanges for trouble-free assembly
- Kits include all bolting and installation specifications in one unit
- System simplifies warehouse logistics and storage, reduces the risk for errors and improves efficiencies in managing employees by providing all of the items they need to properly and safely assemble the bolted joint - all in one place.

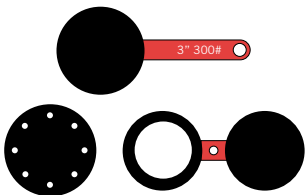


Standard ANSI Flange Kitting

- Gaskets, fasteners and washers per flange size and pound class all in one place
- Easy to store
- Greater inventory control
- Reduced waste by eliminating loose parts for job requirements

Our kitting capabilities allow us to provide the right gasket, eliminate torque misapplication and create time efficiencies providing one thing – total peace of mind.

Media Isolation



Blinds

Style: Paddle and Spectacle

For all your isolation and hydro requirements (isolation blinds are not intended for pressurized services or hydrotest). Unless specified, isolation blinds are 1/4" to 3/8" carbon steel. Blinds for hydrotest are available with thickness per ASME and API.



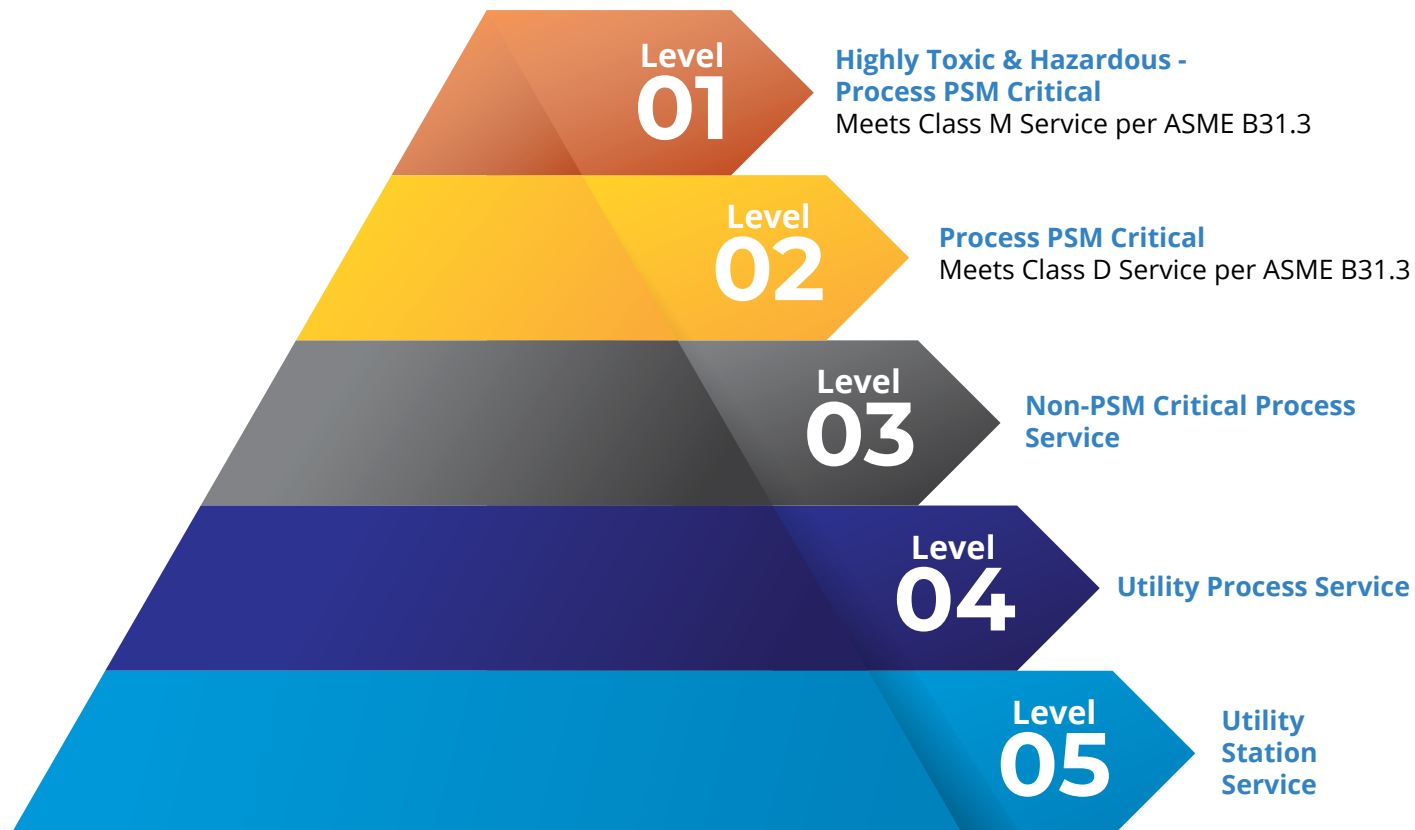
IsolatorHF Gasket

The IsolatorHF gasket provides the ability to ensure that blinding gaskets are not left behind when the process is restarted. By leaving blinding gaskets in the flange, the end user runs the risk of having a leak by attempting to reuse the gasket. It is used when flanged piping is being opened for maintenance events. This gasket works in conjunction with paddle blinds to prevent fluid from moving forward in cases where the system may be pressurized prematurely.

Industrial Hose Products

Criticality of Service

LGG Industrial provides hose assemblies designed to meet the demanding needs of chemical manufacturing. Below is our hose portfolio, categorized by service criticality for the chemical industry.



Metal Hose ▲▲▲▲▲



LGG Industrial can fabricate metal hoses to accommodate your custom application requirements, including:

- C276
- Monel
- Inconel
- 316L/304 Stainless Steel

Comprehensive Welding Program

We have the most comprehensive welding program in the industry that was created in partnership with metallurgists, inspectors, and subject matter experts in the chemical manufacturing industry. This partnership has created a proprietary fabrication and inspection process that increases mechanical integrity, reduces risk, and creates a lower total cost of ownership.

ASME B31.3 Section IX Qualified

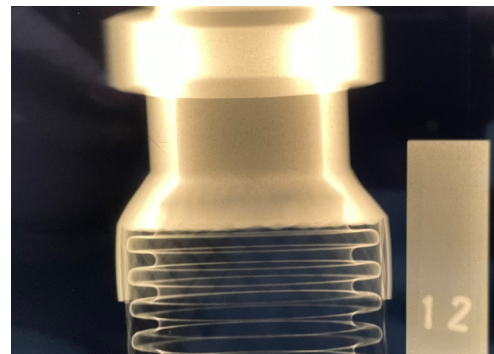
Our welders are ASME B31.3 Section IX qualified and maintain welding logs. This log helps us maintain the 5% random radiography requirement set-fourth within our industry.



Full Penetration Weld

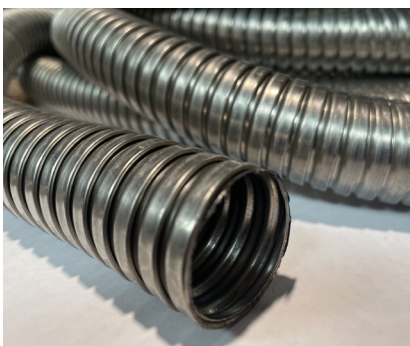
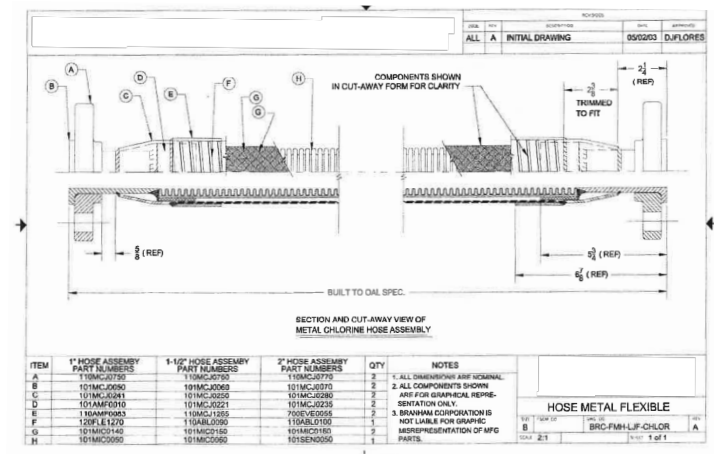
We can apply full penetration welds to the attachment weld for a variety of fittings that a third party inspects via visual and radiographic inspection per criteria set by ASME B31.3. We also understand the importance of weld quality, so we use high-purity argon at all our weld stations to reduce weld contamination.

<h2 style="margin:0;">Hartford Quality Assurance</h2> <h3 style="margin:0;">RADIOGRAPHIC INSPECTION REPORT</h3>																
Customer: Branhram Industrial										Component: POF11045352		B/W No.: RT-4 Rev B		"TEST 3-2007"		
Acceptance Standard:		<input type="checkbox"/> ASME	<input type="checkbox"/> ENR	<input type="checkbox"/> Customer	<input type="checkbox"/> AWS	<input type="checkbox"/> B3.1	<input type="checkbox"/> B3.1.1	<input type="checkbox"/> B3.1.2	<input type="checkbox"/> AWS D1.1	<input type="checkbox"/> AWS D10.1	<input type="checkbox"/> AWS D15.1	Lead Time:				
Isotope: <input type="checkbox"/> Ir <input type="checkbox"/> Ga		Source Size: 15" x 7"	<input type="checkbox"/> X	<input type="checkbox"/> RRP	<input type="checkbox"/> B3.124	<input type="checkbox"/> SCD 15"	<input type="checkbox"/> DFD 0.040"				First: 6.00" 6.00" 6.00"					
Film-MP: <input type="checkbox"/> 04		Speed: 400	Dev: 4 min 15 sec	Technique:	<input type="checkbox"/> Single	<input type="checkbox"/> Double	<input type="checkbox"/> Vase	<input type="checkbox"/> Vase	<input type="checkbox"/> Double	<input type="checkbox"/> Double	<input type="checkbox"/> Double	<input type="checkbox"/> Double	<input type="checkbox"/> Double	Exposure per weld: 5	End: 6.00" 6.00" 6.00"	
Weld Descriptions:												Use 4-20		All Dimensions in Inch		
<input type="checkbox"/> 1	Location 30"	Orientation Vertical	Joint 1117524	<input type="checkbox"/> X	Joint 01222	Joint 1117524	<input type="checkbox"/> X	Joint 1117524	<input type="checkbox"/> X	Joint 1117524	<input type="checkbox"/> X	Joint 1117524	<input type="checkbox"/> X	Joint 1117524	<input type="checkbox"/> X	Joint 1117524
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<input type="checkbox"/> 5	Location C	Orientation Vertical	Joint 01222	<input type="checkbox"/> X	Joint 01222	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222
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<input type="checkbox"/> 7	Location E	Orientation Vertical	Joint 01222	<input type="checkbox"/> X	Joint 01222	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222
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<input type="checkbox"/> 10	Location H	Orientation Vertical	Joint 01222	<input type="checkbox"/> X	Joint 01222	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222	<input type="checkbox"/> X	Joint 01222		



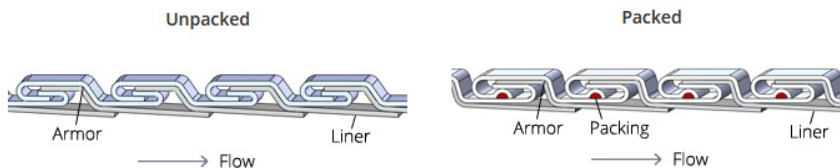
Chlorine Transfer Hose

Our unique welding capabilities have allowed us to fabricate chlorine transfer hoses per Pamphlet 6 in-house.



Interlocked Hose

We know that dry material handling and pellet transfer applications can bring unique challenges to product transfer. The abrasive nature of the application makes a robust stainless steel interlock hose ideal for the job. We have the ability to customize these hoses to meet your unique requirements.



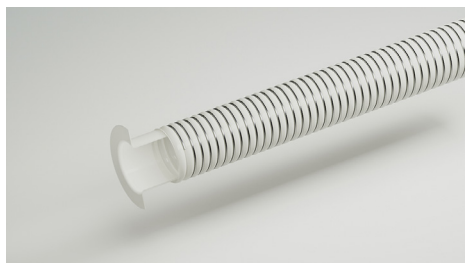
PTFE Hose ▲▲▲▲

LGG Industrial has unique capabilities when the application requires a highly chemical-resistant hose.

Hose for Highly Toxic Applications

We can fabricate and supply purpose-built hoses for highly toxic applications such as:

- Anhydrous hydrogen fluoride
- Bromine
- Chlorine
- Fluorine
- Furan
- Hydrochloric Acid
- Hydrofluoric Acid
- Hydrogen Cyanide
- Methyl Mercaptan
- Nitric Acid
- Phosgene

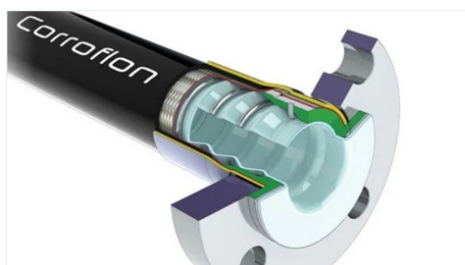
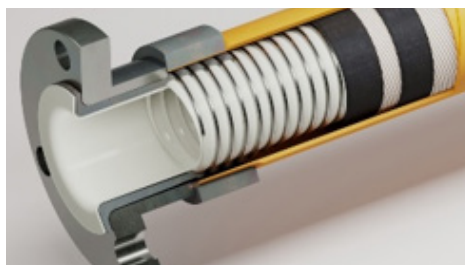
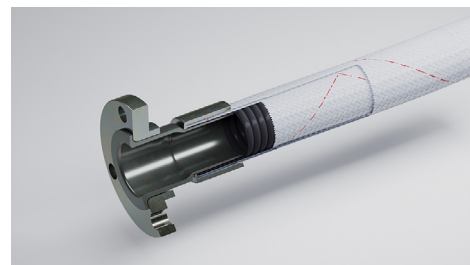


PTFE Hose

PTFE is highly chemical-resistant, and we have the capabilities to fabricate flare thru PTFE hose in-house. We can flare thru the end fittings of a hose to create a seamless PTFE layer for ultimate chemical compatibility. This is necessary in applications where corrosion of metals is likely.

We can fabricate these hoses with rubber covers or utilize a variety of braid types:

- Polyvinylidene Fluoride (PVDF)
- Polypropylene (PP)
- Stainless Steel
- Monel
- C276



We understand PTFE is not always the answer, so we also have a variety of other hoses suitable for chemical transfer. These include FEP, UHMWPE, XLPE, and elastomeric hoses that contain EPDM, FKM, and Nitrile rubbers.

Rubber Hose



(FEP) Fluorinated Ethylene Propylene Chemical Hoses ▲▲▲

LGG Industrial provides a diverse selection of FEP hoses, engineered to meet the demands of a wide range of chemical applications, including both suction and delivery services. Our FEP hoses are available with either smooth or corrugated covers to suit your specific needs.



(UHMWPE) Ultra-High Molecular Weight Polyethylene Chemical Hoses ▲▲▲

Style: Goodall Kemflex Series

LGG Industrial offers a range of smooth and corrugated UHMWPE hoses, designed to resist 95% of the chemicals used in the industry. Our exclusive Goodall Kemflex hoses feature a highly impermeable yet flexible UHMWPE tube, reinforced with high-tensile Nylon or brass-plated steel wire braids. This construction delivers superior strength, flexibility, kink resistance, and durability compared to competing spiral-reinforced hoses. The tube and reinforcement are protected by a tough EPDM cover, specially formulated to resist abrasion, chemicals, sunlight, and ozone, ensuring longevity and reliability. The Goodall Kemflex series is tailored to meet your unique needs, offering features such as crush resistance, higher working pressures, and static conductivity.



(XLPE) Cross-linked Polyethylene Chemical Hoses ▲▲▲

LGG Industrial offers a wide range of XLPE hoses, designed to handle the majority of today's industrial chemicals in pressure, gravity flow, or suction service. Our XLPE hoses are available with both smooth and corrugated covers to suit various application needs.



Rubber Chemical Hoses ▲▲▲

LGG Industrial offers a vast selection of rubber hoses specifically designed for conveying a wide range of chemicals. These hoses feature tube materials such as EPDM, CPE, and other elastomers. Unique and hard-to-find options, like the Hydrogen Cyanide and CO₂ King hoses, are expertly manufactured at our North American Goodall facility



Anhydrous Ammonia Hose ▲▲▲

LGG Industrial proudly offers Goodall Anhydrous Ammonia hose assemblies, built by certified technicians and hydrostatically tested to ensure maximum safety and reliability. To combat cover blistering and extend service life, Goodall offers hoses featuring our proprietary seamless, extruded Chlorobutyl tube, which is 15 times less permeable to vapor and gases compared to the EPDM tubes exclusively used by other manufacturers. Whether you choose one of our textile or stainless steel braid reinforced hoses, Goodall's NH₃ hoses are engineered to deliver the highest quality and longest service life in the industry.



Chlorobutyl Steam Hoses ▲▲▲

Chlorobutyl steam hoses are the top choice for those who prioritize safety and high performance. Goodall offers several steam hose options featuring our proprietary, seamless, extruded Chlorobutyl tube, which is 15 times less permeable to vapor and gases compared to the EPDM tubes commonly used by other manufacturers. The combination of a premium Chlorobutyl tube, multiple layers of brass-plated steel braid reinforcement, and a high-grade, abrasion-resistant EPDM cover makes this the industry's finest steam hose.



EPDM Steam Hoses ▲▲▲

LGG Industrial offers a variety of brand-name EPDM steam hoses that deliver a cost-effective solution for high-pressure steam and hot water service applications.



Crimped Steam Hose Assemblies ▲▲▲

Replacing bolted steam fittings with a crimped solution enhances safety, eliminates leaks, and saves both time and money. Additional benefits include electrical continuity, reduced weight, and a lower profile. LGG Industrial has partnered with industry-leading hose and fitting manufacturers to develop crimped steam assembly solutions and is actively expanding our range of crimped steam hose and fitting combinations.



Air, Water, Breathing Air and Nitrogen Hoses ▲▲

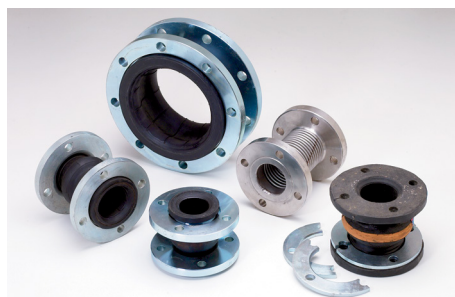
In addition to steam hoses, LGG Industrial offers a comprehensive range of products in the SWAN hose category (Steam, Water, Air, Nitrogen). With various sizes, colors, temperature and pressure ratings, and end couplings available, LGG Industrial provides complete solutions, including Breathing Air and Nitrogen service hoses.

Composite Hose ▲▲▲▲



Composite hose is a unique combination of metals and plastics to create an extremely flexible hose suitable for many applications. This unique construction makes it a common hose for loading/unloading applications within the plant. The hose is built per the application and will have an inner and outer wire compressing multiple layers of fabrics and plastics together. Metallurgy choices range from carbon steel, coated carbon steel, and stainless steel. The inner plastic lining will be polypropylene, FEP, PTFE, or PFA film to suit a wide range of chemical compatibility.

Expansion Joints



LGG Industrial provides the chemical industry with a full range of expansion joint types, including PTFE, metal, rubber, and fabric. We work closely with the industry's largest and highest-quality expansion joint suppliers, which allows us to meet any expansion joint requirement.



PTFE Expansion Joints

Our extensive range of molded PTFE joints and PTFE-lined rubber joints cater to diverse piping applications, offering exceptional resistance to chemicals and high temperatures.



Rubber Expansion Joints

LGG Industrial provides everything from standard-size piping joints to custom sizes, lengths, offsets, and angles to meet unique piping configuration needs.



Metal Expansion Joints

Our expertise extends from standard stainless steel piping joints to highly engineered solutions utilizing exotic metals and custom hardware, ensuring optimal performance in even the most demanding applications.



Fabric Duct Joints

We offer a wide range of Fabric Duct Joints designed to withstand extreme temperatures and address unique ducting challenges.

Loading Arms Solutions



LGG Industrial is a solutions-driven national distributor of loading arm products and accessories. Our technical expertise helps customers avoid costly repairs and make their equipment last longer. Our product, industry, and application know-how increase your operational efficiencies and our proactive and value-added services aim to solve your problems before they become emergencies.

Loading Arms

- Custom Designed Systems
- Closed Loop and Vapor Recovery Systems
- Hose Handler "By-pass" System
- Open Dome Loading System
- Pneumatically Actuated
- Linear Spring or TBLA Spring

Loading Arms-Swivel Joints

- Low Pressure Series
- OEM Swivels
- Split Flange

Loading Arms-Loading Racks

- Custom Designed Systems
- Canopies
- Gangways
- Safe-Walk Bridges
- Self-Leveling Stairs

Loading Arms Service & Repair

We offer on-site application support, training, and installation support along with drawings for design modifications or changes. Partnering with a repair facility in Houston, Texas, LGG Industrial also repairs Loading Arms, Dry Break Fittings, Loose Swivel Joints and Safety Breakaways.

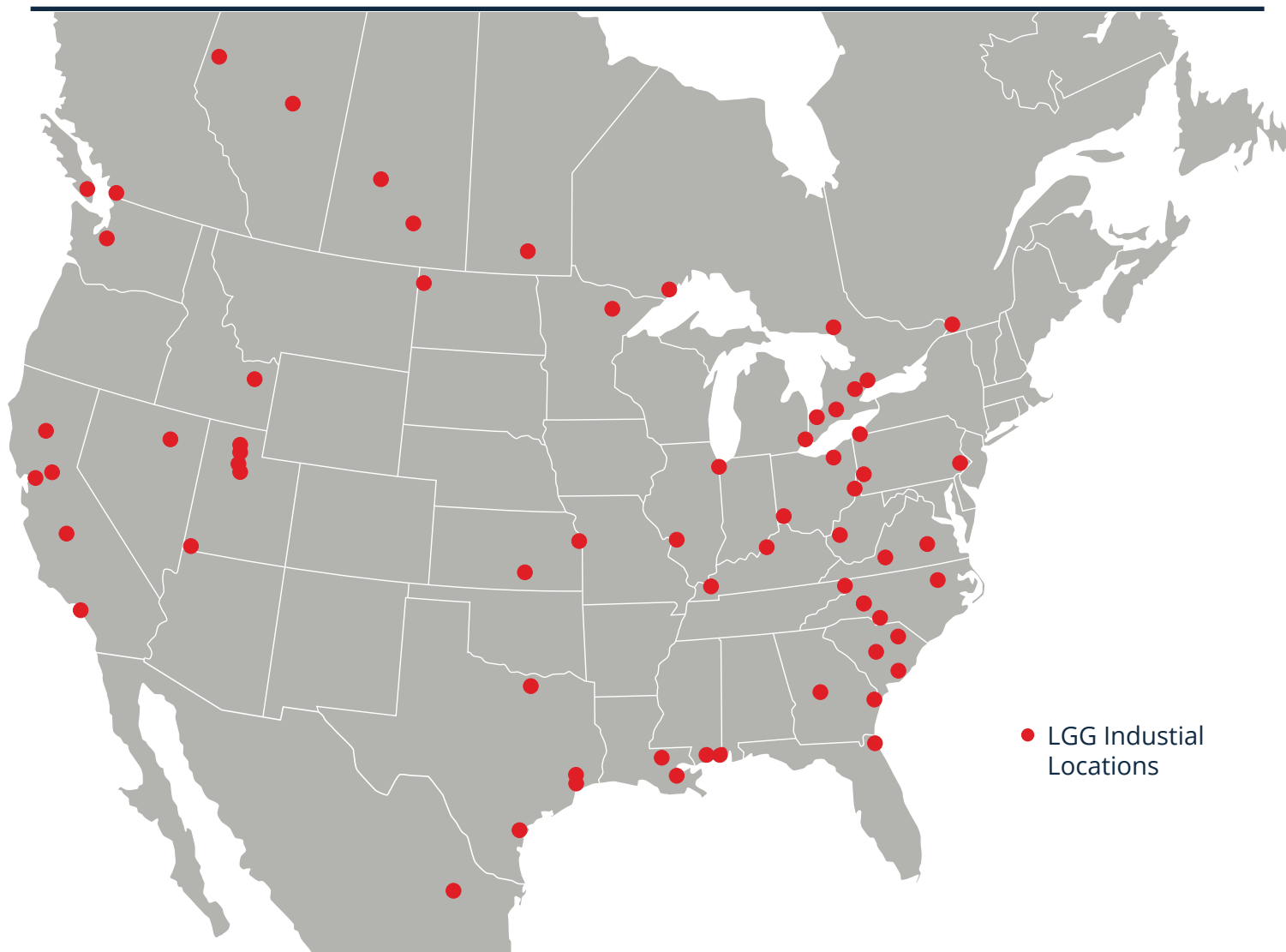
Loading Arms-Accessories

- API Couplers
- Breakaway Fittings
- Dry-Break Disconnects
- Pumping Station Skid Packages
- Vapor Recovery Plate
- Vapor Recovery Cone
- Loose Swivel Joints

Loading Arms-Capabilities

- Application Consultation
- Customer Site & In-House Repairs
- Equipment Inspection
- Field Surveys
- Project Based Engineered Liquid Transfer Systems





LGG Industrial offers a complete line of products including:

- Fluid Transfer Solutions
- Fluid Power Hose Solutions
- Material Handling Solutions
- Sealing Solutions

LGG Industrial Industries Served:

- | | | |
|-------------------|--------------------|----------------------------|
| • Aggregate | • Mining | • Pulp & Paper |
| • Agriculture | • OEM | • Refining & Petrochemical |
| • Chemical | • Oil & Gas | • Rental |
| • Food & Beverage | • Power Generation | • Tire |
| • Grain | • Primary Metals | |



LGG INDUSTRIAL

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