Leader Global Technologies (formerly JM Clipper) brings you product and market place experience as well as the most cost effective sealing solutions available in the market today. Founded over 100 years ago, Leader GT has led the industry in fluid sealing and gasket manufacturing technology.

As the original designer and developer of the compressed sheet manufacturing equipment, Leader GT has continued to develop leading edge gasket and packing technology. These technologies include the "Patented Dynagraph™ Process", Elastagraph®, Graphite and Corrugated Metal Gasket, CW 2000 High Temperature Packing and many other technology driven fluid sealing products. Leader GT continues to be the fluid sealing technology leader that you can count on.

With our extensive experience in the fluid sealing market, Leader GT is setting new standards of excellence in the manufacture and supply of fluid sealing products. We will work to lower the fluid sealing product “Total Installed Cost”, which allows the end-user and their partner distributor to take complete ownership and control of their fluid sealing product spend. Leader GT will help you accomplish this through increased efficiencies, minimized downtime, onsite training and fixed equipment & piping drawing management, all the while continuing to provide “World Class” fluid sealing technologies.

The primary focus of Leader GT is to bring an attitude of excellence to the manufacturing of fluid sealing, faster and better with specialty sealing products. As your dedicated resource, we will manage your day-to-day fluid sealing applications. With our superior manufacturing capabilities, outstanding field technical support and engineering services, we will deliver demonstrable cost savings, and measurable reliability advancements.

**Products and Services**
- Spiral Wound Gaskets
- Full Line of Stud Bolts and Fastener Products
- Elastagraph® Molded Graphite and Metal Flange Gaskets
- Dynagraph® Flexible Graphite Technology
- Dynagraph® HE (Heat Exchanger) Gaskets
- Graftech GRAFOIL® Products including Sheet and Tape
- LeaderCam® Camprofile Gaskets
- Double Jacketed Gaskets
- Specialty Manufactured Metallic Gaskets
- Calendared, Filled PTFE Sheet
- Compressed Sheet Gasket Materials
- Specialty Manufactured Cut Gaskets
- Dynagraph® Mechanical Packing Materials
- Full Line of Standard Mechanical Packing Materials
- On-site Technical Training Programs
- Engineered Gasket Design
- Engineered Bolt Torque Calculations
- ASME Code-Bolted Joint Analysis
- Fixed Equipment and Piping Drawing Management
- Warehouse & Zone Stores Materials Management Programs
- Turn Around Materials Management Programs

**Spiral-Wound Gaskets Quality Construction**

Available in a full range of styles and materials, our spiral-wound gaskets are manufactured in accordance with ASME B 16.20 for use in all industry flanges, including ASME B 16.5 and ASME B 16.47, Series A&B. Leader GT assures strict adherence to these specifications as routine inspection procedures are applied throughout the manufacturing process. In addition, we maintain traceability of all materials used in our gasket construction to provide material certifications as required. Leader GT’s gaskets maintain a ISO 9001 Certification. Choose from the following styles and materials, or let us customize an order to fit your individual need.

**SM, SH Manhole and Handhole Gaskets**

Designed for standard manhole cover assemblies, as well as boiler handholes and tubecaps, styles SM and SH are manufactured in all materials and fillers. Common shapes include round, oval, obround, pear, diamond, rectangle and square.

**S Spiral Windings Only**

Style S consists of winding with no inner or outer ring. Available in the full range of winding metals and filler materials, style S is manufactured to meet most dimensional requirements.

**SRP and SP Spiral-Wound Gaskets with Pass Partitions**

Styles SRP and SP include jacketed ribs in any configuration attached to the inside diameter of the spiral winding to serve as a partition for heat exchanger applications. The rib material generally corresponds to the metal in the winding.

**Inner Ring Gaskets**

Styles SRI and SI include a solid metal inner ring generally fabricated from the same metal as the winding. The inner ring is designed to minimize turbulence in process material flow and to prevent inward buckling of the spiral-wound gasket element. The chart to the left gives the standard inside dimensions for Leader GT Style SRI.
LeaderCam/Camprofile gaskets are offered as a high quality, low emission sealing alternative. LeaderCam is designed for a difficult sealing environment where performance is critical or sealing stresses are low. LeaderCam gaskets consist of a metal core with concentric grooves and normally have sealing layers of either flexible graphite (GRAFOIL®) or PTFE. Metal cores are usually selected based on metallurgy of the piping system and can be re-laminated with new sealing layers to give virtually endless uses. This can be most interesting in applications using expensive alloys. The following presents the two types of profiles available.

**LeaderCam camprofile F**

This profile is grooved and has covers from the ID to the OD. Its uses are similar to the spiral wound gasket profile S. It is designed for tongue and groove and male/female flanges.

**LeaderCam camprofile FR**

This profile has a section that performs as the guide ring in a SR spiral wound gasket. It is designed for raised and flat faced flanges. The OD normally extends to the surface of the bolts.

**Advantages**

- Excellent sealing characteristics at a wide range of seating stresses
- Very forgiving of inconsistent bolt torquing or installation error
- Applicable to almost all types of flanges regardless of available bolt loads
- The working thickness of sealing layers is extremely small reducing fugitive emissions
- Low seating stresses reduce flange damage and gasket removal problems
- Extreme temperature, pressure and chemical resistance due to variety of materials available

**Types of Covers**

<table>
<thead>
<tr>
<th>Profiles</th>
<th>Seating Stress Y (psi)</th>
<th>Gasket Factor M</th>
</tr>
</thead>
<tbody>
<tr>
<td>F and FR</td>
<td>2900</td>
<td>3,75/4,25</td>
</tr>
</tbody>
</table>

**LeaderCam camprofile FL**

The FL is designed with a floating guide ring to meet end user specifications in standard flanges. The guide rings can be made from a variety of metals for various service conditions.

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**Standard Shapes Chart**

- 00
- 05
- 20
- 23
- 24
- 26
- 27
- 29
- 40
- OR
- FL
- F
- FR
**The Dynagraph™ Process**

**How it works**

The Dynagraph™ process is a patented manufacturing process used to mold flexible graphite to various corrugated metal substrates. By using the Dynagraph process, Leader GT is able to provide gaskets capable of outperforming competitor gaskets that are said to be equals to the Elastagraph™ and Dynagraph™ HE gaskets. Because of our patented Dynagraph, there are no equals to the Leader GT corrugated gasket family of products.

**Description**

Dynagraph HE and Elastagraph gaskets are made by infusing a seamless layer of flexible graphite at varying densities and thicknesses over a corrugated metallic core. These gaskets utilize a unique corrugated pattern, which increases the depth of the groove and the pitch at the peak of the corrugation. This greatly improves the gasket’s sealability over traditional corrugated designs.

**Advantages**

- Industries’ only corrugated rib pattern
- Increased gasket recovery
- Lower porosity and stress corrosion
- Greater unit load at initial torque
- Increased load retention
- No mylar/polyester film
- Patented

The increased pitch and groove depth increase the Dynagraph HE and Elastagraph gasket’s recovery or “spring back” and reduces the surface area of the gasket for greater unit load at initial torque as well as lower minimum seating stress. This results in bolt stability and increased load retention during thermal cycling. The proprietary production process allows the graphite to be applied without the “seam” that is present in other gaskets fabricated from flexible graphite sheets. Elastagraph gaskets are made with a high-density inner ring that increases sealability many times over traditional flexible graphite-covered corrugated metal gaskets. The inner diameter of the Elastagraph is incapsulated by high-density flexible graphite increasing its sealability over traditional designs as well. The superior design of the Elastagraph flange and our Dynagraph HE family of products eliminate leak paths that typically contribute to stress corrosion of the metal insert. The Leader GT process also eliminates the mylar/polyester film adhesive used in traditional gasket designs which contributes to volume and bolt torque loss.

**Applications**

Dynagraph HE and Elastagraph gaskets were developed specifically to solve fugitive emission and compliance problems. These gaskets perform well in flanges that experience thermal cycling or limited initial bolt load. Dynagraph HE and Elastagraph gaskets are the most economical way of meeting low emission requirements.

**Elastagrapth™ and Dynagraph HE Gaskets**

**Dynagraph HE Operating Limits**

<table>
<thead>
<tr>
<th>Pressure Ratings</th>
<th>Vacuum to 4,500 psi (306 bar) depending on temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Operating Temperature</td>
<td>1200°F (650°C) (Steam); 850°F (450°C) (Air)</td>
</tr>
<tr>
<td>PH Range**</td>
<td>0-14</td>
</tr>
<tr>
<td>Composition</td>
<td>Flexible graphite infused over a corrugated metal core (316, 304, or carbon steel)</td>
</tr>
</tbody>
</table>

**Elastagrapth™ Operating Limits**

| Maximum Operating Temperature | 1200°F (650°C) (Steam); 850°F (450°C) (Air) |
| PH Range** | 0-14 |

**Elastagrapth™ Material Specifications**

- **Temperature Capabilities:** Cryogenic to 850°F (460°C) oxidizing; to 1200°F (650°C) steam.
- **Pressure Ratings:** 150 and 300 lb. class flanges

**Elastagrapth™ Material Considerations**

- **Sealing Material:** Flexible graphite has been widely recognized as the material of choice in combining excellent thermal stability with corrosion resistance (nuclear grade available).
- **Metal Carrier:** 316SS is the standard carrier. The flexible graphite used for the sealing element of all Elastagraph gaskets is GRAFOIL.
Leader Global Technologies and GrafTech have formed a partnership allowing for Leader GT to use only GRAFOIL® products for all standard gasket manufacturing.

GRAFOIL® flexible graphite was the first fluid sealing material made exclusively from pure, natural graphite flake. Its resistance to heat, fire, corrosion and aggressive chemicals make it the most universally applicable sealing solution on the market today. Like no other, GRAFOIL products provide a tight seal after repeated exposure to the harshest environments.

A distinctive sheet material, GRAFOIL flexible graphite combines the high temperature and chemical resistance characteristics of graphite with flexibility, conformability, compactability and resilience. These unique properties are enhanced by a patented manufacturing process and differentiate GRAFOIL products from other materials. Considered one of the safest materials for nearly all sealing applications, GRAFOIL gaskets and packings are fire safe and widely used as a replacement for asbestos.

While maintaining an effective seal, GRAFOIL material exhibits virtually no creep relaxation. As a result, the need for periodic bolt tightening is greatly reduced.

Sealing Applications
From precision pipe threads to large valves and flanges, GRAFOIL flexible graphite creates a superior seal. GRAFOIL products fill pits, gouges and microscopic irregularities under only moderate bolt loads, leaving no open spaces - or voids for leak path development.

Single Layer Material
- GTS: Standard Industrial Grade flexible graphite sheet with an oxidation/corrosion inhibitor and typically 98% carbon content
- GTD: "Durable" grade flexible graphite is specifically designed for use as the filler material in spiral wound gaskets
- GTE: "Economy" grade flexible graphite sheet, noninhibited and typically 98% carbon content
- GTX: "LowOx" flexible graphite sheet, highly oxidation-resistant material.

Reinforced Laminates
- GHE: 316/316L stainless steel tanged insert (0.0014" thick), mechanically bonded to GTS facing
- GHR: Flat 316/316L stainless steel insert (0.002" thick), adhesively bonded to GTS facing
- GRAF KOTE®: Laminate with a single- or double-sided thin (0.0005" thick) polymer coated surface

GRAFOIL® Sealing Solutions are:
- Chemically compatible: GRAFOIL® flexible graphite is inert to most chemicals and gases.
- Resilient and compressible: GRAFOIL products provide leak-tight performance and recover after compression, protecting systems from load loss caused by bolt stretch.
- Naturally lubricious: GRAFOIL flexible graphite is ideal for gasket and seal applications where surface movement exists, maintaining the utmost in performance and sealability.
- Thermally stable: GRAFOIL flexible graphite will not cold flow or creep under normal gasket loads and no embrittlement occurs.
- Easily cut: Using conventional tools, GRAFOIL flexible graphite can be cut or molded into most required configurations.

Other GRAFOIL products
- GTS®: High-purity paste made from high purity flake and a nuclear quality petroleum-based carrier
- UCAR®-323: Woven continuous PTFE with fiberglass reinforcement

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