Product Family - Laminates (Metal-Reinforced)

- GHH - GTC with Flat Low-Carbon Steel
- TG-251 - GTC with Thicker Low-Carbon Steel
- GHE - GTB with Tanged Stainless Steel
- GHR - GTB with Flat Stainless Steel
- GHT - GTB with C-276

Applications

GHE material is suitable for standard industrial fluid sealing applications.

- Chemical
- Petrochemical
- Refinery
- Steam Service
- Cryogenic Applications
- ASME Class 150 & 300 Flanges

Product Overview

GRAFOIL® GHE metal-reinforced laminate consists of GRAFOIL® GTB flexible graphite mechanically attached to both faces of a stainless steel tang metal insert.

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

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness of Laminate</td>
<td>0.064&quot; (1.63 mm) 0.124&quot; (3.15 mm)</td>
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<tr>
<td>Width</td>
<td>39.4&quot; (1000 mm)</td>
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<tr>
<td>Length</td>
<td>39.4&quot; (1000 mm) 100' (30.5 m) (&lt; 0.064&quot; thickness)</td>
</tr>
<tr>
<td>Bulk Density (Graphite)</td>
<td>70 lb/ft³ (1.12 g/cc)</td>
</tr>
<tr>
<td>Compressibility at 5000 psi (35 MPa) load</td>
<td>36% for 0.064&quot; thick</td>
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<tr>
<td>Recovery after 5000 psi (35 MPa) load</td>
<td>18% for 0.064&quot; thick</td>
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<tr>
<td>Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C</td>
<td>&lt;3% for 70 lb/ft³</td>
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<tr>
<td>Sealability Method: Mod DIN 3535 at 580 psi N² at 32 MPa load</td>
<td>&lt;1.5 ml/min for 70 lb/ft³</td>
</tr>
<tr>
<td>Temperature Use Range</td>
<td>-400°F to 975°F (-240°C to 525°C)</td>
</tr>
<tr>
<td>Resistance in #3 Oil</td>
<td>Thickness increase Weight change</td>
</tr>
<tr>
<td>Resistance in #1 Oil</td>
<td>Thickness increase Weight change</td>
</tr>
<tr>
<td>Certification</td>
<td>Certify to Grade</td>
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</tbody>
</table>

**Notes:**
* Because teeth of the tanged metal interlayer may indent metals softer than 316/316L Stainless Steel, Grade GHE gaskets are not normally recommended for use with glass, bronze, aluminum or other softer metal flanges.

**Properties listed are typical and cannot be used as accept/reject specifications.

## ASME Gasket Factors
- “m” Factor: 2
- “y” Stress: 2,500 psi (17.28 MPa)
- Max Gasket Unit Load: 24,000 psi (165.87 MPa)