

# **GHE Laminate**

Technical Data Sheet 131

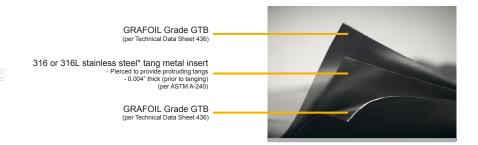
### **Metal Reinforced Laminates**











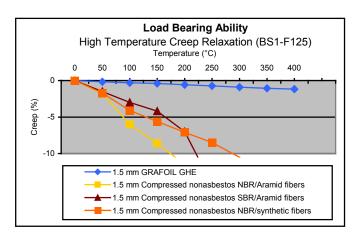
## **Product Overview**

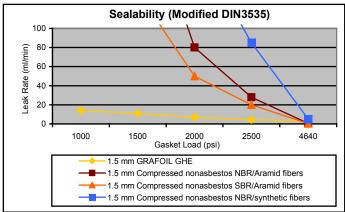
GRAFOIL Grade GHE laminate is made with GTB flexible graphite mechanically bonded to both faces of a 316 or 316L stainless steel tang metal insert. Surface identifiable, laminate is branded with the GRAFOIL grade and source guarantee.

## **Applications**

Grade GHE is suitable for standard industrial fluid sealing applications.

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





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\*\*

Characteristic	Value
Thickness of Laminate	0.064" (1.63 mm) Standard 0.124" (3.15 mm) Standard Non-standard thicknesses may be available upon request
Width	39.4" (1000 mm) Standard  Non-standard widths may be available upon request
Length	39.4" (1000 mm) Standard 100' (30.5 m) Standard (available for <=0.064" thick) Non-standard lengths may be available upon request
Bulk Density (Graphite)	70 lb/ft³ (1.12 g/cc) Standard Non-standard densities may be available upon request
Compressibility at 5000 psi (35 MPa) load	36% Typical for 0.064" thick
Recovery after 5000 psi (35 MPa) load	18% Typical for 0.064" thick
Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C	<3% Typical for 70 lb/ft³
Sealability Method: Mod DIN 3535 at 580 psi N² at 32 MPa load	<1.5 ml/min Typical for 70 lb/ft³
Temperature Use Range	-400°F to 975°F (-240°C to 525°C)
Resistance in #3 Oil Thickness increase Weight change	<12% Typical <35% Typical
Resistance in #1 Oil Thickness increase Weight change	<8% Typical <33% Typical
Certification	Certify to Grade

# **ASME Gasket Factors**

"m" Factor: 2

"y" Stress: 2,500 psi (17.28 MPa)

Max Gasket Unit Load: 24,000 psi (165.87 MPa)

- +1 (800) 253-8003 (Toll-Free in USA) +1 (216) 529-3777 (International)

# **Redefining limits**

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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.