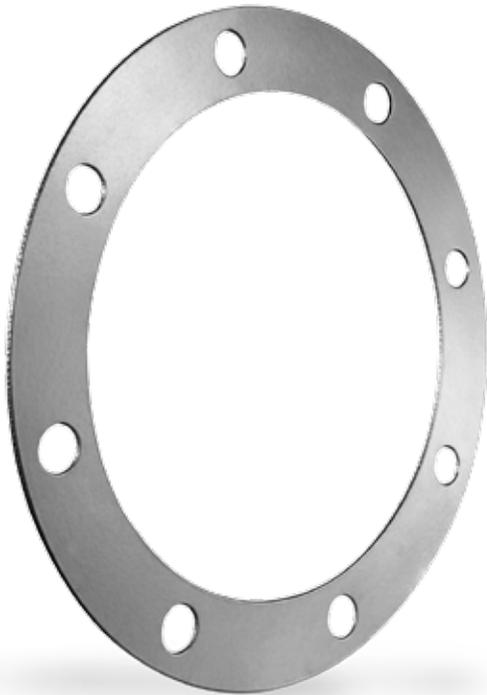


# Garlock HOCHDRUCK<sup>®</sup> Style 3128

High performance reinforced graphite gasket material with improved handling and sealability characteristics



HOCHDRUCK® is a sealing material with excellent mechanical properties which is manufactured by a patented process without the use of adhesives (adhesives tend to weaken load retention at elevated temperature). HOCHDRUCK® is available in Standard Grade and Reduced Sulfur Grade "RS", certified to meet D50YP12 and other current nuclear and military specifications.

## SPECIFICATIONS

<b>Temperature</b>	
Minimum	-400°F (-240°C)
Max. in atmosphere	850°F (454°C)
Max. in steam	1200°F (650°C)
<b>Pressure</b>	2,000 psig (140 bar)
<b>PxT (max)*</b>	700,000 (25,000) 1/16" and .040" 350,000 (12,000) 1/8"

## PHYSICAL PROPERTIES

ASTM Test Method	Typical Physical Properties	Typical Results
ASTM F37B	<b>Sealability</b>	
	<b>ASTM Fuel A Nitrogen</b> ml/hr	0.2
DIN 3535	<b>Gas Permeability, cc/min</b>	0.4
	<b>Creep Relaxation, %</b>	10
ASTM F38	<b>Creep Relaxation, %</b>	10
ASTM F36	<b>Compressibility Range, %</b>	30-40
ASTM F36	<b>Recovery, %</b>	20
ASTM F152	<b>Tensile Strength, psi (N/mm<sup>2</sup>)</b>	4,500 (31)
DIN 52913	<b>Stability Under Stress, % (N/mm<sup>2</sup>)</b>	96 (48)

### NOTE:

This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results are in accordance with ASTM F104; properties based on 0.040" (1.0mm) sheet thickness (except as noted).

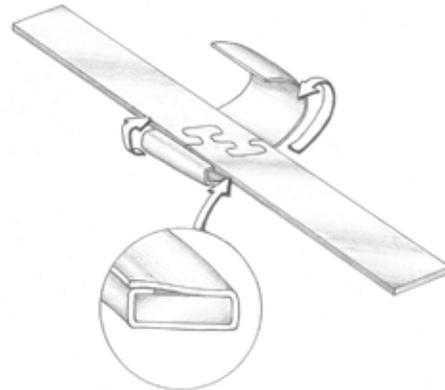
## VALUE & BENEFITS

- » Better handling and greater safety, when compared with other metal-inserted graphite sheet products
- » Anti-scratch and anti-stick properties on surface of product
- » Patented "Adhesive Free" technology
- » Can be cut with a utility knife
- » Extremely high compressive strength; can replace metal gaskets in some applications
- » Tight sealing (Meets TA-LUFT requirements at 60MPa stress)
- » Great value - less breakage compared to conventional graphite sheet products



## DOVETAIL INSTALLATION INSTRUCTIONS

After mating the matching dovetail sections together, wrap a length of either Garlock Smooth Finished or Garlock Diamond Textured Graphite tape (0.010" thick) around dovetail area. Width of graphite tape must be at least 1/2" greater than dovetail area. Wrap tape one full revolution around gasket in dovetail area. Be sure to overlap tape by approximately 1/2" and cut tape. DO NOT attempt to open or move tape at this point - it will damage the tape. With a smooth piece of metal that is greater in area than the dovetail area, softly tap with a hammer and blend the tape into the gasket. Place flanges together and follow normal installation procedures.



High Pressure gasketing material with multiple stainless steel foil laminations and graphite blocking agents. This creates a gasketing material that has a scratch resistant surface, increased sealability and is more rigid than standard graphite sheet. HOCHDRUCK® is easy to:

- » Cut
- » Dovetail
- » Seal
- » Handle
- » Install
- » Remove

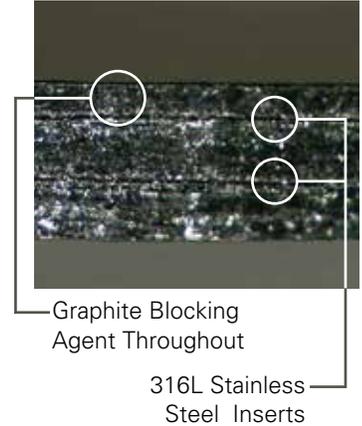
**EASY TO CUT**



**EASY TO INSTALL**



**EASY TO SEAL**



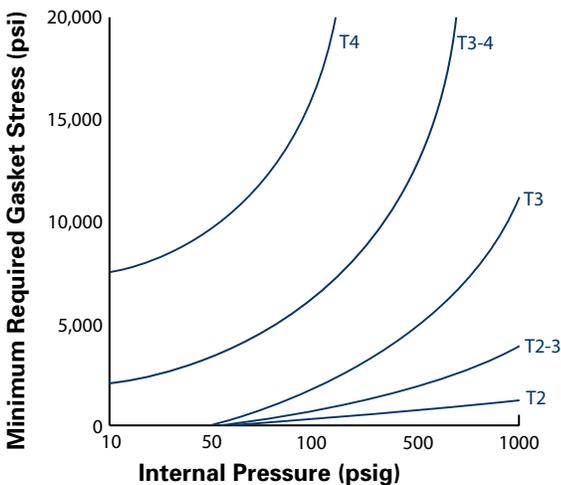
**STYLE 3128 HOCHDRUCK® ORDERING INFORMATION**

High Performance Multilayer Flexible Graphite Foil with 316SS Insert (.002" thick) - Branded

Order Code	Style	Description	THK (inches)	Width (inches)	Length (inches)	Number of inserts	Approx. lbs / pc
31280-7031	3128	Hi-Performance Graphite w/ 316SS insert	0.040	39.4	39.4	1	3.0
31280-7131	3128	Hi-Performance Graphite w/ 316SS insert	0.040	59.1	59.1	1	6.0
31280-7014	3128	Hi-Performance Graphite w/ 316SS insert	0.060	39.4	39.4	2	4.6
31280-7104	3128	Hi-Performance Graphite w/ 316SS insert	0.060	59.1	59.1	2	9.5
31280-7027	3128	Hi-Performance Graphite w/ 316SS insert	0.080	39.4	39.4	3	6.1
31280-7127	3128	Hi-Performance Graphite w/ 316SS insert	0.080	59.1	59.1	3	12.7
31280-7015	3128	Hi-Performance Graphite w/ 316SS insert	0.120	39.4	39.4	5	8.7
31280-7105	3128	Hi-Performance Graphite w/ 316SS insert	0.120	59.1	59.1	5	18.5
31280-7106	3128	Hi-Performance Graphite w/ 316SS insert	0.157	59.1	59.1	7	24.0

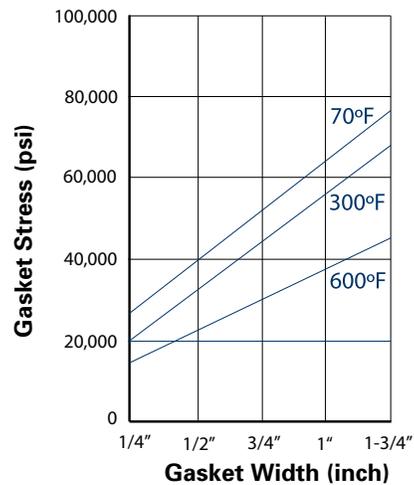
**TIGHTNESS PERFORMANCE**

0.060" Thick HOCHDRUCK®



**MAXIMUM GASKET STRESS**

0.060" Thick HOCHDRUCK®



**TIGHTNESS FACTORS**

- » T1 = 2•10-1 mg/(s•mm) : Economy
- » T2 = 2•10-3 mg/(s•mm) : Standard
- » T3 = 2•10-5 mg/(s•mm) : Tight
- » T4 = 2•10-7 mg/(s•mm) : Extremely Tight

## EXTERNAL PERFORMANCE TESTS AND APPROVALS

- » ROTT - Room Temperature Tightness Test (TTRL)
- » HOTT - High Temperature Tightness Test
- » Fire Safe Test, modified API 607 and ISO 10497-BS 6755 (TUV NL)
- » Ethylene / Propylene Oxide (BAM)
- » Oxygen Service (BAM)
- » US Coast Guard
- » Compression Tests (MPA)
- » Gas Permeability, regular tests (DVGW)



### NOTE:

HOCHDRUCK® is marketed exclusively by Garlock

GSK 3:70\_01.2017

### GARLOCK

an *EnPro* Industries family of companies

Tel: 1-877-GARLOCK / 315.597.4811

Fax: 800.543.0598 / 315.597.3216

[www.garlock.com](http://www.garlock.com)

Garlock

GPT

Garlock Australia

Garlock de Canada, LTD

Garlock China

Garlock Singapore

Garlock Germany

Garlock India Private Limited

Garlock de Mexico, S.A. De C.V.

Garlock New Zealand

Garlock Great Britain Limited

Garlock Middle East