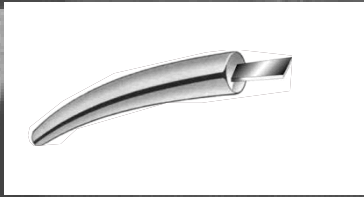
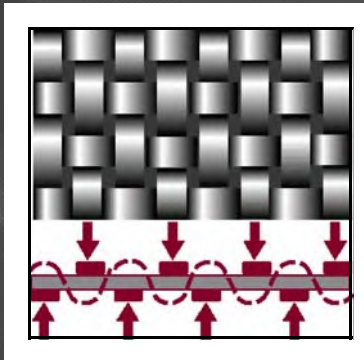


# PYRO-TEX

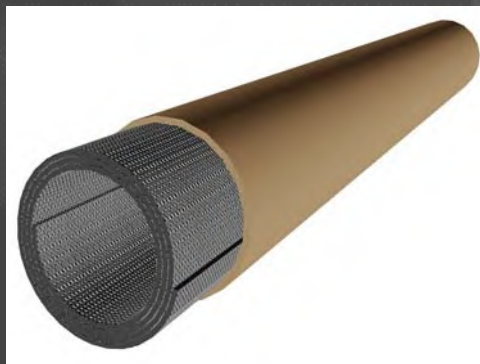
## WOVEN GASKET SHEET



**Individual  
Reinforced  
Weaving Yarn**



**Woven Yarns**



**Rolled and Packaged  
in Cardboard Tubes**



**Manufactured by SLADE**

I.  
Individual Graphite Foil  
Weaving Yarn is  
Reinforced  
with Stainless Steel Strips

II.  
Yarns are then  
Woven

III.  
Woven Compressed  
Gasket Sheet is then  
Rolled  
into Cardboard Tubes for



# PYRO-TEX GASKET SHEET

## Services:

Up to 4500 psi/310bar  
Up to 1400°F/1000°C\*

\* Contact factory for application suggestions, especially for high pressures and temperatures over 1000°F/538°C.

## Applications:

Badly oxidized flange surfaces  
Ring & Full Face  
Manhole & Handhole  
Diesel Exhaust Flanges  
Turbine Cross Over  
Heat Exchangers



## Properties:

Compressibility: 34% ( $T_{room}$  @ 5000 psi)

Recovery: 6% (DIN 28090-2)

Qmin (0.1 mg/m/s): 20 Mpa (2900 psi)

Qmin (0.01 mg/m/s): 35 Mpa (5000 psi)

Creep Deformation\*: 70% ( $T=300^{\circ}C$  &  $500^{\circ}C$ )

\* See explanation below

m = 4

y = 3190 psi

- ◆ Eliminates shipping pallets: Gasket Sheets individually packaged in 3" cardboard tubes
- ◆ Takes physical abuse
- ◆ Die cut or shears to shape, do NOT use circle cutters
- ◆ Surface nodules promote flexibility and flow into oxidized surfaces & scratches
- ◆ Eliminates spiral leak path of spiral wound gaskets
- ◆ Layering of sheets allows for greater thicknesses
- ◆ Available in sizes as large as 80" x 160" sheets
- ◆ Single sheet thickness: nominal 0.075"

**Contact the factory for Installation Instructions.**

\* **Conclusions on CREEP DEFORMATION:** results as performed by Dr. M. Gawlinski and Dr. K. Podkomorzy: "In spite of high level of compressibility and low elastic recovery, Pyro-Tex distinguishes itself with a high level of tightness. This paradox can be explained in the following way:

- (1) elastomer, which covers external gasket surfaces, adheres well with flange surfaces at the definite contact pressure value and temperature. The adherence is so effective, that the leakage between gasket surfaces and flanges surfaces is not possible,
- (2) elastomer doesn't penetrate into the gasket material and thanks to that, its middle part preserves some elasticity. Thanks to that, material displacement in the radial and circumferential direction is possible. The structure of the steel strips and expanded graphite makes easy this displacement,
- (3) decrease of the gasket thickness by more than 50% of its initial thickness leads to density increase in the middle area of the gasket and to the decrease of the leakage through the material."

According to the BHR Group report, *Development of Gaskets Made from Expanded Graphite* by M. Gawlinski and J. Blachura (given at the Sealing for Pollution Prevention and Control 18th International Conference on Fluid Sealing in Belgium), the Pyro-Tex Woven Gasket

- (1) maintains a superior tightness over other graphite gaskets during temperature cycling due to its adherence to the sealing surface;
- (2) operates with high tightness due to the low tangential resistance at compression. Thus, a larger than typical compression set, due to the presence of a nitrile rubber/graphite surface with nodules, is not a deterrent to its sealing capabilities.

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The above data, collected from in-house testing, field testing, and field applications, is subject to change without notice and must be used for examination ONLY. Contact the factory for suggestions on each application. Each application must be independently tested for safety and suitability. Failure to independently test can result in property damage and/or personal injury. 2011