

## Extreme Temperature Gaskets SWG/Durtec®/Kammprofile

**Extreme gaskets for extreme applications. Contact a Durlon Applications Engineer to learn more about Durlon® gasketing solutions.**

Durlon® Extreme Temperature Gaskets have been engineered to provide the preeminent solution to sealing gasketed joints having exposure to high temperatures, typically greater than 650°C (1,200°F) and up to 1,000°C (1,832°F). At extreme temperatures, flange assembly torque retention is the key component to maintaining a tight seal. Durlon® ETG has combines a oxidation boundary material with the excellent stability and sealing characteristics of flexible graphite in order to preserve seal integrity and to retain the initial assembly torque.

Durlon® ETG's engineered design principle is focused around providing oxidation protection zones around the central oxidation inhibited flexible graphite sealing component. Standard industrial grade flexible graphite typically begins to rapidly oxidize at around 650°C (1,200°F). By adding oxidation inhibitors to the graphite, the rate and amount of oxidation can be significantly reduced, thus extending the seal life of the



material, however, oxidation can still occur and at extreme temperatures, it can be fatal to the integrity of the joint.

Durlon® ETG adds an inner and outer protection boundary in the form of a mica-phyllsilicate based sealing material called Durlon® HT1000® consists of phlogopite mica paper impregnated with an inorganic binder at less than half the binder amount found in a typical vermiculite-phyllsilicate filled product. This lower binder content allows for superior weight retention and results in ultimate extreme temperature sealing performance.

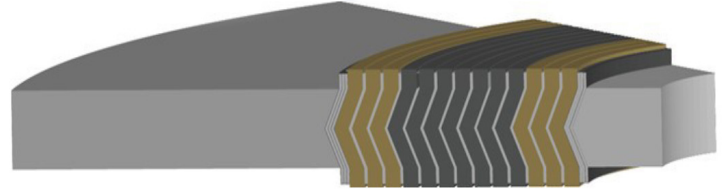
The Durlon® ETG's design is the sealing industry's current best available technology for effectively sealing extreme temperature applications.

**Note:** ASTM properties are based on 1/16" sheet thickness, except ASTM F38 which is based on 1/32" sheet thickness. This is a general guide only and should not be the sole means of accepting or rejecting this material. The data listed here falls within the normal range of product properties, but should not be used to establish specifications limits nor used alone as the basis of design. For applications above Class 300, contact our technical department.

**Warning:** Durlon® gasket materials should never be recommended when both temperature and pressure are at the maximum listed. Properties and applications stated are typical. No applications should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious injury. Data reported is a compilation of field testing, field service reports and/or in-house testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors. Specifications and information contained in this flyer are subject to change without notice. This edition cancels and obsoletes all previous editions.

#### DRI-ETG Spiral Wound Gaskets

Durlon® takes our standard mica-graphite manufacturing technology two steps further by: (1) incorporating 3 full layers of HT1000® on the ID and OD of the sealing element and (2) using oxidation inhibited flexible graphite layers as the central sealing component. This oxidation boundary created by the HT1000® material allows for temperature stability up to 1,000°C (1,832°F).

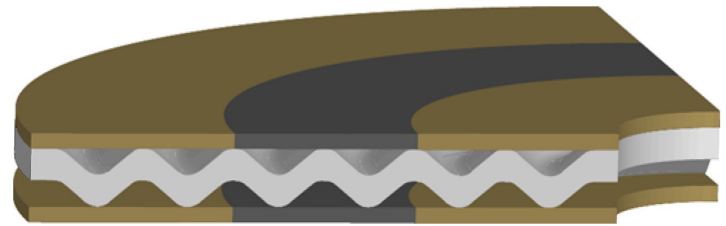


**DRI-ETG SWG**

As both mica and graphite offer outstanding natural chemical resistance, the Durlon® DRI-ETG is also capable of withstanding many aggressive chemicals and environments subject to elevated temperatures. The DRI-ETG can be manufactured in virtually any metal alloy combination required by the application.

#### Durtec® ETG

The Durtec® gasket concept just got better. By using the ETG engineered design concept, the Durtec® gasket's facing layers get an extreme temperature upgrade providing both temperature resistance and enhanced sealability. On both faces of the unique core design lays a central oxidation inhibited flexible graphite ring surrounded on its ID and OD with a ring of HT1000® which acts as the oxidation barrier.

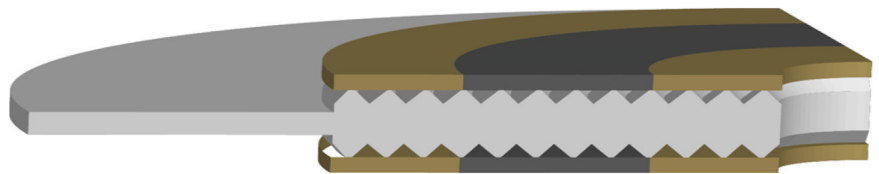


**Durtec® ETG**

The entire combination of materials and core design provides unsurpassed bolt torque retention, fire safety, sealability, and extreme temperature resistance to 1,000°C (1,832°F). There is no other single gasket on the market which exhibits the performance characteristics of the Durtec® ETG.

#### K40-ETG Kammprofile Gaskets

Kammprofile gaskets are commonly used to improve sealability in tough thermal cycling applications such as heat exchangers and large vessel seals. Durlon® K40 Kammprofile Gaskets naturally provide a tight seal with enhanced load bearing and distribution abilities but with the addition of the ETG engineered design concept similar to that used on the Durtec® ETG, Durlon® K40-ETG gaskets can now offer those abilities at extreme temperatures up to 1,000°C (1,832°F).



**K40-ETG Kammprofile**