

### Specially Engineered Metal Core Technology

Durtec® is a registered trademark of Triangle Fluid Controls Ltd.



Physical Properties*	
Temp.: Min	-200°C (-328°F)
Max	1,000°C (1,832°F)
Continuous, Max	650°C (1,200°F)
pH range, Room Temp.	0-14
Pressure: Max, bar (psi)	430.9 (6,250)

\*Depends on facing material and metallurgy of core.

Note: Data shown is for 316LSS core with HT1000 covering layers.

#### SIZE, TYPES & MATERIALS:

- Standard ASME, DIN, JIS and BS EN sizes
- Non-standard flanges 1/2" thru 157" diameter
- Standard core material is 316L stainless steel. Other core materials: SS304, SS321, SS316Ti, Monel®, Titanium, Hastelloy® & Alloy 20 can be manufactured to your specifications on request
- Alternate facing material is available upon request. Popular materials include Durlon® 9600 expanded PTFE (ePTFE), mica & ceramic

#### API 607 FIRE TEST:

- Average bolt torque loss (with no adjustments): Upstream 45%; Downstream 33%
- Fire, Cool-Down & Post-Burn: Combined Leak Rate (2 gaskets) 0 mL/min at 30 psig avg.
- Exxon requirements post burn: Combined Leak Rate (2 gaskets) with no flange bolt re-torques at any test pressure 0 mL/min at 30 psig, 0mL/min at 50 psig, 0 mL/min at 100psig and, 0mL/min at 200 psig.

**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 within are subject to change without notice. This edition cancels and obsoletes all previous editions.

Durlon® Durtec® gaskets are made with a specially engineered machined metal core that is bonded on both sides with soft covering layers, typically flexible graphite. The core is produced by proprietary technology that allows the finished gasket to have the best possible mechanical support function. The Durtec® core is virtually uncrushable, unlike conventional corrugated metal core gaskets. The precision construction guarantees that Durlon® Durtec® gaskets will have excellent sealing characteristics even under low bolt loads.

The Durtec® gasket is designed to withstand high temperatures and pressures, to be blowout resistant, to be fire safe, and to resist toxic and or corrosive chemicals for such applications as: pipeline flanges, valves, small & large pressure vessels, heat exchangers, towers, and tanks.

#### INDUSTRY APPLICATIONS:

- Water & Wastewater
- Oil & Gas
- Mining
- Food & Beverage
- OEM Services
- Petrochemical
- Power Generation
- General Industrial
- Marine
- Chemical Processing
- Pulp & Paper

Gasket Factors	
G <sub>b</sub> psi (MPa)	187 (1.29)
a	0.467
G <sub>s</sub> psi (MPa)	0.5 (0.003)
m, Y psi (MPa)	1.5, 833 (5.74)

Certifications	
Fire Test**	API 607, 4th edition with Exxon modifications
RoHS Reach Declaration	Compliant

\*\*Passed modified API 607 fire test and meets the requirements of Shell Specification MESG SPE 85/203 & PVRC SGR Flexible Graphite Spec for FG 600 material.

#### COMMON HEAT EXCHANGER SHAPES

There are many styles of heat exchanger gaskets and most have complicated rib designs or partitions. While some of the most common designs are shown below, we can provide almost any configuration of heat exchanger type gasket utilizing our Durlon® Durtec® technology.

- Anywhere fire safety is a concern
- High temperature
- Low available assembly loads

- Heavy vibrations
- Extreme temperature fluctuations
- Remote field applications
- Large diameter gasket replacement

#### Advantages:

- Fire Safe - SS316L/Graphite Passed Modified API 607 fire test, 4th Edition
- Blowout Resistant - Metal core provides excellent resistance to internal pressure spikes

- Reusable - The core may be refaced with new material and reused providing lower cost of ownership
- Superior Core Technology - Durtec® design can allow for complete replacement of spiral wound and kammprofile gaskets with improved performance and lower life cycle cost
- Easy and safe to handle, easy to install
- Seals tightly with lower bolt loads vs. spiral wounds and Kammprofiles

