

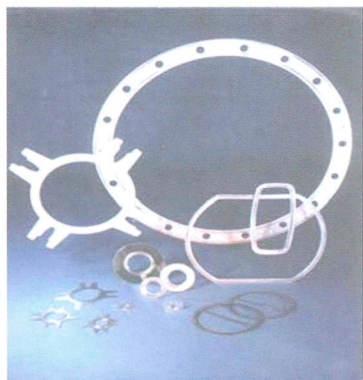
# SELCO SEAL<sup>®</sup>

## G A S K E T S

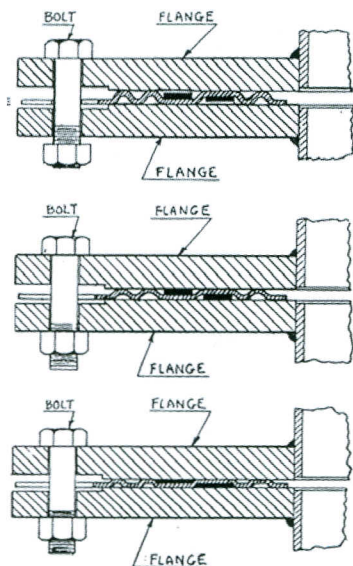
### Selco Gasket Technology



Trusted in the **TOUGHEST** applications



Available for flanges, heat exchangers, soot blowers, valve bonnets, manways, sight glasses, hand holes & most other gasket services.



The metal carrier energizes/encapsulates the graphite or PTFE sealing elements.

Bolt force focused for a T-3 leak tight seal that doesn't relax under thermal cycling.

Vacuum to 5800 psi  
-328°F to 1200°F (Steam)  
-328°F to 5432°F (Inert)  
pH 0-14  
API 607 & Exxon Fire Tests  
Safety Items 10CFR50B  
Exceeds EPA Requirements

### Immediate Benefits:

#### Emissions-

A greener plant- <10ppm leakage  
Less product leakage=  
Greater safety  
More product to sell  
Fewer EPA troubles  
Less steam leakage=  
Greenhouse gases reduced  
More process power available

#### Inventory-

No sheet gasket to store, age, scrap  
One 2500 psi Selco gasket retrofits  
150#, 300#, and 600# gaskets  
Less inventory, increased safety

#### Maintenance-

Reduces labor 30-70% or more  
No installation of incorrect class  
Self locating styles  
Cannot be over torqued  
Wide surface finish of 10-400μ"  
Re-torquing not necessary

#### Operations-

Selco gaskets usually double  
flange reliability.  
A blowout on a \$5 gasket can shut  
down a multi-million process or  
even cause an injury or fire.  
The metal carrier on the Selco seal  
is blowout proof.

**THE RELIABILITY OF YOUR PROCESS IN MAKING MONEY & REDUCTIONS  
IN LABOR COSTS MAKE THE SELCO SEAL THE BEST INVESTMENT-  
USE THE FLANGE ROI CALCULATOR TO SEE FOR YOURSELF**



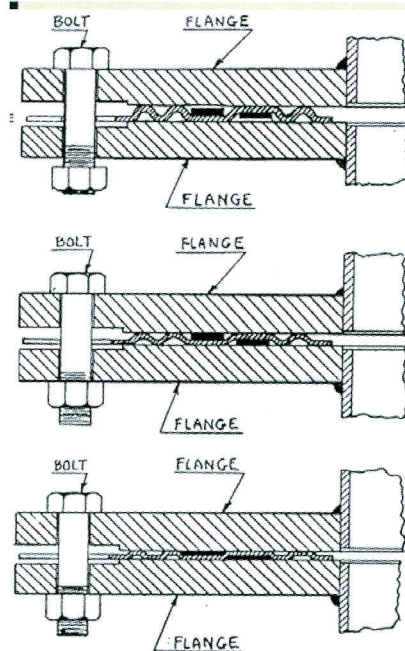
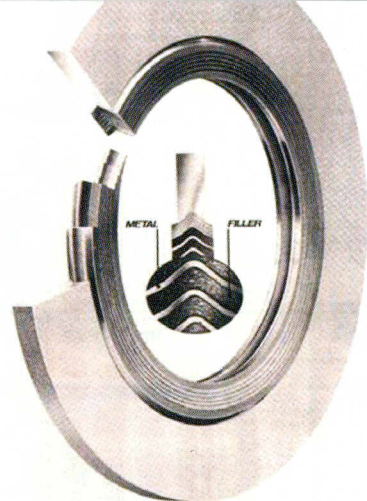
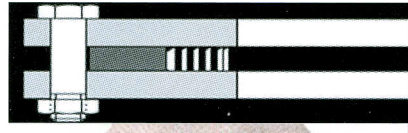
## SELCO IS TRUSTED BY:

Amoco  
Arco  
BP  
Chevron  
Commonwealth Edison  
ConEd  
Conoco  
Demarva  
Duke Power  
Exxon  
Florida Light & Power  
Georgia Power  
Hoosier Energy  
Houston Light & Power  
Hovensa Hess  
Illinois Light & Power  
Irving Oil  
Kansas Light & Power  
Mobil  
Nebraska Light & Power  
Nevada Power  
Northern States Power  
Ontario Hydro  
Orbit Valve  
Ormat Geothermal  
Petro Canada  
Philadelphia Electric  
Phillips Petroleum  
Public Service Colorado  
Shell  
Sunoil  
Texaco  
Tosco  
Trigen  
United States Air Force  
United States Navy  
Unocal  
Velan Valve and others...

## Types:

Self Locator, 1530, 15250,  
Double Thick, Double  
Track, Exotic Carrier, etc.

## HOW IT WORKS:



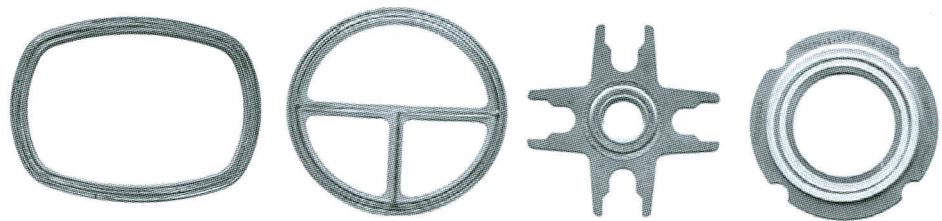
Flange bolts are torqued to stretch them & place load on the gasket face.

The conventional gasket to the left has a large contact area, & often requires >10000 psi seating stress to compress

This means the flange bolts, which have much less area than the gasket face they squeeze, are often torqued to near their yield strength. If the flange expands due to process cycles, the bolts will often exceed their elastic limit (like overstretching a spring), the gasket becomes a leaker, and a retorque of the bolts must be done.

The metal carrier of the Selco gasket: **Encapsulates** the graphite or PTFE sealing elements, making the gasket virtually blowout proof (the metal carrier must fail for the gasket to fail). **Energizes** the narrow sealing elements so that only 2850 psi seating stress is needed.

**This gives 40% compression** of the sealing element, and a 20% margin for recovery, at a bolt torque equaling <50% of yield, plenty of margin for process cycling without retorquing. **For the most demanding applications** the flange can be Selco gasketed and liveloaded to give the ultimate in spring capacity.



The Selco design delivers the same (<10 ppm) low leakage at 800°F that it does at room temperature. It has been used in the field at pressures exceeding 10,000 psi. This unvarying performance is why it is the afterburner fuel line seal on the F16 and the OEM bonnet seal for Orbit and Velan valves. We do all of the designs shown above and more. Put our three year leak free warranty to the test. Contact your Chesterton rep to do an application in your plant.