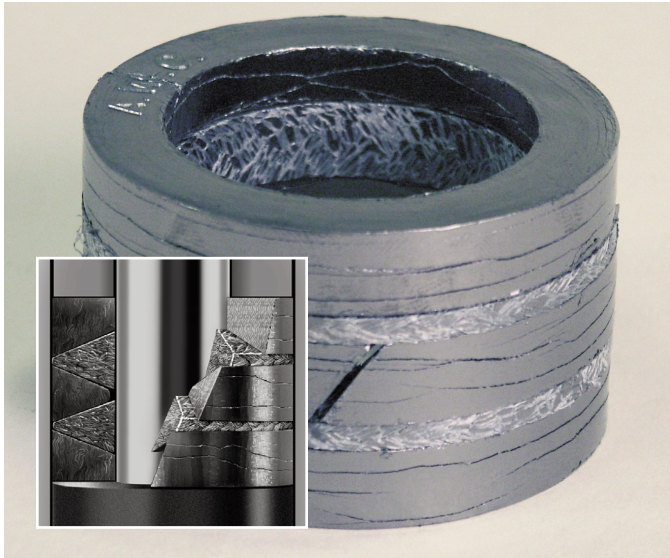


# 5800T WedgeSeal for Low Temperature



## TECHNICAL DATA

**Temperature Limit:**

-300°F to 450°F (-180°C to 230°C)  
600°F (315°C) in steam services

**Pressure Limit:**

2500 psi (172 bar)

**Chemical Resistance:**

pH 0 – 14

**Sizes:**

Consult your local Chesterton Representative for a list of available sizes

**Application:**

Light and heavy hydrocarbon services  
Low temperature steam services  
Chronic leakers in fugitive emissions services  
Live-loading is recommended for most applications

Chesterton's 5800T combines the excellent thermal and physical stability of graphite and the low friction properties of PTFE. The packing set incorporates the unique Chesterton WedgeSeal design with an innovative graphite/PTFE hybrid packing material. This specially designed hybrid yarn contains a thermally stable base of pure graphite tape overknitted with a thin web of pure PTFE filament. The complete packing set uses the graphite/PTFE hybrid against the dynamic stem where friction is the concern. The static sealing components use Chesterton's pure 5300 graphite tape with a passive corrosion inhibitor.

This design gives 5800T the low friction properties comparable to pure PTFE packings. Unlike PTFE designs, the sealability of 5800T is unaffected by changes in temperature. Because it is mostly graphite by design, the 5800T undergoes minimal volume loss at higher temperatures, maintaining a tight seal even during system upsets. And of course, the 5800T meets the difficult sealing requirements of both state and federal regulations for VOC emissions and in steam services.

**Designed specifically  
for Air Operated Control Valves**

**For service temperatures below 450°F (230°C)**

**Exceeds U.S. EPA requirements for emissions services  
(<500 ppm as measured by EPA Method 21)**

**Very low friction design  
ensures most efficient valve operation**

**Passes API 589 Fire Test**

Control valves are friction sensitive applications. High packing friction can result in overall decreased system efficiency and reduced production output. In lower temperature services, the most common sealing option is a PTFE V-ring set which provides good sealability and low stem friction during normal use. But, pure PTFE sets do not tolerate large temperature changes and are prone to creep and cold flowing. Fluoroelastomer V-ring packing sets offer improved performance especially at higher temperatures, but they can be very expensive. Pure graphite packings have excellent thermal and physical stability but have higher coefficients of friction than PTFE.

Chesterton ISO certificates available on [www.chesterton.com/corporate/iso](http://www.chesterton.com/corporate/iso)

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