**STYLE® 2236**

**Valve Stem Packing, Flexible Graphite, Inconel®**

**APPLICATION / BENEFITS:** 

Style 2236 is ideal for valves and can be used within a broad range of applications. It is well suited for power plants, refineries, petrochemical industries, chemical processing as well as sealing applications in steam at high pressure and temperatures.

This product is self-lubricating, non-hardening, dimensionally stable and resistant to gases and fluids as well as heat, pressure and chemicals. The Inconel® filament jacket affords mechanical stability and resists extrusion. The advanced construction provides leakage control and has high integrity in steam service.

### Key Features

- Certified Low-Leakage Packing Technology
- TA-Luft approved
- Suitable to VOC and VHAP emissions regulations
- Environmentally friendly valve stem packing with extreme emissions control
- API 607
- API 622
- API 624
- ISO 15848

### Service Limits

<table>
<thead>
<tr>
<th>Products</th>
<th>2236</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature °F (°C)</strong></td>
<td>Minimum: -400°F (-240°C)</td>
</tr>
<tr>
<td></td>
<td>Maximum: 850°F (455°C)</td>
</tr>
<tr>
<td>Steam</td>
<td>1200°F (650°C)</td>
</tr>
<tr>
<td><strong>Pressure PSI (bar)</strong></td>
<td>Valves: 6500°F (450°C)</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>0-14</td>
</tr>
</tbody>
</table>

### Standard Package

<table>
<thead>
<tr>
<th>Size (mm)</th>
<th>3.2</th>
<th>4.8</th>
<th>6.4</th>
<th>7.9</th>
<th>9.5</th>
<th>11.1</th>
<th>12.7</th>
<th>14.3</th>
<th>15.9</th>
<th>19.1</th>
<th>22.2</th>
<th>25.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package**</td>
<td>1Kg (2.2lb)</td>
<td>2Kg (4.4lb)</td>
<td>5Kg (11lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Package** Subject to change depending on tolerance expected +/-10%.

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**Low Emission Technology —**

API 622 Maximum 22 ppmv in 1,500 cycles and with an average of 2 ppm

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**Yarmouth Research and Technology, LLC**

API 622 PROJECT SUMMARY

Customer: Teadit North America

Start Date: 8-Jun-11

Project #: 211142

Packing Information

Packing Description: Teadit Style 2236

Rings cut from spool and installed by Yarmouth

Test conducted in test fixture. (1)

Source of Sample: Customer

Packing Cross Section: 1/4 inch nominal

Packing Free Ht: 1.375 inches - measured

Test Conditions


Test Media: 99% Methane

Test Pressure: 600 psig

Recommended Packing Nut Torque: 57 ft-lb

Maximum Allowable Leakage: 100 PPMv

Stem Linear Travel During Cycling: 4.0 inches

Cycling Rate: 45 seconds per cycle

Dimensions (inches)

Stem Diameter: 1.000

Bore Diameter: 1.500

Follower Height: 1.015

Bore Depth: 1.250

Gland Ht at Start: 0.658

% Compression: 35%

Gland Ht at End: 0.658

% Compression: 35%

Gland Bolt Diameter: 5/8

Results

Average Test Pressure: 600 psig

Number of Mechanical Cycles Completed: 1510

Number of Thermal Cycles Completed: 5

Number of Packing Adjustments Required: 0

Cycle Number(s) of Packing Adjustments: n/a

Average Leakage Throughout Test: 2 PPMv

Maximum Leakage Throughout Test: 22 PPMv

Witness: Matthew J Wasielewski, PE

President, Yarmouth Research

www.yarmouthresearch.com

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**Style 2236**

Best Packing for fugitive emission control in valves

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**Fugitive Emissions**

Exceeds TA-Luft requirement

Highly Suitable for services with fugitive emissions control

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President, Yarmouth Research

www.yarmouthresearch.com
ECOTAPE-LE is manufactured to provide an advanced structural matrix which incorporates Graphite into the Expanded PTFE. Due to the excellent properties of PTFE and graphite, this combination ensures a wide degree of chemical resistance, low coefficient of friction, excellent heat dissipation due to the high thermal conductivity of graphite and superior mechanical resistance.

Our unique manufacturing process provides the final product a high degree of integrity proven to supply the best sealing solution for thread seal tape.

<table>
<thead>
<tr>
<th>SERVICE LIMITS</th>
<th>SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Limits</td>
<td>Spool Width</td>
</tr>
<tr>
<td>Maximum</td>
<td>535°F (280°C) width 5/8 in(15.8mm)</td>
</tr>
<tr>
<td>pH</td>
<td>0-14 length 82 ft (25m)</td>
</tr>
</tbody>
</table>

**STYLE 913M-LE**

The **Style 913M-LE** spiral wound gasket is a major improvement on the traditional ASME B16.20 design. Where the traditional design is based primarily on dimensional criteria, the 913M-LE takes this and adds proven low-emission performance. Teadit Research & Development has discovered that density of the sealing element, a well-defined preformed metallic strip, and an enhanced soft filler material configuration, along with mandatory outer and inner rings, together play key roles in achieving sealing ability which can meet even the most stringent fugitive emission requirements. Furthermore, the design provides low-emission performance at a level significantly below the minimum ASME seating stress rating for spiral wound gaskets – making the 913M-LE a truly low seating stress design!

- **Reliability - High Pressures**
- **Sealability - Very Low Emission**

*Material and Dimension per ASME B 16.20.*
Teadit is a global leader in the development and production of a broad range of sealing solutions. Our mission is to assist you in achieving leak-free and low-emission levels of performance.