MECHANICAL SEALS

Description
St. Marys Carbon custom manufactures a variety of seals grades to suit any application. We offer blank stock, various impregnations and have the capability to machine intricate seals with polished faces. All of our seals, from the blending of raw materials to the finished product, are made in-house by our specialized craftsmen.

* St. Marys Carbon is a custom solution provider. No matter your application or product needs, contact us and we will find a solution.

Features & Benefits
- **Dry-Running / Oil-less**: Greatly reduces failure rates and allows for use in sanitary environments due to its self-lubricating properties.
- **High Temperature Stability**: Maintains high strength and runs effectively without failure at high temperatures.
- **High Thermal Conductivity**: Allows for heat exchange to prevent overheating.
- **Low Friction / Wear**: Resists wear and reduces friction as it is chemically inert, oxidation-resistant and self-lubricating.

Typical Applications
- Chemical Pumps
- Fluid-Handling Pumps
- Food-Handling Pumps
- Fuel Pumps
- Medical Pumps
- Oil & Gas Pumps
- Refrigeration Pumps
- Vacuum Pumps

Key Markets - Aerospace, Chemical, Fluid Handling, Industrial, Medical, Mining, Power, Pharmaceutical

Specifications - Below are St. Marys Carbon’s top recommended grades, which are produced in-house.

### Properties English Units

<table>
<thead>
<tr>
<th>Grade</th>
<th>Density (lbs./ft.³)</th>
<th>Flexural Strength (psi)</th>
<th>Compressive Strength (psi)</th>
<th>Coefficient of Thermal Expansion (µ/°F)</th>
<th>Temperature Limit Neutral (°F)</th>
<th>Temperature Limit Oxidizing (°F)</th>
<th>Scleroscope Hardness</th>
<th>Applications</th>
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<tbody>
<tr>
<td>49S</td>
<td>112.94</td>
<td>8,400</td>
<td>23,000</td>
<td>2.49</td>
<td>500</td>
<td>500</td>
<td>75</td>
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<td>500</td>
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<td>3.06</td>
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<td>95</td>
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</tr>
</tbody>
</table>

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