



## 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

Grade	Density (lbs./ft. <sup>3</sup> )	Flexural Strength (psi)	Compressive Strength (psi)	Coefficient of Thermal Expansion (μ/°F)	Temperature Limit Neutral (°F)	Temperature Limit Oxidizing (°F)	Scleroscope Hardness	Applications
49S	112.94	8,400	23,000	2.49	500	500	75	Mechanical Seals
275	115.44	10,000	24,000	2.60	500	500	80	Mechanical Seals
416	115.50	13,000	33,000	2.80	500	500	95	Mechanical Seals
219	110.45	10,000	25,000	2.54	1,600	700	75	Mechanical Seals
375	118.56	10,000	25,000	2.60	500	500	80	Mechanical Seals
181S	112.32	12,000	30,000	3.06	500	500	95	Mechanical Seals