



Description

St. Marys Carbon manufactures Rotors & Vanes from superior carbon graphite grades for a variety of applications. Our rotors & vanes are made from specialized, proprietary materials that are required for many of the unique environments in which rotors & vanes are used. All of our rotors & vanes, 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

- **Air Pumps / Compressors**
- **Beverage Pumps**
- **Chemical Pumps**
- **Fuel Pumps**
- **Medical Pumps**
- **Vacuum Pumps**
- **Space Heaters**
- **De-Icing Units**

Key Markets - Aerospace, Chemical, Environmental, Food & Beverage, Medical, Plastics, Printing & Paper

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

Properties English Units

Grade	Density (lbs./ft. ³)	Flexural Strength (psi)	Compressive Strength (psi)	Coefficient of Thermal Expansion (μ/°F)	Temp Limit Neutral (°F)	Temp Limit Oxidizing (°F)	Scleroscope Hardness	Applications
404	112.32	10,000	28,000	2.30	1,600	700	90	Rotors
378	114.19	11,000	32,000	2.80	500	500	95	Rotors
22S	117.07	10,000	28,000	4.13	500	500	90	Rotors
429	108.58	9,000	28,000	2.50	1,600	600	100	Vaness
270	107.95	10,000	25,000	2.30	1,600	700	80	Vaness
394	114.19	12,000	33,000	2.50	1,600	650	90	Vaness