



WR[®] 525

THERMOPLASTIC COMPOSITE

WR[®]525 is a thermoplastic composite consisting of carbon fiber in a PEEK™ matrix. WR provides excellent chemical resistance, nongalling and nonseizing properties, impact resistance, and thermal shock and hydrolysis resistance.

WR525 allows the pump user to increase pump efficiency by running tighter wear ring clearances while decreasing potential pump damage when pumps are cavitated or experience down-line bearing failures.

FEATURES & BENEFITS

- WR is lighter weight than steel, so less energy is required to run the pump
- Excellent chemical resistance leads to decreased media-related degradation and extended MTBF (mean time between failure) causing decreased maintenance and replacement costs
- Superior nongalling and nonseizing properties means no damage to mating components during upset conditions and lower replacement costs
- Good impact resistance allows for easier installation and machining
- Low coefficient of friction leads to longer MTBF and allows for short-term dry running
- Excellent thermal shock resistance for extended MTBF results in decreased maintenance and replacement costs due to extreme temperature-related degradation

AVAILABILITY

Diameter—up to 60 inches (1524 mm) OD

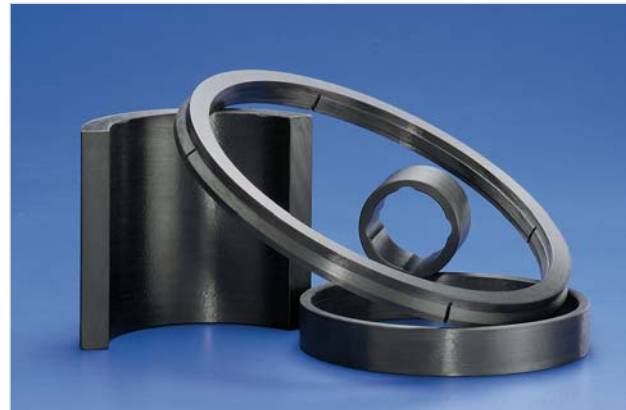
Length—up to 414 inches (10.5 m)

For special diameter and length requests contact PetroChem & Power engineering.

Contact Us

Greene, Tweed Tel: +1.281.821.2094
 PetroChem & Power Tel: +1.800.820.9005
 Houston, TX, USA Fax: +1.281.821.2696

www.gtweed.com



TYPICAL PROPERTIES

Physical Properties	ASTM Method	Typical Value
Color		Black
Specific Gravity	D792	1.63
Hardness, Shore D, Points	D2240	98
Mechanical		
Compressive Modulus, parallel to fiber, ksi (MPa)	D695	18,000 (124,000)
Compressive Strength, parallel to fiber, psi (MPa)	D695	197,000 (1,360)
Tensile Modulus, parallel to fiber, ksi (MPa)	D3039	20,000 (138,000)
Tensile Modulus, perpendicular to fiber, ksi (MPa)	D3039	1,480 (10,200)
Tensile Strength @ Break, parallel to fiber, psi (MPa)	D3039	300,000 (2,070)
Tensile Strength @ Break, perpendicular to fiber, psi (MPa)	D3039	12,500 (86)
Thermal		
Maximum Service Temperature, °F (°C)		525°F (273°C)

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty that shall be applicable to such products.