



# WR<sup>®</sup>300

## Standard Wear Material

### THERMOPLASTIC COMPOSITE

WR<sup>®</sup>300 is a carbon-fiber reinforced compression molded PEEK often selected by pump manufacturers and users for pump bushings and case or impeller wear rings. Maximum service life is achieved in clean, lubricated and/or moist environments.

WR300 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 radial bearing failures. WR300 is API 610 approved for (stationary/stationary and rotating) wear applications.

### FEATURES

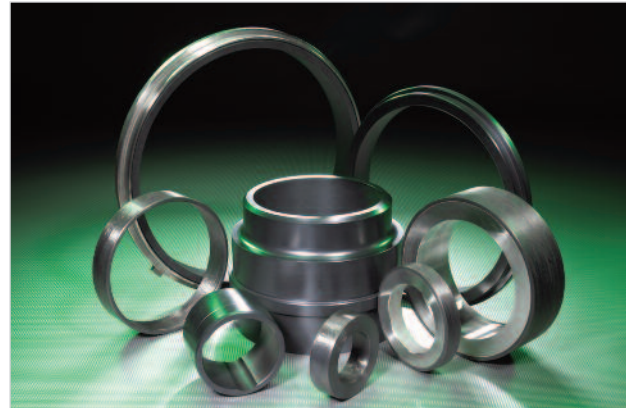
- Excellent chemical resistance
- Nongalling/nonseizing properties
- Low coefficient of friction
- Impact resistance
- Thermal shock resistance

### AVAILABILITY

Greene, Tweed's CPI/MRO group maintains common wear ring and bushing billet sizes in inventory. Outer billet diameters range from 1 in. to 33 in. (2.54 cm. to 83.82 cm.), and lengths of up to 8 in. (20.32 cm.) are possible.

### LIMITATIONS

WR300 should not be used in abrasive medias or in press-in applications above 275°F (135°C).



### TYPICAL PROPERTIES

Physical Properties	ASTM Method	Typical Value
Color		Black
Specific Gravity	D792	1.43
Hardness, Shore D, Points	D2240	93
Hardness, Rockwell M, Points	D785	106
<b>Mechanical</b>		
Compressive Strength, psi (MPa)	D695	29,300 (202)
Elongation @ Break, %	D638	1.8
Flexural Modulus, psi (MPa)	D790	1,580,000 (10,894)
Flexural Strength, psi (MPa)	D790	30,700 (212)
Heat Distortion Temperature @ 264 psi	D648	600°F (316°C)
Tensile Modulus, psi (MPa)	D638	1,570,000 (10,825)
Tensile Strength @ Break, psi (MPa)	D638	19,400 (134)
<b>Thermal</b>		
Coefficient of Thermal Expansion, 15.3 x 10 <sup>-6</sup> in/in/degree F, (73°F to 290°F (23°C to 143°C))	—	15.3 x 10 <sup>-6</sup>
Heat Distortion Temperature @ 264 psi	D648	600°F (315°C)
Maximum Service Temperature, °F (°C)		275°F (135°C)

### Contact Us

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*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 a modification or alteration of our standard warranty which shall be applicable to such products.*