

## Thermoplastic

Greene, Tweed & Co.

## Message:

AR<sup>®</sup> HT is a proprietary thermoplastic material specifically developed for use as bushings, bearings, and wear rings in pumps handling abrasive media up to 250°F (121°C). ARHT provides outstanding chemical, thermal shock, and impact resistance, making it a better wear material than traditional rubberm ceramic or bronze materials.

Greene, Tweed's proprietary AR thermoplastics materials exhibit outstanding wear characteristics in media containing solids. AR combines excellent abrasive resistance, good dry run capability and superior vibration dampening characteristics with no hydrolysis or swell.

ARHT works well in a variety of abrasive pump applications including those working with circulating water, open and closed cooling water, river water, screen water and crude oil pumps. When using ARHT pump users can operater their equipment with much tighter clearances, boosting efficiency and improving process reliability.

Features       Good Abrasion Resistance         Good Impact Resistance         Good Impact Resistance         Good Wear Resistance         Good Wear Resistance         Good Wear Resistance         Low Friction         Machinable         Vibration Damping         Uses       Bearings         Bushings         Pump Parts         Appearance       Grey         Preside       Mominal Value         Unit       Test Method         Specific Gravity       163       g/cm <sup>an</sup> Astm D2240       Nominal Value       Unit       Test Method         Durometer Hardness (Shore D)       80       Test Method       3070       Ma         Coss Secant       3180       MPa       Test Method       101       Test Method         Tensile Knedylike (Break)       35.2       MPa       ASTM D638       1         -1       3870       MPa       Test Method       310       MPa       311         -2       3630       MPa       3510       3510       MPa       3510       3510       MPa	General Information				
Good Impact Resistance         Good Vear Resistance         Good Wear Resistance         Good Wear Resistance         Low Friction         Machinable         Vibration Damping         Vibration Damping         Verse       Bearings         Bushings       Pump Parts         Verse       Grey         Forms       Peltes         Physical       Nominal Value       Vitor         Partice       Jord*       Test Method         Specific Gravity       163       Qrd*       ASTM D792         Nominal Value       Vitor       Test Method       Monto         Duromeet Phardness (Shore D)       80       Vitor       Test Method         Gravita       Jano       Machinable       Vitor       Test Method         1       1       Specific Gravity       Spitor       Sp	Features	Good Abrasion Resistance			
Good Thermal Shock Resistance         Good Ware Resistance         Low Friction         Machinable         Vibration Damping         Uses         Bearings         Bushings         Pump Parts         Forms         Poletis         Physical         Nominal Value         User         Reference         Response         Poletis         Promoter Hardness (Shore D)         80         Conditional Value         Unit         Test Method         Data Part         Stronge         Solo         Marinal Value         Unit       Test Method         Durometer Hardness (Shore D)         80       Unit         Testile Modulus       Test Method         -1       180         Stronge       Mainal Value         Optimizer Hardness (Shore D)       180         Solo       Mainal         Stronge       180         Stronge       180         Stronge       180         Stronge       180         Stronge       180		Good Chemical Resistance			
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Flexural Modulus     ASTM D790 <sup>2</sup> 3630	Tensile Strength (Break)	35.2	MPa	ASTM D638	
<sup>2</sup> 3630 MPa	Tensile Elongation (Break)	2.2	%	ASTM D638	
	Flexural Modulus			ASTM D790	
0.5% Secant 3410 MPa	<sup>2</sup>	3630	MPa		
	0.5% Secant	3410	MPa		

Flexural Strength (Break)	60.0	MPa	ASTM D790
Compressive Strength	67.6	MPa	ASTM D695
Flexural Strain at Break	2.9	%	ASTM D790
Service Temperature	-73 to 121	°C	
Thermal	Nominal Value	Unit	Test Method
Thermal CLTE - Flow (-18 to 41°C)	Nominal Value 2.9E-5	Unit cm/cm/°C	Test Method ASTM D696
CLTE - Flow (-18 to 41°C)			

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