Materion ToughMetÂ® T2 CX 90

Category : Metal , Nonferrous Metal , Copper Alloy

Material Notes:

ToughMetÂ® is Brush Wellman's solution for severe service material problems. By applying their EquaCastÂ® process, tailored alloying additions and spinodal hardening technology, they have engineered ToughMetÂ® to provide attributes beyond those typically found in a high-strength copper alloy.Exceptional resistance to corrosion and cavitationOutstanding lubricity and durability in demanding applicationsHighly uniform composition in all product formsUniform microstructure in a variety of wrought shapes and sizesToughMetÂ® 3 in the wrought and spinodally hardened (AT) condition exhibits tensile strength up to 140 ksi and hardness up to HRc 34 in a Copper-15% Nickel-8% Tin alloy with excellent machinability.Information supplied by Brush Wellman Engineered Materials.Brush Engineered Materials Inc. changed its name to Materion Corporation in March 2011.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Materion-ToughMet-T2-CX-90.php

Physical Properties	Metric	English	Comments
Density	8.91 g/cc	0.322 lb/inÂ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	>= 27	>= 27	
Tensile Strength, Ultimate	>= 724 MPa	>= 105000 psi	
Tensile Strength, Yield	>= 621 MPa	>= 90000 psi	
Elongation at Break	>= 3 %	>= 3 %	
Modulus of Elasticity	117 GPa	17000 ksi	
Poissons Ratio	0.30	0.30	
Fatigue Strength	138 MPa @# of Cycles 1.00e+6	20000 psi @# of Cycles 1.00e+6	R = -1, 105 ksi YS
Shear Modulus	45.1 GPa	6540 ksi	calculated
Charpy Impact	13.6 - 27.1 J	10.0 - 20.0 ft-lb	V-Notch

Thermal Properties	Metric	English	Comments
CTE, linear	16.2 Âµm/m-Â°C @Temperature 21.1 - 102 Â°C	9.00 Âµin/in-Â°F @Temperature 70.0 - 215 Â°F	
Thermal Conductivity	51.9 W/m-K	360 BTU-in/hr-ftÂ²-Â°F	

Component Elements Properties	Metric	English	Comments
Copper, Cu	85 %	85 %	As remainder
Nickel, Ni	9.0 %	9.0 %	
Tin, Sn	6.0 %	6.0 %	

Electrical Properties	Metric	English	Comments
Magnetic Permeability	<= 1.001	<= 1.001	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China