Special Metals INCONELÂ® 625LCFÂ® Nickel Superalloy (UNS N06626) Annealed + 10% Cold Work

Category : Metal , Nonferrous Metal , Nickel Alloy , Superalloy

Material Notes:

Tensile strength (ultimate and yield), elongation, and reduction of area values are for annealed then cold worked samples. This produces ASTM grain size 9.0. Other property values are typical of this alloy.Data provided by the manufacturer, Special Metals.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Special-Metals-INCONEL-625LCF-Nickel-Superalloy-UNS-N06626-Annealed-10-Cold-Work.php

Physical Properties	Metric	English	Comments
Density	8.44 g/cc	0.305 lb/inÂ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	915.6 MPa	132800 psi	
Tensile Strength, Yield	462 MPa @Strain 0.200 %	67000 psi @Strain 0.200 %	
Elongation at Break	48 %	48 %	
Modulus of Elasticity	208 GPa	30200 ksi	
Poissons Ratio	0.28	0.28	
Shear Modulus	81.4 GPa	11800 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	12.8 Âµm/m-Â°C @Temperature 21.0 - 100 Â°C	7.11 Âµin/in-Â°F @Temperature 69.8 - 212 Â°F	Mean
	13.3 Âµm/m-Â°C @Temperature 21.0 - 300 Â°C	7.39 Âµin/in-Â°F @Temperature 69.8 - 572 Â°F	Mean
	13.9 Âµm/m-Â°C @Temperature 21.0 - 500 Â°C	7.72 Âµin/in-Â°F @Temperature 69.8 - 932 Â°F	Mean
	14.9 Âµm/m-Â°C @Temperature 21.0 - 700 Â°C	8.28 Âµin/in-Â°F @Temperature 69.8 - 1290 Â°F	Mean
Specific Heat Capacity	0.410 J/g-Â°C	0.0980 BTU/lb-Â°F	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	3.10 W/m-K	21.5 BTU-in/hr-ftÂ²-Â°F	
Melting Point	1290 - 1350 Â°C	2350 - 2460 Â°F	
Solidus	1290 Â°C	2350 Â°F	
Liquidus	1350 Â°C	2460 Â°F	
Maximum Service Temperature, Air	650 Â°C	1200 Â°F	resistance to low cycle and thermal fatigue

Component Elements Properties	Metric	English	Comments
Aluminum, Al	<= 0.40 %	<= 0.40 %	
Carbon, C	<= 0.030 %	<= 0.030 %	
Chromium, Cr	20 - 23 %	20 - 23 %	
Cobalt, Co	<= 1.0 %	<= 1.0 %	
Iron, Fe	<= 5.0 %	<= 5.0 %	
Manganese, Mn	<= 0.50 %	<= 0.50 %	
Molybdenum, Mo	8.0 - 10 %	8.0 - 10 %	
Nickel, Ni	>= 58 %	>= 58 %	
Niobium, Nb (Columbium, Cb)	3.15 - 4.15 %	3.15 - 4.15 %	Includes Ta
Nitrogen, N	<= 0.020 %	<= 0.020 %	
Phosphorous, P	<= 0.015 %	<= 0.015 %	
Silicon, Si	<= 0.020 %	<= 0.020 %	
Sulfur, S	<= 0.015 %	<= 0.015 %	
Titanium, Ti	<= 0.40 %	<= 0.40 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.000132 ohm-cm	0.000132 ohm-cm	
Magnetic Permeability	1.0006	1.0006	at 200 Oersted (15.9 kA/m)

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