

HP Alloys Alloy X, 15% Cold Worked

Category : Metal , Nonferrous Metal , Nickel Alloy , Superalloy

Material Notes:

15% Cold Worked applies to tensile and/or hardness; other properties are typical of this alloy. Data provided by High Performance Alloys, Inc., Allvac, and Haynes International.

Order this product through the following link:

http://www.lookpolymers.com/polymer_HP-Alloys-Alloy-X-15-Cold-Worked.php

Physical Properties	Metric	English	Comments
Density	8.22 g/cc	0.297 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	945 MPa	137000 psi	
Tensile Strength, Yield	731 MPa	106000 psi	
Elongation at Break	20 %	20 %	
Modulus of Elasticity	205 GPa	29700 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	15.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	8.33 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 20.0 - 500 °C	@Temperature 68.0 - 932 °F	
	16.6 $\mu\text{m}/\text{m}\cdot\text{°C}$	9.22 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 20.0 - 1000 °C	@Temperature 68.0 - 1830 °F	
Thermal Conductivity	16.9 W/m-K	117 BTU-in/hr-ft ² - °F	
	@Temperature 400 °C	@Temperature 752 °F	
Melting Point	1260 - 1355 °C	2300 - 2471 °F	
Solidus	1260 °C	2300 °F	
Liquidus	1355 °C	2471 °F	

Component Elements Properties	Metric	English	Comments
Boron, B	$\leq 0.0080 \%$	$\leq 0.0080 \%$	
Carbon, C	0.10 %	0.10 %	
Chromium, Cr	22 %	22 %	

Component Elements Properties	Metric	English	Comments
Iron, Fe	18 %	18 %	
Manganese, Mn	<= 1.0 %	<= 1.0 %	
Molybdenum, Mo	9.0 %	9.0 %	
Nickel, Ni	47 %	47 %	
Silicon, Si	<= 1.0 %	<= 1.0 %	
Tungsten, W	0.60 %	0.60 %	

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