Latrobe LescalloyÂ® 17-4 VAC-ARC Precipitation Hardening Stainless Steel

Category : Metal , Ferrous Metal , Martensitic , Stainless Steel , Precipitation Hardening Stainless

Material Notes:

LESCALLOY 17-4 VAC-ARC steel is a precipitation hardening martensitic stainless steel. A wide range of mechanical properties is available via simple aging within a 900-1150Â°F (482-621Â°C) temperature range. Vacuum arc remelting provides low gas content, superior cleanliness and optimum transverse properties.H900 Condition - Information Provided by Timken Latrobe Steel.Timken sold Latrobe in December 2006. They are now Latrobe Specialty Steels Co.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Latrobe-Lescalloy-17-4-VAC-ARC-Precipitation-Hardening-Stainless-Steel.php

Physical Properties	Metric	English	Comments
Density	7.81 g/cc	0.282 lb/inÂ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 931 MPa	>= 135000 psi	H1150 Condition - 620Â°C at 4 hr
	>= 1000 MPa	>= 145000 psi	H1075 Condition - 580Â°C at 4 hr
	>= 1310 MPa	>= 190000 psi	H900 Condition - 480Â°C at 1 hr
Tensile Strength, Yield	>= 724 MPa @Strain 0.200 %	>= 105000 psi @Strain 0.200 %	H1150 Condition - 620Â°C at 4 hr
	>= 860 MPa @Strain 0.200 %	>= 125000 psi @Strain 0.200 %	H1075 Condition - 580Â°C at 4 hr
	>= 1170 MPa @Strain 0.200 %	>= 170000 psi @Strain 0.200 %	H900 Condition - 480Â°C at 1 hr
Elongation at Break	>= 10 %	>= 10 %	H900 Condition - 480Â°C at 1 hr
	>= 13 %	>= 13 %	H1075 Condition - 580Â°C at 4 hr
	>= 16 %	>= 16 %	H1150 Condition - 620Â°C at 4 hr
Reduction of Area	>= 35 %	>= 35 %	H900 Condition - 480Â°C at 1 hr
	>= 45 %	>= 45 %	H1075 Condition - 580Â°C at 4 hr
	>= 50 %	>= 50 %	H1150 Condition - 620Â°C at 4 hr
Modulus of Elasticity	197 GPa	28500 ksi	Tension
Poissons Ratio	0.272	0.272	
Shear Modulus	77.2 GPa	11200 ksi	

Mechanical Properties	Metric	English	Comments
Thermal Properties	**Metric**	**English**	**Comments**
CTE, linear	11.0 Âµm/m-Â°C @Temperature 21.0 - 204 Â°C	6.11 Âµin/in-Â°F @Temperature 69.8 - 399 Â°F	
	11.7 Âµm/m-Â°C @Temperature 21.0 - 427 Â°C	6.50 Âµin/in-Â°F @Temperature 69.8 - 801 Â°F	
Specific Heat Capacity	0.460 J/g-Â°C @Temperature 0.000 - 100 Â°C	0.110 BTU/lb-Â°F @Temperature 32.0 - 212 Â°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.040 %	0.040 %	
Chromium, Cr	15.7 %	15.7 %	
Copper, Cu	3.5 %	3.5 %	
Iron, Fe	74.6 %	74.6 %	
Manganese, Mn	0.65 %	0.65 %	
Nb + Ta	0.30 %	0.30 %	
Nickel, Ni	4.7 %	4.7 %	
Silicon, Si	0.35 %	0.35 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000769 ohm-cm	0.0000769 ohm-cm	

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