

Latrobe Lescalloy® AF 1410 VIM-VAR ; 6 in High Strength Alloy Steel

Category : Metal , Ferrous Metal , Alloy Steel , Carbon Steel , High Carbon Steel

Material Notes:

LESCALLOY AF1410 VIM-VAR steel exhibits both high strength and very high fracture toughness. It is typically used in the 235/260 ksi (1620/1793 MPa) tensile strength range for a variety of critical, fracture-sensitive aerospace structural applications. It is double vacuum melted (VIM-VAR...vacuum induction melted followed by vacuum arc remelting) to provide superior cleanliness, ingot homogeneity, and to enhance mechanical properties. Heat Treatment - 857°C - 1 hour oil quench; -73°C - 1 hr air warm; 510°C - 5 hrs air cool. 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-AF-1410-VIM-VAR-6-in-High-Strength-Alloy-Steel.php

Physical Properties	Metric	English	Comments
Density	7.83 g/cc	0.283 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	1670 MPa	242000 psi	Transverse
	1670 MPa	242000 psi	Longitudinal
Tensile Strength, Yield	1517 MPa	220000 psi	Transverse
	1517 MPa	220000 psi	Longitudinal
Elongation at Break	17 %	17 %	Longitudinal
	17 %	17 %	Transverse
Reduction of Area	70 %	70 %	Transverse
	73 %	73 %	Longitudinal
Modulus of Elasticity	203 GPa	29400 ksi	
Fracture Toughness	165 MPa-m ^{1/2}	150 ksi-in ^{1/2}	
Charpy Impact	76.0 J	56.1 ft-lb	V-Notch, Transverse
	84.0 J	62.0 ft-lb	V-Notch, Longitudinal

Component Elements Properties	Metric	English	Comments
Carbon, C	0.15 %	0.15 %	
Chromium, Cr	2.0 %	2.0 %	
Cobalt, Co	14 %	14 %	

Component Elements Properties	Metric	English	Comments
Manganese, Mn	0.10 %	0.10 %	
Molybdenum, Mo	1.0 %	1.0 %	
Nickel, Ni	10 %	10 %	
Silicon, Si	0.10 %	0.10 %	

Chemical Properties	Metric	English	Comments
Critical Temperature	168 °C	334 °F	Martensitic Finish
	336 °C	637 °F	Martensitic Start

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