Latrobe LescalloyÂ® 300M - HS VAC-ARC High Strength Alloy Steel

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

Material Notes:

LESCALLOY 300M-HS VAC-ARC steel is a modified 4340 steel with added silicon allowing for use of a higher tempering temperature. The steel has high hardenability and strength with good ductility and toughness in heavy sections, which make it suitable for aircraft landing gear, flap tracks, and other structural components. This variant has been developed for applications requiring 287 ksi (1979 MPa) minimum tensile strength through stringent control of chemistry and processing parameters. The enhanced properties of Lescalloy 300M-HS VAC-ARC permit the design of lighter aircraft components that exhibit equivalent load carrying capacities compared to standard 300M components. Vacuum arc remelting (VAR) is used to provide optimum cleanliness and preferred ingot structure.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-300M-HS-VAC-ARC-High-Strength-Alloy-Steel.php

Physical Properties	Metric	English	Comments
Density	7.83 g/cc	0.283 lb/inÂ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	57.5	57.5	1" from quench end; Jominy End Quench Hardenability
	58	58	1/2" from quenched end; Jominy End Quench Hardenability
	59	59	1/8" from quenched end; Jominy End Quench Hardenability
Tensile Strength, Ultimate	2010 - 2050 MPa	292000 - 298000 psi	302Â°C Temper Temperature
Tensile Strength, Yield	1696 - 1731 MPa @Strain 0.200 %	246000 - 251100 psi @Strain 0.200 %	302Â°C Temper Temperature
Elongation at Break	10 - 11 %	10 - 11 %	302Â°C Temper Temperature
Reduction of Area	31 - 34 %	31 - 34 %	302Â°C Temper Temperature

Thermal Properties	Metric	English	Comments
CTE, linear	11.34 Âµm/m-Â°C @Temperature -17.8 - 93.0 Â°C	6.300 Âµin/in-Â°F @Temperature -0.0400 - 199 Â°F	
Specific Heat Capacity	0.448 J/g-Â°C	0.107 BTU/lb-Â°F	
Thermal Conductivity	37.49 W/m-K	260.2 BTU-in/hr-ftÂ²-Â°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.42 %	0.42 %	
Chromium, Cr	0.80 %	0.80 %	
Iron, Fe	94.11 %	94.11 %	
Manganese, Mn	0.75 %	0.75 %	
Molybdenum, Mo	0.40 %	0.40 %	
Nickel, Ni	1.8 %	1.8 %	
Silicon, Si	1.65 %	1.65 %	
Vanadium, V	0.070 %	0.070 %	

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