

Latrobe CBS-223 VIM-VAR Carburizing Bearing and Gear Steel

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

Material Notes:

CBS-223 VIM-VAR steel is a double vacuum melted carburizing steel with high hot hardness characteristics. Double vacuum melting sequentially combines vacuum induction melting with VACARC remelting to provide for superior cleanliness, which imparts improved fatigue strength and fracture toughness to the alloy. Its high hot hardness and the improved properties readily identify CBS-223 VIMVAR steel for use as gears, shafts and bearings in helicopter and other aerospace applications. 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-CBS-223-VIM-VAR-Carburizing-Bearing-and-Gear-Steel.php

Physical Properties	Metric	English	Comments
Density	7.75 g/cc	0.280 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	25	25	1200°F Temper
	41	41	400°F Temper Temperature
	46	46	950°F Temper
Tensile Strength, Ultimate	1310 - 1550 MPa	190000 - 225000 psi	Core; Heat Treated from 1850°F
Tensile Strength, Yield	1138 - 1172 MPa	165100 - 170000 psi	Core heat treated from 1850°F
	@Strain 0.200 %	@Strain 0.200 %	
Modulus of Elasticity	174 GPa	25300 ksi	
	@Temperature 1000 °C	@Temperature 1830 °F	
	216 GPa	31400 ksi	
	@Temperature 70.0 °C	@Temperature 158 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	13.32 µm/m-°C	7.400 µin/in-°F	
	@Temperature 21.0 - 649 °C	@Temperature 69.8 - 1200 °F	
	14.58 µm/m-°C	8.100 µin/in-°F	
	@Temperature 427 - 649 °C	@Temperature 801 - 1200 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.14 %	0.14 %	
Chromium, Cr	5.0 %	5.0 %	
Iron, Fe	90.36 %	90.36 %	
Manganese, Mn	0.40 %	0.40 %	
Molybdenum, Mo	1.4 %	1.4 %	
Silicon, Si	0.90 %	0.90 %	
Tungsten, W	1.35 %	1.35 %	
Vanadium, V	0.45 %	0.45 %	

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