

## Latrobe Lescalloy® M50 VIM-VAR High Performance Bearing Steel

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

### Material Notes:

LESCALLOY M50 VIM-VAR steel is a through-hardening grade with high hardness and high compressive strength at elevated temperatures. It is produced exclusively as a double vacuum melted produced using vacuum induction melting plus VAC-ARC remelting. This VIM-ARC process provides the optimum in control and reproducibility of chemistry, micro cleanliness and superior fatigue resistance. 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-M50-VIM-VAR-High-Performance-Bearing-Steel.php](http://www.lookpolymers.com/polymer_Latrobe-Lescalloy-M50-VIM-VAR-High-Performance-Bearing-Steel.php)

Physical Properties	Metric	English	Comments
Density	8.03 g/cc	0.290 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	62	62	RT
	35	35	
	@Temperature 649 °C	@Temperature 1200 °F	
	55	55	
	@Temperature 482 °C	@Temperature 900 °F	
	60	60	
	@Temperature 204 °C	@Temperature 400 °F	
Modulus of Elasticity	203 GPa	29500 ksi	
	86.2 GPa	12500 ksi	
	@Temperature 649 °C	@Temperature 1200 °F	
	148 GPa	21500 ksi	
	@Temperature 316 °C	@Temperature 600 °F	
Machinability	65 %	65 %	1% Carbon Tool

Thermal Properties	Metric	English	Comments
CTE, linear	10.06 µm/m-°C	5.589 µin/in-°F	
	@Temperature -73.0 - 21.0 °C	@Temperature -99.4 - 69.8 °F	
	11.5 µm/m-°C	6.39 µin/in-°F	

Thermal Properties	Metric	English	Comments
	@ Temperature 21.0 - 149 Â°C	@ Temperature 69.8 - 300 Â°F	
	13.28 Âµm/m-Â°C	7.378 Âµin/in-Â°F	
	@Temperature 21.0 - 538 Â°C	@Temperature 69.8 - 1000 Â°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.85 %	0.85 %	
Chromium, Cr	4.1 %	4.1 %	
Iron, Fe	89.3 %	89.3 %	
Manganese, Mn	0.30 %	0.30 %	
Molybdenum, Mo	4.25 %	4.25 %	
Silicon, Si	0.20 %	0.20 %	
Vanadium, V	1.0 %	1.0 %	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China