

## Latrobe Lescalloy® 52100 VAC-ARC High Performance Bearing Steel

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

### Material Notes:

LESCALLOY 52100 VAC-ARC is a deep hardening alloy steel used for aircraft bearings and other high stressed parts where good rolling contact fatigue strength is required at operating temperatures below 400°F. This grade is produced by the vacuum-arc remelting process and offers greatly improved cleanliness and internal soundness over conventionally air melted bearing quality SAE 52100 steel. 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-52100-VAC-ARC-High-Performance-Bearing-Steel.php](http://www.lookpolymers.com/polymer_Latrobe-Lescalloy-52100-VAC-ARC-High-Performance-Bearing-Steel.php)

Physical Properties	Metric	English	Comments
Specific Gravity	7.80 g/cc	7.80 g/cc	
Density	7.75 g/cc	0.280 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	45	45	1/2" from quenched end
	66.5	66.5	1/8" from quenched end
Modulus of Elasticity	200 GPa	29000 ksi	
Modulus of Rigidity	82.7 GPa	12000 ksi	
Machinability	37 - 45 %	37 - 45 %	

Thermal Properties	Metric	English	Comments
CTE, linear	11.6 Åµm/m-Å°C	6.44 Åµin/in-Å°F	
	@Temperature 38.0 - 260 Å°C	@Temperature 100 - 500 Å°F	
	14.3 Åµm/m-Å°C	7.94 Åµin/in-Å°F	
	@Temperature 38.0 - 649 Å°C	@Temperature 100 - 1200 Å°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.05 %	1.05 %	
Chromium, Cr	1.5 %	1.5 %	
Iron, Fe	96.8 %	96.8 %	
Manganese, Mn	0.35 %	0.35 %	

Component Elements Properties	Metric	English	Comments
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