

## Latrobe Dynaflex® VAC-ARC High Strength Alloy Steel

Category : Metal , Ferrous Metal , Alloy Steel , Medium Alloy Steel

### Material Notes:

DYNAFLEX VAC-ARC steel is a medium alloyed, air hardening ultra high strength grade designed for structural applications requiring room temperature tensile strengths of 220,000 to 300,000 psi. Due to the secondary hardening feature exhibited by this alloy, stable elevated temperature properties are available up to 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-Dynaflex-VAC-ARC-High-Strength-Alloy-Steel.php](http://www.lookpolymers.com/polymer_Latrobe-Dynaflex-VAC-ARC-High-Strength-Alloy-Steel.php)

Physical Properties	Metric	English	Comments
Density	7.81 g/cc	0.282 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	1790 MPa	260000 psi	
Tensile Strength, Yield	1585 MPa @Strain 0.200 %	229900 psi @Strain 0.200 %	<150 in<sup>2</sup>
Reduction of Area	6.0 %	6.0 %	
Modulus of Elasticity	207 GPa	30000 ksi	
	159 GPa @Temperature 538 Â°C	23000 ksi @Temperature 1000 Â°F	
	186 GPa @Temperature 204 Â°C	27000 ksi @Temperature 399 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear	11.5 Âµm/m-Â°C @Temperature 21.0 - 204 Â°C	6.39 Âµin/in-Â°F @Temperature 69.8 - 399 Â°F	
	13.1 Âµm/m-Â°C @Temperature 21.0 - 648 Â°C	7.28 Âµin/in-Â°F @Temperature 69.8 - 1200 Â°F	
Specific Heat Capacity	0.460 J/g-Â°C @Temperature 0.000 - 100 Â°C	0.110 BTU/lb-Â°F @Temperature 32.0 - 212 Â°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.40 %	0.40 %	
Chromium, Cr	5.0 %	5.0 %	
Iron, Fe	91.6 %	91.6 %	
Manganese, Mn	0.30 %	0.30 %	
Molybdenum, Mo	1.3 %	1.3 %	
Silicon, Si	0.90 %	0.90 %	
Vanadium, V	0.50 %	0.50 %	

Chemical Properties	Metric	English	Comments
Critical Temperature	815 Â°C	1500 Â°F	

## 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