

## Weartech International WT-50 Nickel Hardfacing & Wear Resistant Alloy

Category : Metal , Nonferrous Metal , Nickel Alloy

### Material Notes:

Applications: liners, thrust shoes, bushings, cages and other valve components for nuclear applications  
Information provided by Weartech International

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Weartech-International-WT-50-Nickel-Hardfacing-Wear-Resistant-Alloy.php](http://www.lookpolymers.com/polymer_Weartech-International-WT-50-Nickel-Hardfacing-Wear-Resistant-Alloy.php)

Physical Properties	Metric	English	Comments
Density	8.14 g/cc	0.294 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	45 - 56	45 - 56	
Hardness, Vickers	100	100	
	@Treatment Temp. 760 °C	@Treatment Temp. 1400 °F	
	250	250	
	@Treatment Temp. 649 °C	@Treatment Temp. 1200 °F	
	450	450	
	@Treatment Temp. 427 °C	@Treatment Temp. 800 °F	
	480	480	
	@Treatment Temp. 538 °C	@Treatment Temp. 1000 °F	
	525	525	
	@Treatment Temp. 25.0 °C	@Treatment Temp. 77.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	15.1 µm/m-°C	8.40 µin/in-°F	
Specific Heat Capacity	0.460 J/g-°C	0.110 BTU/lb-°F	
Melting Point	<= 1070 °C	<= 1950 °F	
Liquidus	1070 °C	1950 °F	

Component Elements Properties	Metric	English	Comments
-------------------------------	--------	---------	----------

Component Elements Properties	Metric	English	Comments
Carbon, C	0.60 %	0.60 %	
Chromium, Cr	13 %	13 %	
Iron, Fe	4.0 %	4.0 %	
Nickel, Ni	75.7 %	75.7 %	
Silicon, Si	3.7 %	3.7 %	

Descriptive Properties	Value	Comments
Relative Wear Performance	Cold Abrasion	Excellent
	Corrosion	Good/Moderate
	Erosion	Good/Moderate
	Hot Abrasion	Good/Moderate
	Impact	Not Recommended
	Metal to Metal	Excellent

## 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