

## The NanoSteel® Company SHS 7574 HVOF Steel Alloy, Atomized Powder

Category : Metal , Ferrous Metal , Alloy Steel , Other Engineering Material , Ceramic/Metallic Coating

### Material Notes:

**Coating Description:** SHS 7574 HVOF is an iron based steel alloy with a nanoscale microstructure that features extreme corrosion resistance in high chlorine, salt fog, concentrated salt and seawater environments. SHS 7574 is also a coating alternative to electrolytic hard chromium.

**Key Performance Characteristics** Outstanding corrosion resistance in high chlorine, salt fog, concentrated salt and seawater environments Can be finished to very high surface specifications for use as a replacement for hard chrome High bond strength, low porosity and high impact resistance Corrosion resistance is superior to crystalline austenitic stainless steel and nickel based superalloys

**Application Process:** High Velocity Oxygen Fuel (HVOF) thermal spraying

Information Provided by The NanoSteel Company, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_The-NanoSteel-Company-SHS-7574-HVOF-Steel-Alloy-Atomized-Powder.php](http://www.lookpolymers.com/polymer_The-NanoSteel-Company-SHS-7574-HVOF-Steel-Alloy-Atomized-Powder.php)

Physical Properties	Metric	English	Comments
Density	7.65 g/cc	0.276 lb/in <sup>3</sup>	Coating Property
Porosity	<= 5.0 %	<= 5.0 %	Coating Property

Mechanical Properties	Metric	English	Comments
Vickers Microhardness	975 - 1075	975 - 1075	kg/mm <sup>2</sup> ; HV300
Adhesive Bond Strength	62.7 MPa @Thickness 0.508 mm	9100 psi @Thickness 0.0200 in	316L stainless; ASTM C633-01
	76.88 MPa @Thickness 0.508 mm	11150 psi @Thickness 0.0200 in	1018 steel; ASTM C633-01

Component Elements Properties	Metric	English	Comments
Boron, B	<= 5.0 %	<= 5.0 %	
Carbon, C	<= 3.0 %	<= 3.0 %	
Chromium, Cr	<= 25 %	<= 25 %	
Iron, Fe	>= 30 %	>= 30 %	
Manganese, Mn	<= 5.0 %	<= 5.0 %	
Molybdenum, Mo	<= 20 %	<= 20 %	
Silicon, Si	<= 2.0 %	<= 2.0 %	
Tungsten, W	<= 10 %	<= 10 %	

Descriptive Properties	Value	Comments
Deposition Efficiency (%)	50 - 55	Coating Property
Impact Resistance	No delamination/cracking at 480 in-lbs	Drop Impact Testing
Wear Resistance Mass Loss (g)	0.13	2000 cycles; ASTM G65-04 Procedure B

## 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