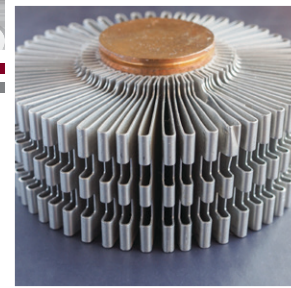
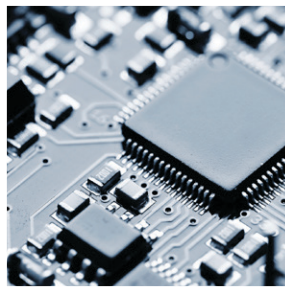


# NICKEL 200



CHEMICAL COMPOSITION %	
Chemical Element	Nickel 200
Nickel	99
Carbon	.15
Manganese	.35
Sulfur	.01
Silicon	.35
Copper	.25
Iron	.40
MECHANICAL PROPERTIES	
Property	Nickel 200
Density	(lbs. per cu. in): .321
Module of Elasticity	(x 10 <sup>-6</sup> PSI, tension): 29.6
Electrical Conductivity	(% IACS at 68°F (20°C) as annealed): 9.5
Magnetic Permeability	At 200H (at 70°F): 110-600
PHYSICAL PROPERTIES	
Property	Nickel 200
Ultimate Tensile Strength	72,000 psi
0.2% Offset Yield Strength	25,000 psi
Elongation in 2 inches	40%
Rockwell Hardness	B61
Linear coefficient of thermal expansion cm. per cm. per °F x 10 <sup>-6</sup>	
Temp. range – °F	Nickel 200
70-200	7.4
70-400	7.7
70-800	8.3
70-1000	8.5

Certified to ASTM B160/162

Nickel 200 Alloy is a commercially pure nickel that exhibits good corrosion resistance and has rather low electrical resistivity. It also has a good combination of toughness, ductility and strength retention at high temperatures.

A general purpose material for use when the specialized properties of the other alloys are not required. High thermal and electrical conductivity are also characteristic of Alloy 200. Although most useful in reducing environments, it can be used also under oxidizing conditions that cause development of a passive oxide film. The outstanding resistance of Nickel 200 to caustics is based on this type of protection.

It's used in caustic solutions, food handling equipment, and general corrosion-resistant parts and structures. Because it contains magnetic and mechanical properties, it can be used in devices that require magnetic actuated parts. Other applications include Electrical & Electronic Parts, Aerospace Components, Rocket Motor Casings, and Transducers.

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**NATIONAL ELECTRONIC ALLOYS**  
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#### EAST COAST

3 Fir Court, Oakland, NJ 07436  
**201-337-9400 • Fax: 201-337-9698**  
Toll Free: 800-524-4309  
Email: Sales@nealloys.com

#### WEST COAST

1847 W. Business Center Dr., Orange, CA 92867  
**714-556-5561 • Fax: 714-556-5562**  
Toll Free: 877-632-9378  
Email: Sales@nealloyswest.com

# NICKEL 200

## **NICKEL 200** (ASTM B 160/162) **COIL FROM STOCK**

Thickness				Width					
.005"	X	12" or Your Width	X	COIL	.020"	X	12" or Your Width	X	COIL
.010"	X	12" or Your Width	X	COIL	.030"	X	12" or Your Width	X	COIL
.015"	X	12" or Your Width	X	COIL	.040"	X	12" or Your Width	X	COIL
					.062"	X	12" or Your Width	X	COIL

Above Can Be Slit To Your Width On 8" or 16" Cores

## **ROD FROM STOCK**

.050" dia.	X	72"	.250" dia.	X	72"	1.250" dia.	X	72"
.062" dia.	X	72"	.375" dia.	X	72"	1.500" dia.	X	72"
.093" dia.	X	72"	.500" dia.	X	72"	1.750" dia.	X	72"
.125" dia.	X	72"	.625" dia.	X	72"	2.250" dia.	X	72"
.156" dia.	X	72"	.750" dia.	X	72"			
.187" dia.	X	72"	1.000" dia.	X	72"			

## **PLATE FROM STOCK**

Thickness		
.187"	.375"	.812"
.250"	.500"	1.000"
.312"	.750"	

### **OTHER SIZES AND TEMPERS AVAILABLE UPON REQUEST**

*Most stock is dual certified to meet Nickel 200 and 201. Our coil stock will also meet Nickel 233 and in some cases 205 chemistry.*

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