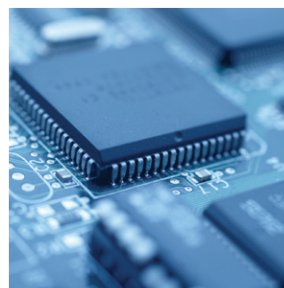


# NICKEL 201



CHEMICAL COMPOSITION %	
Chemical Element	Nickel 201
Nickel	99
Carbon	.02
Manganese	.35
Sulfur	.01
Silicon	.35
Copper	.25
Iron	.40
MECHANICAL PROPERTIES	
Property	Nickel 201
Density	(lbs. per cu. in): .321
Module of Elasticity	(x 10 <sup>-6</sup> PSI, tension): 30
Electrical Conductivity	(% IACS at 68°F (20°C) as annealed): 8.4
Magnetic Permeability	At 200H (at 70°F): 110-600
PHYSICAL PROPERTIES	
Property	Nickel 201
Ultimate Tensile Strength	59,000 psi
0.2% Offset Yield Strength	15,000 psi
Elongation in 2 inches	40%
Rockwell Hardness	B55
Linear coefficient of thermal expansion cm. per cm. per °F x 10 <sup>-6</sup>	
Temp. range – °F	Nickel 201
70-200	7.3
70-400	7.7
70-800	8.4
70-1000	8.5

Certified to ASTM B160/162

Nickel 201 Alloy is a low carbon modification of the Nickel 200. Its thermal and magnetic properties are also similar. Nickel 201 is generally specified where exposure to temperatures above 600 F is expected.

It has a low annealed hardness and very low work-hardening rate. Those who use Nickel 201 Alloy find it desirable in deep drawing, spinning, and coining.

Nickel 201 is not subject to embrittlement at temperatures of 600-1400 F due to its low Carbon however, Nickel 201 is subject to intergranular embrittlement by Sulfur compounds at temperatures above 600 F. It is particularly resistant to caustic soda, dry fluorine, chlorine, hydrogen chloride and hydrofluoric acid.

It addition, it can be applied to corrosion-resistant equipment including but not limited to: caustic evaporators, spun anodes, and laboratory crucibles.

Other applications include heat exchanger parts, electrical parts and aerospace components.

**NEA** ISO 9001: 2015  
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**NATIONAL ELECTRONIC ALLOYS**  
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Email: Sales@nealloyswest.com

# NICKEL 201

## **NICKEL 201** (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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