

# Alloy 347

Alloy 347 exhibits excellent resistance to intergranular corrosion.

Alloy 347 from NeoNickel offers superior resistance to intergranular corrosion. It's also suitable for high temperature service, due to its good mechanical properties. Alloy 347 is now available from NeoNickel Hranice.

## PRODUCT FORMS

PRODUCT FORM	SIZE RANGE FROM	SIZE RANGE TO
Alloy 347 welding wire	0.762mm	2.3622mm
Alloy 347 sheet & plate	0.508mm	101.6mm
Alloy 347 round bar	9.5mm	177.8mm
Alloy 347 coil	4.76mm	-

Can't find the size you need? **Please contact us at [onlinesales@neonickel.com](mailto:onlinesales@neonickel.com)**

## CHEMICAL ANALYSIS

%	CR	NI	CB+TA	C	SI	MN	P	S	FE
Min	17	9	Cb10xc	0.04	-	-	-	-	-
Max	19	13	1	0.08	0.75	2	0.045	0.03	Balance

## APPLICATIONS

- Oil Refineries
- Fluid catalytic cracking units
- Hanger rods
- Recuperator tube sheets
- Fired heater tubes
- Equipment in and around reactors

## ABOUT ALLOY 347

Alloy 347 is generally used where corrosive conditions are severe, such as aircraft exhaust stacks, manifolds and ring collectors. Type 347 is also used for heavy welded assemblies which cannot be annealed after welding or where the operating conditions cause exposure within the temperature range between 426.67° to 815.55°F. For more information on Alloy 347 please feel free to contact our Hranice facility on +420 581 604 712 or salesceska@www.neonickel.com

## PROPERTIES

<b>Density:</b>	7.916 g/cm <sup>3</sup>
<b>Electrical resistivity:</b>	8.89 x 10 <sup>-7</sup> Ωm

## MECHANICAL & PHYSICAL PROPERTIES

MECHANICAL & PHYSICAL PROPERTIES	21.1°C	100°C	500°C
Coefficient of Thermal Expansion, μm/m°C		16.6	
Thermal Conductivity/ kcal/(hr.m.°C)		167.4	219.8
Modulus of Elasticity Dynamic/ x10 <sup>5</sup> MPa	1.93		

## MINIMUM SPECIFIED PROPERTIES, ASTM A240

TENSILE STRENGTH, KSI	75
0.2% Yield Strength, ksi	30
Elongation, %	40
Hardness Max, Brinell	201

## TYPICAL TENSILE AND IMPACT PROPERTIES

TEMPERATURE, °C	20°C	204.44°C	426.66°C	537.77°C	648.88°C	732.22°C	815.55°C
Ultimate Tensile Strength, ksi	93.3	73.6	69.5	63.5	52.3	39.3	26.4
0.2% Yield Strength, ksi	36.5	36.6	29.7	27.4	24.5	22.8	18.6

## SPECIFICATIONS

<b>Standards:</b>	AMS 5512, AMS 5646
<b>UNS Number:</b>	UNS S30347