



## C110 Copper Alloy Wire

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### Introduction

C110 is a commercial copper which is more economical than C102. It has good solderability and corrosion resistance and is used for high current applications.

To learn more please contact our [sales department](#).

# C110 Copper Alloy Wire

Chemical Composition - Limits		Chemical Composition - Nominal	
Cu 99.90 min - incl Ag		Cu 99.90	
		O 0.04	
Specifications		Fabrication Index	
ASTM B1		Soldering	5 - Excellent
ASTM B2		Hot Worked	5 - Excellent
ASTM B3		Cold Worked	5 - Excellent
ASTM B33		Brazing	4 - Very Good
ASTM B48		Machinability	1 - Poor
ASTM B152			
ASTM B246			
ASTM B272			
ASTM B298			
ASTM B355			

## Physical Properties

Annealing Range (Min)	700 °F
Annealing Range (Max)	1200 °F
Density	0.322 lb/in <sup>3</sup>
Electrical Resistivity (Annealed)	10.3 Ω·cir-mil/ft @ 68 °F
Electrical Conductivity (Annealed)	101% IACS @ 68 °F
Thermal Conductivity	226 Btu/ft <sup>2</sup> /ft·hr/°F @ 68 °F
Coefficient of Thermal Expansion	9.8 per °F (68-572 °F)
Modulus of Elasticity (Tension)	17 ksi
Modulus of Rigidity (Tension)	6 ksi
Melting Point (Solidus)	1,700 °F

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Melting Point (Liquidus)

1,900 °F

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## Round Wire

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Typical		
Annealed	OS050	35.0		.0010 - .1285 inch
Hard Drawn	H04	60.0		

## Square Wire

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Typical		
Annealed	OS050	35.0		.0100 - .0808 inch
Hard Drawn	H04	60.0		

## Rolled Flat

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Min	Max	
Annealed	OS050	26.0	38.0	Thickness: .0100 - .0500 inch
1/4 Hard	H01	34.0	42.0	
1/2 Hard	H02	37.0	46.0	Width: .0150 - .2500 inch
Hard	H04	43.0	52.0	
Spring	H08	50.0	58.0	