



CA 770 18% Nickel Silver

Characteristics

- * Corrosion Resistant
- * High Strength
- * Resistant to Stress Relaxation
- * Decorative Silver Finish

Description

Nickel Silver Alloys offer impressive strength, stress relaxation resistance, solderability, and shelf life. They are extremely resistant to corrosion and therefore will not tarnish easily. Used in applications ranging from decorative belt buckles to aircraft relays where arcing is of concern.

Specifications

ASTM-B-122

Forms Available

COIL Gauge: .002 to .090 Width: .060 to 25.000
 SPOOL Gauge: .005 to .060 Width: .060 to 2.000 Weight: 5 lbs to 4,000 lbs per spool
 SHEET Gauge: .002 to .060 Width: .250 to 24.500 Length: .500 to 144"
 WIRE Round, Square, Flat

Typical Property Values

CHEMICAL

Copper: 55.0%
 Zinc: 27.0%
 Nickel: 18.0%

PHYSICAL

Density 0.314 lbs per cu. in. @ 68°F (annealed)
 Modulus of Elasticity 18 x 10⁶ PSI Tension
 Electrical Conductivity 6 % IACS @ 68°F (annealed)
 Thermal Conductivity 17 BTU per sq. ft. per hr. @ 68°F
 Coef. Of Thermal Expansion 9.3 inches/inch/ F x 10x⁻⁶ from 68°F to 572°F

MECHANICAL

	Ann.	1/4 Hard	1/2 Hard	3/4 Hard	
Tensile Strength	61 - 76	69 - 87	78 - 95	88 - 101	x 1000
Yield (2% offset)	23 - 41	44 - 83	64 - 93	84 - 100	x 1000
Elongation	39 - 48	11 - 41	5 - 24	3 - 13	% in 2 inches
Rockwell Hardness (30T)	39 - 65	63 - 75	71 - 78	73 - 78	.020 gauge and above
	Hard	Ex. Hard	Spring	Ex. Spring	
Tensile Strength	92 - 107	102 - 115	108 - 120	116 Min.	x 1000
Yield (2% offset)	99 - 106	101 - 114	107 - 118	115 Min.	x 1000
Elongation	3 - 6	1 - 2	1 Max.	1 Max.	% in 2 inches
Rockwell Hardness (30T)	76 - 80	79 - 82	80 Min.	81 Min.	.020 gauge and above

(Properties listed above are provided for reference only)