

CoNiChrome stands out as a cobalt-nickel-chromium alloy engineered for environments where strength, fatigue resistance, and corrosion performance must all be exceptional. Its unique balance of toughness and elasticity allows it to maintain high mechanical strength even after extensive cold work, making it a favorite for demanding spring components, medical devices, and aerospace hardware. The alloy's chromium and molybdenum content give it impressive resistance to corrosion and chemical attack, while its non-magnetic, stable austenitic structure ensures reliability in precision applications. Altogether, CoNiChrome offers a rare combination of durability, resilience, and environmental stability that few alloys can match.

Products & Sizes

Precision Reroll Strip

0.0008" - 0.015"

CoNiChrome Chemical Composition

	Element	Percent by Weight Min	Percent by Weight Max
C	Carbon	-	0.15
Co	Cobalt	39.0	42.0
Cr	Chromium	18.5	21.5
P	Phosphorus	-	0.015
Be	Beryllium	-	0.001
Mo	Molybdenum	6.0	8.0
Si	Silicon	-	1.20
S	Sulfur	-	1.20
Fe	Iron	-	Balance
Ni	Nickel	14.0	18.0
Mn	Manganese	1.0	2.5

Industry Standards

Industry Applications

- Suture wires
- Surgical clops
- Pacemaker leads
- Stents
- Vena cava filters
- Orthopedic nails
- Precision springs
- Torsion bars
- Seals

Physical Properties

- Density: 0.300 lb/in³
- Magnetic Properties: This material is non-magnetic in its annealed, cold worked, and aged conditions.

Mechanical Properties

Mechanical Properties of CoNiChrome					
Condition	0.2% Yield Strength	Ultimate Tensile Strength	% Elongation in 4D	% Reduction of Area	Orientation
Annealed	52 ksi (359 MPa)	124 ksi (855MPa)	80	80	Long
Cold Worked	100-250 ksi (690-1724 MPa)	150-280 ksi (1034-1930 MPa)			Long
Cold Worked + Aged		250-300+ ksi (1724-2068+ MPa)			Long