

# Cobalt/Chromium/Tungsten/Nickel/Iron/Manganese Alloy Coil (Co50/Cr20/W 15/Ni10/Fe 3/Mn 2)

**Formula:** Co50/Cr20/W 15/Ni10/Fe 3/Mn 2

**Thickness:** 0.25mm

**Coil Width:** 300mm

**Length:** 0.5m

**UOM Code:** 417-321-08

**SKU:** 1000039643-group

**Product Code:** CN01-FL-000100

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	58.5
Modulus of elasticity( GPa )	225
Tensile strength( MPa )	860

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	88.6
Temperature coefficient( $\text{K}^{-1}$ )	-

### Thermal Properties

Element	Value
Melting point( C )	1330-1410
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	9.4@23°C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	12.6@25-100°C

### Physical Properties

Element	Value
Density( $\text{gcm}^{-3}$ )	9.13