

Resistance Alloy Cr30Ni70

Standard

EN: NiCr7030 / 2.4658
 UNS: N06008
 GB/T 1234: Cr30Ni70

Chemical Composition (%)

Ni: Remainder
 Cr: 28-31
 Fe: max. 1.0

Physical Properties

Density (g/cm ³)	8.1
Resistivity (μΩ/m)	1.18
Coefficient of thermal expansion 10 ⁻⁶ /K	17
Thermal conductivity W/(m*K)	14
Melting point (°C)	1380
Max. Working Temperature (°C)	1250

*value for the lowest temper class

Applications

Industrial electric furnaces, enamelling furnaces, household appliances, night-current storage space-heaters.

Merit

Cr30Ni70 is a nickel-chromium heating conductor alloy for operating temperatures of up to 1250 °C and often contains additives of rare earths for a higher resistance to oxidation, especially with frequent switching operations or broad temperature variations. The resistance to atmospheric corrosion at 20 °C is high up to the upper operating temperature the resistance to air and other oxygen-containing gases as well as to nitrogen-containing low-oxygen gases is high as well, yet it is low to oxidizing as well as reducing gases containing sulphur. The resistance to carbonizing is high.

Mechanical Properties

Tensile strength	Elongation(%)	
Mpa	Dia. > 3.0mm(Wire)	Dia. 0.1-3.0mm(Wire)
	Thk. > 0.2mm(Strip)	Thk. > 0.2mm(Strip)
min. 650	min. 25	min. 20

Physical properties of the above materials are conventional performance indicators. If you have some special requirements, (for example property and tolerance), please contact Kinmachi Company directly, we will give you professional assessments and answers.