

Cold Rolled strip

Nicrimphy 601

Nicrimphy 601 is a nickel chromium alloy designed for applications requiring resistance to corrosion at high temperature. Nicrimphy 601 has also good resistance to aqueous corrosion.

The high chromium content of Nicrimphy 601 increases its resistance against corrosion and substantial aluminium content provides excellent oxidation resistance at high temperatures.

Nicrimphy 601 is used for: heat exchangers, industrial furnaces, thermoelectric safety (thermocouples ..), automotive industry (gasket, heat resistance cover in turbocharger, spark plug ..).

International standards

Werkstoff Nr 2.4851 - ASTM B168

UNS N06601 – AMS 5870

Chemical composition (% weight), main elements

Ni	Cr	Fe
58,0 – 63,0	21,0 – 25,0	<= 18,0
Al	Ti	
1,0 – 1,7	<= 0,50	

Physical properties

Density (g/cm ³)	Melting T° (°C)	Coefficient of Thermal Expansion between 20 and 100°C (10 ⁻⁶ .°C ⁻¹)	Resistivity at 20°C (μΩ.cm)	Thermal conductivity (W/(°Cm))	Specific heat at 20°C (J.Kg ⁻¹ .°C ⁻¹)
8,1	1360 - 1411	13,8	118	11,2	448

Nicrimphy 601 is non magnetic

Mechanical properties, Typical Values (Room temperature)

Temper	Hardness (HV)	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)
Annealed	165	710	310	40

Standard delivery form & dimensions

Form *	Thickness (mm)	Width (mm)	Length (mm)	Temper
Coil - Sheet	0,10 to 1,6	10 to 640	500 to 3500	Annealed

* Depending on thickness, width & temper

Nicrimphy 601 can also be delivered in thickness higher than 1,6mm or in the hard condition, upon request.

The data enclosed in this document are only given as indicative values and correspond to our standard product. Different requirements are subject to discussion and formal approval by Aperam Alloys Imphy. For further information or special request, please contact us.

Aperam Alloys Imphy

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