

## Cold Rolled Strip



SUPRA50 T is an iron-nickel soft magnetic alloys with maximum saturation induction and high permeability? with secondary recrystallization used for laminations and the manufacture of toroidal cores.

### International standards

ASTM A 753, DIN 17405, IEC 404, JIS C 2531

### Chemical composition %weight

	Ni	Fe
Typical value	48	Bal

### Physical properties

Density (g/cm <sup>3</sup> )	Melting T° (°C - °F)	Curie T° (°C - °F)	Thermal expansion (10 <sup>-6</sup> .°K <sup>-1</sup> )	Resistivity (μΩcm)	Thermal conduction (W/°Km)	Specific heat (J.Kg <sup>-1</sup> .°K <sup>-1</sup> )
8.2	1425	450	8	45	13	500

Conditions	Thickness (mm - ")	Permeability	Sample
Hard	0,34 -.00315	μp (40G) : 14000	Laminations
Hard	0,08 -.0134	μ5Z : 8000	cores

\* Typical values measured after heat treatment at 1150°C /2102 °F in pure & dry Hydrogen (cooling rate : not critical, 50 to 100°C/hour).

### Mechanical properties (Typical values)

Temper	Hardness (HV)	Grain size	Tensile strength (MPa - KSI)	Yield strength (MPa - KSI)	Elongation (%)	Young's modulus (MPa - KSI)
Hard	250	-	-	-	-	-

Typical values for material to be tested in accordance with NF EN 10002, NF EN ISO 6507, NFA 04102

### Standard Delivery & dimensions available

Form	Thickness * (mm / ")	Width (mm / ")	Temper
Coil	0.08 to 0.34 / .00315 to .0134	10 to 630 / .394 to 24.80	Hard

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

### Aperam Alloys Imphy

B.P. 1  
Avenue Jean Jaurès  
F- 58160 Imphy

Tel + 33 3 86 21 30 00  
Fax + 33 3 86 21 31 00  
nickel.alloys@aperam.com  
www.aperam.com/alloys-imphy