Cold Rolled Strip

1. Description, standards & chemical

SUPRA 36 is an iron-nickel soft magnetic alloys with high permeability and with good resistivity.
Main applications are clock motors parts, CTR gun grids.

International standards

DIN 17405 - IEC 404 - JIS C 2531

Chemical composition (%weight)

	Ni	Fe
Typical value	36	Bal

2. Physical properties

Density (g/cm³)	Melting T° (°C - °F)	Curie T° (°C - °F)	Thermal expansion (10^{-6}.°K^{-1})	Resistivity (µΩcm)	Thermal conduction (W/°Km)	Specific heat (J.Kg^{-1}.°K^{-1})
8.1	1450 - 2640	230- 446	1	75	10,5	500

3. Magnetic properties *

Conditions	Thickness (mm - ")	Saturation induction (G - T at 10Oe – 800A/m))	Coercive force (Oe - A/m)	Permeability
Direct Current	0,35-0.0138	13000 - 1,30	0.075- 6,0	µmax 30000
Alternat. Current	0,35-0.0138	13000 - 1,30	-	µ5z : 7000

** Typical values measured on rings sample thickness. 0,350.0138/ " after heat treatment at 1150°C /210 2 °F in pure & dry Hydrogen (cooling rate: not critical, 50 to 100°c/hour).*

4. Mechanical properties *

Temper	Hardness (HV)	Grain size	Tensile strength (MPa - KSI)	Yield strength (MPa - KSI)	Elongation (%)
Annealed	130	9	480	300	30
Hard	230	-	700	680	3

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

5. Standard delivery & dimensions available

Form *	Thickness(mm / ")	Width (mm / ")	Length (mm / ")	Temper
Coil - Sheet	0.10-3.5 / .004-.138	10-640 /0.4-25.2	500-3500 / 19.7-137.8	Annealed / Hard

** Depending on thickness, width & temper*

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

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