

Cold Rolled Strip



Invar® is an iron-nickel alloy with a very low coefficient of thermal expansion in the temperature range -100°C to +200°C. Typical applications are moulds for composite components, piezoelectric injectors, echoboxes and filters for mobile telephone relay stations.

International standards

DIN 1715 - W 1.3912 – A54-301 – SEW 385

Chemical composition %weight

	Ni	Fe
Typical value	36	Bal

Standard Delivery & dimensions available

Form	Thickness	Width	Length	Temper
Strip - Sheet	0.10 to 3.50 mm	10 to 640 mm	500 to 3500 mm	Annealed / Hard

Physical properties

Density (g/cm ³)	Resistivity (μohm.cm)	Melting T° (°C)	Curie T° (°C)	Specific heat (J/g °C)	Thermal conductivity (W/m/°C)
8.13	75	1450	230	0.51	10.5

20 to 100°C

Guaranteed linear CTE (10-6/°C) ≤ 1.5

Mechanical properties (Typical values)

	Hardness Hv	Ultimate strength (MPa)	Yield strength (MPa)	Elongation %	Young modulus KN/mm ²
Annealed	140	480	310	30	140
Hard	210	630	620	3	

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

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