Aluminum Strip for Transformer

About Haomei

Haomei is a professional manufacturer and supplier specializing in the R&D, production and sales of aluminum transformer strip, copper strip roll for transformer, cable armored aluminum and cable strip. With years of experience in the metal processing industry, we have built a complete production system and made our way in the fierce market competition.

What is Aluminum Strip for Transformer

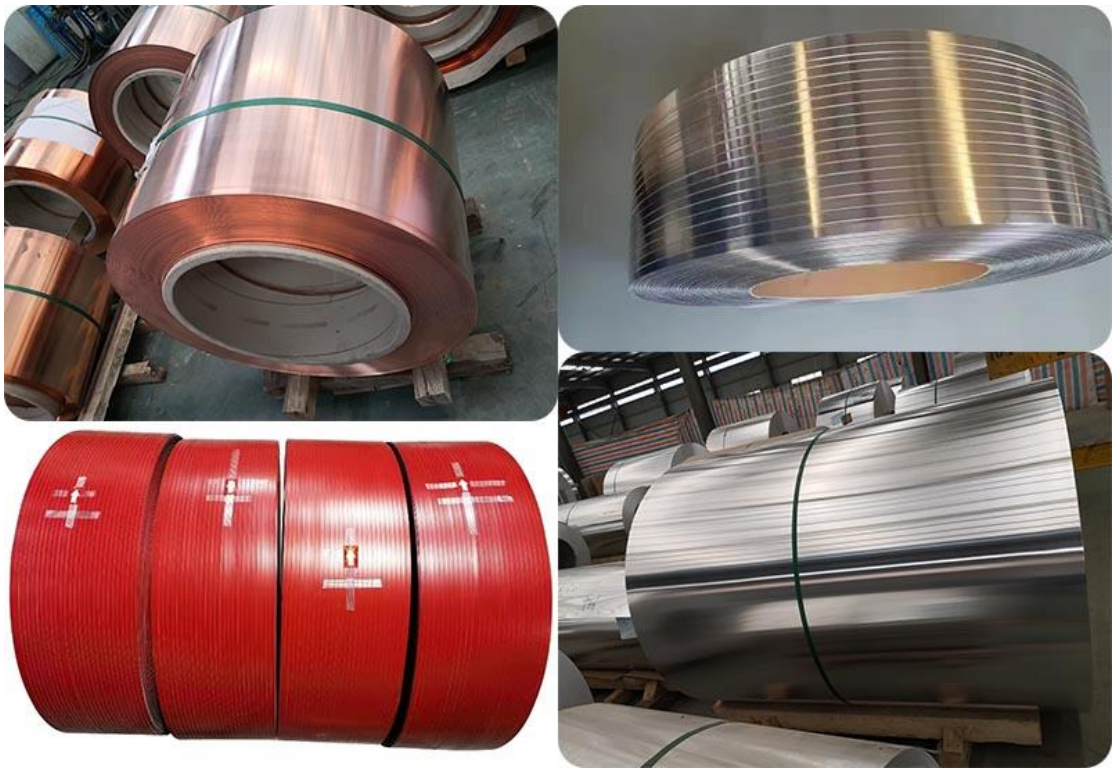
Transformer aluminum strip is a key conductive raw material for manufacturing transformer winding. It is widely used in various types of transformers, including

dry-type and oil-immersed transformers, and performs the function of current transmission.

Its material and production standards directly affect the performance and reliability of the transformer. The alloys mainly consist of 1xxx series pure aluminum alloys, with core grades including 1050, 1060, 1070, and 1350, mostly in the O-state (soft state), with an aluminum content of over 99.5%.

It has excellent electrical and thermal conductivity, is soft and processable (malleable, bendable and windable without cracking), with a smooth burr-free surface and good corrosion resistance.

Cheaper and lighter than copper (about 30% of copper's weight, easy to transport and install), it also has mature technology and various specifications to meet different winding needs, becoming the preferred copper replacement for modern transformers.



1000 Aluminum strip properties

1050 O aluminum strip properties	1060 Alloy Properties
Electrical conductivity: >60% IACS	Conductivity: O temper ≥61.5% IACS

(20℃) Resistivity: ≤0.02825 Ω·mm²/m Tensile strength: 60~95 MPa Yield strength: 15~35 MPa Elongation: ≥25%~35% Hardness: 16~25 HB Density: 2.71 g/cm³ (approximately 1/3 that of copper) Thermal conductivity: 222~230 W/(m·K), rapid heat dissipation Melting point: 660℃ Coefficient of thermal expansion: 23.5×10^{-6} /K	Resistivity: 20℃ ≤0.02825Ω·mm²/m Tensile Strength: 75-105MPa Elongation: ≥25% (δ50 standard) Hardness: HV25-35 Density: ≈2.71 g/cm³ Thermal Conductivity: ≈237 W/(m·K) Melting Point: ≈660℃ Thermal conductivity： approximately 237 W/(m·K)
1070 aluminum strip properties Conductivity: ≥62.7% IACS (at 20℃) Resistivity: ≤2.826×10^{-8} Ω·m (at 20℃) Heat dissipation: Thermal conductivity approximately 230 W/(m·K) (at 20℃) Tensile strength (at 20℃): ≥75 MPa Elongation (at 20℃): ≥30% Yield strength (at 20℃): ≥30 MPa Density: Approximately 2.70 g/cm³ (at 20℃)	**1350 aluminium properties** Conductivity: ≥62.0% IACS, low loss, high energy efficiency. Resistivity : ≤0.02825 Ω·mm²/m, reducing winding heat generation. Continuous operation at ≤130℃, stable electrical performance. O-temper, elongation ≥25%, good flexibility, easy to wind Tensile strength 60-95 N/mm², moderate strength, easy to process Burr-free edges (≤0.03-0.05mm), protecting the insulation layer.

Specification

Alloys	1050, 1060, 1070, 1350

Tempers	O, HO
Thickness(mm)	0.2-3.0 mm, customization available
Thickness tolerance	Thickness tolerance: ±0.02mm to ±0.08m; Width tolerance: +0.3mm to +2.5mm
Width	20-1500 mm
Surface quality	Mill finish, smooth, clean, free from oil stains, burrs, and scratches.

Uses

-Dry-type transformers

-Oil-immersed transformers

-Distribution transformers

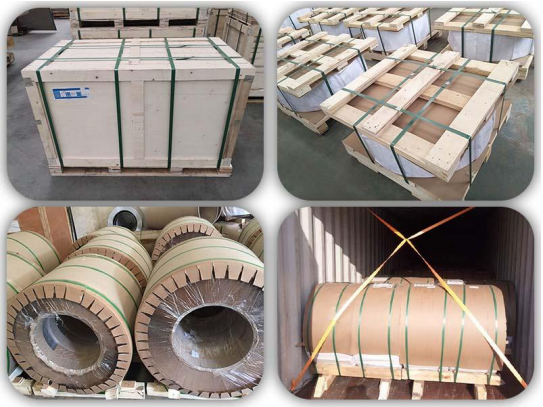
- Rectifier transformers

- Isolation transformers

-High-frequency transformers

-New energy supporting transformers

-Large power transformers



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