



Nickel Plating

Through our surface treatment technology and results, Create new values.

Nickel plating is a representative electroplating process widely used across various fields due to its excellent decorative appearance, corrosion resistance, hardness, and electrical properties. A major advantage is the ability to adjust the appearance and physical properties according to the application, thereby contributing to improved product performance and reliability.

At ERG, we maximize the benefits of nickel plating by offering three types: bright nickel, semi-bright nickel, and dull nickel. Each has distinct characteristics in terms of appearance, functionality, and workability, enabling optimal selection according to product objectives and specifications.

ERG's Nickel plating

Type	Appearance Characteristics	Features & Properties	Main Applications
Bright Nickel	Mirror-like strong gloss	High addition of brighteners; High hardness and excellent wear resistance; Higher internal stress	Final layer or underlayer in decorative plating; Connectors; Home appliance parts
Semi-Bright Nickel	Slightly glossy silver-white	Small amount of brighteners; Good balance of gloss and ductility; Low internal stress	Intermediate layer in multilayer plating; Applications requiring both decorative appearance and corrosion resistance
Dull Nickel	Matte, subdued appearance	No brighteners used; High ductility, suitable for forming and brazing; Excellent electrical and magnetic properties	Underlayer for electronic components; Pretreatment before brazing; Magnetic parts

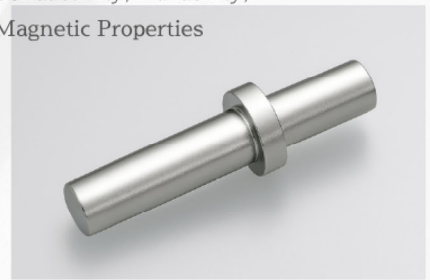
Bright Nickel
Wear Resistance, Decorative,
Corrosion Resistance



Semi-Bright Nickel
Corrosion Resistance,
Decorative + Corrosion Resistance



Dull Nickel
Conductivity, Brazability,
Magnetic Properties



FAQ - Frequently Asked Questions

Q. What is the difference between bright nickel and semi-bright nickel?

A. Bright nickel provides a mirror-like finish with emphasis on appearance. It has high hardness and is suitable for sliding parts. Semi-bright nickel has lower internal stress, offering excellent adhesion and ductility, making it ideal as a base layer or for multi-layer structures.

Q. What applications are suitable for dull nickel?

A. Dull nickel is suitable for applications requiring electrical conductivity or magnetic properties. It also provides excellent brazing performance.

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