



# Silver Plating

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



## Silver Plating for High-Reliability Applications

Silver plating is an essential surface treatment technology for contact components and high-frequency applications, thanks to its superior electrical and thermal conductivity among metals. Additionally, the antibacterial properties of silver ions have attracted attention in the medical and hygiene fields. At ERG, we utilize hard silver plating to form coatings with excellent wear resistance and adhesion. This enables us to support a wide range of high-reliability components such as automotive connectors, relay contacts, and switch parts.

Currently, we primarily offer bright silver plating in response to customer needs, but we also have extensive production experience in both bright and semi-bright silver plating. If you are interested in semi-bright silver plating for prototyping or other purposes, please feel free to contact us.

At ERG, we offer three different plating methods for you to choose from.

**Plating  
Methods**

- Barrel Plating : High-throughput processing for small parts. Handles complex shapes and keeps costs down.
- Rack Plating : Each part is fixtured for precise thickness—ideal when appearance matters.
- Mesh-Assisted Plating : Best for complex geometries; prevents overlap and sticking.

Plating Method	Features & Applications	Advantages	Disadvantages
Barrel	Small parts are placed in a rotating barrel container for plating. Suitable for mass processing. Relatively uniform coating formation is possible.	<ul style="list-style-type: none"> <li>• Capable of mass processing</li> <li>• High cost efficiency</li> <li>• Suitable for automation</li> </ul>	<ul style="list-style-type: none"> <li>• Minor scratches due to contact between parts</li> <li>• Not suitable for complex shapes or large parts</li> </ul>
Rack	Parts are fixed to a jig and plated in a stationary state. Suitable for medium to large parts and high-precision items. Ideal for applications where appearance quality is important.	<ul style="list-style-type: none"> <li>• Precise control of coating thickness</li> <li>• Excellent appearance quality</li> <li>• Can handle complex shapes</li> </ul>	<ul style="list-style-type: none"> <li>• Higher processing cost</li> <li>• Jig design required</li> <li>• Lower productivity than barrel plating</li> </ul>
Mesh Basket	Small parts are placed in a mesh basket and processed manually. Used when barrel plating is difficult due to shape or when contact damage must be avoided.	<ul style="list-style-type: none"> <li>• Minimal contact damage</li> <li>• Shape retention possible even for small parts</li> <li>• More flexible than barrel plating</li> </ul>	<ul style="list-style-type: none"> <li>• Mesh preparation and management required</li> <li>• Limited processing</li> </ul>

We recommend the ideal plating method and bath for your product.  
Get in touch with us.

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