

PLATING

In the plating process, a thin layer of metal is deposited on top of a metallic component to improve the assembly process (soldering, wire bonding), inhibit corrosion, alter the conductivity, and/or increase the durability of the product...

The Egide group provides state-of-the-art plating services at its manufacturing sites in the USA (San Diego, CA and Cambridge, MD) and in Europe (Bollène, France). Our plating capabilities are fully integrated into the manufacturing process of our packages.

TYPICAL PLATING OPTIONS:

Table 1: Typical plating options at the Egide group

| Plating option** | Standard Thickness* for all metallic surfaces | Plating Specification |
|-------------------------|-----------------------------------------------|---------------------------|
| Electrolytic Nickel | 1.27µm / 50µinch to 5.08µm / 200µinch | AMS-QQ-N-290 |
| Electrolytic Gold | 1.27µm / 50µinch to 6.00µm / 236µinch | MIL-DTL-45204 / ASTM-B488 |
| Electrolytic Flash Gold | 0.50µm / 20µinch maximum | |
| Electroless Nickel | 1.27µm / 50µinch minimum | MIL-C-26074 |
| Electroless Gold | 0.3µm / 11.8µinch to 1.27µm / 50µinch | |
| Electroless Flash Gold | 0.127µm / 5µinch maximum | |
| Electrolytic Copper | | AMS2418 |
| Matte and Reflow Tin | | ASTM-B545 |
| Au Type II (AuNi) | | |

* Standard plating measurement points are on the seal ring & on the bonding pads (minimum surface for measurement: 0.80mm x 0.50mm – 0.030 inch x 0.020 inch).

** These are our typical plating options. Please contact us if you are interested in a chemistry not listed here. Specific Plating Thickness¹ can be specified on request: Please visit our website or contact us with your requirements for more information.



Figure 1: Plating Facility



Figure 2: Plated Traces

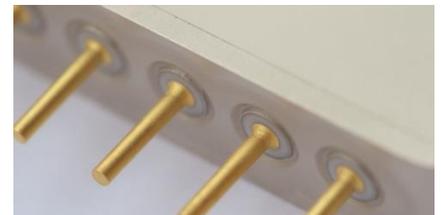


Figure 3: Selectively Gold Plated Pins

PROCESS / CAPABILITIES :**CHEMISTRY**

- The Egide group has its own wet chemistry laboratories to ensure optimal bath conditions and cross-correlates its analyses with those taken by the suppliers to ensure quality.

**RACKING & BARREL PLATING**

- The Egide group uses standard racks and custom designs its own racks for specific parts.
- The Egide group has several types of barrels which are suitable for plating small parts.

**PLATING SELECTION**

- The type of plating is selected based on product application and customer specification.
- Selective plating is achieved by a subtractive process or masking.

QUALITY TESTING & INSPECTION :

Egide's laboratories provide testing and analysis to ensure quality and conformance. Including;

X-Ray Fluorescence (plating thickness)

Steam Aging

Adhesion Test (bend and/or cut test)

Gold hardness / purity

Solderability (flux dip and solder strip methods)

Nickel hardness / composition

Heat Resistance / Heat Quench

Visual Inspection

Corrosion Resistance (salt spray)