

Gold

High Tech Galvanics



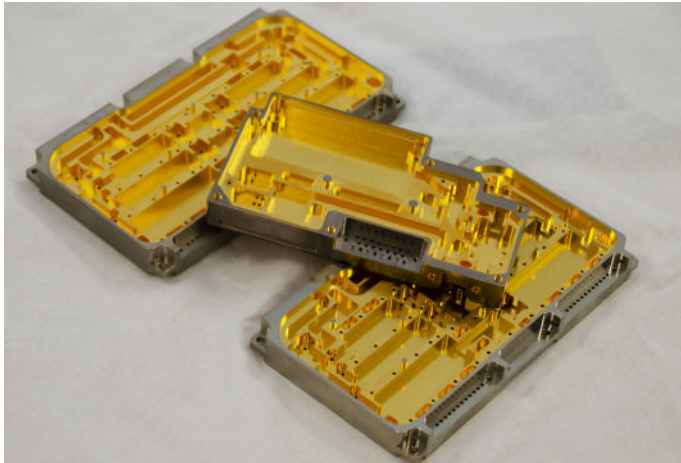
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What is gold plating?

Gold plating is an electrolytic process that can be used to apply gold to almost any metal. In electroplating, gold is applied to a conductive surface of metal products by means of an electric current in an electrolyte to which gold salts have been added.

At Aalberts-ST, you can choose both the barrel and rack methods. Thanks to these flexible gold plating methods, we are able to offer both single products and bulk products with very short delivery times. We can offer both traditional gold layers and a gold/cobalt layer with increased hardness.



Feature	Specification
Maximum layer thickness	50 µm
Density	19,2 g/cm ³ for Au 99,9%
	17 g/cm ³ for Au/Co 99,7%
Weight of 1 µm layer	192 mg/dm ² for Au 99,9%
	170 mg/dm ² for Au/Co 99,7%
Hardness	ca. 90 HV for Au 99,9% ca. 120-190 HV für Au/Co 99,7%
Melting point	1063 °C for Au 99,9% 1063 °C for Au/Co 99,7%
General standard	ISO 27874 : 2008

Galvanic gold is used for the following applications, among others:

- Connectors for the electronics industry
- Batteries
- LED production
- Professional halogen lamps
- Spare parts for the aerospace industry
- Radar systems
- Soldering at high temperature

Parameter	Au	Au / Co
Wear resistance	-/-	+
Solderability	+/+	+/+
Corrosion resistance	+/+	+/+
Chemical resistance	+/+	+/+
Thermal conductivity	+/+	+/+
Electrical conductivity	+/+	+/+
Hardness	approx. 90 HV	120-190 HV
Appearance	Matte	Matte to bright
Applicable basematerials	All materials, including aluminum, titanium and other exotic metals	