Product Code	307-127.GF
Colour	24K (World Standart22-24 Carat Colour)
Preparation	5 Liter product 40°C heated coating water potassium gold cyanide is added and the product is prepared for use.
Tanks	Polypropylene or Glass
Anodes	Platinised titanium or stainless-steel
Heaters	Porcelain or Stainless Steel
Agitation	Solution and work movement (slow)

USAGE: Heat the ready-to-use solution to 60°C. Dipping the platinum coated titanium (+) anode into it. Put the material you want to plate into the solution with the help of a current-conducting (-) hanger (Platinex hanger is recommended).Perform the plating process by immersing it and applying 6V voltage and moving it for 30 seconds.Flash gold plating is used as the final color and has aproximatly 0.1 micron thickness on the product.
IMPORTANT NOTE: The more accuratethe pre-treatment processes before plating, the better the plating quality will be. Please contact our company regarding the pre-treatment preparation.

OPERATING CONDITIONS

Gold Content:	It should be added. (1 gr Au/l)
Potassium Cyanide:	0.5 g/l ± 0.2 pH: 10.5 ± 0.3
Temperature:	60°C ±3
Cathodic Current Density:	1.0 - 2.0 A/dm^2
Voltage:	5,5 – 6V
Anode-To-Cathode Ratio:	1 : 1 or plus
Plating Efficiency:	10 mg/A.mn
Deposition Rate:	~ 0.1 μ/mn at 2 A/dm^2 (average)
Plating Time:	30 second (20 - 60)

DEPOSITION CHARACTERISTICS

Purity:	97 % ± 1
Hardness:	140 - 160 HV
Density:	18.5 g/cm^3

MAINTENANCE RATE

Consumed 10,000 Amps Per Minute

- 100 gr PURE GOLD (%68,2 Gold Potassium Cyanide)
- 100 ml PALET AL 24K REPLENISHER
- 2 kg PALET AL CORRECTING SALT

SOLUTION MAINTENANCE

The gold metal content should be maintained at the recommended concentration (0.2-0.3 for barrel) by periodical additions of %68,2 Gold Potassium Cyanide. PALET AL 24K replenishers are supplied in units of 100 ml and contain all necessary ingredients to be added with 100 g gold metal, and should always be added together with the gold.

The pH should be determined using a pH meter and be maintained between 10.2 and 10.8 with either 5 % Phosphoric acid chemically pure or 20 % Sodium Hydroxide chemicallypure.

The density of the solution is usually maintained by additions of the Replenisher and pH adjustments. However, if the density falls below 3 °Be for rack or 5 °Be for barrel, then it will be necessary to add PALET AL Corrector Salt. An addition of 17 g/l will increase the density by 1 °Be.

In general, any metallic contamination could interfere with the operation of PALET AL processes and should therefore be prevented by proper rinsing of the parts to be plated. A final rinse in deionised water is recommended.

EQUIPMENT REQUIRED

1. TANKS

Tanks should be made from Polypropylene or rubber lined steel and be able to withstand temperatures up to 70° C. Prior to use the tank should be leached with 5 % Sodium Hydroxide solution at 60°C for 24 hours and then rinsed in several changes ofwater.

2. HEATERS

Heaters should be made from Porcelain or Stainless Steel and be thermostatically controlled. The temperature of the bath should be maintained at 57 - 63°C.

3. FILTRATION

The solution should be filtered continuously. All parts of the filter should be made from alkali resistant materials,able to withstand a temperature of 60-70°C. When cartridges filters are used, then the cartridge should be leached in 2% Sodium Hydroxide prior to use. Solution volume should be filtered at least twice per hour and particle retention should be 10 μ orless.

4. AGITATION

Mechanical agitation is not required. Solution movement via the filter system will be adequate.

5. ANODES

Insoluble anodes of Platinised titanium should be used with this solution or stainless- steel.

TROUBLE SHOOTING

CONSTITUENT	LOW	HIGH
Gold	---	Hazy Deposit
Alloy Metal	Deposit Too Yellow	Reddish or GreenishDeposit
Potassium Cyanide	Deposit Too Pink	Hazy Deposit
pH-Value	Too Pale Deposit	Too Dark Color
Temperature	Hazy Deposit	Dark Yellow Deposit
Voltage	Too Yellow Deposit	Too Pink Deposit
Density of The Bath	Loss of Brightness	---
Agitation	Possible Pitting	---