

DECRAGOLD RN 200

INTRODUCTION

Decragold RN 200 is one of a series of decorative gold plating processes specially formulated to give a nickel alloyed gold with consistent pale gold coloured deposit.

The process is ideal for flash deposits. (0.1 - 0.5µ)

BENEFITS

- Consistent deposit colour.
- Ease of control.

SOLUTION MAKE-UP

Decragold RN 200 is supplied ready for use at the gold concentration suitable for the application (See NOTES).

The following cleaning and leaching procedure should be followed before installing a Decragold RN 200 Solution.

1. Thoroughly wash the tank with clean water.
2. Leach overnight at 50-60°C with a 50g/L solution of citric acid.
3. Wash out tank thoroughly with clean water then add the Decragold RN 200 solution.
4. Heat to operating temperature.

OPERATING DATA

Gold	1 – 3g/L
Nickel	7.5 – 8.5g/L
SG	1.104 min
pH	3.5 – 4.5
Temperature	25 – 35°C
Cathode current density	0.1 – 1.5 asd
Anode current density	0.25 asd
Plating rate	0.1µm in 1.5 mins at 1.0 asd

EQUIPMENT

Tanks	Moulded polythene or PVC
Anodes	Platinised titanium
Agitation	Solution movement
Filtration	Glandless all plastic construction capable of 3-4 turn-overs/hour through a 5µ polypropylene cartridge free of winding lubricant.

MAINTENANCE AND CONTROL

The solution should be regularly analysed for gold and nickel and kept within 5% of the optimum concentrations.

The gold and nickel concentrations will be approximately maintained by the following additions every ampere-hour:

- 1.0gm gold as Gold potassium cyanide
- 2.5ml Decragold RN 200 Replenisher

Specific gravity	Maintain the solution density at 1.104 minimum S.G. To raise the density by 0.005 add 12 ml/L Decragold Acid Adjuster 1 and 17ml/L Decragold Buffer Solution.
pH	Maintain the pH by additions of Decragold Acid Adjuster 1(the pH will increase with electrolysis). A 20ml/L addition will reduce pH by 0.1. If it is necessary to increase the pH a 20ml/L addition of a 20% w/w sodium hydroxide (lab reagent grade) will increase the pH by 0.1.

NOTES

Gold concentration - for deposit thicknesses in the range 0.1 - 0.3µm a gold concentration of 1g/L is recommended. For thicker deposits (0.5 - 1.0µm) 3g/L is preferred.

DISPOSAL

Dispose of in accordance with local authority requirements

PRODUCT FAMILIES

The following products or families of products are referred to in this data sheet:

PRODUCT NAME	PRODUCT NUMBER
Decragold RN 200 RTU	038007
Decragold RN 200 Base Solution	037053
Decragold RN 200 Replenisher	047054
Decragold Acid Adjuster 1	067032
Decragold Buffer Solution	061004
Gold as GPC - 100gm unit	029003

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