

CODE C0150 BLACK RUTHENIUM BATH PLATING

RUTENOR 200 can be used for flash plating and It is particularly suitable on all jewellery items where a real black colour is required. RUTENOR 200 can be deposited directly on Silver, Palladium, Gold, ; an intermediate deposit of Nickel and Gold is necessary before to plate Tin, Lead, Zinc, Cadmium, Aluminium, copper, nickel and Iron.

Operating conditions and deposit data

Parameter	UM	Operative Range	optimum
Ruthenium concentration	g/l	3.0 - 20.0	5.0
Density of the solution	Bé°	8 - 15	10
Deposition time	Min	3 - 10	8
Temperature	°C	65 - 70	68
Voltage	V	1.8 - 2.5	2.0
Current density	A/dm ²	1.0 - 4.0	1.0 - 2.0
pH	Un	0.7 - 1.0	0.8
Cathodic efficiency	mg/Amin	2 - 8	3
Ruthenium plated every 1000 A/min	g	2 - 8	4
Deposition speed	u/min	0.03 - 0.125	0.05 - 0.08
Deposition time for 0.2 microns	s	350 - 400	380
Density of deposit	g/cm ³		11.70
Anodes			Ti/Pt net
Anode/Cathode rate		1:1 - 4:1	2:1
Agitation			Strong
Filtration			Necessary over 5 litres

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