

GROWEL'S NICKEL FREE TECHNOLOGY



Some women experienced itching, flaking, swelling, soreness or inflammation, while wearing plated jewellery. These are symptoms of metal sensitivity, the chemical reaction to metal alloys (nickel, primarily) used in modern jewellery. In the manufacturing of 'nickel free', traditional nickel plating is not used. The best choice to replace the nickel plating and at the same time, maintain the effect of 'barrier layer' would be the adoption of either bronze or palladium plating.



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Growel's Nickel Free Technology

Growel's unique achievement in Nickel free plating process is the introduction of **Growbronze WT Make Up (BL)** – Rack & barrel, **Bronzeglo WT Make Up** – Rack, **White Bronze Salt/ White Bronze Salt 20** (resembles to Rhodium plate) and **Palladium 100**.

- Replacement for bright nickel undercoat to eliminate the chances of nickel dermatitis.
- Plated surfaces have germicidal effect.
- Used as barrier layer over bright or satin acid copper to replace use of nickel.
- Avoids the tendency of “copper migration” from the base copper deposit to the top layer (yielding to discolouration of deposit).
- Best alternative to silver in a connectors & high frequency of application.

USAGE:

Costume Jewellery

White finish and / or barrier layer replace palladium

Fashion accessories

Buttons, snaps & fasteners, hair items where nickel for white-finish is required for low cost, also barrier layer.

Fasteners

May be used to replace zinc where colours match for chromium or barrel chromium required.

Watch Case and Watch strap

Nickel free, excellent barrier layer under gold or palladium

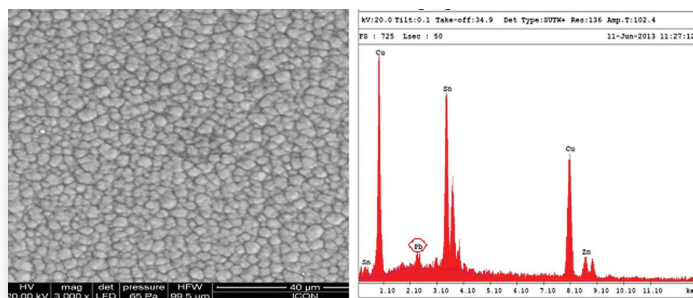
Cosmetic colours

Produces excellent low cost white brilliant finish to replace nickel/flash silver and lacquer

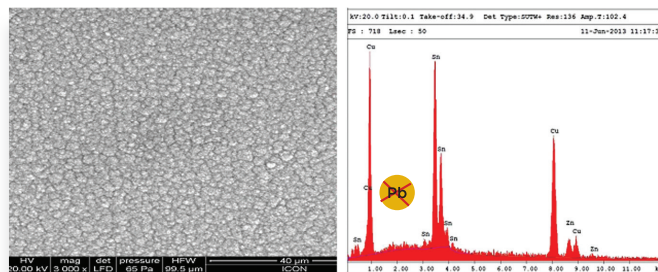
Electronics parts

Connector parts for high frequency telecommunication

Contemporary Process



Growbronze WT Make Up (BL)



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