

## Platings

### IMD on CATV and Wireless connectors

Identified below are the most likely factors that can affect intermodulation performance in CATV and Wireless connectors:

**Contaminated plating solution**  
**Insufficient plating thickness**  
**Corrosion**  
**Dissimilar metals in intimate contact**  
**Magnetic materials in the signal path**  
**Low contact pressure**  
**Less than 360° contact**  
**Poor surface finish**  
**Debris and dust within the connector**  
**Convolutated signal path**



### Silver and white bronze

Silver and white bronze has the lowest practical resistivity and they are therefore able to minimize interface contact resistances, which is ideal for low intermodulation.

But silver and white bronze are sensitive for corrosion.

### Stainless steel, nickel and ferrites

Magnetic and para-magnetic materials as stainless steel, nickel and ferrites, only compound non-linearity and give poorer interface contact resistance, which gives low intermodulation.

During experimentation degradation in performance of 20 dB was discovered, when nickel plate was used instead of silver.

## Nitin-6

Nitin-6 plating has excellent protection in all environments against corrosion and much better corrosion resistance than silver and white bronze. The Nitin-6 plating has proved to be extremely stable and resistant over many years of operation in hard climatic environments. Our salt spray tests have shown no impact to the Nitin-6 plating or the function of the connection. Nitin-6 is non-magnetic and resistant to most chemicals.

The Nitin-6 plating has a stainless steel look, a low friction surface and will retain lubricant well.

Nitin-6 is non-toxic and does not cause allergic reactions to nickel allergic persons.

### The Cabelcon plating process

Cabelcon's customers expect high and long lasting quality, and that is why Cabelcon has developed a unique Nitin-6 plating process, where a lot of different items can be plated in contiguous operations. The system controls automatically the right time and operation procedure for the each specific lot.

A part from Nitin-6 Cabelcon is also manufacturing silver plated connectors, with silver- or gold plated inner conductors, as well as other NITIN/silver/gold combinations, depending of applications and requirements.

### Environmental Care

Unfortunately it is not possible to do any metallic plating without the use of chemicals. In order to ensure minimum impact to the environment in the washing process, we use only water and washing chemicals - not harmful to the environment.

The water used for the plating- and washing process is reused several times in different washing levels. After extensive use, the discharge water is being cleaned in our advanced "wast water cleaning system". The final discharge water complies with the government environmental regulations. The remaining contents of metal and chemicals drawn from the discharge water and used chemicals, go for destruction.

