

POETON

High Specification Coatings

Electronics & Telecoms Industries

Apticote Coatings for the Electronics and Telecoms Industries

Poeton offer several specialised coatings for the Electronics and Telecoms Industries.

1. Highly conducting coatings
2. Electrically insulating coatings
3. Dielectric coatings
4. Reflective coatings
5. Black body coatings
6. Thermal barrier coatings
7. Corrosion protection coatings



Apticote Applications in the Electronics and Telecoms Industries

1. Layup plates
2. Electronic boxes
3. Slip rings
4. Antennae
5. Connectors
6. Mirrors

The Poeton **Apticote** coatings can deliver unrivalled combinations of properties for the Electronics and Telecoms industries, bringing corrosion protection and durability alongside insulation, heat protection reflectivity and electrical conductivity.

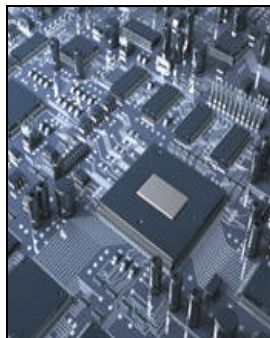
We are at the forefront of surface coating and treatment suppliers to some of the world's leading Electronics and Telecoms companies, and one of our crucial advantages is our technical support and laboratory backup. Using our expertise in characterising and understanding wear and corrosion processes, we work with our customers on a project basis, ensuring that the most effective coating solution is identified.

A case-history

Tin/Nickel Coatings for Shielding

Problem - A major aerospace company producing advanced electronic equipment had a requirement for protecting a range of cast aluminium housings from corrosion. It was also necessary to provide electro magnetic (ems) shielding for the internal electronics.

The corrosion resistant top-coat, a complex tin/nickel composite, was specified by the customer (after internal development and trials), and they needed a reliable surface treatment specialist who could provide the coating on a production basis.



Solution - After an extensive search of the treatment supply base, Poeton were selected as the preferred supplier, and a test program was established to develop a process that would combine **Apticote 400N** (an electroless nickel) as a base coat for 'ems' shielding with the **Tin/Nickel** top coat.

After many months of development work, where Poeton solved all the problems of combining the two processes, the duplex coating was perfected and went into production.

Which Apticote coating do I specify?

Apticote Coating	Features	Application areas and benefits
Apticote 200	Polymer coatings	Our Apticote 200 range of coatings can bring exception corrosion protection when combined with other coatings from our range that give specific electrical properties.
Apticote 300	Hard anodising	As an example, our Apticote 300M anodising process provides exceptional insulation and dielectric properties
Apticote 350 & Apticote 355/356	Composite hard anodising of aluminium	range of anodic specialised processes with polymer infusion, providing the ultimate corrosion protection for electronic systems working in hostile environments
Apticote 600	Silver plating	For the best electrical conductivity and minimum contact resistance
Tin plating	Tin and Tin/Nickel plating	For electronic shielding
Copper plating	Electrolytic copper plating	Coatings with low contact resistance and high electrical conductivity for connectors and slip rings.
Apticote Keronite 3000	An electro-ceramic coating for Al, Mg and Ti alloys	Exceptional insulation properties. For situations where the coating must be harder and tougher than standard anodising.

A second case-history

Layup Plates

Problem - Poeton was approached by a customer who required a dielectric film to be applied to aluminium layup plates that were to carry a range of complex electronic circuitry.

Existing anodisers were unable to produce a film thickness that would provide the dielectric resistance needed (1,000v DC for 2 minutes minimum).

Following detailed technical discussions, Poeton offered a coating test program that would provide a range of anodic finishes to be tested for dielectric strength. Poeton had the advantage of offering specialist thick, hard anodised treatments, together with a wide range of polymer coatings

Disclaimer

The information contained in this leaflet is intended for guidance. Whilst every effort is made to understand the environment in which the coating is designed to work, success can only be determined by trials and in-service testing.



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NADCAP Accreditation is held by Poeton Industries Ltd with Poeton (Gloucester) Ltd Accredited for Plasma Spray (coatings) and Chemical processing, and Poeton (Cardiff) Ltd Accredited for Chemical Processing and NDT

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