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PLATINODE[®] Wire

Platinum coated wires Ø 0.05 - 1.5 mm



Highly adhesive platinum coating of refractory metals

Platinum coating is carried out using high temperature electrolysis (HTE). In this process, the platinum is deposited from a cyanide salt melt at temperatures of 500 to 600°C. The platinum layer produced in this way not only has high ductility and maximum purity, but also superior adhesion and is free from internal stress. Coatings with high load-bearing capacity, maximum corrosion resistance and excellent durability can be produced. In this way, layers from 0.1 to 10.0 µm can be deposited in a dense, adhesive and ductile manner.

The HTE platinum coating is deposited in a cyanide salt melt and is therefore free of organic substances.

This highly adhesive platinum coating is mainly used for refractory metals such as titanium, niobium, molybdenum, tantalum, stainless steel, nickel, CrNi, FeNi, Inconel, copper, etc.



Advantages

- High purity 99,99%, ductility and plasticity
- Best corrosion resistance
- No internal stress
- Superior adhesion
- Closed and dense Pt-layer
- No Hydrogen-embrittlement
- Best weldability
- Electrical conductivity
- Excellent thermal compatibility
- High body compatibility

Applications

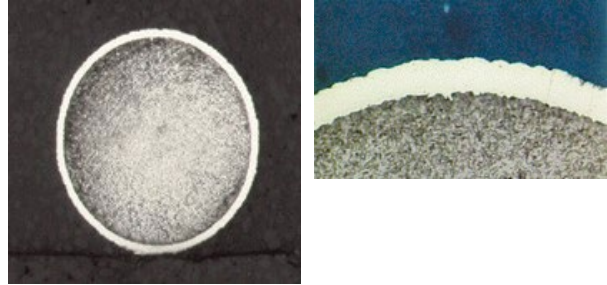
- Medical application
- Lighting industry
- Sensor-applications
- Water purification
- Water descaling
- Corrosion protection
- Violin strings

Technical Specifications

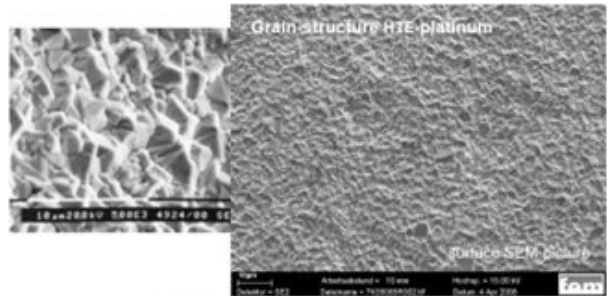
Technical Specifications

Diameter of the wire	0.05 - 1.5 mm
Pt-thickness	0.1 – 10.0 µm
Thickness toleranz	+/-0.02 - +/- 0.1
Coatable base materials	Mo, Ti, Nb, Ta, W, Ni, CrNi, FeNi, Inconel, Cu, Stainless Steel, Nitinol, Zr

Cross section of the HTE platinum layer



Grain structure of the HTE platinum layer



Your Contact

Do you have a specific question or would you like a no-obligation quote calculation? Our specialist will be happy to help you with any technical questions you might have.



Christian Kurrle
Sales Manager Electrochemical Electrodes

Mail: christian.kurrle@eu.umicore.com
Phone: +49 (0) 7171 607 - 167

