

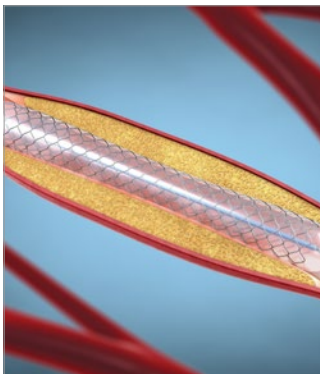


Version: 22 January 2025



# PLATINODE<sup>®</sup> WIRE

## PRECISE PLATINUM COATING FOR THE HIGHEST MEDICAL STANDARDS

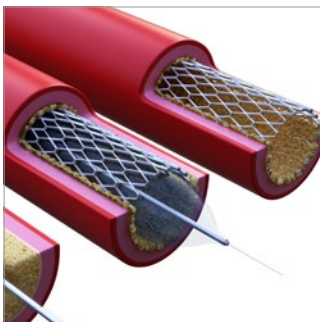


### Innovative High-Temperature Electrolysis (HTE) – A Specialized Process for Medical Technology

Our platinum surfaces are produced using High-Temperature Electrolysis (HTE) in a cyanide-based molten salt bath at temperatures between 500–600°C. This specialized process enables the creation of platinum functional layers that meet the highest requirements in medical technology:

- Ultra-high purity of 99.99%
- Maximum adhesion strength and ductility
- Free of internal stresses and hydrogen embrittlement
- Excellent biocompatibility and body compatibility

Thanks to these properties, our platinized wires and surfaces are particularly well-suited for demanding medical applications:



### Outstanding Properties for Medical Technology

- Biocompatibility for maximum safety in the human body
- High corrosion resistance against body fluids and aggressive environments
- Electrical conductivity for precise sensor technology and electrostimulation
- Thermal stability for sterilization and high-temperature applications
- Non-magnetic behavior, ideal for MRI-compatible products
- Mechanical strength and ductility for delicate yet durable structures
- No hydrogen embrittlement for long-term stability
- Finest dimensional precision for high-accuracy applications

### Typical Applications in Medical Technology

- Pacemaker electrodes
- Neurostimulation systems
- Diagnostic sensors (e.g., pressure and temperature measurement)
- Catheter technology and guide wires
- Microsurgical instruments
- Vascular implants (e.g., stents, wire meshes)



With our HTE specialized process, we guarantee durable, precise, and safe platinum surfaces that meet the stringent requirements of modern medical technology. Rely on our expertise for innovative solutions that combine precision and safety.

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PRECISE PLATINUM COATING FOR THE HIGHEST MEDICAL STANDARDS

## TECHNICAL SPECIFICATIONS

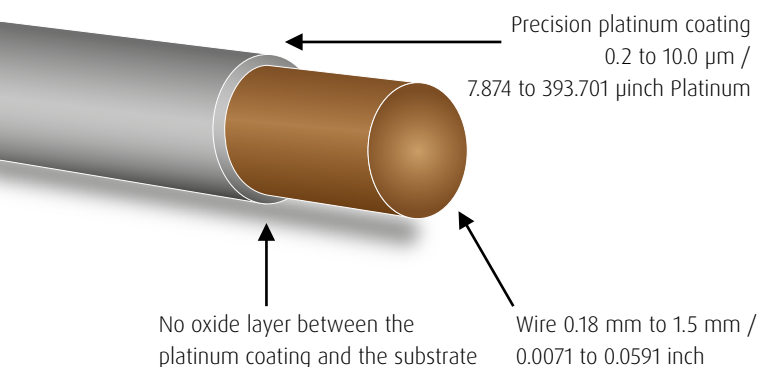
### Technical Specifications

Diameter of the wire 0.18 - 1.5 mm  
0.0071 to 0.0591 inch

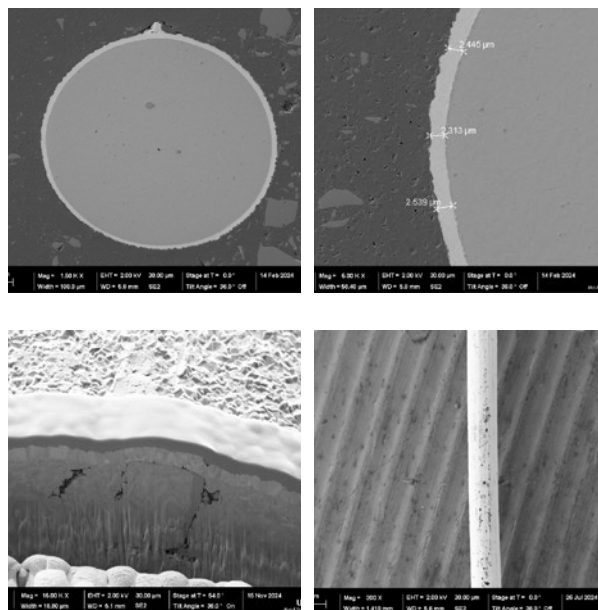
Pt-thickness 0.2 - 10.0  $\mu\text{m}$   
7.874 to 393.701 pinch

Thickness toleranz  $\pm 0.02$  -  $\pm 0.1$

Coatable base materials Mo, Ti, Nb, Ta, W, Ni, CrNi, FeNi, Inconel, Cu, Stainless Steel, Nitinol, Zr



Cross section of the HTE platinum layer



## 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.



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Sales & Project Manager Electrocatalytic Electrodes

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Mobile: +49 157 80535100



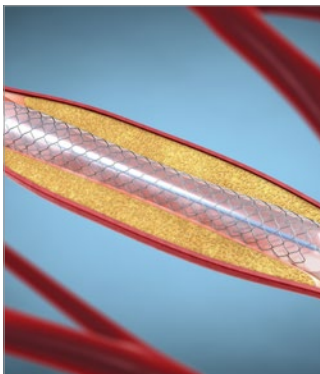


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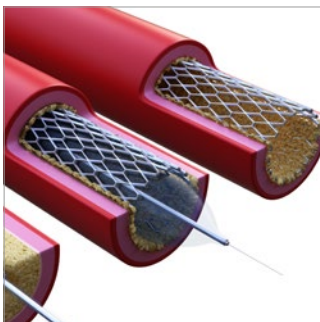


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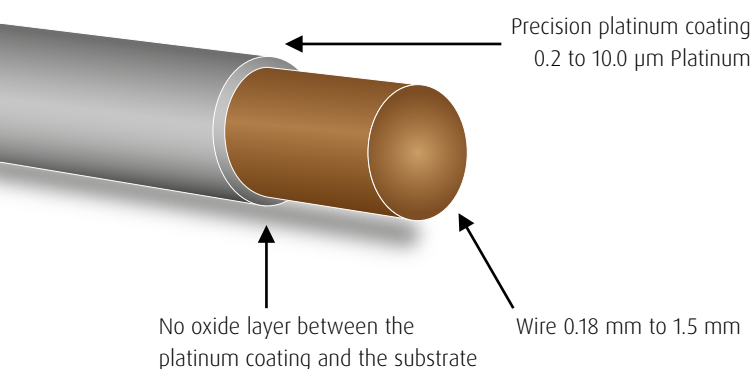
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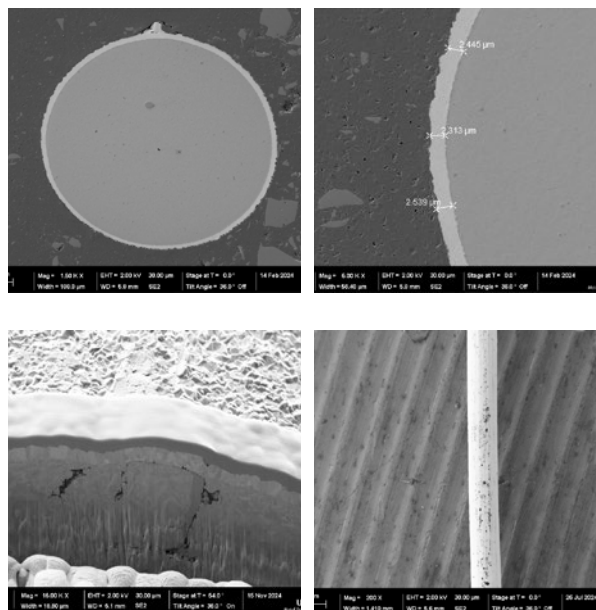
PRECISE PLATINUM COATING FOR THE HIGHEST MEDICAL STANDARDS

## TECHNICAL SPECIFICATIONS

| Technical Specifications |                                                                              |
|--------------------------|------------------------------------------------------------------------------|
| Diameter of the wire     | 0.18 - 1.5 mm                                                                |
| Pt-thickness             | 0.2 - 10.0 µm                                                                |
| Thickness toleranz       | +/-0.02 - +/- 0.1                                                            |
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