



Our Innovation. Your Edge.

P-SHIELD® Sputtered Films

Sputtered films are films, either conductive or non-conductive, created by a variety of vacuum deposition methods coating pure materials onto a range of substrates. Plasma Vapor Deposition (PVD) is a process in which a material goes from a solid phase to a plasma vapor phase and is applied onto the substrate as the material condenses “sticking” to the substrate creating a film. Sputtered films are used in a variety of military, medical, aerospace, automotive and electronics applications.

Applications

- EV Battery
- Wireless Charging
- Flex Circuits
- In-vitro Diagnostics
- Consumer Electronics
- Precision Guidance Systems

Polymer Science Advantages

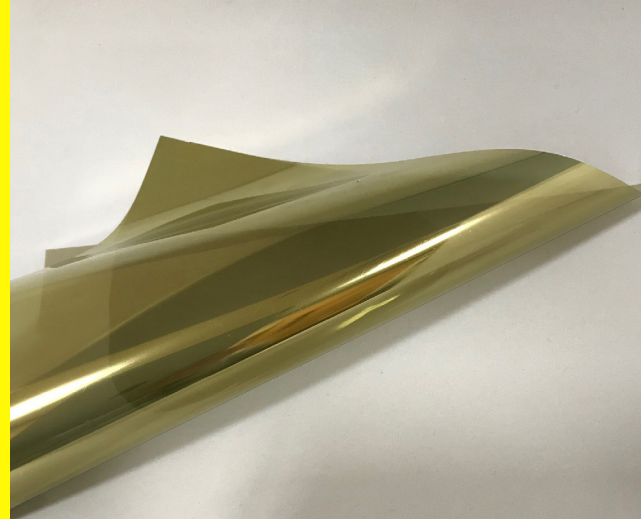
- Lower minimum order quantity
- Customization of width to minimize waste
- Standard and customized construction available
- Short lead times
- Excellent in-house and field technical support
- Eco-friendly facility

Attributes

- Sputtering of metals, oxides, nitrides and alloys
- Conductive or nonconductive options available
- Wide web production sputtering machines
- Developed monitoring and process automation to ensure uniform layers of thin films, providing consistent electrical and optical properties
- Lab sputtering machine
 - Multi-target
 - Quick turn around
 - Lower-cost product development (smaller targets)
 - Scales to production equipment

Custom Solutions...

Our design team works quickly to provide the solutions you need, allowing your project to expeditiously move from conception to production. Our diverse team of engineers and technical staff, along with our state-of-the-art equipment provide the capabilities to develop a quality product consistent with your application requirements.

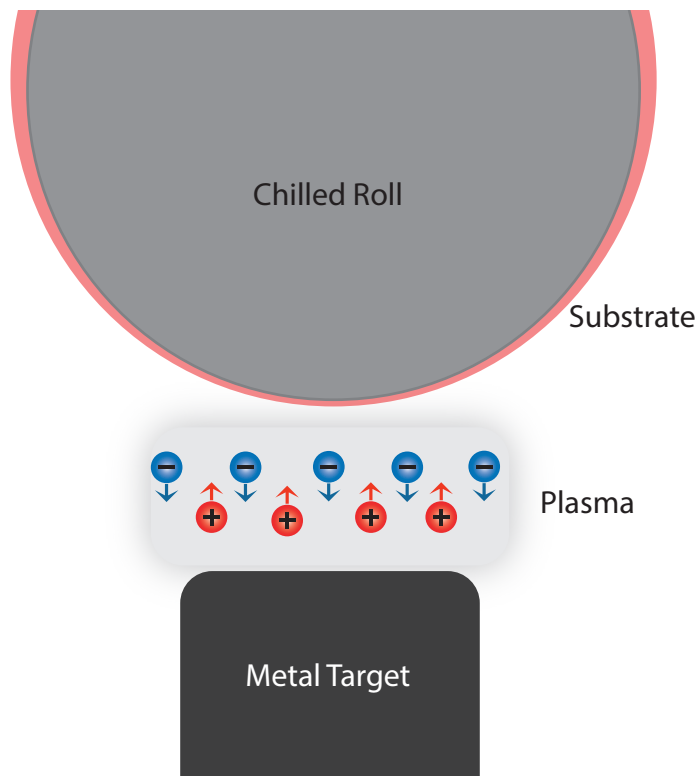


Advantages of PVD

- Safer than other forms of deposition
- Higher precision
- Wider range of materials available for deposition
- Plasma can be deposited more uniformly over large areas

Quality System & Testing Capabilities

- Dedicated QC Lab, Complete Characterization and Test Method Validation
- In Line resistance monitoring during sputtering
- XRF – in house thickness testing
- Off line automated surface resistance testing
- Metal adhesion testing
- Experienced technical team



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