



# ADVANCED COATING

PARYLENE CONFORMAL COATING SPECIALIST



## RELIABLE SURFACE PROTECTION OF SUBSTRATES

### Optimize Performance and Dependability

There are many reasons why a manufacturer may need to protect, encapsulate or enhance an assembly or component. This could be because of the substrate properties or due to the harsh or rugged environment in which the substrate needs to function, such as exposure to sub-zero conditions, chemicals, solvents, or moisture. Whatever the reason, Parylene conformal coatings could be the solution.

Parylene displays unmatched thermal, chemical, moisture and environmental barrier properties and is suitable for ruggedized use despite micron levels thicknesses. The gaseous nature of the deposition process allows Parylene to coat surfaces evenly, including sharp points, deep crevices and hard to reach areas. Parylene will not pull away from corners or edges and is entirely pinhole free.

Advanced Coating offers innovative and customized application technology to match your specifications and are trusted for our high-quality products, services, and capabilities to complete critical projects on time.

#### INDUSTRIES SERVED

Military & Defense

High Performance Electronics

Aviation & Aerospace

Industrial/Commercial

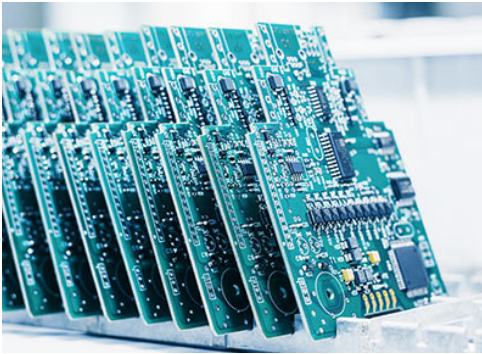
Medical Device Technologies

# ADVANCED COATING

## Committed to Your Success

At Advanced Coating we distinguish ourselves from the competition through our flexible and creative approach to delivering superior Parylene coating solutions. We are guided by our decades of industry experience and focus on dynamic production capabilities that provide the capacity to manage changes effectively.

We prioritize exceptional customer support and partner with each customer from the initial project review through successful delivery of innovative, top quality coating results. Excellence is the driver behind everything we do.



### Why Use Parylene?

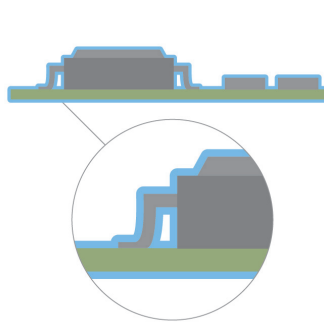
Liquid-based coatings add physical mass to a substrate with the potential to create damaging cure forces and thermal stress to delicate components. Pooling and surface tension properties add to the unsuitability of liquid coatings for many applications.

Unlike traditional conformal coating methods Parylene involves no liquid phase or lengthy curing time involved. The powdered raw material (dimer) is applied in a vacuum deposition process at ultra-thin thickness and avoids many of the drawbacks of liquid coatings.

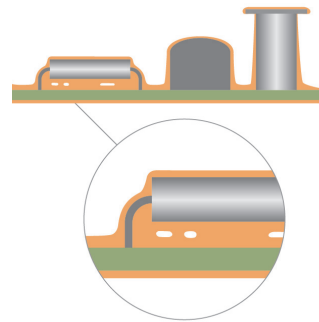
Parylene variants include Type N, Type C, Type D and Type F. Each type has unique benefits that are suitable for various conditions and applications. Our team will guide you to the choice best suited to your need.

### COATING COMPARISON

Parylene Coating



versus



Liquid Coating

### Parylene Highlights

- Ultra-Thin, Transparent Film Adds Minimal Weight and Volume
- Absolute Conformity to Substrate Contours, Crevices and Edges
- Pinhole-Free and Stress-Free Application
- Low Gas Permeability, Chemical Protection, Thermal Stability Across Environments
- Excellent Moisture & Vapor Barrier and Mechanical Properties
- Extremely High Dielectric Strength
- Chemically Inert, Biocompatible and Biostable

## Outsource with Confidence

When partnering with Advanced Coating for off-site coating services, customers have access to the latest equipment and techniques, managed by our team of highly trained and experienced vacuum deposition experts. Your product is coated under optimal conditions using proven processes that meet the latest industry certifications.

We operate as an integrated part of the supply chain through effective engineering, production control and quality management resources.

Our decades of expertise, flexible planning capacity and innovative coating solutions focus on the singular goal to consistently deliver 100% of orders to spec and on time.



**MILITARY | AEROSPACE | ELECTRONICS | COMMERCIAL | MEDICAL**



## Excellent Quality Record

When you partner with Advanced Coating you can rest assured that our materials, workmanship, and processes meet the most stringent quality requirements. Our facility is continuously certified for all pertinent industry standards including for military contracts, and our team is experienced working within various FDA programs. We stay up to date with the latest compliance developments and provide ongoing training to our skilled technical staff.

### Common Parylene Applications

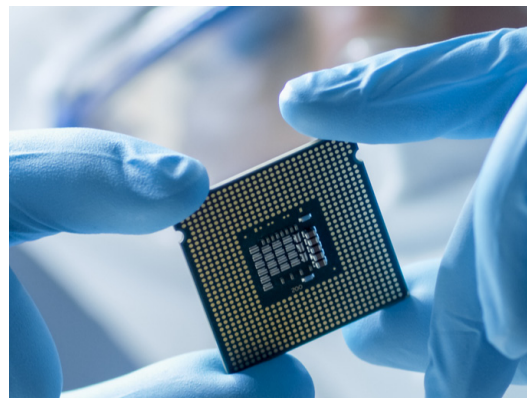
- High Reliability Class 1, 2 & 3 Electronics
- Sensors & RF Devices
- Rigid & Flexible Circuits
- Aircraft and Aerospace Electronics
- Navigation Equipment
- Flight Control Systems and Fly-by-Wire Avionics
- Optical Devices
- Drones and Submersibles
- Tin Whisker Mitigation
- Coil Forms and Ferrites
- Silicon Wafers
- LEDs and Digital Displays
- Molded and Extruded Elastomers
- Medical Devices & Instruments



## Invest in Long-Term Savings

The unique benefits of Parylene make it more effective in optimizing critical system dependability than any other coating. Investing in this premier coating can yield substantial long-term warranty cost savings compared to less effective materials.

There are many careful steps involved in effectively managing the Parylene coating process. Advanced Coating has the experience needed to successfully handle high risk assemblies and maximize the performance of this sophisticated material across a wide range of applications.



## Medical Device Applications

Non-toxic Parylene coatings are widely used throughout the medical industry to coat a variety of products from implantable components to surgical instruments. The polymer material is chemically inert, biocompatible (USP Class VI), biostable, lubricious and moisture-resistant, and medical products coated with Parylene can be sterilized.



## Partner with Advanced Coating

Advanced Coating has decades of Parylene coating experience and is ready to design an ultra-thin protective coating that meets your specifications.

Our strength is our long-term business partnerships developed over time and we would welcome the opportunity to count your company to our list of satisfied customers.



**ADVANCED COATING**

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