



**JARO** CORP

SUPPORTING HUMAN EFFORTS  
IN EXTREME ENVIRONMENTS

# ABOUT US

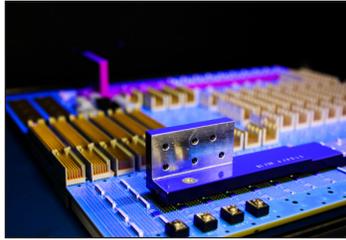
Jaro Corp. specializes in the application of functional coatings for the electronics industry. The use of conformal, conductive and dielectric coatings provides an economical solution for all of your environmental protection, EMI / RFI shielding and dielectric isolation requirements. By focusing solely on our core technology since 1984, we have gained the experience necessary to solve even the most challenging coating issues.

In 2007, Jaro Corp. moved into a new facility specifically designed with the needs of the coatings industry in mind. With 34,000 square feet of available production space, our new location helps us meet the increasing demands and requirements of our customers, while providing us with the space needed to support our continued growth.

Our goal is to meet our customers' demands for timely delivery and high quality functional coatings by becoming a seamless extension to their manufacturing operation. Jaro Corp. will do this by providing unparalleled technical support and service at a price point commensurate with your overall product goals.

**Jaro Corp is an AS9100 certified and ITAR registered company.**



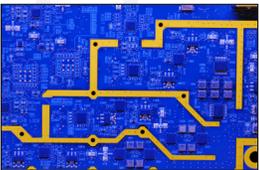
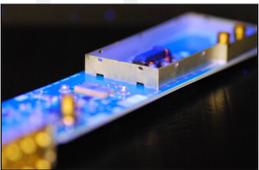
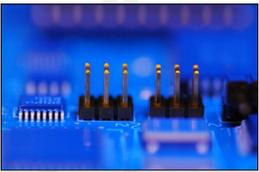


## CONFORMAL COATINGS

Conformal coatings are dielectric materials applied to printed circuit boards or other electronic substrates to protect their circuitry from environmental stresses such as moisture, fungus, dust and corrosion. They also minimize dendritic growth and the electromigration of metal between conductors. These coatings work to significantly extend the life of electronic devices used in extreme environments.

Conformal coatings generally fall into four categories: acrylics, polyurethanes, silicones and epoxies. Each coating type has specific traits that ensure optimal performance under various conditions. We work closely with all of our customers to help determine which type of coating best suits your needs.

Conformal coatings are applied by a variety of methods, including spraying, dipping and computer-controlled selective coating systems.



## CONDUCTIVE COATINGS

Conductive coatings are used for electro-magnetic interference and radio-frequency interference (EMI / RFI) shielding, mainly inside plastic enclosures. These coatings can be used to either shield EMI / RFI emissions generated by the electronics within your device, or to protect the device from surrounding EMI / RFI interference. They are also used to add conductive surfaces to dielectric materials or to prepare substrates for plating applications.

## DIELECTRIC COATINGS

A dielectric coating is a nonconductive, i.e., an insulating, coating. At Jaro Corp., we manufacture and apply our own dielectric coating: JARO 650 Series Polyimide. This coating is a proprietary polyimide thermoset material which features remarkable resistance to extreme temperatures, oxidative degradation, weathering and radiation. JARO 650 Series Polyimide also offers exceptional protection against abrasive and frictional wear, solvents and electricity—providing insulation of up to 3100 volts per mil.



## SECONDARY PROCESSES

Cleanliness testing: Jaro Corp. can test for the presence of ionic residues on circuit board assemblies using an Omegameter Ionograph 500 M SMD II ionic contamination tester.

Cleaning: Although we request customer boards be supplied in clean “ready for coating” condition, we understand this may not always be possible. Therefore, we offer a variety of cleaning processes, including a terpene solvent wash, an IPA wash and a solvent wipe.

Underfilling / Staking / Potting: These common secondary operations can be performed to the most stringent specifications using any customer specified material.

Coating removal: Various chemical methods are used for either a partial or complete removal of conformal coating from PCBs. More resilient coatings may also be removed mechanically, using an ESD safe CCR2000 conformal coating removal station.

Jaro Corp. has over 50 different coatings in stock at all times. Information on many of these products can be found on our website at: <http://jarocorp.com/datasheets.html>.

## BUILDING

With considerable time and effort, we designed our 34,000 square foot building to be used specifically for the application of functional coatings. Our extensive experience was instrumental in determining the features that would help us improve workflow, provide the handling / processing precautions important to our customers, reduce our impact on the environment and allow us to advance along with the latest technology.

## ESD

Protecting our customers' circuit board assemblies from electrostatic discharge was a top priority in the design and outfitting of our facility. Conductive flooring and multiple paths to earth ground were incorporated throughout the building to guarantee the effectiveness of our extensive ESD system. The system is based on ANSI/ESD S20.20 – 1999 and includes ESD awareness training and the use of ESD wrist straps, heel straps and lab coats. In addition, all work surfaces, handling trays and carts are constructed of static dissipative material and are tested regularly.

## ENVIRONMENT

Temperature and humidity are monitored and controlled through the use of multiple air make-up units. Each spray booth uses its own dedicated unit to guarantee the optimal conditions for the application of each specific coating type.

## SECURITY

As an ITAR registered company, numerous security measures, including the use of surveillance cameras and the availability of locked storage areas, have been taken to ensure the safety of sensitive customer product.

## EQUIPMENT

Jaro Corp. utilizes the latest manual and automated spray equipment technology to provide the best product possible. Coatings are manually applied in six production spray booths, each of which is dedicated to a specific coating type. To accommodate larger quantities, coatings are also applied using our computer-controlled selective coating lines. A separate laboratory is reserved for prototype runs and for research and development projects. Conventional, infrared and UV curing systems are employed to meet the requirements of any coating type.

## QUALITY CONTROL/STANDARDS

All work is performed and inspected to the following industry standards:

J-STD-001      IPC-CC-830  
IPC-A-610      MIL-I-46058



## WHY SHOULD YOU OUTSOURCE YOUR COATING NEEDS?

By entrusting Jaro Corp. with your coating needs, you are gaining a reliable partner with comprehensive knowledge and experience who will:

- Guarantee a quick turnaround
- Reduce your overhead costs
- Redirect your focus to your core competencies
- Eliminate the need for environmental permitting
- Minimize your need for hazardous waste storage and disposal
- Mitigate your liability exposure

