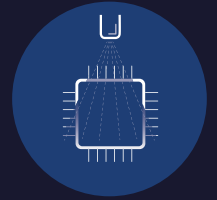


PowerShield Conformal Coating



★ Australian Designed Power Protection Solutions

Ensuring Performance And Reliability In The Harshest Of Environments

As an Australian company PowerShield is committed to providing products that greatly improve the reliability of electronic and electrical systems for the harsh conditions found in our environment. PowerShield Conformal Coating reduces corrosion that causes up to 60% of failures in dusty environments with sustained high ambient relative humidity.

Water condensation inside electronic equipment inevitably leads to corrosion, short circuits and over time builds up deposits of dirt and grease due to airborne contaminants that can drastically shorten life expectancy.

Condensation occurs on components when the relative humidity is high and is accompanied by a rapid drop in temperature. This can happen when the equipment ambient relative humidity is high and the external environmental temperature drops suddenly or even when the equipment cooling fans have the effect of providing a large temperature differential inside the equipment. The water that is held as a vapour in the air at the higher temperatures condenses at the lower temperature and forms water droplets on components inside the equipment.

In mining and industrial applications, where electronic equipment are exposed to sustained high levels of moisture and dust that often have metallic qualities that can short circuit electrical devices and components, condensation becomes even more problematic.

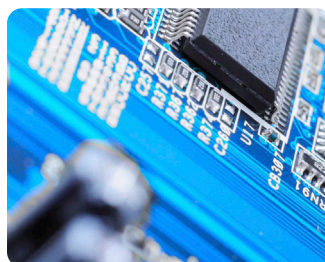
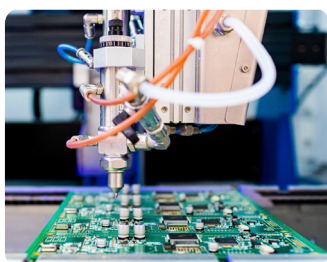
Without a protective coating, the equipment components will predictably fail with certainty well before the expected life of your equipment.

For situations in which our UPSs are exposed to high dust levels accompanied with sustained high relative humidity, we offer conformal coating. Conformal coating also protects against damage caused by other external elements associated with harsh environments such as salt spray, airborne contaminants, shock and vibrations. In addition to forming a protective barrier, the conformal coating also increases insulation thereby reducing the thermal stress from Australian extreme temperatures.

The procedure involves the coating of all printed circuit boards, including the backplane, with a specified coating containing corrosion inhibitors; protection to all plugs and sockets within each module and protecting all external connectors with a thin film of a synthetic grease compound.

The standards and procedures used to perform this service are ASTM B826-03 (Standard Test Method for Monitoring Atmospheric Corrosion Tests by Electrical Resistance Probes), ISA 71.04 (Instrument Society of America Standard ISA-71.04 "Environmental Conditions for Process Measurement and Control Systems: Airborne Contaminants") and IPC-A-610 "Standards for the Acceptance of Appearance Quality of Electronic Assemblies".

If you have a project that involves a harsh operating environment be sure to include PowerShield Conformal Coating in the overall solution.



PROTECT - BACKUP - CONNECT

www.powershield.com.au