

SKILL DEVELOPMENT TRAINING PROGRAMS

Global Electronics Assn Sdn Bhd
(IPC Training Centre)

NCER Technology Innovation Centre (NTIC)
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CONFORMAL COATING



Conformal coating is a protective layer applied to electronic components and printed circuit boards (PCBs) to shield them from environmental stressors, such as:

1. Moisture: Humidity, water, and condensation
2. Dust and particles: Airborne contaminants
3. Chemicals: Corrosive substances, gases, and vapors
4. Temperature extremes: High and low temperatures
5. Mechanical stress: Vibration, shock, and handling to ensure Quality, Reliability, and safety of the Products in its end use environment

This course presents the details of the applicable standards, Types of coatings, their applications and acceptance criteria as per the standards.

Who can Participate

Designers, Technicians, Quality control Inspectors
Supervisors, involved in the manufacturing activities
and new entrants to the EMS industry.

Benefits of Participation:

Participants will get an awareness of criteria for selection
of the right type of coatings, The application Methods,
and Acceptance conditions of conformal coatings

Syllabus:

- Introduction
- Function & uses
- Performance
- Health and safety
- Applicable documents
- Design
- Selection
- Process
- Defects
- Conclusion

Mode of Training

Instructor-led Training

Certificate:

Participation certificate will be provided

Instructor

Master IPC Trainer (MIT) or Certified IPC Trainer (CIT)

Knowledge about conformal coating materials and processes offers several benefits:

Benefits:

Improved reliability: Conformal coatings protect electronic components from environmental stressors, ensuring reliable performance.

Enhanced durability: Coatings shield components from moisture, dust, and chemicals, extending product lifespan.

Increased safety: Conformal coatings can prevent electrical shorts and reduce the risk of electrical shock.

Reduced maintenance: Coated components are easier to clean and maintain, reducing downtime.

Compliance with regulations: Conformal coatings can help meet industry standards and regulations (e.g., IPC, UL).

Applications

Aerospace and defence: Conformal coatings protect critical electronics in harsh environments.

Automotive: Coatings ensure reliable performance in vehicles' electronic systems.

Medical devices: Conformal coatings protect sensitive electronics in medical equipment.

Consumer electronics: Coatings enhance durability and reliability in consumer products.

Process Benefits

Optimized coating thickness: Knowledge of coating materials and processes ensures optimal thickness for protection.

Reduced defects: Understanding coating processes minimizes defects and ensures consistent quality.

Improved yield: Optimized coating processes reduce waste and improve production efficiency.

By understanding conformal coating materials and processes, manufacturers can ensure the reliability, durability, and safety of their electronic products.

Duration: Half Day

Session No	Session Name	Description
1	Introduction	Registration and Introduction of participants
	Overview	General overview of the course
	Introduction to the Conformal coatings	Functions and uses Conformal Coating
2	Performance specifications of conformal Coatings	Specifications, Related IPC Standards, Health & Safety and Design Considerations Types & Selection Of Conformal Coating materials
	Process & acceptance Conclusion	Process type, Rework & Repair Acceptance Questions Answer session Conclusion

IMPORTANT NOTES

- > Session can be organized on Weekend
- > Participation certificate shall be provided to the candidates
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Price

Non Member

RM 990.00

Member

RM 880

For discounts, please connect

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www.electronics.org/SEA-Training-Calendar-Malaysia