

Conformal Coating Applications, Inspection, Rework & Quality Control Interactive CD-ROM

The use of Conformal coating has provided benefits to industry for many years either in the high reliability market sector or where products have to deal with extreme environmental conditions. In recent years due to changes in technology and miniaturisation coating are being used in consumer applications. The use of coatings is seen in different industries like telecommunications, automotive and consumer products have benefited from the use of selective coating but for different reasons.

The CD-ROM provides a simple guide to the use of coatings, their application and process, product benefits, inspection and quality control. A practical defect guide session will also allow delegates to examine coated boards using different materials and inspect the coating application. A unique feature of the CD is a number of engineers answering question on coating processes, process defects and quality control in manufacture.

CD-ROM Topics Included:

Why Conformal Coat
Clean or No Clean
Coating Material Options
Coating Process Options
Cost of coating assemblies
SIR and cleanliness testing
Cleanliness testing methods
Reliability of Coating

Testing & Evaluation of Coatings
Correct design for coating
Masking options and methods
Inspection & Quality Control of Coating
In-house or Contracting Services
Inspection of coatings & methods
Rework & repair of board assemblies
Process Defects



A copy of the interactive Conformal Coating CD-ROM is **£99 plus VAT**. To order a copy simply complete the following and fax your order to **(+44) 01245 496123**

Company VAT number (for EEC countries outside the UK) _____

Name: _____ Job Title: _____

Company: _____

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Conformal Coating Photo Album CD-ROM

A photo CD-ROM album featuring over 300 colour images and is available to allow engineers to create their own training material, PowerPoint files, process documents and standards. The photo CD covers many of the defects listed below and is one of over 15 of photo CD-ROMs created by Bob Willis. The photographs can also be used in marketing and advertising material or in technical articles provided the source is credited. They can be simply pasted into any Word or PowerPoint document for in-house company use. Photographs are provided in either .Tiff or .jpg file format. The images are not all one resolution but a mixture of high and low resolution.

A separate 24 page colour poster guide is available at ASKbobwillis.com and was originally produced to accompany our workshops run jointly with ITRI in St Albans, England. The photographic guide is ideal as a reference source for operators, inspection and training departments in your organisation and is provided as an Acrobat pdf file. The individual sheets can be printed as A4 for bench top reference or as A3 colour posters for reference in manufacture. Alternatively they can be viewed on a PC with each page featuring three images illustrating points to examine or steps in the inspection process. Currently the guide features 20 individual pages for on site printing and display.

Surface Corrosion
Through Hole Penetration
Bubbles
Delamination
Excessive Coating
Insufficient Coating Thickness
Thickness Variation
Coating Skips
Masking Residues

Solder Balls
Vesication
Spitting
Contamination
Finger Prints
Surface De-wetting
Blistering
Cracked Coating
Shadowing

Coating Runs
Fish Eye Bubbles
Bug Eye Bubbles
Surface Fibers
Rework Over Spray
Conformal Coating Brush Hairs
Surface dendrites
Hand Brushing Debris

A copy of the photo CD-ROM is **£99 plus VAT**. To order a copy simply complete the following and fax your order to **(+44) 01245 496123**

Company VAT number (for EEC countries outside the UK) _____

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Conformal Coating Photographic Poster Guide

The 20 page colour poster guide is available at ASKbobwillis.com and was originally produced to accompany our workshops run jointly with ITRI in St Albans, England. The photographic guide is ideal as a reference source for operators, inspection and training departments in your organisation and is provided as an Acrobat pdf file. The individual sheets can be printed as A4 for bench top reference or as A3 colour posters for reference in manufacture. Alternatively they can be viewed on a PC with each page featuring three images illustrating points to examine or steps in the inspection process. Currently the guide features 10 individual pages for on site printing and display.

A practical onsite workshop is also available to train staff on inspection of coatings. A photo CD-ROM album featuring over 150 colour images is available to allow engineers to create your own training material, PowerPoint files, process documents and standards is also available for purchase. The colour poster guide covers many of the following topics:

Surface Corrosion
Through Hole Penetration
Bubbles
Delamination
Excessive Coating
Insufficient Coating Thickness
Thickness Variation
Coating Skips
Masking Residues

Solder Balls
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Coating Runs
Fish Eye Bubbles
Bug Eye Bubbles
Surface Fibers
Rework Over Spray
Conformal Coating Brush Hairs
Surface dendrites
Hand Brushing Debris

A set of wall charts are **£45 plus VAT** and provided as a pdf file for colour printing A4 or A3 onsite To order a copy simply complete the following and fax your order to **(+44) 01245 496123**

Company VAT number (for EEC countries outside the UK) _____

Name: _____ Job Title: _____

Company: _____

Address: _____

_____ Country: _____ Postcode: _____

Tel: _____ Fax: _____

Email: _____

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Conformal Coating Applications, Inspection, Rework & Quality Control Workshop Bob Willis ASKbobwillis.com

Workshop Introduction:

The use of Conformal coating has provided benefits to industry for many years either in the high reliability market sector or where products have to deal with extreme environmental conditions or simply in use in consumer applications. The use of coatings is seen in different industries like telecommunications, automotive and consumer products have benefited from the use of selective coating but for different reasons.

This workshop will provide a simple guide to the use of coatings, their application and process, product benefits, inspection and quality control. A practical session will also allow delegates to examine coated boards using different materials and inspect the coating application.

The company will also receive a **FREE** set of colour Inspection Wall Charts covering coating application and common defects to use on their manufacturing shop floor. During each workshop there are opportunities to win some of Bobs interactive CD ROMs for best questions of the session.

Who should attend?

This workshop is designed for design, process and quality engineers responsible for introducing coating materials, inspection or auditing presented is extremely visual and practical making it ideal for manufacturing staff, like all the instructors workshops it not just theory, it's a "How to Do It Session"

Workshop Topics Included:

- Why Conformal Coat
- Clean or No Clean
- Coating Material Options
- Coating Process Options
- Cost of coating assemblies
- SIR and cleanliness testing
- Cleanliness testing methods
- Reliability of Coating
- Testing & Evaluation of Coatings
- Correct design for coating
- Masking options and methods
- Inspection & Quality Control of Coating
- In-house or Contracting Services
- Inspection of coatings & methods
- Rework & repair of board assemblies



For further details and to arrange an on site workshop email Bob Willis at bob@bobwillis.co.uk