



High Performance Electronics Assembly Cleaning Symposium

OCTOBER 28-29, 2008

Crowne Plaza Chicago O'Hare • Rosemont, IL

CONFERENCE CHAIR

Mike Bixenman, *Kyzen Corporation*

TECHNICAL COMMITTEE

Dave Adams, *Rockwell Collins*

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Steve Stach, *Austin American Technology*

Laura Turbini, *Research In Motion*

Harald Wack, *ZESTRON America*

ADMINISTRATIVE SUPPORT

Bill Barthel, *Plexus Corporation*

Jean Hebeisen, *IPC*

Melissa Serres Marx, *SMTA*

Dave Torp, *IPC*

OCTOBER 28, 2008

CONTINENTAL BREAKFAST

7:30AM – 8:00AM

WELCOME

8:00AM

Mike Bixenman, Ph.D., *Kyzen Corporation*, Conference Chair

KEYNOTE PRESENTATION

8:00AM – 8:45AM

The Evolution of Manufacturing Residues and Their Effects on Electronics Assembly

Jim Raby, *STI Electronics*

BREAK — 8:45AM – 9:00AM

SESSION 1

Introduction, Standards and Regulations

9:00AM – 11:00AM

Chair: Dale Lee, *Plexus Corporation*

- IPC Cleaning and Coating Update – Doug Pauls, *Rockwell Collins, Inc.*
- IPC Cleaning Handbooks (IPC-CH-65A; IPC-SC-60A; IPC-SA-61A; & IPC-AC-62A) Task Group – Bill Kenyon, Ph.D., *Global Centre Consulting*
- REACH, WEEE, & RoHS – Ron Lasky, Ph.D., *Indium Corporation*
- VOC Waste and Water Municipalities – Lee Wilmot, *TTM Technologies, Inc.*

PANEL DISCUSSION 1

Electronic Cleaning Fluid Designs

11:00AM – 12:00PM

Moderator: Bill Kenyon, Ph.D., *Global Centre Consulting*

Panelists: Tom Tattersall, *MicroCare Corporation*; Karl Manske, *3M Company*; Harald Wack, Ph.D., *ZESTRON America*; Ken Dishart, Ph.D.; Kyle Doyel, *Kyzen Corporation*; Jay Soma, Ph.D., *Petroferm*

LUNCH — 12:00PM – 1:00PM

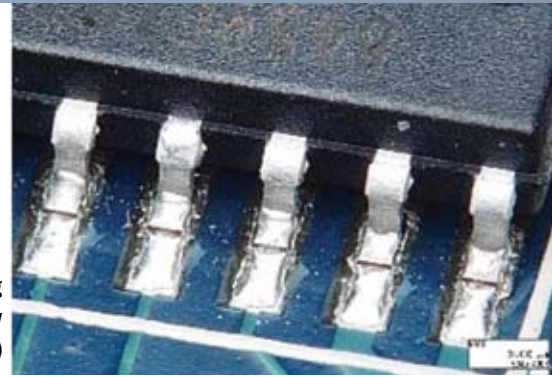
SESSION 2

Cleanliness Assessment

1:00PM – 3:00PM

Chair: Laura Turbini, Ph.D., *Research In Motion*

- Test Board Selection for Cleaning Evaluations – Doug Pauls, *Rockwell Collins*
- Utilizing and Understanding the Various Methodologies for Evaluating Cleanliness of Printed Wiring Assemblies – Joe Russeau, *Precision Analytical Laboratory, Inc.*
- Spot Cleaning Assessment Under Components Following Inline Aqueous Cleaning – Steven Perng, *Cisco Systems*
- IPC Technology Roadmap Future of Interconnection Technology and Its Impact on Cleaning for Reliability – Jack Fisher, *Interconnect Technology Analysis, Inc.*



Before and After Cleaning
(images submitted by
Kyzen Corporation)

BREAK — 3:00PM – 3:30PM

SESSION 3

Building to Customer Reliability Standards in Class 2 and Class 3

3:30PM – 5:30PM

Chair: Joe Russeau, *Precision Analytical Laboratory, Inc.*

- Component Cleanliness – Bev Christian, Ph.D., *Research In Motion*
- Reduced Cleaning of Printed Wiring Assemblies: The Science of Leaving Flux Residues Alone – Dave Hillman, *Rockwell Collins*
- Simplifying Building Complex No Clean Assemblies Using Solid Solder Deposits – Matt Kehoe, *Sipad Systems, Inc.*
- Cleaning Process Development in a High-Mix, Medium-Volume, Class 3 Electronics Manufacturing System – Doug Schueller, *AbleConn, LLC*

OCTOBER 29, 2008

CONTINENTAL BREAKFAST

7:30AM – 8:00AM

KEYNOTE PRESENTATION

8:00AM – 8:45AM

Nozzle Design and Implementation for Cleaning Residues from High Density, Low Profile Component Assemblies

Linda Woody, *Lockheed Martin*

PANEL DISCUSSION 2

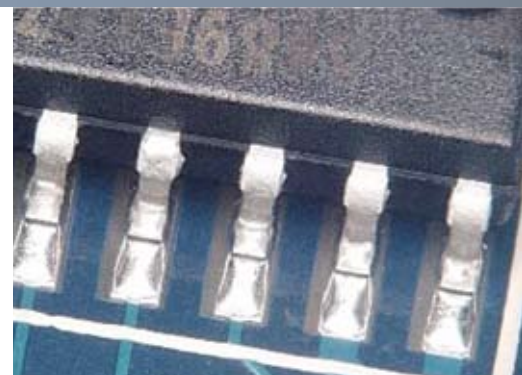
Cleaning Machines

8:45AM – 9:45AM

Moderator: Dave Torp, IPC

Panelists: Steve Stach, *Austin American Technology*; Jim Timler, *Stoelting, LLC*; Mike Konrad, *Aqueous Technologies*; Dirk Ellis, *Kyzen Corporation*; Roger Travato, *Technical Devices Company*; Eric Larson, *Crest Ultrasonic*

BREAK — 9:45AM – 10:00AM



SESSION 4

Lead-Free Cleaning

10:00AM – 12:00PM

Chair: Dave Adams, *Rockwell Collins*

- Cleaning Technique Testing as Part of Manual Soldering Rework/Repair Process Development – Lee H. Flasche, *Delphi Electronics Group*
- Lead-Free Flux Technology and the Influence on Cleaning – Ning-Cheng Lee, Ph.D., *Indium Corporation*
- Qualifying Lead-Free Medical Electronics – Steve Hugh, *Philips Medical*
- Using Hansen Solubility Parameters to Match the Cleaning Material to the Lead-Free Flux Residue – Ken Dishart, Ph.D.

LUNCH — 12:00PM – 1:00PM

PANEL DISCUSSION 3

Cleaning Process Integration

1:00PM - 2:00PM

Moderator: Steve Stach, *Austin American Technology*

Panelists: Dave Adams, *Rockwell Collins*; Jerry Purnell, *Philips Medical*; Jeff Kennedy, *Celestica Inc.*; Jim Raby, *STI Electronics*; Dale Lee, *Plexus Corporation*; and Linda Woody, *Lockheed Martin*

BREAK — 2:00PM – 2:30PM

SESSION 5

Conformal Coating

2:30PM – 4:30PM

Chair: Harald Wack, *ZESTRON America*

- Critical Considerations for Selecting a Conformal Coating Process – Jason Keeping, *Celestica Inc.*
- Cleaning for Conformal Coating – Barry Richie, *Dow Corning Corporation*
- The Impact of Process Residues on Conformal Coating Performance – Phil Kinner, *Humiseal*
- Cleaning Effects on Conformal Coating Adhesion – Lamar Young, *Specialty Coating Systems*

Sponsorship Opportunities

Suppliers, manufacturers, and users will be in attendance at this conference. Your company can showcase its services and products as a tabletop exhibitor, or take advantage of one of the many sponsorship opportunities available for this conference. Download the application form at www.ipc.org/CleaningConfSponsorshipApp.

Tabletop Exhibit Space

We expect a strong turn-out for the tabletop display area during the conference breaks and lunches on October 28-29, 2008. Don't miss out on this opportunity to reach your audience. Download the application form at www.ipc.org/CleaningConfTabletopApp.

Contact Michelle Michelotti at 847-597-2822 or via e-mail at MichelleMichelotti@ipc.org for more information or download the sponsorship and tabletop exhibit applications from the links listed above.



Hotel Information

Crowne Plaza Chicago O'Hare
5440 North River Road
Rosemont, IL 60018
888-233-9527
Room Rate: \$159/night

A room block has been reserved at the event hotel for conference attendees. Please reference IPC/SMTA when making your reservation to ensure receipt of the discounted rate. The room block rate will expire on September 27, 2008.

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SMTA/IPC

5200 Willson Rd., Suite 215
Edina, MN 55424

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1. REGISTRATION INFORMATION

Dr. Mr. Ms. SMTA Member IPC Member

Name _____ Job Title _____

Company _____ MS _____

Address _____

City _____ State/Province _____ Zip _____ Country _____

Phone _____ Fax _____

E-Mail _____

2. REGISTRATION FEE (US\$\$)

Register before October 1st and save 10%!

Conference Fee

IPC/SMTA Members	Non-Members
\$550	\$650

3. PAYMENT OPTIONS

Conference Cost _____

Subtract discount (*if applicable*) _____

Total Amount Due _____

Check enclosed (US\$\$) _____

Purchase order # _____

MC VISA AMEX

Credit Card # _____

Expiration Date _____

Cardholder's Name _____

4. REGISTRATION

Registration

Pre-Registration is strongly recommended. There will be no guarantee of space or materials for on-site registrants.

Four Registrations for the Price of Three

If four employees from the SAME company each register for the technical conference the fourth registrant is free!

Registration Fee

Your registration fee for the symposium includes proceedings, coffee breaks, and lunch.

Cancellation

Registration fees will be refunded (less a \$50 processing fee), if written notice is postmarked two weeks prior to program date.

Registrants may also send a replacement in the event they cannot attend (please notify Melissa Serres Marx at 952-920-7682 to transfer registration).

No Shows

Registration fee will not be refunded in order to cover expenses incurred.