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DAVE'S WORLD



In one of Shakespeare's most famous scenes, Romeo asks, "What's in a name?" Juliet replies, "That which we call a rose by any other name would smell as sweet." After 22 years, Soldering Technology International, Inc. is now STI Electronics, Inc. You won't see much difference except for the new logo and how we answer our phones. Many of our customers and suppliers have known us as STI through the years. We've talked about changing our name for several years because the word "Soldering" in many ways was limiting our growth. When we started, we consulted on soldering processes and sold solder training kits and the name made sense. Now, we still do those things but we also do board level qualifications, cleanliness and component testing and real time x-rays on a variety of levels of electronics and we have invented a new method of electronics assembly that doesn't use solder. Not that solder isn't important to us; we are still the largest independent solder training company around. Kester Solder is by far our number one distribution line by sales. Solder Training Kits are still a big seller for us. And while our Analytical Lab does all kinds of things, finding and understanding the cause of solder joint failures and being able to predict their occurrence is still the majority of its work.

While we've known it was coming for several years, it was still a little sad to sign the papers and make it official. There are many great memories associated with the name but the reality is that they go with the company and especially the people and the company and employees are still around so there's no reason for sadness. There are several unintended good side benefits from the change. 1) It is easier to spell. 2) It will fit in those little boxes when we fill out forms. 3) When we sponsor kid's baseball teams, the kid's don't have to be big and the jerseys don't have to be long sleeves to fit the name on them. 4) It is pronounced the same in

England as in the US. 5) You'll know the answer to the trivia question years from now when someone asks, "I wonder where the initials STI came from?" 6) With our employees, we'll quickly pay for the new building by fining them \$1 every time they use the old name. 7) It will pay our printer's kids' way through college. 8) Our phone number didn't change. 9) Our address didn't change. 10) Our employees didn't change. On the down side, between all of us we probably have 500 "Soldering Technology International" golf shirts that will either go to garage sales, eBay, or the Smithsonian. (OK, probably garage sales.)

On a completely separate note, thanks to all of you who called to notify us that you saw our workmanship posters during an episode of Fox's TV show "The Simple Life: Interns" starring Paris Hilton and Nicole Richie. To answer the most FAQ's of me regarding the show. 1) No, it was not filmed here. That wouldn't happen. 2) No, neither Paris nor Nicole is our new spokesperson. That wouldn't happen either. 3) What did I think of the show? My opinion is that it was a complete waste of time (other than seeing our workmanship posters, of course) and my TiVo is wondering why my viewing preferences have taking a sharp dive. (On a side note, I have stayed at the Paris Hilton a couple of times and it was nice.)

I'd love to hear from you.

David E. Raby

David Raby
STI Electronics, Inc.
President/CEO
draby@solderingtech.com

PS. How many of you who know me ever thought I would quote Shakespeare before Jimmy Buffett?

TRAINING SERVICES 2005 SCHEDULE

MADISON ALABAMA

JULY

- June 27 - July 6: IPC 7711/21 Certified IPC Application Specialist (CIS) Rework/Repair and Modification Certification
- July 7 - 8: IPC Rework/Repair and Modification CIT Recertification
- July 11-14: IPC-A-610 Certified IPC Trainer (CIT) Certification
- July 11-15: J-STD-001 Certified IPC Application Specialist (CIS) Certification
- July 18-22: J-STD-001 Certified IPC Trainer (CIT) Certification
- July 25-26: IPC/WHMA-A-620 CIT Recertification
- July 27-29: IPC-A-600 CIT Certification

TO CHECK OUT OUR SCHEDULE FOR THE NEW IPC-A-610D AND J-STD-001D CLASSES OR TO REGISTER FOR CLASSES VISIT OUR WEBSITE AT WWW.SOLDERINGTECH.COM OR CALL 1-800-767-4919.



**Ann Duncan
Training Coordinator**

**COME SEE
US AT:**

Trade Show	Start Date	End Date	Location	Booth #
Assembly Technology Expo	September 27, 2005	September 29, 2005	Rosemont, IL	5334
Defense Manufacturing Conference	November 29, 2005	December 01, 2005	Orlando, FL	TBD

TRAINING MATERIALS

FREE! LEAD FREE SOLDERING SAMPLE KIT

**BY MEL PARRISH
DIRECTOR OF TRAINING MATERIALS**



Would you like to develop a personal appreciation for Lead Free soldering skill requirements? STI Electronics Training Materials Resources has assembled some sample kits with Lead Free boards and components for you to try. Add your favorite Lead Free solder and experience first hand what all of the excitement is about. This sample kit is based on a simplified version of our popular Lead Free Soldering Skill Assessment kit and includes SMT, Through Hole and Wire attachments.



Training toward application Lead Free Soldering Skill is important to the continued success of production soldering operations. STI has a full line of Lead Free Training kits that will allow operations to experience Lead Free initial soldering, rework soldering, and even machine process development. Our Lead Free Soldering Certification Kits such as those used in the IPC J-STD-001D Instructor Certification Beta classes during May have become very popular with trainers throughout the world. In addition, there is a Lead Free rework version for IPC-7711 Certification Kit.

To request your Lead Free Sample kit, contact Mel Parrish at mparrish@solderingtech.com, or 256-705-5530. Quantities are limited and please only one sample per person.

STI Electronics Training Materials can support your upcoming Lead Free Solder Training and Process Development requirements but we also maintain the traditional soldering kits that contain normal tin/lead materials.

ENGINEERING SERVICES

BY JASON GJESVOLD
MANAGER, ANALYTICAL LAB

STI Electronics Adds Capability & Staff to its Analytical Lab

STI Electronics Engineering Services Division would like to introduce Kristi Kaler as the newest member of the Analytical Lab team. Kristi joins STI Electronics as a recent graduate of the University of Alabama in Huntsville, and will be assuming the duties of Analytical Chemist. Kristi's



background is in both Chemistry and Biology, and her experience with analytical testing such as Fourier Transform Infrared (FTIR) Microscopy and Ion Chromatography (IC) will complement the current Analytical Lab staff in terms of nondestructive materials analysis. Additionally, much more detailed interpretation of data will be possible based on her chemistry background.



Kristi Kaler

Analytical test techniques such as Ion Chromatography are increasingly important to assessing long term reliability of a product in terms of cleanliness of the assembly process, the individual component set, and the adequacy of the wash process if applicable. While surface insulation resistance (SIR) testing is important in qualifying material sets, there is a clear shift in the industry with many manufacturers moving to IC testing to avoid some of the limitations inherent to the SIR test protocol.

IC testing tends to be a much more analytical test technique for determine the cleanliness of a board, and while SIR does yield quantifiable results, SIR is not always indicative of how an actual board will respond to an assembly or wash process. Many times SIR test substrates are assembled through an assembly process without including representative components that the actual board may incorporate. This includes large, low profile components which are historically more difficult to clean underneath due to difficulty with impingement. Often this leads to a false sense of security in positive test results that are not indicative of the cleanliness or reliability of the end product.

Ion Chromatography allows for testing of the actual hardware, and does take into account variables related to hardware that can not be replicated with SIR test substrates. IC also yields very accurate results for numerous important ionic species, and provides a very precise measure of the materials on the surface of the assembly. While IPC does not document recommended levels for which the IC levels should remain below, STI Electronics can provide guidance based on past experience with high reliability commercial/industrial and military applications.

Another very useful tool in the analysis of organics is the FTIR microscope. Unlike the scanning electron microscope (SEM) whose use is more tailored toward elemental materials analysis, the FTIR provides a method for detailed analysis of organic materials such as flux, adhesive, or conformal coating. FTIR works based on the principle of vibration spectroscopy in which infrared light is input into a sample. This energy creates vibrations of the chemical bonds within an organic material. Those vibrations obey the laws of mechanics in terms of resonance frequencies based on stiffness and mass, and reveal the chemical structure of an organic material. STI Electronics employs a state of the art FTIR microscope instrument designed for not only point scan analysis, but also mapping the distribution of organics across a surface. This capability enables STI Electronics to determine chemistry drivers in corrosion reactions, assess the microstructure of conformal coatings, and investigate the construction and microstructure of organic printed circuit board materials, among other things.

Whether your needs dictate nondestructive cleanliness testing via the Ion Chromatography test method, or materials analysis of an unknown contaminant, STI Electronics is equipped to provide analytical solutions to your manufacturing problems. Along with full failure analysis services including microsectioning, etching, SEM/EDS, RTX, and solderability testing capabilities, STI Electronics is poised to provide you with analytical data and practical applications solutions to solve your difficult manufacturing issues.

RON DANIELS

AN INDUSTRY GIANT

BY JIM RABY P.E.

Ron Daniels was a close friend of mine for many years. We did not spend a lot of time together but in the 1960's and 1970's when Ron was a Westinghouse employee, we spent time together in IPC meetings in serious combat over printed circuit board requirements. We were trying to say the same things however Ron was an industry person and I government. We both wanted what was best for the industry. It took lots of time and patience to write good strong requirements that didn't place too many restrictions on the process but enough to maintain controls in the plating systems.

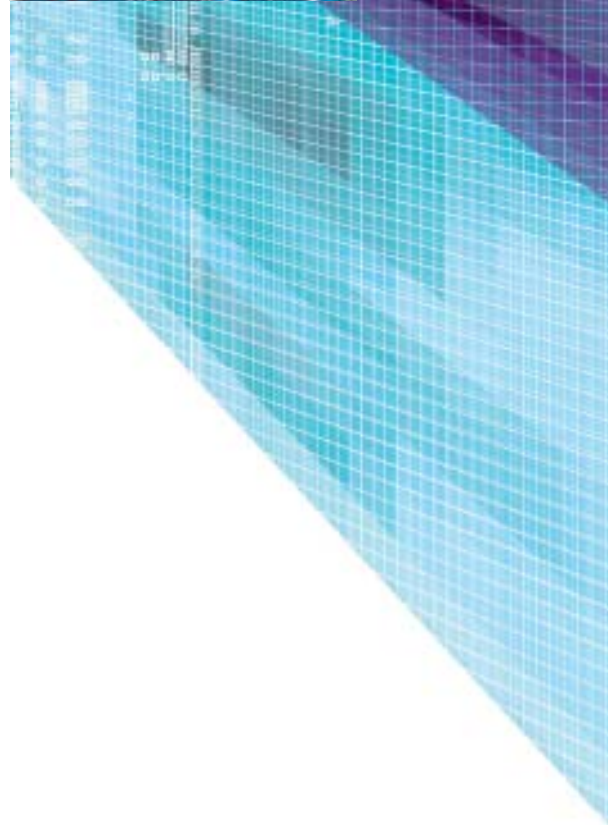
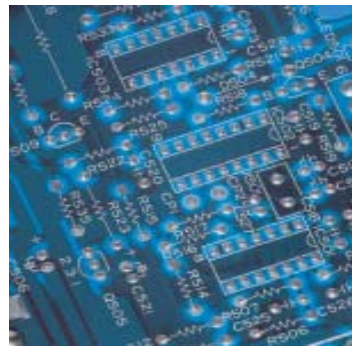
Ron was a leader in these meetings; he knew how to press for the correct verbage to get the job done without being offensive to others. He was a great chairman of the printed circuit board specifications and made things happen.

Ron was my friend, younger than I by several years, but my friend, and he worried about people, including me. He was a good fisherman, not so much a catcher but a fisherman. He was a Brother Fat Elk, a distinguished and elite club with only a few key industry members and we enjoyed some very fine food and wine together as well as great conservation.

Ron was also a fine writer, and he loved this industry, and he contributed to it with his thoughts and writing.

Ron Daniels passed away recently. I will miss him greatly. He was my friend and I will remember him with fond memories for the rest of my days.

Jim D. Raby, PE



STI is proud to introduce Christy Hill as our new Accounting Clerk. Christy graduated from Athens State College and has several years of experience in the accounting field. Christy will be responsible for accounts payable as well as other accounting functions. Please feel free to contact her at chill@solderingtech.com or (256) 708-5513 if you have any questions or to say "welcome".

SALES & DISTRIBUTION

LECROY INTRODUCES THE MS-32 MIXED SIGNAL OPTION FOR THE WAVE SURFER OSCILLOSCOPE



The MS-32 is the first Oscilloscope solution to combine 4 analog channels with 32 digital channels. This module is ideal for the most efficient testing of 16-bit embedded controllers, where all 16 ADDR and 16 Data lines can be viewed at one time. Or, a multitude of ADDR and DATA lines can be viewed, in addition to control lines and low-speed serial data lines (SP1, 12C, etc). Testing and debugging efficiency is greatly enhanced by eliminating the need to continuously disconnect/reconnect signals to observe different behaviors.

Cursors - Cursors will read time or bus information, as appropriate.

Parallel Bus Definition - The digital information obtained by viewing parallel ADDR or Data bus Information can be defined as a bus display. Users can also define a digital trigger for a particular bus value.

User Interface - A familiar interface eliminates the need to spend a lot of time learning a new tool.



Resize/Reposition - Digital lines can be resized and repositioned anywhere on the oscilloscope grid by using the front panel controls or software menus.

Flexible Trigger - Select from a number of different analog triggers; or create a digital trigger by defining a digital trigger pattern, logic bus value, or interval.

Long Digital Capture Time - Up to 1 Mpts of digital memory/channel ensures that users can capture their area of interest.

Quick Setup - The MS-32 is easy to use. A single module consolidates all of the MS-32/Oscilloscope interconnections, so users can start viewing signals and debugging quickly. In addition all standard oscilloscope tools are readily accessible.

Please contact one of our sales staff for demos and pricing at 800-858-0604.

Surplus Inventory Sale

STI Electronics, as one of the largest distributors of electronic assembly and solder supplies, occasionally has overstock on some items. We have created a surplus inventory list with prices drastically reduced. The surplus inventory list is available at our website, www.solderingtech.com, and is updated monthly. Please call (256) 461-9191 and ask for Sales or (800) 858-0604. Quantities are limited so don't delay.

TRAINING SERVICES

DAN FOSTER, DIRECTOR OF TRAINING SERVICES



Lead Free Soldering is here!

Finally Lead Free IPC training is available. STI Electronics, "Your Total Solutions Partner," is proud to announce that we have completed the Beta classes for the IPC-A-610D Acceptability of Electronics Assemblies and IPC J-STD-001D Requirements for Soldered Electrical and Electronic Assemblies Courses.

On April 4-7 the first IPC-A-610D Certified IPC Trainer (CIT) class was conducted. The class had an international as well as a domestic flavor. Trainers from all over the world attended to hear the latest in IPC-A-610D. The students were very interested in the IPC-A-610D criteria for lead free solder connections. The class went extremely well with all the participants coming away with a thorough understanding of the IPC-A-610D criteria.

The week of April 11 had us jetting off to Arizona to conduct the beta for the IPC-A-610D Certified IPC Application Specialist (CIS) course. This course is now modular giving the user much more flexibility. This is accomplished by training people only in the modules they need.

On the weeks of May 9th and May 16th the IPC J-STD-001D CIT beta courses were conducted. The training was done completely Lead Free. The class was pleased with the lead free kits and materials that STI used. Many commented on how easy it was to solder the lead free once you understood the changes. Some students even responded by saying "this was not as difficult as we first thought".

May 23rd was the CIS beta classes for the IPC J-STD-001D. We have another full class of students attending from all over the US.

Yes lead free classes are here and STI is ready to train your instructors and operators. You will want to sign up for the classes as soon as possible as class size is limited and the courses are filling up months in advance.



STI Electronics is your one stop shop for over 100 manufacturer's. Here's a few! For a complete listing visit our web site at www.solderingtech.com





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AND PRODUCT DISTRIBUTION
VISIT WWW.SOLDERINGTECH.COM

Division Highlights

By: Mike Gainey, VP of Sales and Distribution

All of us in the electronics industry have witnessed quite a few changes in the past several years. In some instances the changes have been of drastic nature. Here is just a snippet.

- Sanmina and SCI decide to join forces and become one.
- OEM manufacturers discover that it is less expensive to build abroad and the mass exodus begins.
- International mandates force manufacturers to say "maybe this lead free thing is for real".



STI Electronics is no different than our customers for we too have changed.

The Sales and Distribution department has evolved vastly in product offerings, sales staff and programs offered to our customers. As many of you are already aware we have transitioned to Kester and in less than 2 years have become their largest distributor in the Southeast region. We have also broadened our offerings to over 90 product lines including test equipment with the additions of Lecroy and Extech. Our staff continues to grow to service our customers ever changing needs. Currently STI Electronics has the largest inventory in the Southeast servicing the electronics industry. We are always looking for new and innovated ways to service our customers and have some new additions. Our tool crib program continues to be a signature product that lends added value to the customer. Now we are offering Bar Code Scan Technology as a new wrinkle to the program. (Call for details). E-commerce continues to be available on our website. Did you know that you can access your account (i.e. order and payment history, outstanding balances, order status) through our e-commerce site? (Call for details).

As you can see the Sales and Distribution division has changed greatly over the past 8+ years. These changes were made to better serve you the customer and would not have been possible without your loyalty and support over the years. **THANK YOU!!!!** I almost forgot, we are in the beginning stages of developing our next catalog and any suggestions on how we can improve our last edition are welcome. If I can be of any assistance in the future I can be reached at mgainey@solderingtech.com or 256-705-5505.