

We personally performed each of these trainings and absolutely guarantee you will enjoy equally magnificent results.

Technology Information Corporation

1-240-631-6746

www.WaveSoldering.com

The logo for ADTRAN, featuring the word "ADTRAN" in a bold, red, sans-serif font with a horizontal line underneath.

“I have worked with wave solder machines and the soldering process for years and can honestly say that this was the most informative and thorough class that I have attended on this subject. I would recommend this training course to any company that has done everything right, but somehow their wave soldering is still causing them headaches.”

Dale Shedd, Process Engineer

The logo for DELPHI, featuring the word "DELPHI" in a bold, black, sans-serif font with a horizontal line underneath.

Automotive Systems

“We have just finished the third wave solder process control training course you’ve given at our plant. At every level our overall competence has been uplifted to a new standard of expertise. And, once again, during the training you identified the reason for a board problem we’ve been having and were able to fix it right away. When we were choosing a wave solder training program, we compared a number of well-known courses and experts to help us. I speak for all of us when I say that we made the best decision.”

Faustino Rivas, Process Engineer

The logo for ALPS, featuring the word "ALPS" in a large, bold, blue, sans-serif font, with "ALPS AUTOMOTIVE, INC." in a smaller, black, sans-serif font below it, and the tagline "Creative Technology, Uncompromising Performance" in an even smaller, black, sans-serif font at the bottom.

“Your wave solder seminar gave us concrete methods and procedures completely different and beyond anything else we’ve ever heard or seen from other vendors or ‘experts.’ In fact, we were able to implement several of your approaches during the training itself and our wave soldering immediately improved. We are implementing your methods for all our board types right away, on each of our seven wave machines.”

Juan Guevara, SMT and Through Hole Manager

The logo for BOSE, featuring the word "BOSE" in a bold, black, sans-serif font with a horizontal line underneath.

“Because of how much our facility has benefited in both knowledge and quality, I highly recommend this training to any company that is in need of wave solder process improvement.”

David Denney, Manufacturing Engineer

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“Our training was great. My team (9 engineers) has been asking for this type of hands on training for close to four years. I am glad that we finally got it.”

Arthur Olvera Process Engineer



“We are now positioned to improve our process to greater levels of excellence. It was a pleasure working with Technology Information Corporation. The time spent will prove invaluable.”

Dr. Kyle Klabenes, Instructional Technology Manager



“I highly recommend and applaud your instructor and your wave solder and training techniques. We enjoyed having him here and look forward to learning more from him in the future. In short, it was truly an outstanding and well-done job.”

Paul Orndorff, Process Engineer



“While at our wave machine we were able to see that solder quality really is determined by how the boards pass through the wave. The additional day of process consultation was extremely beneficial. You provided us with written procedures which will improve our overall process. I would recommend this course and process consultation to anyone involved with controlling their Wave Solder Process. Thank you for the many benefits of this presentation.”

Ernest Moreno, Maintenance Manager



“During this course my staff asked many questions. Their questions were answered thoroughly, and usually with a specific suggestion for positive action to improve our board quality. I strongly recommend this training course to everyone who is involved with the control of their Wave Solder Process. It has made a big difference for how we handle our wave soldering.”

Reynaldo Mondragon, Wave Solder Process Manager



“In all my years in PCB assembly, I have never seen such an enthusiastic response to a training program. I can now see that there really is no reason to have higher defects from wave soldering compared to our reflow ovens. Other vendors never really could improve out problems like you have. What you showed us, in only a few hours at our wave machines, is that almost all of our defects are being caused by how our boards go through the actual solder waves. This will save us large amounts of money and strengthen our relationships with our customers.”

Luis Velazquez, Engineering Manager



“ Our training was a huge success. I also welcomed the opportunity to finally compare the Wave Solder Optimizer with its predecessor, our older Solder Wave Analyzer. I plan to invest in an Optimizer as soon as possible. The training was everything you said it would be, and more.”

Fabian Reynoso, Engineering Manager



“ Many of the voids and insufficients we had been experiencing were assumed to be design defects. Your training instructor used measurements taken with our Optimizer to make adjustments easily and now we should never see these defects in our production again. What a relief! You have a completely satisfied training customer with CEL.”

Enda Moran, Manufacturing Manager



“ Your course was essential in showing us how to eliminate solder bridges in our process.”

Demitrio Montalvo, Senior Manufacturing Engineer



“ Your Wave Solder Process Training and Troubleshooting was a resounding success with all sixteen members of our through hole staff. Now we realize that we can run the Optimizer before each shift to verify our process BEFORE board problems occur. This simple realization will save us countless time and money on rework and defects.”

Robert Meinert, Process Section Manager



“ Your workshop instantly solved a frustrating bridging defect we were seeing on many of our boards.”

Raul Flores, Production Manager



“ Your company walked in here and quickly showed my staff how to reduce defects that we've had to live with for a long time.”

Dennis Herrick, Director of Operations



“ Thank you for the day of troubleshooting for our wave soldering. The instructor was very knowledgeable and passionate about wave soldering.”

Mike Daley, Assistant General Manager



“ Over my years in wave soldering, I've seen a lot of trainings and a lot of experts and a lot of vendors. Your approach is clearly different, refreshing, faster, easier and far more useful. I don't know if your training workshops will help every assembly plant out there, but they have helped us dramatically.”

Gerardo Martinez, Process Engineer



“ I look forward to working with you again since I’m already getting requests for a follow up visit and additional training in the future.”

Francisco R. Luna, Manufacturing Engineering Team Leader

GTS

“ With measurements recorded by our Optimizer, your instructor was able to identify the process source of our insufficients and showed us how to adjust our process to prevent their reoccurrence.”

Julian Arbuckle, Senior Process Engineer



“ My Ops Manager and GM are thrilled with the much higher quality levels that we are enjoying.”

Bruce D. Shawcroft, Senior Manufacturing Engineer



“ Your company has exceeded our expectations for our wave solder training. Based on the success we had during the training workshop and the troubleshooting day, we are now attacking our remaining defects with a vengeance.”

Maritza Zayas, Engineering Manager



“ Your approach to process troubleshooting solved our board issues right away and gave us all the evidence we needed to implement your Optimizer techniques daily on each wave machine.”

Felix Delgado, Technical Supervisor



“ Prior to investing in our Optimizer, we relied on a thermal profiler as our process tool but we could not solve skipping and insufficients problems that have affected our production. In fact, these defects were not due to improper temperatures at all but instead to how our boards run through our solder waves. Your training was welcome relief from not knowing what steps will eliminate our defects.”

Ricardo Soto, Process Engineering Manager



“ Everybody in this industry should adhere to your unique techniques. We certainly will.”

Roberto Martinez, Maintenance Leader



“ This class was exactly what we needed to get back on the path of reducing board defects and improving overall production quality.”

Rod Wallace, Focus Factory Manager



“ We were exceptionally impressed that we were able to use the Optimizer during the training to methodically reduce recurring wave solder defects that we have struggled with for some time.”

Joe Thomas, Production & Engineering Manager



“ Your instructor solved our excessive solder and bridging by adjusting our process based on Optimizer data, and showed us how we can easily do this by ourselves. The Optimizer’s powerful process improvement techniques really do what you say they do! Your class was a real eye-opener.”

Gary Wirth, Production Supervisor



“ We’re already saving enough money on touchup and rework that will pay for the training many times over.”

Raul Flores, Production Manager



“ We’ve had other wave solder programs here but Technology Information Corporation’s is a cut above the rest. Even with my broad background in PCBA, I never imagined that such simple steps could have so great an impact on our board quality. That you could demonstrate this to us so easily on our own boards during the training is a big motivator.”

Ricardo Guerra, Engineering Manager



“ We have excellent, experienced engineers overseeing our three Vitronics Soltec wave solder machines, but have been concerned about three types of recurring wave solder defects on our boards. Your instructor was very effective in identifying exactly what was needed to reduce or eliminate our most frustrating defects. He helped us to achieve some of this so quickly we were amazed.”

Pei Min, Process Engineering Manager, Suzhou, China



“ I have 25 years of experience in the industry, and I would like to say that your trainer is first rate – one of the best teachers and production engineers I have ever met. Also want to say that during your training the situation with our topside solder fill problem was vastly improved and to thank you for that, since it was one of our key objectives in bringing you in here.”

Garry Barrows, Manufacturing Engineer



“ Your excellent instructor was able to very quickly cure board problems that we have not been able to eliminate. He showed us how easy it is for us to use the Optimizer’s special daily applications to determine how we want to run each of our board types through our wave machines. Your overall approach to wave soldering brings an enormous change to our outlook.”

Alfonso Flores, Engineering Manager



“ All three of Sigmatron's PCBA facilities are using the Wave Solder Optimizer's procedures and special techniques every day, and you have now performed the on-site training workshop at all three of our plants - here, in Mexico and in China. We sincerely appreciate your proactive support. It's something that sets you apart from many other suppliers.”

Eduardo Trujillo, Automation Manager

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“ A main reason we asked your company to perform wave solder process training for our facility in China was due to the tremendous, positive impact your program had at our Mexico facility. I'm pleased to tell you that the training and troubleshooting performed at our China facility has been equally extraordinary. Success is the uncommon application of common knowledge. Once you conveyed the basics, you showed us how easy it is to eliminate wave solder defects, implement specific daily process guidelines to prevent their recurrence, and take complete advantage of the critical data provided by our Optimizer.”

Dan Camp, Vice President for Operations
Henry Huang, Director of Operations



“ We have set very rigorous objectives for improving our wave solder yields (in terms of DPU) by the end of this year, as well as over the next 12 months. Our team has significantly broadened its knowledge base and has acquired a tangible set of procedures from you for raising our quality levels.”

Lonnie Richardson, Engineering Manager



“ These proactive process control methods help us reduce board defects before they occur, particularly in the new Lead Free environment with its new variables and unknowns.”

Franco Gigliore, Engineering Director



“ We continuously need to acquire new tools and capabilities for addressing board defects. Our production environment is overwhelmingly Lead Free. I was pleased to have participated first hand in this training, and look forward to applying the many valuable principles our entire team learned throughout the week.”

Daniel Tan, Process Development Manager



“ Thanks for a terrific wave solder training session. It was extraordinary. Your training showed us how to eliminate our defects and should be a requirement for any PCB assembly facility.”

Cy Beauchesne, Engineering Manager



“ We have been facing new quality and process challenges since migrating to Lead Free. We felt we needed better, repeatable data for auditing our wave solder process in order to constantly improve our board quality. We now have deeper insight whether to attribute specific board issues with process vs. design factors. We can now ‘remove some of the voodoo’ associated with wave soldering.”

Brian Weafer, Vice President



“ We put our Empalme, Mexico, and Reno, Nevada, teams through the workshop. It was worth every minute and every dollar. My entire staff is thrilled. They have set a new, much higher bar for quality. You were right about having managers, engineers, technicians and operators in the class together. I know this means lower operating costs very quickly.”

Rogan Owens, Plant Manager



“ We have made significant improvements to our wave process because of the Optimizer and the training. As I believe in ongoing and continuous improvement to reduce and eliminate wave defects, the tools that you have provided are allowing us to make dramatic steps in the right direction.”

Clay McElhany, Operations Director



“ The proactive nature of your methodology which allows us to identify board defects and production issues before they happen is critical for raising yields.”

Luis Lopez, Operations Manager



“ We have placed the metalized numbers you sent to us on our fingers and are now recording the location each time we take a reading with the Optimizer. We have now established our control limits and we are running the Optimizer twice per shift if we are within the limits or as many times as required to get the process within the limits.”

Scott Buttars, Process Engineer



“ As a result of your training, we no longer try to apply a single set of parameters to all of our different boards, and we no longer rely on temperatures to reduce our touchup and rework after our wave machines. You have already helped us to identify the best dwell time and immersion depth for several of our board types, and they are not the same. We have reduced immediately the touchup work for these boards. I wish we had known long ago how important dwell time and immersion depth are for board quality.”

Rebeca Hernandez, Operations Manager

We personally performed each of these trainings.

**We absolutely guarantee you
equally magnificent results.**

**Schedule your on-site training today to
reserve the earliest date that is best for you.**

**Call Technology Information Corporation at
1-240-631-6746 today.**

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