

FEBRUARY 2003



Los Angeles/Orange County Chapter

"The Surface Mount Technology Association membership is a network of professionals who build skills by sharing practical experiences and developing solutions in electronic assembly technologies and related business operations."

DATE

February 20th, 2003

AGENDA

6:00PM, Social Hour
7:00PM, Dinner/Presentation

MEETING FEES

\$20, Members
\$25, Nonmembers

MENU

TBD

LOCATION

Embassy Suites
3100 East Frontera
Anaheim, CA



RESERVATIONS

Call: MaskTek
(714) 557-3383

NO SHOWS WILL BE INVOICED

If you can not attend, please cancel your reservation by 12 Noon on Wednesday, prior to the meeting. See you there!

FEBRUARY 2003 Dinner / Presentation LA/OC SMTA Chapter Meeting

Connect and Save: Deriving cost savings through effective equipment communication

Presented By:

Dan Kauss
Consulting & Product Manager
Motorola Global Software Group

Real-time visibility of manufacturing equipment data can potentially drive significant cost savings in Manufacturing Operations. However, accessing homogeneous data from heterogeneous processes has proven difficult due to disparate equipment types and lack of industry standard adoption. Furthermore, traditional applications fail to seamlessly present usable information, preventing the user from harvesting the data's true business value.

This paper addresses three topics. Firstly, the availability of industry standards (including the latest entitled CAMX), how these standards function and their current status in the industry. Secondly, an overview of the applications that take advantage of effective equipment communications such as part verification, line balancing, ERP connectors, bottleneck identification, production visibility, and material management; and the business value derived from these applications. And thirdly, the paper describes case studies of actual implementations and the level of results achieved.

2003 SMTA LA/OC Source Guide Calling All Advertisers

Michelle Ogihara has been working diligently on recruiting Advertisers for the 2003 SMTA LA/OC Source Guide, but in a brief interview she stated "We are still short of our goal. We need 11 more to reach our goal."

Michelle has put countless hours into supporting your chapter and could really use some of your wonderful support! So, open up your heart and give her call to find out how you can help!

Contact: Michelle Ogihara at 310-540-7310 ext.120, email: michelle-o@jp.seika.com

FEBRUARY 2003 SPEAKER PROFILE

Connect and Save: Deriving cost savings through effective equipment communication

Presented By:

Dan Kauss
Consulting & Product Manager
Motorola Global Software Group

Dan Kauss has been working within the Motorola Global Software Group's Manufacturing Software Strategic Business Unit since November of 1998 as a Consulting and Product Manager. Dan has many years of Manufacturing Engineering experience (Quality Improvement, Cost Reduction, New Product Introduction, CIM Systems) within Motorola and as well as an external Chicago-based company. Dan was the co-chair of Motorola's Manufacturing Center of Excellence committee covering Machine Placement Corporate Commonality issues. He has a Bachelors Degree in Mechanical Engineering from the University of Illinois Campaign/Urbana and a Masters Degree in Manufacturing Engineering from Northwestern University.

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NEW MEMBER PROFILE

Kelly Mobley

Kelly Mobley is a Quality Engineer at the Alcon facility that manufactures eye surgical equipment. He has been with Alcon for 3 years. Kelly received his Manufacturing Engineering Degree from Cal Poly San Luis Obispo three years ago. He went from college to Alcon as a quality engineer. He grew up in Hermosa Beach. He is also a Native of California, second generation. His hobbies are surfing, skiing, camping and traveling. He just got back from a trip to Mexico and he is planning a skiing trip to Mammoth.

Let's all give Kelly a warm SMTA Welcome!

PRESIDENT'S MESSAGE

By: Scott Penin

Thank you for being a member of the Los Angeles/Orange County SMTA. It shows you have drive and dedication for our industry, and you're involved in the future of electronics manufacturing. If any-time during the year you hear of anything that interests you and you feel it would benefit our chapter, by all means, please let us know. We are here for you.

The January meeting was a success with Richard Osborne and Scorpion Technologies identifying the low volume solution to test PCBA's without dedicated tooling. In February we have Dan Kauss and Motorola telling us how to save money by increasing our efficiency by monitoring our equipment and driving out wastes. I heard Dan give the presentation in Chicago at the SMTAI show back in 2001. I believe we will all be impressed with the direction software technology is taking.

Based on the survey that was presented by the SMTA at the end of last year, our members number one interest is BGA's. We are identifying speakers that can educate us on this subject. Any idea's? We are also seeking a company for our plant tour. We have identified a couple of possibilities and will let you know the destination before June. Atul is also working on our Chapter Training Day which will occur in October.

Again, we are here for you, please tell us what direction(s) peak your interest.

MEETING REVIEW

JANUARY 16TH, 2003

BY: ATUL MEHTA, JPL

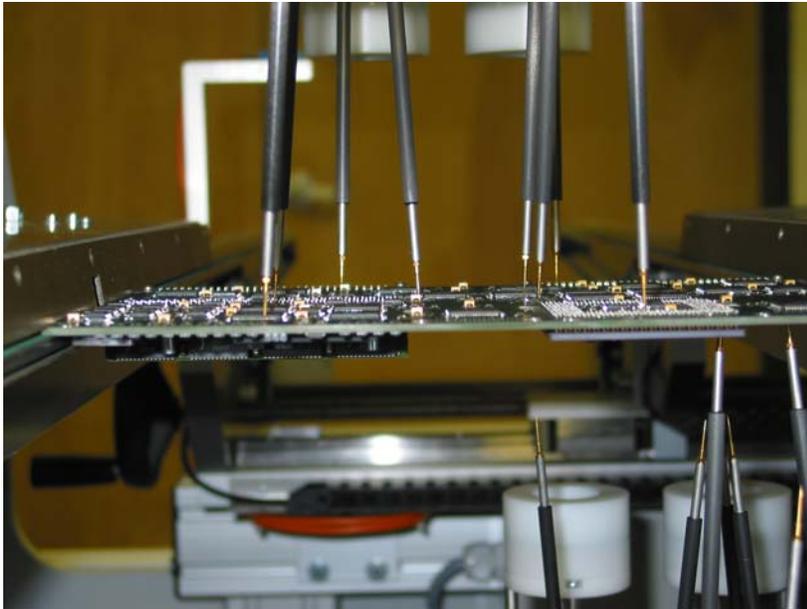
The LA/OC SMTA first meeting of year 2003 was held on January 16, 2003 at Embassy Suites located in Anaheim. The presentation was conducted by Richard Osborne from Scorpion Technologies. The topic was **Bed-of Nails Testers vs. Modern Flying Probe Testers.**

Design and test engineers are facing a great challenge as far as DFT (design for testability) as the board size is constantly shrinking, the components are getting smaller and component density is increasing significantly.

In past Bed-of-nails test was the only solution for testing assemblies. Flying probe testers were limited to bare board testing only. With recent advances in flying probe technology, flying probe testing has become viable solution for testing assembled boards.

Time To Market Has Decreased With Intense Competition. Some of the factors favoring the use of flying probe testers are -

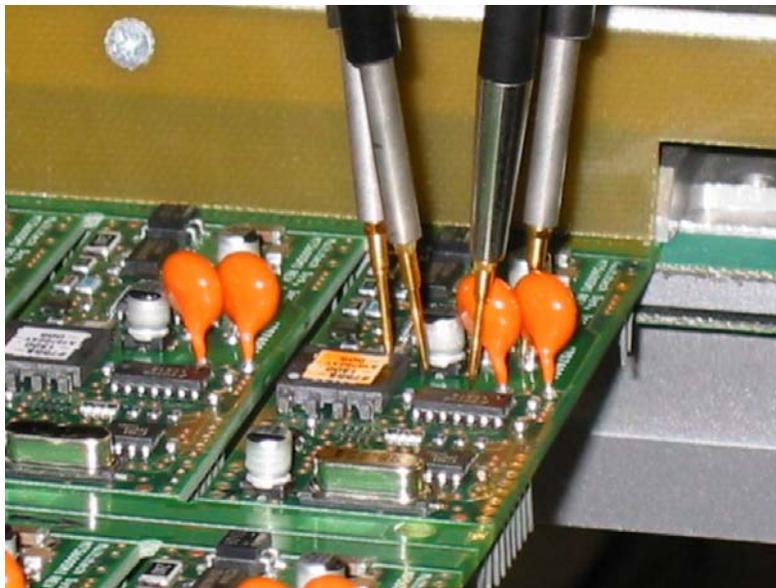
- Fixtures For Bed-of-Nails Testers Can Take Up to 4 Weeks To Complete and are expensive (20K to 40K per fixture)
- Engineering Changes Frequently Obsolete a bed-of nails Test Fixture
- Flying Probe Testers Have Dual Sided Probing Capability
- Flying Probe Testers Have Variable Angle Probes
- Flying Probe Testers Ability To Probe On Component Leads Cost of programming is relatively low and no fixture is generally required
- Flying Probe Testers Options That Move The Probe Beyond Just An MDA



The above picture depicts a simultaneous probing scheme used with a Flying Probe Tester.

Here are some more reasons why flying probe testing is gaining more acceptance by the electronic industry:

- Move Towards Hi Mix – Low Volume Production
- Large size boards can be tested
- North America Is A New Product Introduction Center
- High Volume Is Going Overseas
- Flying Probes Provides Flexibility and is more forgiving to warped boards
- Job changes are easy to accomplish
- Additional Test Options may be Integrated with flying probe testers such as:
 - ⇒ AOI
 - ⇒ Boundary Scan
 - ⇒ BGA's
 - ⇒ Power Up Tests
 - ⇒ Programming
- Test access in tight places can be accomplished. See picture below.



Overall there are several benefits of using the flying probe tester. Of course there is a place for bed of nails testers. Especially when a high volume product is being tested. One major advantage of the bed-of-nails over the flying probe is that it is extremely fast.

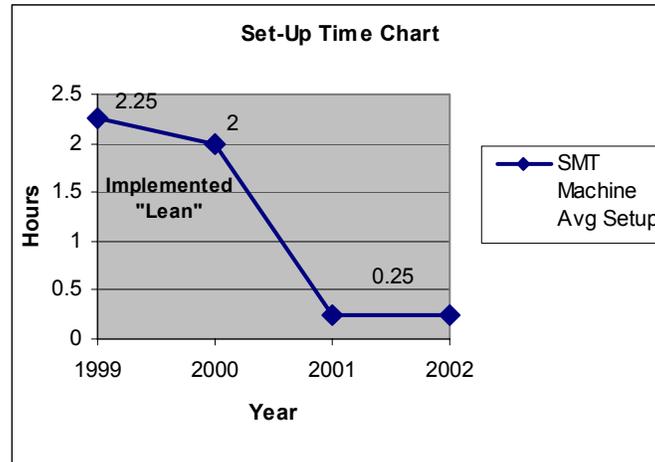
The presentation provided good overview of two testing philosophy and shed light in modern PWA testing.

A special thanks from the entire LA/OC SMTA Chapter to Mr. Osborne for a great presentation.

TECHNICAL EXCHANGE

"Lean and Mean"

Written By: Deon Nungaray, General Monitors USA



Lean and mean is the new name of the game. The recent downturn in this industry has been, at the very least, relentless. High-volume manufacturing in the US is a thing of the past for now. The shift to offshore manufacturing trend has remained resilient. Now, talks about sending design services offshore are also plaguing the industry. Nobody knows how far the offshore outsourcing trend will go, but one thing is for sure, it has taken its toll in the manufacturing sector.

The expected contraction or "weeding out" phase in the industry also continues. Mergers, consolidations and downsizing are on daily headlines. Which leads us to this month's SMTA Article topic; "Lean and Mean" How to stay competitive and profitable in an ever-changing and uncertain business climate? There is no easy one size fits all answer. However, changing traditional manufacturing methods and techniques are essential. How you might say? Gearing up for flexible high mix-low volume manufacturing is one viable niche. Lowering overhead, training people to do more with less resources and increasing efficiencies is a must. Changing gears in order to obtain higher profits for efficiency in a Lean low-volume high mix manufacturing system is a lot more lucrative than volume these days.

Obviously easier said than done. Implementation of Lean Manufacturing methods is a major undertaking for any company. There may be many pitfalls in the attempt to do so, and much too large to be tackled at the same time. Even in smaller job shops there may be difficulties in implementing such systems all at once. The implementation of said programs may become much easier if broken up in segments.

Consider implementing said systems on a real life basis rather than on a theoretical off-site training basis. It would be very difficult to learn the theories off-site and then come back in to your facility to implement lean systems. So training without direct experience is of little value, people gain theory but still have very little understanding of the subject.

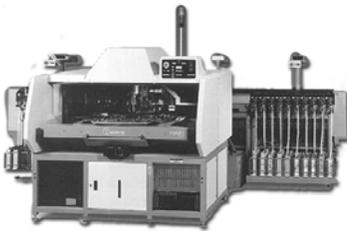
Implementation of a Lean program should have a plan with an overall vision of where the company is heading in the long-term. This plan should include the current state of the company in the form of modeling all of the different processes. This model can then be used to develop the future vision of the company and should include "targeting improvements". Once this is established, new models should be produced to reflect how the company would look at some point in the future after the changes have been made.

These are critical preliminary steps, which will help the company determine the vision and long-term direction once a lean system is implemented. It may also point out inefficiencies in the current system that may be addressed as immediate process improvements.

Next month we will continue to evaluate the "Lean Manufacturing Implementation" factors.

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We are looking for input from you...our members!

What would you like to see in the news letter?

**What types of presentations would you like at our
monthly meetings?**

**Would more of you attend if we had some of our
meetings during lunch time?**

Help us...Help You!!!

E-mail your responses and/or ideas to:

laocsmta@laocsmta.org

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Get Connected!

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Acceptable Artwork Formats: .pdf, .jpg, .bmp, .gif, .tif, html, & Camera Ready Artwork. Laser Printed Pages will not be accepted.

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AD SIZES	WIDTH	LENGTH
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Schedule

Ads should be submitted at least one week prior to the end of the month proceeding the first month of desired publication.

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Display your products and literature at a Chapter Meeting for a fee of \$100, and receive a bonus of one free 1/4 page AD for one month.

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