

*Apex Special Issue, Feb 2005*

# TIN World

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## Solder News *(continued)*

pared to aid forecasting of future turning points, early identification of which led to timely management decisions about changes of strategy.

Phil Zarrow gave his customary energetic, enthusiastic and entertaining presentation, with some very serious messages on "The real cost of going lead-free SMT manufacturing - the other 90%." Change is never easy, but Phil made it clear that lead-free was happening whether we liked it or not, and the decision had to be made whether to make a 100% change to lead-free, or to face the prospect of maintaining two processes.

In the USA, there was still only a low level of awareness of lead-free. Consequently many companies had not yet formed any plan to change, although if Europe and Japan were among their export markets they would have to soon wake up to reality. Phil made it clear that, whatever claims might be made, there was no such thing as a drop-in lead-free replacement for 63:37 solder and, although SAC alloys could be considered "mainstream", the fact that there was no "standard lead-free alloy" was

an area of serious concern. More subtle was the worrying prospect of the effect of higher reflow temperatures on moisture-sensitive component packages, where cracking could occur out of the sight of optical and x-ray inspection systems and might escape detection until field failures were experienced.

Phil explored many aspects of equipment, processes and inspection, and referred to draft D of IPC-A-610, which when published would recognise differences in wetting and illustrate new reference criteria for qualification of solder joint acceptability. Training and re-training were important matters also. He reviewed operational and organisational issues, the logistics of implementation, then defined five psychological stages of adjustment lead-free: Denial, Anger, Bargaining, Depression and finally Acceptance, and concluded with a blunt "adapt or die" maxim.

Over and above all the visible and hidden costs of converting to lead-free, with tongue in cheek Phil reminded the audience that a good consultant is priceless!

## SMART Fellows!



The Directors of The SMART Group have elected the following to receive a SMART Fellow award: Alan Brewin - NPL (National Physics Laboratory) Nigel Burt - (Dolby Laboratories Inc) Amy Faulkner - EMP (Electronics Manufacturing Products magazine) Sue Knight - (EADS Astrium) Steve Mainwaring - (Solectron) JoAnn

Stromberg - (SMTA) Tim Reynoldson - DTI (Department of Trade & Industry) The SMART Fellowships were first announced at The SMART European Surface Mount Conference in Brighton in 1998. SMART Fellowships are awarded to individuals to "thank them for their active participation in the furtherance of the aims of The SMART Group" during the year. The list includes committee members, supporters and sponsors, people who have helped the Group through the media, and those who are aiding the electronics manufacturing industry. The list also includes SMART members who are regular attendees or to extraordinary contributors to the association's seminars, forums and events. Photo L to R: Alan Brewin (NPL), Nigel Burt (Dolby Laboratories), Sue Knight (EADS Astrium), Amy Faulkner (EMP). Peter Swanson presented the awards on behalf of SMART and behind is Bob Willis SMART Technical Director wearing a shirt that was auctioned at the SMART European Conference Gala Dinner and raised £500 for charity. Steve Jones (Circatex) put in the highest bid that also included a day of Bob's consultancy.

## AIM appoints representative in Mexico

AIM has announced the appointment of Repstronics as manufacturers' representative for AIM's complete line of solders and related assembly materials in southern and central parts of Mexico.

Repstronics forms yet another link in the global sales and technical support of the AIM line of assembly and fabrication products.

Repstronics, a well-known manufacturers' representative company, specializes in Sales, Service and

Customer Support for electronic production materials and equipment. Repstronics may be contacted via email at [sales@repstronics.com](mailto:sales@repstronics.com) and can be visited on the internet at [www.repstronics.com](http://www.repstronics.com).

In 1997 AIM opened the first manufacturing facility for electronic-grade solder materials within Mexico. Today, AIM-Soldadura de Mexico in Cd. Juarez services a significant part of the growing electronics assembly industry of Mexico.