



There are a few key events throughout the year that offer EMS industry professionals the chance to stay current with emerging technologies, demo the latest equipment, network, participate in standards development meetings, attain certifications, and so on:

- **Productronica** is the largest of these events (44,000 visitors last year) and will be held this winter in Munich, Germany.
- The **SMTA International Conference and Exhibition** is another very popular event and will be held this fall in Rosemont, IL.
- To kick them all off each year is the **IPC APEX Expo**. This event is by far the largest in the USA (8,500 visitors last year) and is an event that we regularly attend ~ For us, this event is the “Catalina Wine Mixer” (☺) to kick off the new year.

Following is a quick recap of the IPC APEX Expo 2018 from sunny San Diego from your field reporters on the scene: Frank Nichols (President & CEO), Colin Campbell (Process Engineer) and myself.

The first few days at APEX are spent attending various professional development courses and standards development meetings. The courses cover a wide range of topics and are aimed at providing attendees with the latest in research findings, best practices and emerging technologies in our industry ~ Failure analysis, Design for Manufacturability, Root Cause Defect Investigation and PCB Fabrication were a few of the courses that we attended this year. As usual, the courses were interesting and well attended. The standards development committee meetings allow for participation and interaction with fellow committee members while debating and voting on potential additions to the many standards that govern our industry. These meetings are a nice change from the typical conference calls and WebEx sessions that occur throughout the year.



The rest of the week was spent attending meetings with various equipment manufacturers from all over the world. Having the latest equipment powered-up and in one location provide the opportunity to get some hands-on time, ask questions and compare & contrast the systems that we are considering for the upcoming year. As such, Colin spent his time attempting to narrow down a suitable 3D X-ray system from the vast line up of these machines (which were particularly abundant this year). Frank concentrated on various dispensing & labeling solutions and I was busy investigating the latest offerings in stencil printing and cleaning systems. Overall, we made great progress throughout the week and

came away with a short-list of equipment for further testing, evaluation and eventual selection & purchase.

The common thread for this year appeared to be the so-called “Smart Factory”, also known as the “Internet of Manufacturing” and the fourth industrial revolution, or “Industry 4.0”. In short, the idea is to collect and manage the data flowing from all of the connected systems and processes in manufacturing and organize & present it to users for quick analysis, decision and action. The show featured a working example of this technology called “CFX” (Connected Factory Exchange), which provided real-time data from participating exhibitors’ machines on the show floor. The data was accessible to all attendees (through the cloud) on their mobile devices. We are excited to see how we might continue implementing this technology at our facility.



Overall, we had a great trip and made progress on our journey of continual improvement as well as keeping up with the ever changing technology curve. As always, please don’t hesitate to contact us for any questions or further information.

Thanks for reading!

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