

George Szekely Interview – TYCO Electronics

The PC board assembly automation business of TYCO Electronics is a multifaceted machine that grew mainly through acquisitions such as Quad and several others, including ASG and Wand Singulation. Today the company has a product offering in virtually every stage of the assembly process, but more importantly, it has created some significant niches it can call its own. Trevor Galbraith interviews TYCO Assembly Automation's General Manager, George Szekely.

Q1: Let's start by talking a little about TYCO. TYCO is a huge conglomerate - how does TYCO Automation fit into the corporate structure?

A1: Tyco International is a conglomerate with \$39.74 billion annual sales. Tyco Electronics is the biggest one of the major business segments of Tyco International, with over \$12 billion annual sales. These figures are for fiscal year 2005, which ended September 30, 2005. Within Electronics, we have a separate Division focusing on tooling and automation solutions to meet our customers' wire and board processing needs. My group is part of this Division.

I should also point out: Tyco International has announced plans for splitting into three independent public companies, the three being Electronics, Healthcare, and Fire & Security/Engineering Products and Services. The timetable is about a year.

Q2: You recently restructured your divisions. What benefits has this brought to TYCO Automation?

A2: With the restructuring we have accomplished several

things - from our customers' perspective the most important one being the creation of the new Automation Technology Center. We did this to ensure a sharper focus on providing solutions for our customers' emerging needs, particularly in lead-free assembly and RFID tag assembly.

Q3: You promote your Pressfit systems as a real alternative to lead free solder joints. Can you explain the types of applications/ components where this technology is best suited?

A3: Compliant pin technology has been around for decades. It is widely used in all electronics market segments, telecom, automotive, industrial, and even in military. The applications are governed by well-respected global standards (IEC). Of all the market segments, telecom is the most prevalent. In automotive, the German auto industry adopted the technology starting in the late 80s. The rest of the world slowly follows the example. There are good reasons why this is happening. The connection performance is superior, and the board assembly process itself is cleaner and more cost effective



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than soldering. And, with the RoHS deadline looming, you really cannot get more lead-free than using no solder at all!

Q4: You are one of the first companies to produce a reel-to-reel RFID manufacturing system. What benefits does the TYCO system have over other systems in the market?

A4: Customers are most interested in the degree of flexibility and modularity we offer. This includes the ability of assembling active tags by placing printed or piece batteries, direct chip placement or strap assembly, as well as placing miscellaneous SMT components. We have also introduced a real unique thermo-compression process implementation.

It has a positive impact on process yields compared to those achieved by more conventional methods.

Q5: Selective soldering is another niche where you were early into the market. Why are these systems popular with lead free manufacturing companies?

A5: I think the main reason is we have been helping them with the transition to lead-free. Tyco Electronics is the world's largest passive electronics component supplier, so believe you me, we really feel our customers' pain.... As far as the machines are concerned, we have, for example, a dual-pot configuration, where one of the pots can be leaded, the other one can be lead-free. Customers, especially some EMS companies who have limited visibility into the jobs coming down the pike, do like this flexibility.

Q6: You have a unique Nitrogen generator system that works on the principle of pure air in, pure nitrogen out. Is this a real alternative to the expensive costs of running nitrogen in ovens?

A6: The short answer is absolutely YES - unless you have high purity nitrogen pumped in free into your facility. We are working on a white paper for explaining this in more detail, with real life examples. Stay tuned!

Q7: How does Tyco's sales breakdown geographically?

A7: I can speak for Tyco Electronics only. In our sales breakdown geographically the Americas are on top with 42%, EMEA (Europe/Middle East and Africa) is second with 34%, and Asia/Pacific has the balance with 24%.

Again, these are fiscal year 2005 figures.

Q8: What do you see as the next big challenge for EMS companies?

A8: I am afraid I don't have a 'one size fits all' answer to your question. The answer depends on what size company we are talking about, global or not, and if not, which country/region you are asking about. This is a whole other Q&A on its own. Could be a real good panel discussion!

Editor: I think you are right. This is a multifaceted and ongoing debate that we will continue to report in Global SMT & Packaging as the industry develops. We will be sure to invite you on any future panel debates.

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