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American Standard Circuits Taking Business to New Heights

Patty Goldman, I-Connect007 | 11-03-2015


Anaya Vardya, ASC

I sat down with American Standard Circuits President Anaya Vardya at the recent SMTAI show and conference in Rosemont, IL. Anaya wanted to share all the great new things going on at his company. Among the topics we discussed: new equipment, new processes, new people, and what it all means for ASC's growth.

Patty Goldman: Anaya, how has the SMTAI show been for American Standard?

Anaya Vardya: The show has actually been quite good for us. We've had the opportunity to meet with a lot of our customers, both existing and potential new customers. What I would say is, compared to other shows, the traffic isn't very high but the quality of the traffic is excellent.

Goldman: Everybody is focused on SMT.

Vardya: Right, exactly. I think the IPC show is also bringing a lot of the people who are interested in buying circuit boards.

Goldman: The IPC Fall Standards Meeting is right here alongside the SMTAI conference and show, so it's a two-fer for you guys.

Vardya: Correct, it is a two-fer.

Goldman: You told me you had something new to talk about, so what's happening?

Vardya: We wanted to talk about all the changes that are going on at our company. In the last year, we've decided to take the company to a new level. As a result, we've made investments both in terms of people and equipment that are pretty intense. About six months ago, we hired Rob Coleman to be our VP of operations.

In addition, most recently, we've reorganized our existing staff and actually increased our management in the quality organization. Our new director of quality is Jim Zeman. Jim has about 25 years in the circuit board industry; he's been an American Standard for about eight years, and he's got about 20 years of quality management experience.

Part of what we're doing as a company is not only are we adding capital and people, but we're also adding quality certifications and upgrading our processes in general.

Goldman: What kind of quality certifications?

Vardya: Currently, we're ISO 9001:2008 certified, and we're also MIL-PRF-31032 certified. What we're working on is getting our aerospace AS9100C certification. We expect to get it sometime early next year, and then we would ultimately follow that up with NADCAP certification. We are also working on adding product lines to our MIL-PRF-31032 certification.

Goldman: Okay, and so then you're going after the Mil/Aero market, shall we say?

Vardya: Today, mil/aerospace is about 30% of our business, yes, but as we're growing the company, we're growing all the various market segments that we're in today—and mil/aero is certainly one of those segments. I think a lot of companies are requiring people to be AS9100C certified to get into newer accounts.

Goldman: If you're going after some other market, having that certification is pretty impressive.

Vardya: Right, exactly.

Goldman: You go for the hardest one and everything else follows. Do you get into the medical industry very much?

Vardya: Actually, that's another interesting question, because that is a good growth segment for us right now. One of the product mixes and market segments that's growing for us is rigid-flex, and we're doing a lot of the rigid-flex for the medical industry.

The applications are very interesting. We make a flex circuit that actually goes into a pressure monitor for blowing up stents. During angioplasty, they put in a balloon and have to inflate it with a pump that has a digital calibration, and they actually use one of our flex circuits in there.

Another application that we were in is blood analyzers, so we're actually in pieces of equipment that are going to end up being pretty high-volume, FDA-approved pieces of equipment for analyzing blood.

Goldman: And then there's the automotive industry for new applications. That seems to be a big area also.

Vardya: We're probably one of the larger players in North America in terms of being in the automotive market. About 30% of our business today is in the automotive market segment, and we are working on continuing to grow that. We're working on some of the newer applications at 77 GHz. Currently, the circuit boards we make are at about 24 GHz.

Goldman: The markets that I see that seem to have all the new apps are medical, automotive, and mil/aero. The applications in those areas seem to be almost exploding.

Vardya: Right, and to be honest with you, those three are part of what we're targeting right now, but in addition to that, we are also targeting the LED market space, where see a lot of growth; again, the board technology might be a little bit simpler, but there's a lot of volume there. We make the boards for the control systems, for the actual lights, and for the driver board, so there are a number of different kinds of boards that get in there.

Goldman: Your headquarters is right here in Chicago, but do you expand beyond North America?

Vardya: We have only one facility in North America, and that's in West Chicago, Illinois, and then we also have partnerships in Asia. We do work with a number of different Asian board shops. I would tell you that today, maybe 10% or less of our business is actually procured from Asia, but we're also working on growing that part of our market segment.

Goldman: So most of what you do is actually produce here in North America, is that what you're saying?

Vardya: Yes, it is.

Goldman: That's great. Is that something your customers require, that their PCBs are made in the USA?

Vardya: Some of them do. Obviously, a percentage of our business is ITAR, but a percentage of the balance of the business is just a matter of selling them on what the advantages are of doing it onshore, also the fact that they're quick turns. Some of them are worried about their intellectual property and they don't want to send the boards to China. We have a whole variety of customers that choose to do business in North America for a number of reasons.

Goldman: You help them out. What else would you like to talk about?

Vardya: I'd like to talk about a couple of things that we've done and that we're doing differently. For example, in our engineering organization, we're working to become a lot more automated. Earlier this year we implemented a package called Insight, by Orbotech. It helps us in the quotations stage where we're able to analyze our customers' raw data and make decisions on whether there's going to be any issues with building the board, things like that.

If there are, we'll get back to the customers. If not, it also helps us say, "Okay, you know what? This is a more difficult board to build. Here are some of the issues, and these are some of the extra steps we're going to have to take."

Goldman: You work with your customers very closely.

Vardya: Yes, we do. In addition, we are also in the process of implementing the Orbotech InPlan system, which has two parts to it. One of them is a much more automated stackup generator than the ones that we are using today. If you have controlled impedance, or if you have a number of different limitations on your stackup for a particular job, it’s able to figure out all the different permutations and combinations of stackups that would meet the requirements. Then it gives you the opportunity to choose which one you want to do. In just a short time, we are able to see that it's doing a much better job than the manual process that we have been going through so far.

Goldman: And faster, I'm sure.

Vardya: Faster, of course. Then, the other part of it is actually getting to rules-based travelers. That's one of the things that we're going to be working on for the balance of the year.

Basically, you look at the Gerber file, you look at what the copper rate requirements are, you look at all the different parameters, and then based on that, our traveler gets generated automatically, versus our process today, which is a lot more manual. All the correct information is there which makes for less errors, plus it is faster, and has better quality.

Goldman: That's really great.

Vardya: The other thing that we've also recently implemented is a software package called TrueChem to control all our lab chemistries. We now have a dashboard that anybody can go to. They can know exactly where we are on our analyses, if we're falling a little behind, or if somebody hasn't made the adds.

All of that information is very visible, and we're also able to control chart all of our chemistries now, so we've seen much better control of our processes. We've also seen, whenever we have any kind of a technical issue, or a scrap issue, they're quickly able to go back to what tanks in the process may have a problem and look at what state of affairs the chemistries were in. We've got better traceability.

Goldman: That's the byword for many of your customers, too, I'm sure. They all want traceability.

Vardya: Correct. We've also made some pretty significant investments in terms of capital equipment. Earlier this year, we had a bought an AccuScore machine to improve our scoring capabilities. Recently, we've also invested in what I would call a high aspect ratio hole cleaner. It cleans up the debris that's inside the holes after drilling. It's very high pressure, it's meant for high aspect ratios, and it's a custom-designed machine where we're working with someone to do that. It's a combination wet and dry process; it's a blow-off, and followed by a very high pressure rinse.

We've upgraded our inkjet printer to the latest Orbotech Sprint 120. We've also invested in a Pluritec X-ray drill machine. We already have X-ray drill capability, but this is adding capacity, and also getting us the latest in drilling technology. Our current X-ray is dated, so it's only so good. This has much better capabilities, especially for the higher layer counts, and the mixed materials that we're pursuing.

Then, our largest investment this year has been an Orbotech LDI machine that actually just came into our facility today. It's been a very busy year for us at American Standard.

Goldman: A really exciting year. You must be very busy and that's great to hear. A lot of positive stuff coming out, and a lot of growth-related stuff, so that's all good news. I presume your customers love this.

Vardya: Yes, it's great news for us. But to be honest with you, we are just starting to tell our customers the whole story of what we're doing, but they're absolutely going to be very happy with us, given the investments we're making.

Goldman: Yes, because you keep up with them. They put out new designs, and nothing gets simpler, it always gets more complicated, and you are keeping up with all of that. That's fantastic. Anaya, thanks so much for spending some time with me today.

Vardya: Thank you, Patty.