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**ELECTRONIC
SYSTEMS, INC.**

An ISO 9001:2008 and ISO 13485:2003 Firm

LIVING LEAN

By Gary Larson, President, glarson@electronicssi.com



I went through a traumatic experience this summer. I handed over my 11-year-old car to my 16-year-old daughter. It was distressing, not just because my teenager would now have wheels on the road, but it also meant I would have to purchase a new car. For me, spending money does not come easily.

In fact, frugality has always been my motto. I dislike wasting money and time. That's why the concept of Living LEAN seems so natural and right at Electronic Systems. LEAN isn't just a structure we follow here, it's a culture—a way of thinking and working. The payout for our customers is that they can be confident they're doing business with a company that provides excellent value in terms of cost, quality, and on-time delivery.

How are we implementing the Live LEAN/5S philosophy? Let me count the ways:

- 1. Focus on continuous flow process.** If an assembly sits during production, it's a waste of time, material, and money. We've experienced a 70% reduction in manufacturing

throughput time over the past five years.

- 2. Reduce inventory.** Frequent delivery of materials, rather than dealing with stored inventory, is a better use of time and money.
- 3. Enhancing inventory accuracy.** We are currently running at 99% inventory accuracy.
- 4. Real-time quality focus.** We're adamant about finding any defects sooner rather than later in the production process. When we have a problem we know about it right away and can make needed adjustments, reducing waste and lost time.
- 5. Improved schedule adherence.** By following all of these steps, we're better able to deliver on time to our customers.

We are also asking our suppliers to be integral players in our Living LEAN philosophy. During our annual Supplier Appreciation Day in August, we presented our 2011-2012 procurement initiatives. (Read about those initiatives—and this year's award-winning suppliers—inside.) Suppliers are excited to be an important part of our LEAN journey. That journey is to become the best we can be—for them, for us, and most of all, for you, our customer. Living LEAN isn't an overnight trek, but an evolving process. We're just pleased we're all on the ride together. ♦

OUR CUSTOMERS SAY ...

"It is refreshing to work with a company that truly believes in partnering with their suppliers. We really want to work . . . to improve our service, with the ultimate goal to be walking up to accept one of your awards next year."

General Manager.

Supply Partner



THE LONG INTERNSHIP

Little did Michelle Goodman know, back in 1996, that her summer internship in accounting at Electronic Systems would become a 15-year-and-counting commitment. "I was only supposed to be here for about three months," recalls Michelle. However, as the summer ended, and she headed back to college to complete her accounting major, the Sioux Falls firm asked her to continue during her senior year on a two-day-a-week basis. That led to a full-time gig once she had her diploma in hand.

Back then, Michelle was simply sending out invoices and filing. Today, this staff accountant supervises accounts receivable, and is responsible for sending out invoices and collecting payments. She's the voice of Electronic Systems to our customers' accounting departments. She also handles bank reconciliation and prepares the financials for CFO Jeff Tornow. Since those early days, she has also experienced changes in the technology that mirrors Electronic System's penchant for LEAN. "The programs we're using today are leaner and more efficient,"

says Michelle. "Years ago, it took me half a day to send out invoices. Today, it takes approximately half an hour."

While the time it takes to complete any of her individual tasks may have been reduced, the responsibilities that come with her position have not. That's why, in her spare time, she says she loves to relax through reading, scrapbooking, or heading out in the camper with her husband, Jeff, and their son, age 7, and daughter, age 4.

Perhaps her love of the outdoors can be traced to growing up on a southeast South Dakota farm, where she first realized her affinity toward numbers. "I was always good in math," says Michelle. "It was my best subject." She adds that the accounting field fits her personality, explaining, "I'm more of a quiet person who would rather just crunch the numbers. But, even more than the numbers, Michelle says she likes working at Electronic Systems because of the human element. "Honestly, I like working with the people here, and even though this company is growing, there is still the small business atmosphere. It's a friendly place to be." ♦



Fellow manufacturing engineers and brothers Brian Aldren (left) and Jason Aldren review plans for a floor design change that will accommodate new capacity-production equipment and improve continuous production flow.

MACHINES ON THE FLOOR

Engineers at Electronic Systems are taking advantage of new incoming equipment to redesign the production floor—a change that will propel the company's continuing drive to reduce throughput time. "It's about the continuous improvement nature of LEAN," says Director of Manufacturing Fred Ledwell. "You don't just throw machines out on the floor. You take the opportunity to see how they best fit within our production process and where we can eliminate more waste."

The new equipment includes a second PVA 650 selective coating machine to be operational October 1 and a second Vitronics Delta 5 lead-free wave solder to be on the job one month later. Both investments are driven by increased business and plans to increase flexibility. In the process of creating additional work cells centered around the new equipment,

Electronic Systems will further reduce inventory on the floor and push the continuous flow process.

"In the last two to three years, we've reduced the number of production tables by 40%," says Manufacturing Engineer Jason Aldren. Rack space has also been dramatically reduced. "There is no provision for product to just sit around waiting to be built," says Jason. "It has to be built and finished and moved to shipping."

Floor redesigns are no easy task, admits Ledwell. In addition to factoring details from facility requirements to the way material flows in a production process, the engineers are increasingly seeking the input from team leaders and production associates. "We want their buy-in," says Fred. "If we don't get their involvement, we would miss the nuances of how product needs to flow." ♦

THE SUPPLIER LINK TO LEAN

At Electronic Systems, we have been concentrating on LEAN initiatives within our walls for some time, with excellent results. This August, as part of Electronic Systems' Supplier Appreciation Day, Materials Manager Randy Bathke and President Gary Larson challenged our select suppliers with becoming our partner in LEAN, announcing a number of procurement initiatives. "We need supplier participation to be truly successful," explains Gary. "The Supplier Day gave us an excellent opportunity to talk to our suppliers about how we can work together to ultimately provide a better value for our customers."

2011-2012 procurement initiatives

In order to assist Electronic Systems in better serving our customers, we challenged suppliers to:

- **Utilize electronic payment.** Sending checks through the mail is no longer an efficient way to transfer money.
- **Offer us quality.** We are looking for zero defects. Products coming in should be able to go on the shelf without inspections.
- **Provide us value.** Can our suppliers recommend alternates and substitute parts that can provide cost savings without cutting quality? Can they provide more bang for the buck with part number consolidation or package size recommendations?
- **Give us service.** Price of parts is always an important consideration, but service can be the trump card. Is a supplier willing to jump hoops to help solve a problem, or help us be flexible for our customer's changing schedule?

To review Electronic Systems' 2011 Supplier Appreciation Day PowerPoint presentation, scan this QR code on your mobile device, or go to www.electroniccsi.com/esidownloads.htm.



- **Participate in our Kanban Program.** We are working to increase the number of build-to-print suppliers who build material for us and ship it as needed—not before.
- **Participate in our MRP Share Program.** We're experiencing great success with distribution suppliers on the program and are asking all of the suppliers to participate, taking our weekly forecasts of part demands, so they can better plan for our inventory needs.
- **Quote with speed and accuracy.** We need timely, complete, and accurate quotes.
- **Reduce freight charges.** We're looking for suppliers to come up with creative ways to get us product, including practices such as consolidated shipments.

"Supplier response to the presentation was excellent," says Randy. "We had very positive feedback," he explained. "They really like our attitude about truly having a partnership with them, not just buying product from them at the best price, but working with them and developing programs that make our processes more efficient and flexible for our customer." ♦

2011 SUPPLIER AWARDS

For the seventh year, Electronic Systems has brought together our select suppliers for our Supplier Appreciation Day to thank them for our partnership. We understand the unique role our suppliers play in our ability to effectively serve our customers with quality and value. Each year we also recognize five suppliers with Best in Class and Best in All Categories awards. This year our winners are:

Congratulations to Digi-Key for winning Electronic Systems' Best in All Categories supplier award. From left to right: Electronic Systems' Material Manager Randy Bathke, Digi-Key's Jana Hodgson and Kari Jesme, and Electronic Systems' President Gary Larson.

BEST IN ALL CATEGORIES

(Total overall value, quality, and service)
Digi-Key Corporation

CATEGORY

Custom Manufacturer
Printed Circuit Boards
Electronic Distributors
MRO/Consumables/Equipment

BEST IN CLASS

Minntronix
Active Sales Associates
Arrow
Stanley Supply & Services



We're proud of our supplier partnerships. To see photos of our 2011 winning suppliers, go to www.electroniccsi.com and click on the New/Events page.

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December 7

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FACE-TO-FACE WITH SUPPLIERS

By **Randy Bathke**, *Materials Manager*, rbathke@electroniccsi.com



As you'll read in this issue of our newsletter, we are intent on bringing our suppliers on board with our LEAN initiatives. To date, we have had great success with distributor participation in our MRP Share Program. Now we are focusing on our build-to-print suppliers. We are asking them to work with us on our Kanban program for those items we need monthly and that will not require frequent revisions.

To do that effectively, it is important to build a strong relationship with these partners, so that both Electronic Systems and the individual supplier understand the expectations we have of one another. That's why I will be heading out on the road over the next few months to visit these suppliers. These face-to-face meetings will provide me the opportunity to sit down and talk about product that could be built ahead and sent to us on an as-needed basis—reducing our storage of inventory and assisting us in getting product to our customer on time. I will also be able to tour individual supplier facilities and view their processes so that together we can design a Kanban program that meets our needs and respects their specific capabilities and requirements.

While developing a Kanban program is an important impetus for these personal visits, it is not the sole motivation. Electronic Systems understands that the best supplier/EMS relationship is one where we can pat each other on the back for meeting or surpassing each other's expectations, as well as challenge each other when we need to make improvements. It's working together to make each other better and provide our customer with the very best value. ♦

