## **Becker Electronics**

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By Fred Noer

hatever it may be, just one piece of technology can make a tremendous difference in a business. To that the three owners of Becker Electronics Inc. can attest.

The firm in Ronkonkoma on Long Island in New York, 45 miles from New York City, grew by 33 percent in 2013 and '14 after starting to use enterprise resource planning (ERP) software on July 1, 2011. It was purchased from Global Shop Solutions in The Woodlands, Texas.

"We made an investment that was fortuitous and necessary," said David Sosnow, company president. "We gained full control of our business. It is the largest and most fundamental change we've made. The new software gave us the tools that enabled us to define our processes, get goods into production and have real-time communication with our customers."

Becker Electronics Inc. (BEI), which began in December 1996 and has grown to \$10-15 million in annual sales, is a contract manufacturer of wiring harnesses, cable assemblies and electromechanical assemblies for OEMs.According to Sosnow, the company has 125 active customers and has 400-500 items open for production at any given time.

"We have to make changes and reshuffle the deck on a daily basis," Sosnow said, adding that all production is done in house. "This is an extremely complex business to manage, and we have to manage it quickly and efficiently."

Sosnow related that business manager Frank Spagnuolo spent more than two years studying ERP software on the bases of price, quality and long-term support. "We are fully satisfied with the software," Sosnow said. "We manage our inventory and have on-time delivery, and our success with customers has gained us more business. Refinement is a priority now."

The need for the software grew from a crisis when the company was overwhelmed with orders. "We had been constantly



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late, and we were not efficient," Sosnow said. "We were hanging on by a thread. It has been difficult for us to perfect our processes and operations.

"With quality and delivery, there's no margin of error," Sosnow said. "We have a lot of competitors, and the competition is brutal. These days Mexico is our biggest one."

To withstand such competition, BEI relies on quickness. "Speed is absolutely critical," Sosnow said. "I'd say nobody is faster than us in quotes, first articles and production. Our lead times are extremely good, and often we can respond to an emergency situation the same day because we have a lot of people and resources."

The BEI profile today is dramatically different from the startup 19 years ago. Sosnow, Patrick Spagnuolo and Sharon Becker worked together at another company in the harness and cable distribution industry in the New York City area when they decided to open a components distributorship in a 2,000 square-foot rented facility in Bayshore, N.Y., southwest of Ronkonkoma.

"It soon became apparent that we should get into valueadded services," Sosnow said. "There were only the three of us, and we didn't have a lot of capital. We had a good sense of contract manufacturing and the components needed, and we were able to build relationships with suppliers."

The firm stayed in Bay Shore six years before moving to a 4,000-square-foot building in Bohemia, south of Ronkonkoma. After five years in Bohemia, the move was made to a 7,500-square-foot building in Ronkonkoma, a city of approximately 20,000 people.

The company began renting 14,000 square feet of a 32,000-square-foot building  $4\frac{1}{2}$  years ago. It has an 18-foot ceiling, so

the vertical space is being put to use. "We're going to stay here a while because there's a lot of parking, we're near an airport, and the streets are wide," Sosnow said.

Sosnow, 65, and Spagnuolo, 62, are the majority owners of the company, and the balance is owned by Becker. All three work hands-on.

Besides serving as president, Sosnow is the sales manager. Spagnuolo is the chief financial officer and treasurer and has in-depth knowledge about electronics to assist customers and employees. Becker, the company secretary, specializes in finances.

The key managers are: Brayan Cardenaz, accounts; Kathleen Fauteux, purchasing; Frank Spagnuolo, business; Lola Jadan, production; Santiago Ochoa, materials; Jesse Orellano, inspection; Lukas Sosnow, special projects; and Glenn Clifford, engineering.

They are among 100 people on the company staff – 20 in management and 80 in production. Eighty-five work first shift, 15 second. The production staff may vary by 20 percent, depending on demand, but the last year has been steady.

"It's easy to find help where we are," Sosnow said. "There's an unlimited labor pool for unskilled assembly jobs."

A starting wage of \$10 per hour was established by the company when the state minimum was \$7.75. N.Y. Gov. Andrew Cuomo has proposed a \$15 minimum wage, up from the current \$8.75.

"That would cost us hundreds of thousands of dollars," Sosnow said. "Politicians have good intent, but it costs a lot. We have to maintain low-cost labor due to the industry we're in and the complex challenge from Mexico and China. We have to mechanize wherever possible as labor costs become increasingly disproportionate.

The culture at the firm is "uniquely 100-percent transparent and completely open," Sosnow said. Regular meetings are held with staff members, and they are told about the five-year plan, which is reviewed every December.



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When BEI first started they had one wire-processing machine - they now have 20 wire-processing machines.

Every employee is reviewed annually on the basis of his or her professional goals, according to Sosnow. "That is a cornerstone of our management philosophy," he said. "I love HR, and I'm very concerned about the relationship of us as an employer to our employees and the relationship of our company to society.

"You have to be very practical and focused," Sosnow said. "We are responsible to everyone. Therefore, complete and candid communication is fundamental to our approach."

BEI makes harnesses, cables and electromechanical assemblies for assorted industries. Aerospace accounts for 10 percent of production, medical is another 10 percent, and the remaining 80 percent is for commercial and industrial such as audio and video equipment, automated lighting, boiler systems, communication, computer, home automation, machine tool, music equipment, oil, security and solar.

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Applications include a cable running from a battery pack to a doctor's headlight, internal wiring for a home entertainment center, an XY axis for a solar-panel production machine and wiring for hooking up military antennas. Harnesses and cables are 80 percent of production.



Three-quarters of BEI customers are located in New York, New Jersey and Connecticut, with the balance in other states as well as Canada and Mexico.

The other 20 percent is electromechanical assemblies that cost between \$100 and several thousand dollars each, according to Sosnow. The assemblies are in sheet metal cabinets and used in such applications as aircraft location monitoring equipment, medical components, industrial heating equipment and manufacturing of boilers.

Run sizes are from one to tens of thousands. The average run is a few hundred items. Packaging and storage are available, and some customers have kanban programs in effect.

All aspects of production except final assembly are automated as much as possible. "It's important to automate more," Sosnow said. "Our first machine was 18 years ago to cut and strip. Now we have 20 wire-processing machines." They are from Schleuniger, Amp, Molex, JST, Hollingsworth and Carpenter.

Quality standards are based on UL certification and ISO 9001:2008 registration. The first ISO certification was earned in 2008.

The main quality criterion is external rejects, and they number less than .04 percent. "The quality demands are very intense," Sosnow said. "The margin of error has shrunk in every respect and in every aspect of this business.

"You can't compete with China and Mexico on price and survive, so we have to offer something they can't," Sosnow said. "Customers are coming back from overseas because of lower volume, flexibility, reducing the cost in the air and the communication difficulty."

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The company has grown 5-15 percent every 1-2 years, Sosnow stated, but he expected 2015 to be flat. Same for 2016. He would not speculate beyond next year.

Profits have been steady in spite of "a terrible downward pressure on price from customers," he said. "There's a constant grinding down, grinding down.

"In the old days once you established a price on item you delivered at that level for a while," Sosnow said. "Now there's a constant attempt to auction every piece of business and squeeze every penny from you. There's also a lack of fidelity and long-term relationship, and there's an extraordinary urgency that everybody feels they should put on you.

"That puts a lot of pressure on profit margins," Sosnow said. "We can't raise our prices, but our suppliers do. We're caught in the middle. So, we have to do things quicker and more efficiently to maintain a reasonable, viable position in the economy."

Speed and efficiency will be supplemented by a greater emphasis on marketing. It will include going to trade shows, using Google and tapping into staff members' ideas, including those of Lukas Sosnow, the 27-year-old son of David Sosnow.

The younger Sosnow is being trained with 2-3 others to take over management of the company in 3-5 years as David Sosnow, Patrick Spagnuolo and Sharon Becker retire. He has been the senior projects manager since September 2014, and he was account manager in July 2009-August 2011.

"We very much have a plan for transition in place," David Sosnow said. "There are multiple possibilities, which includes the company being sold if the right offer comes along."

In the meantime, Sosnow will find pleasure working with people inside and outside the company and concentrating on improving systems and procedures. "I like doing my job well," he said. "It's a big job, but I enjoy the responsibility and what it teaches me. I like every bit of it.

"I'm proud that we deliver on time and with good quality," Sosnow said. "As an entity, we have survived and matured. We are a valuable contributor to our customers and to society."

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