



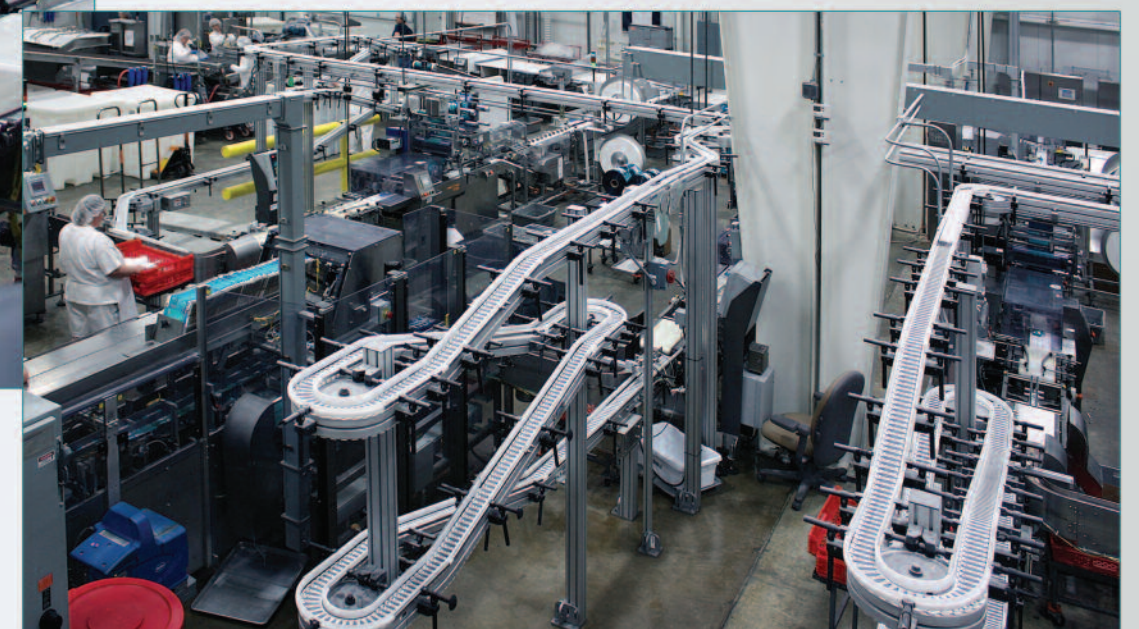
# BROADENED HORIZONS

Adding integration services can boost a manufacturer's bottom line and benefit end users. But is it a win-win proposition for everyone?

**I**n the years since its founding in 1969, Exton, Pa.-based All-Fill, Inc. had grown into one of the packaging industry's leading manufacturers of augers and other powder and liquid filling equipment. The company possessed all the ingredients for continued success—a healthy customer base, a sound reputation for economical, reliable products and service and an experienced management team.

By Jim Parsons

Manufacturers of equipment such as wrappers, cartoners and casing equipment say their experience can also help users optimize their operational efficiency and performance.







But All-Fill President Glenn Edginton sensed that it wasn't enough. Faced with an increasingly competitive marketplace, the company needed to add extra value to its products and services.

Recently, the company made several acquisitions, including Taylor Products' line of vertical/form/fill/seal equipment; redesigned some of its own products;

as an extension of their core business of building machines, according to Keith Perkey, account manager for Duluth, Ga., manufacturing consultant E2M, Inc.

The difference, he says, is the urgency that seems to underlie these moves.

"One of the most significant driving factors is the desire to do more for the customers to ensure the machine manu-

Kevin Mauger, president of NCC Automated Systems, Inc., Souderton, Pa., which began as a conveyor manufacturer and is now a full system and line integrator. "They see value in having one source handle all of the coordination, integration and responsibility. It allows them to explain their goals and let us handle the details. In turn, they can move on to other projects, or focus on other aspects of a specific project."

A similar example is Marchesini Packaging Machinery Inc., West Caldwell, N.J., which has consolidated its nearly 40 years of machine experiences into the production of complete integrated lines for the pharmaceutical industry.

Piero Tomasi, commercial director for Marchesini's parent company, says the lines "conceived and manufactured with the common factor of being integrated with each other right from the initial design phase." He adds that the company continually invests in R&D "because we believe strongly in the need to innovate relentlessly in order to remain competitive at the worldwide level."

And because more and more customers want to maximize their overall equipment effectiveness (OEE), "we can look at all aspects of efficiency improvement as we seek the best solutions," Mauger says.

Or as All-Fill's Edginton puts it: "Customers drive the direction, and the trend seems to be 'faster, better, cheaper.'"

## SO YOU WANT TO BE AN INTEGRATOR

The typical starting point for a manufacturer's venture into integration is the packaging line "neighborhood" its product occupies. For example, Perkey says, end-of-line machinery suppliers will often offer integration of other associated upstream or downstream equipment. Similarly, front-of-line equipment suppliers will offer integration around their

equipment.

But not every piece of machinery lends itself to being the centerpiece of an integration role. Among the prerequisites for a machine supplier to be considered as an integrator, Perkey says, "they generally need to be supplying a major piece of equipment on the line."

No company can afford to enter the integration market on a whim.

Among the questions Mauger says his firm had to ask—and answer—were: "Can our company handle this increased responsibility? Do we have the skill sets? What processes do we need to put into place to make this happen? What talent do we need to bring on board to make sure we are adequately staffed? And, is there market demand for these services?"

While becoming an integrator may be tempting, a company must also consider the immediate and long-term effects on its core manufacturing business.

"It's great if we have a solution that fits our target markets," Edginton says. "But, we have to be able to provide it at a price without sacrificing profit, quality, performance and reliability."

Like most everything else in life and business, timing is also critical.

Andrew Smith, sales manager for Modular Packaging Systems, Randolph, N.J., notes that his company was well aware of the need among its pharmaceutical customers to gather data to meet serialization regulations, as well as OEE and line management. A customer's request to add OEE data tracking functions to the company's electronic counters proved to be the ideal opportunity to offer something competitors did not.

"The result was Modular Packaging Systems CMS [Central Monitoring System], which we add to the line integration to link all machines to a single controller and allows for data transfer to building management systems," Smith says. "It allows management to gather real time

data to fully understand what their lines are doing."

Smith adds that the CMS met the cost criteria cited by his colleagues above because "we use our standard real time operating system. There's no need for a separate Windows-based control system to gather the OEE data and communicate machine to machine."

parts, ESS took stock of its resources, experience and skills and decided the time was right to create its own OEM equipment for cartoning and wrap-around case packing, which fit well with the company's existing line of monoblock filler/cappers, vertical case packer and robotic pallet cell.

"Our experience integrating these



A deep understanding of packaging line issues enables manufacturers to tackle specialized integration challenges such as this high-efficiency optical lab automation system developed by NCC Automation Systems.

and, perhaps most significant, added engineering and technical expertise to help customers develop and implement turnkey solutions.

In other words, All-Fill positioned itself as a product manufacturer that's also an integrator.

"It's a matter of seeing what competitors offer in ways of solutions and technology, keeping up with technical advancements and improving our products from a cost, performance standpoint," Edginton says.

Broadening product and service lines in the name of growth is by no means new, nor is All-Fill's case unique to the packaging industry. Many other equipment manufacturers now offer integration services

facturer can sell their core equipment," Perkey observes. "It has almost been a defensive move in order to maintain the direct relationship with the customer."

Indeed, Perkey cites one large machine manufacturer that decided to get into the integration business, "strictly to integrate their equipment for customers, and to assist in the market penetration of their machinery."

Others say that the manufacturers-integrators connection is a natural evolution that tracks with the increasingly integrated nature of modern packaging systems.

"Our customers have always wanted integration services, but the size and scope of the projects has grown," explains

The market for packaging integration is not a one-way street. Firms such as ESS Technologies, Inc., Blacksburg, Va., have proven that it's possible for integrators to turn their knowledge and experience into new products.

"Our market research showed a need for small-footprint automated packaging machinery in medium range production speeds, say 150 cartons per minute max for the horizontal cartoner and 30 cases per minute for the wrap around case packer," says ESS Director of Sales and Marketing Walt Langosch. "It was a trend that spanned the pharmaceutical, diagnostic and medical device markets—areas in which ESS concentrates."

As with its manufacturing counter-

types of machines gave us valuable insight into what our customers look for in this type of equipment, and how we could do it better than the competition," Langosch adds.

Over the past two months, ESS has released the new SC Series horizontal cartoner, often integrated with its designed FANUC robotic infeed system for machine loading and the WA Series wrap-around case packer. "Both products facilitate automated packaging lines within the existing factory floor space available," Langosch says.

## ASSESSING THE BALANCE SHEET

For the manufacturers interviewed for



this story, adding integration to a manufacturing repertoire appears to have paid off.

Along with being able to serve more customers in more ways, Edginton says the move “continually forces us to look at our design and manufacturing processes, and see what we can do better.”

Smith notes that Modular Packaging Systems garnered “a multi-line order and a couple of additional lines” thanks to its capability, while NCC’s customers are getting more done more quickly, and with fewer resources.

“This allows them to get projects done faster, get to market faster, produce more efficiently and decrease startup curves,” Mauger says.

Likewise, for ESS, “the ability to provide OEM equipment integrated with our FANUC robotic solutions has allowed us to offer a broader range of packaging solutions to our customers and bring the flexibility and efficiency of FANUC robots to bear on a number of applications,” Langosch says.

But is the manufacturer-as-integrator concept always a good deal for the packaging system owner?

“One-stop shopping and a single source of accountability for a machine’s performance with upstream and downstream equipment during factory acceptance testing and beyond are certainly plusses,” says Perkey. “The disadvantages arise when

manufacturers stray too far from their core expertise and are not truly equipped to function as an integrator therefore impacting the quality of the system.”

In addition, the manufacturer may not be completely independent of the upstream or downstream equipment suppliers. “Rather than providing an unbiased technical solution, the manufacturer may integrate machinery they are most familiar with,” Perkey says. “Equipment supplier integration can also result in ‘islands of automation’ versus true integration where the machines are working together.”

One way to guarantee a more well-rounded approach to integration is to have the manufacturer collaborate with a system integrator, an approach Perkey says his firm regularly uses for sub-systems. But as with every other aspect of packaging machinery, “the key is to be careful you are selecting an equipment supplier with the right capabilities and there is a good fit,” he says.

What should other packaging manufacturers consider in weighing the merits of providing at least some level of integration or related services? Obviously, the aforementioned examples illustrate much of the soul-searching other companies have done.

But because every case is different, a manufacturer should first see exactly

what it is that customers want, and what the often cited but sometimes difficult to define attribute of “value” means to them.

“In the end, integration is a customer service business,” advises Smith. “We have built in flexibility to our controls with this in mind. That allows us to enable or disable certain capabilities to a system with minimal new engineering on a project, and that allows us to be very competitive in pricing.”

Tomasi adds that his company sees its product as not just a machine or a line, but as “a comprehensive service that we guarantee our customers, which translates into global quality and an all-round technical assistance, spare parts and advisory service.”

In other words, an aspiring manufacturer-integrator needs the same balance of leadership, technical acumen, responsiveness and flexibility that it seeks to provide to current and future customers.

If those qualities aren’t there, and acquiring those skills and resources are too costly either to acquire or meld into the existing company culture, a manufacturer’s best bet may well be to focus solely on their core business of making good, quality products.

“This type of work is not for everybody,” says Mauger. **PMT**

**Jim Parsons** has written about business and technology issues for more than 14 years.