Tek Pak, Inc.
Made2Manage® ERP

Enterprise Business System Makes 24-hour Prototyping Possible

Build an electronic product in 24 hours—from scratch. Impossible? Not at Tek Pak in Batavia, IL, a company that's always been a few steps ahead of its competition in the electronic manufacturing industry. While everyone else is still struggling to make their system work on the manufacturing floor, accomplish 24-hour prototyping, and build a Web site, Tek Pak has already been there and done that with their Made2Manage ERP system. Today, the company is looking toward the future in e-commerce—and Made2Manage software is helping them get there.

Tek Pak manufactures packaging for the electronic industry, including conductive plastic carrier tape, trays, and reels, and it performs rapid prototyping services for its customers. Its major customers are electronic component manufacturers, primarily in the telecommunications business. Tek Pak is in a highly competitive business, but it has always stayed far ahead of its competition.

"We've always managed to outdistance our competition by an enormous margin," says Scott Carter, PhD, secretary/treasurer of Tek Pak. "Five or six years ago, our competition would take three to four weeks to generate a prototype, and we were determined to beat this. We started promoting a three-day lead time. We were way ahead of the curve for quite a while, until our competition started to catch on. That's when we decided to really step it up and implement our 24-hour prototyping service. To our knowledge, we're still a couple of days faster than everybody else."

The Made2Manage Enterprise Business System is vital to the success of the 24-hour prototyping service, says Carter. "The Made2Manage system lets us take detailed information—including CAD data—from customers, process it, and execute the sales orders quickly and efficiently."

Much of the needed design information is in the original quote, so Tek Pak starts interacting with its customers during the quotation process. "Once our customer service person gets initial quote information, one of our engineers can generate a new design in an hour or so," he explains. "We get the specifications of what the customer wants, do the engineering work, and figure out how to fabricate it. Then, we'll generate a quote that will include a CAD drawing and send it back for the customer's approval."

If the customer approves, then Tek Pak gets to work again. "The instant we get approval, all we have to do is push a button on the Made2Manage Enterprise Business System to turn it into a sales order," he continues. "We can be working on a job order instantly, because all the information is there. Our 24-hour prototyping service includes building a full production tool and then running sample product in plastic. So this is a two-step process, and things have to happen very quickly if we are going to ship prototypes in 24 hours."

Improving Information Flow

The total integration of information in Tek Pak's manufacturing process has helped them nail down a large amount of rapid prototyping business. With lead times of only 24 hours, they can't afford to let information flow become a bottleneck in their manufacturing process.

Before installing the Made2Manage business system, Tek Pak operated with islands of information. "We had a homegrown database that was straining under the stress of rapid growth, and standalone financial software that was underpowered for our needs," says Carter. "Quoting had its own island, and CAD files were accessible to only a few people. We didn't track production job costs, scheduling was done by hand, and we couldn't get information on the status of sales orders in real time. We were reaching the point where we would have to increase the administrative staff significantly to keep up with the demand for information."

This prospect led Tek Pak in 1997 to install the Made2Manage Enterprise Business System. They used the standard implementation package and conducted in-house training for employees before going live.

"The implementation was met with a certain amount of hesitation from some of our employees," recalls Carter. "But then everyone began to realize that doing the things necessary to make the Made2Manage system run was making Tek Pak even more responsive to our customers."

The most important applications brought online included the AutoCAD interface, bar coding, Internet, payroll, quality management, scheduling, and e-business. "Before the Made2Manage system, we used five separate systems to take an inquiry from a quote to a finished product that was shipped and billed to the customer," says Carter. "Now, all of this information is contained in the Made2Manage database, where everyone has access to it."

Tek Pak is also using the Made2Manage system to integrate the operations of its plants in Illinois and Sweden. They do most of the administrative and accounting work for the Swedish plant in Illinois, thus reducing overhead in Sweden.

Return on Investment

Benefits are numerous since the installation of the Made2Manage Enterprise Business System. For the first time, Tek Pak can maintain accurate job costs and monitor activities in sales, production, and finance. Better tracking has allowed them to reduce inventory levels by 30 percent, eliminate product shortages, improve on-time deliveries by 30 percent, and make better use of the plant capacity.

Because accurate data makes cost analysis much easier, Tek Pak has established more profitable product pricing and can make more accurate decisions. "We now have the data on hand to make operational decisions," says Carter. "For example, detailed shipping analysis reports give us an up-to-the-minute profit estimate for the month. We can now react early enough to meet certain sales and profit goals for the month. We also have clearer understanding of our most and least profitable products."

It is difficult for Tek Pak to predict how the future would have unfolded without the Made2Manage system. However, comparing staffing levels is informative. In 1997, before the Made2Manage Enterprise Business System, they operated with one less customer service engineer, one less shipping clerk, and one less accounting person than they have today; but Tek Pak expects to sell three times as much product in 2000 as it did in 1997. Carter says that it would need at least four more employees with the old system. From this point of view, the Made2Manage system paid for itself in six months.

The Future

"Our foreign business is now about 30 percent of our sales, and most of those customers found us via the Internet," he says. "We have one customer in Korea, and we've never even spoken to them by phone. We communicate by e-mail, and they pay in advance. The Internet is just astounding!"

With the help of the Made2Manage Enterprise Business System, Tek Pak is still staying two steps ahead of its competition.