



GE Fanuc Automation

Quality Solutions

SUCCESS STORY

Nutraceutical Contract Manufacturer Achieves Zero Defects with GE Fanuc Quality Solution

Quality managers at Delavau, a nutraceutical contract manufacturing facility in Philadelphia, PA, don't measure rejections in their compression and coatings processes anymore. Thanks to a successful implementation of a quality system from GE Fanuc, they don't *have* rejects. With the new solution, Delavau reduced the number of products that failed to meet specifications to zero.

Since installing the solution, Delavau has moved from measuring rejections—a trailing indicator that reflects a failure in quality—to measuring nonconformance to processes. This leading indicator method allows operators and management to identify an opportunity to fix any problems that occur before producing nutraceuticals that aren't up to spec. The change from measuring “what went wrong” to analyzing processes has increased production, improved quality, and boosted profits at the nutraceutical plant.

Weighing in on quality issues

Each day, Delavau processes up to 15 batches of nutraceuticals. Starting with bags and boxes of raw materials, technicians mix up two 900-kilogram lots of a granular mixture for each batch. Depending on the size and shape of the final product, each batch will yield 1.5 to 2 million tablets or capsules, each of which must be exactly the same as every other one in the batch.

Statistical process control formalizes the analysis of production data, fulfilling the old saying that you can't improve what you don't measure. By measuring everything from tablet size and shape to hardness, weight, color, and all the process characteristics in between, variations in the product are detected early. The new quality software system tracks these measurements, delivering real-time, graphical representations of the data so that operators can predict and control their processes to deliver optimal performance.

In the compression rooms, where the granular formulations are made into tablets, operators take frequent samples to test

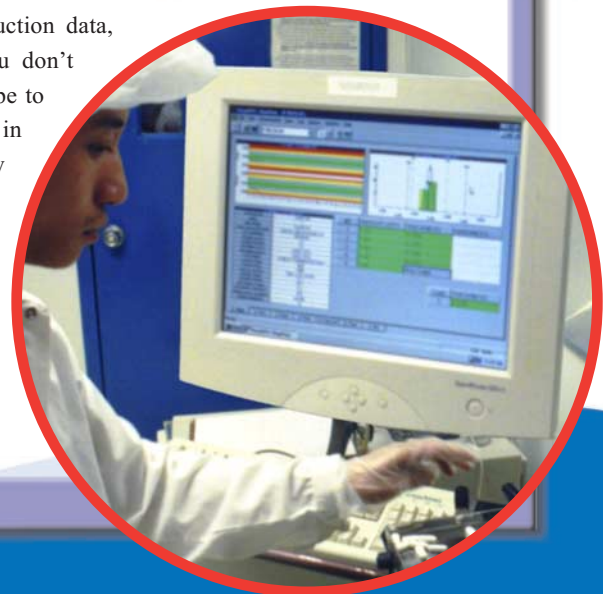
CUSTOMER CORNER

“Getting accurate, up-to-date information directly from the equipment on the plant floor lets me make better decisions. With the GE Fanuc system, I can analyze the data so that we can make better products for our customers.”

Don Prosser
Vice President of Operations
Delavau

Results

- Increased production
- Improved quality
- Higher profits
- Digitized documentation to comply with regulations
- Automated tracking and trending



application brief

SUCCESS STORY

for conformity to specifications. Each tablet in the sample is weighed, measured, and tested for hardness. Operators have only a few minutes to perform the tests. Their sample comes from the tablet stream before conveyors transport the tablets into the giant bins that are used to carry the tablets from the compression room to the finishing areas. If, in the time it takes for a tablet to travel 30 feet from the sample area to the bin, it is determined that a sample doesn't conform, the compression equipment shuts down, ensuring that the bin contains only tablets that meet requirements.

"Because the system is so easy to understand and use, it has given a real boost to our operators' self-esteem," says Don Prosser, Delavau's Vice President of Operations. "When they're comfortable with the equipment, it allows them to focus on their jobs without having to worry about figuring out the equipment."

No paper required

Before implementing the GE Fanuc system, all batch data was recorded by hand and stored on paper. Government regulations require that records be kept for each batch for one year beyond the product's expiration date, so the mass-data storage room was jammed with paper records. Individual records, if not correctly categorized and filed, were hard to find, and trying to decipher hand-written records more than a year after they were written was often difficult. "In addition, trending and tracking was nearly impossible," Prosser says, "because of the delays inherent in data entry of thousands upon thousands of data points from hard-copy forms into spreadsheets."

"Now that we have computerized the data collection, we get more data, it's more accurate, we get it faster, and we can do more with it," Prosser says. Delavau currently uses the GE Fanuc system only for data collection, analysis, and storage, but the company plans to integrate

the statistical package with their control and manufacturing equipment systems within the next two years.

"Statistical process control is most effective when it's used end-to-end," Delgado says. "As we get more proficient, we'll migrate the system throughout our manufacturing process and ultimately out to both ends of our facility. Our suppliers will contribute their information to our data stream, and we'll be able to supply detailed information to our customers."

Prosser says the computerization has already made his office paperless: he pulls up the previous day's production reports on his computer during each morning's planning meeting and shares the results with his staff via e-mail over the company's Ethernet LAN.

"I don't have filing cabinets anymore," Prosser says. "I don't need them. Getting accurate, up-to-date information directly from the equipment on the plant floor lets me make better decisions. The GE Fanuc system lets me dissect and analyze the data so that we can make better products for our customers."



ADDITIONAL RESOURCES

www.gefanuc.com



GE Fanuc Automation

GE Fanuc Automation Information Centers

USA and Canada 1-800-648-2001

Europe and Middle East (352) 727979-1

Asia Pacific 65-566-4918

Latin America (610) 437-7932

Mexico 1-800-989-1244