



Nutra Installs VeriSym[®] SE to Achieve GNC's High Quality Standards

GNC, the largest specialty retailer of nutritional supplements in the world, is respected for its focus on quality. They rely on their subsidiary, Nutra Manufacturing, to apply their “quality first” principle to manufacturing. Over the years, Nutra has turned to Symetix® for high performance optical inspection systems that verify product quality. This year, Nutra installed several of Symetix’s new VeriSym® SE systems on their continuous drying lines for softgels. VeriSym SE is an in-line product verification system that ensures the highest quality product is being produced while increasing throughput and easing operations.

“VeriSym SE is the right size and capacity for our encapsulation lines, and it’s cost appropriate,” said Don Deegan, Senior Director Softgel Operations at Nutra. “This little vision system achieves 100 percent in-line inspection of softgels to assure product quality. It’s enabled us to replace a batch process with a continuous process, which reduces product handling and increases uptime. We’ve wanted this in-line inspection system for years.”

Designed to verify softgels continuously, in-line following a single encapsulator or continuous softgel drying line or off-line in batch mode, the VeriSym SE inspects up to 200,000 softgels or tablets per hour within its compact footprint. Like the full-size VeriSym that inspects up to 1,000,000 softgels or tablets per hour, the small VeriSym SE recognizes each object’s color, width, length and shape, and automatically removes product or items that do not meet physical appearance specifications including those with defects such as spots, color variation, air bubbles or misshapen softgels.



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Nutra, the first in the world to use the new VeriSym SE, installed two systems on a trial basis and, based on their experiences with those, purchased several more.

Prior to installing the VeriSym SE systems, Nutra had Symetix's Impulse®/P size graders in-line after the continuous dryers to remove twins, clusters, empties and over- and under-diameter softgels. Nutra then batched the softgels and took them to the finishing room for inspection by one of their two high-volume inspection systems, the full-size VeriSym and the older Optyx® SG, which was the first successful optical inspection system for softgels. Nutra manually inspected softgels when their volume exceeded the combined capacity of the two full-size inspection systems.

"Our main motivation in looking for this small, in-line vision inspection system was to ensure the consistency of our finished product. Whenever you replace a batch process with a continuous process, you take away opportunities to introduce variables into the product. With VeriSym SE, we've improved product consistency, product segregation and control of the lots," said Chris Gossett, Manager of Softgel Engineering and Maintenance. "The fact that we gained efficiency because we don't have to handle the product twice is an added bonus."

With VeriSym SE in-line after the continuous dryers on discreet encapsulation lines, Nutra has repurposed its Impulse/P size graders for use elsewhere. They have eliminated the need to batch softgels for off-line inspection in the finishing room and eliminated the need to manually inspect softgels.

"Before we submit a capital request, we calculate the equipment's expected return on investment," said Jeff Tweedy, Director of Production for Softgels. "With VeriSym SE, that ROI projection created a one year payback. We based these calculations on very conservative estimates for three factors. We considered the gain in capacity, the elimination of manual inspection and the reduction in changeover time."



“Changing over the VeriSym SE to handle the next product run is quick and easy. It takes about 10 minutes, and that includes clearing and cleaning the system as well as setting it up for the next product,” explained Tweedy. Deegan added, “Having this vision system in-line is a failsafe that mitigates the risk of any carry over between runs. There is still segregation during changeover, but the downtime between runs is reduced. We’ve increased our uptime on these lines by more than 10 percent as a result of the VeriSym SE systems.”

Symetix designed VeriSym SE for both nutraceutical and regulated pharmaceutical manufacturers. The system is FDA 21 CFR part 11 compliant with secure and encrypted logs, secure passcode management, parameter histograms and guided changeover. It meets FDA requirements and complies with GAMP guidelines.

“We put the VeriSym SE through a formal qualification process, beyond what the nutraceutical industry requires. We have successfully performed IQ, OQ and PQ on the systems,” said Tweedy. “As part of our normal quality oversight system, we still submit AQL samples from these lines. Since implementation of the VeriSym SE, we have not had a product put on internal hold. That is one of several measures of success.”

