Cartoner Helps Contract Packager Satisfy Customers

Servo-driven unit reaches speeds of up to 400 cartons/min in a small footprint, helping QPSI put its supply chain discipline to work.

uality Packaging Specialists International is a leader in contract packaging and supply chain solutions. With 36 years of experience satisfying the world's best pharmaceutical and healthcare companies, they know how to get the most out of each step in the chain.

That includes their cartoners, where high speeds, repeatable performance and ease-of-use produce high-quality packages and maximize efficiencies. QPSI recently installed two StealthTM horizontal cartoners from MGS Machine at their Macungie, PA facility.

"Before we selected MGS' cartoners, we considered multiple

suppliers. We compared reliability, changeover time, speed to market, ease of doing business, transparency and price," says William Hamilton Jr., Senior Vice President of Operations at QPSI. "We chose MGS because they gave us what we were looking for and more. From the beginning, they've worked to establish a long-term relationship with us rather than simply looking for a sale. They act like a partner instead of a vendor."

The Stealth is a high-speed servo-driven continuous-motion horizontal cartoner that achieves speeds of up to 400 cartons/min in a small footprint. It can be equipped with standard or custom-designed



infeed modules to handle virtually any primary package including bottles, blister cards, tubes, vials, pouches and more. It accommodates carton sizes from 0.75 x 0.38 x 1.88 in. to 4 x 3 x 8 in. and produces a variety of cartons including all types of tuck and hot melt styles as well as special closures.

"The servo motors on the Stealth cartoner contribute to the machine's reliability. These cartoners offer accurate and repeatable performance that requires less operator intervention," notes Hamilton. "The consistency of these cartoners means our operators can be doing something else."

The Stealth's servo technology, combined with direct drives, provides exceptional accuracy at high speeds and reduces maintenance. MGS' vacuum carton pre-break and rotary carton setup mechanism ensure every carton is set up properly every time. Quick-change drop-in style carton magazine masks, plows and guides eliminate mechanical adjustments. Together with phase-able flights, quickrelease handles and mounted scales, these features reduce changeover time to less than 30 min. The product-specific tooling and absence of mechanical adjustments also enable the Stealth to operate consistently from shift to shift, producing high-quality packages and maximizing production efficiencies.

Packaging equipment expertise

QPSI has considerable experience with a variety of packaging equipment. They operate six production facilities in the U.S., and their Macungie facility alone has 24 packaging lines. Two of these lines use a Stealth cartoner. One is in Room #Q-2 where bottles of over-the-counter (OTC) and regulated solid-dose pharmaceuticals are filled, sealed and labeled before being packed, one, two or three bottles to each carton. The other Stealth cartoner is in Room #Q-9 where blister units of OTC and regulated pharmaceuticals are produced and packed, one or two collated units to each carton.

If somebody tries to run the wrong carton, the machine stops. This feature helps perfect the operation.

> WILLIAM HAMILTON JR., SENIOR VICE PRESIDENT OF OPERATIONS AT QPSI.

"Our Stealth cartoners are doing more than cartoning. MGS equipped each machine with an inspection system that scans the preprinted barcode or 2D code on the carton to confirm the product is going into the right carton. Both Stealth cartoners have embossing units that add the lot and expiration date to each carton. The Q-2 cartoner is also inserting literature," says Hamilton. "Because MGS supplied all these options, the systems are seamless."



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The image-based barcode inspection system at QPSI can read both 2-D and 128 barcodes. "It's easy to set the system up to recognize a new barcode via the cartoner's color touchscreen. Once we've established a new barcode for the first time, it becomes part of the product's recipe that's saved in the cartoner's memory," explains Hamilton. "If somebody tries to run the wrong carton, the machine stops. This feature helps perfect the operation.

"It's nice that these ma-

chines have a no-product, no-carton capability built into them. If it doesn't see product, it doesn't feed a carton, and if it doesn't see a carton, it doesn't feed product. This minimizes waste," he says. "We also have an open-flap detection system, which helps ensure product quality."

In addition to high-speed, reliable performance and fast changeovers, MGS designed the Stealth cartoner for ease of use and low maintenance. The high-capacity 72-in.-long powered carton magazine is ergonomically positioned at a comfortable height for loading, and it accommodates loading from either side of the machine. The fall-through containment shelf, internal lighting and guard design enable clear sight lines and easy machine access.

"Accessibility is one stand-out feature on the Stealth cartoner. Everything is right in front of you, so it's very easy to make changes and get to parts for maintenance purposes. This easy access also facilitates sanitation. Everything is readily accessible during cleaning, and there aren't many hot spots that can trap product," says Hamilton. "The operator controls the machine through the touchscreen user interface, so our mechanics can go work on other machines."

At QPSI, production efficiency isn't just about streamlining processes—it's the best way to save their customers' money. "On the cartoners, we measure success by analyzing reliability and uptime, equipment versatility, the amount of scrap that's created and machine safety. The supplier adds value by providing quick and informative customer service," says Hamilton. "We're very happy with our Stealth cartoners. We consider MGS to be a partner. We're on a journey with them." —Jim Butschli •+ HCP

