

Case Study

Packaging Medical Products

PBM Mail Order Fulfillment



PBM mail order pharmaceutical supplier increased fulfillment productivity from 4,000 packages in a 17 hour workday to same volume produced in just 4.67 hours.



In the United States, a pharmacy benefit manager (PBM) is a third-party administrator of prescription drug programs for commercial health plans, self insured employer plans, Medicare Part D plans, the Federal Employees Health Benefits Program, and state government employee plans.

THE PROBLEM:

Besides the inherent inefficiency of hand loading, the process utilized flat bags, which required employees to try to push out as much air as possible once the bag was loaded. The loading rate was just 480 bags per hour per employee. Standard box pricing made it prohibited to continue to use manual labor and corrugated to fulfill orders.

Stringent standards for patient confidentiality also had to be met to comply with the laboratory environments in which would ultimately be used. The customer's operation suffered from low productivity, capacity issues and customer complaints. They had tried everything from craft bags to peel & stick bags and even wicketed baggers – a total of four different systems before asking Sharp Packaging for a better solution.

The L-bar sealers which this customer formerly used required operators to hand-load the bag's contents and then wait to seal the bag. A cold-seal system turned out to be expensive, slow to set up, and extremely difficult to keep running; what's more, customers complained about unpleasant odors the sealant. Peel & stick bags offered disappointing productivity at just 100 bags/hour.



The Sharp MAX™ Proline Bagger with a custom dual-stage funnel allows this manufacturer to count / accumulate product and then seal the bag in one continuous process. As the product stream continues uninterrupted, the entire line keeps running even as the bag is sealed.



THE SOLUTION:

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We provided the other half of the solution—New Film Technology—with our Sharp Coextruded E-Z Bags™. The “New Film” material is specifically designed for the medical industry. Our all-in-one system evacuates air from the bag and allows the product to be shipped right in the bag decreasing the cost on the material by using less plastic. When the bag reaches the point of end use, its contents can be accessed by a tear, similar to a cut made by a knife. This ease of opening, with little perforations required, reduces the chance of releasing package particles into the laboratory environment.

Our unique, proprietary bag can be fan folded in a box or dispensed from a roll. Available gauges include 2.25, 2.5 and 3.0 mil. Thermal imprinting of bar-codes and variable information directly on the bag eliminates the cost of paper labels. Typically, customers can save between \$10 and \$15 per thousand in labels by printing right on the bag.



“Our all-in-one system evacuates air from the bag and allows the product to be shipped without manual manipulation of the bag”

Video link: https://www.youtube.com/watch?v=dWG9DI1UJ_w

Video link: <https://www.mckesson.com/pharmacy-mangement/automation/central-fill-facilities/>

OUTCOME:

Production for a single employee went from 120 bags per hour previously to 540 bags per hour with the Sharp MAX™ Proline. This increase in productivity allowed the manufacturer to reallocation of staff in this area from 14 to 4 employees. Formerly, the company produced 4,000 packages in a 17-hour workday. It now produces the same number in 4.67 hours.

ABOUT PBM Order Fulfillment

Orders are initiated as products are conveyed to the packaging area and scanned, beginning the fulfillment and shipping process. A label printer is positioned directly in front of the bags as they are indexed into loading position. Each label is automatically printed directly onto the bag in the sequence of the orders that are being conveyed to the pharmacy packaging station.

Our exclusive Print Systems with integrators features primary and back-up Lit Pack printers that are positioned directly over the bag to be loaded. Unlike a print queue, this printing system continuously prints and indexes the Lit Packs as the orders are conveyed to the packaging station. As the verified, labeled bag is moved into loading position, the Sharp System automatically verifies, can fold and inserts the correct Lit Pack for each unique order supplied through OEM integrators.

Single or multiple piece pharmacy orders are then automatically verified and dropped into the bag, which is conveyed through a band sealer and away to a shipping area or tote.

A multi-layer verification system ensures order accuracy. The shipping label is verified at the point an order is inducted, prior to paperwork being loaded, and prior to the medications being loaded. A final scan of the shipping label closes out the order. Literature Pack inserts are scanned both as they are printed and prior to loading into the bag. Medications are verified as they are conveyed to the packaging station, and again before they are loaded into the bag. Labels, paperwork and medications all feature a fail-safe reject or reset mode that ensures only complete and accurate orders leave the packaging area.

The Sharp System features field-proven components integrated into a complete pharmaceutical fulfillment system. An integrators command center monitors and records each step of the packing process, and provides comprehensive productivity reports.

User Benefits:

- Automates the pharmaceutical fulfillment process to increase productivity, reduce costs, and avert human error
- Multi-layer verification processes ensure the accuracy of the orders being shipped
- Continuous Print System prevents paperwork queuing to maintain optimum packaging speed
- Fail-safe reject modes divert short or mismatched orders inline, so system can continue to process good orders
- Fully customizable system features a small footprint that integrates into any existing mail order pharmacy operation

