Roberts PolyPro Introduces a New e-Pedigree Solution For Pharmaceutical Packaging

This New Modular System Can Also Be Used for Braille Embossing and for High Speed Inspection Applications

By Craig Jasper, Director of Sales, Roberts PolyPro

Based on more than 30 years experience in package finishing, Roberts PolyPro has developed a high-performance modular system for e-pedigree printing and labeling, Braille embossing, and high speed inspection and verification. This new system provides a flexible all-in-one solution for emerging traceability and labeling trends in pharmaceutical packaging.

“Finishing operations for pharmaceutical packaging face an unprecedented number of technology, cost, and quality challenges from upcoming anti-counterfeiting — e-pedigree — mandates,” said Allan Sutherland, president. “Roberts PolyPro has developed a unique modular solution that overcomes many of the problems early adopters have had with implementation of e-pedigree labeling and verification. Our solution not only encompasses e-pedigree, but also Braille embossing and flat-pack inspection.”

Early attempts at e-pedigree printing and labeling failed to achieve anticipated results

Since e-pedigree labeling and verification has to be accomplished during the finishing operation, converters have tried to add print heads, labelers, embossers, and vision inspection systems to folder gluers. The problem has

been that folder gluers simply are not a suitable platform for traceability and other labeling applications.

Belts cover portions of the carton as the packaging is conveyed along the folder gluer, which means that there is limited real estate on the carton to print or place an e-pedigree identifier. Converters have said that the lack of available surface area presents an almost insurmountable hurdle to a successful application of any value added feature within a traditional folder gluer. Furthermore, there may be variation in the position of the carton along its X/Y axis. This makes precision printing or labeling difficult. In some situations, ink from a print head may not have time to dry and smearing results, which dramatically increases waste.

Another problem with the folder gluer is the vibration of the carton as it is conveyed along the machine — an effect called fluttering. This unpredictable movement along the Z axis leads to print quality issues because there is variation in the distance between the print head and the carton. The movement of the carton causes lower quality images.

Rather than trying to kludge a folder gluer solution, Roberts PolyPro developed a solution from the ground up for e-pedigree, Braille embossing, and inspection and verification. The key to creating a viable solution was to replace the finishing operation's carton feeder with a Roberts PolyPro pharma feeding system called the *Rx* for cartons and flat blister packs.

The *Rx* Pharma Feeding System

Roberts PolyPro's new *Rx* modular solution integrates with a folder gluer at the in-feed. The solution includes a state-of-the-art carton or flat-pack feeder/conveyor with several standard and customizable widths and lengths.

Longer conveyors provide the needed space to mount print heads, Braille embossers, and vision inspection and verification systems. Length also provides the room for any additional custom tooling needed for the varied applications and can include, for example, pre-folding, an ejection capability for misprints and mislabels, and carton stacking. This extra real estate facilitates high speed since time is provided for ink drying. This decreases the potential for smearing. The base feeder is 4 feet (1.2 meters) in length. With various length extension kits or vacuum conveyor modules added, the Pharma Feeding system ranges from as little as 4 feet up to 20 feet (6 meters) long.

"The modularity of the system means that converters and in-house finishing operations can add capabilities as market conditions change," said Larry Mattson, director of engineering. "For example, Braille embossing may someday be mandated in the U.S. on pharmaceutical packaging. When it is, or if a package is being shipped to Europe, a Braille embosser can easily be integrated within the feeder conveyor."

The Roberts PolyPro solution goes beyond simply adding different lengths of conveyor. This new system is constructed in such a way that the entire front and/or back surface of the carton and flat pack is available for printing, laser etching, Braille embossing, labeling, and inspection and verification. This gives

the finishing operation the widest possible flexibility in locating the pharma carton identifier.

This unique Roberts PolyPro conveyor also ensures there is virtually no flutter or variation in X/Y axis placement. When integrating to a high speed print head, this lack of movement increases printing and inspection accuracy and decreases waste. Print accuracy is beyond anything in the industry now and runs at speeds around 1,000 feet (300 meters) per minute. These systems allow for automatically inspecting, grading, and printing verification and labeling of every carton and flat pack with 100 percent accuracy.

Roberts PolyPro conveyor technology protects against carton edge and surface scuff damage. This feeding system also offers a feature called perfect counting. If a carton is rejected by the inspection system, another will be automatically fed onto the conveyor. The result is a “perfect count,” which eliminates the problem of miscounted stacks.

The new Pharma Feeding system offers the capability to set up a new run of cartons and flat packs in a matter of minutes, an attractive advantage for converters with multiple short runs. For those converters with high volume operations, these feeding systems can run up to 2 million cartons or flat packs a day. The Roberts PolyPro Pharma Feeding system ranges in price from $82,000 to $200,000 on average, depending on the application.

Partnerships with leading suppliers

Because there are so many different major components for e-pedigree, including inspection, printing, and labeling systems, no one company can provide

the total optimum solution. Roberts PolyPro has formed, and continues to expand, relationships with the leading print head, labeling, and vision system suppliers. For instance, Roberts PolyPro, LVS (Label Vision Systems) and Videojet are collaborating on a high speed serialized printing scanning system that will be offered this fall.

“Roberts PolyPro earned a reputation during the past 30 years for innovative high-performance finishing solutions in the food, beverage, and consumer products markets,” said PolyPro President Sutherland. “Today we have a reliable system for finishing pharmaceutical packaging. I encourage every pharmaceutical packaging manager to contact us.”

The modular Roberts Polypro Pharma Feeding system is now available. For more information call Craig Jasper at 704 944 5341 or email him at craig@robertspolypro.com. More information on Roberts PolyPro can be found at www.robertspolypro.com. Roberts PolyPro is a division of Pro Mach.

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