

Shrink-wrapping system gets a star

When Clean Control Corp., Macon, GA, a manufacturer and marketer of cleaning products for household, institutional and commercial use, decided to market its OdoBan disinfectant to wholesale and retail markets, it decided to do so using a promotional package consisting of a quart spray bottle and a 1-gal refill bottle.

To accommodate the packaging, Polypack, Inc., Pinellas Park, FL, designed a starwheel collating system and integrated it into its CFH total closure shrink wrap machine. The starwheel, a stainless-steel rotor, collates product by positioning one object in front of the other.

Individual gallon bottles arrive automatically, standing upright in single file, on an in-line conveyor. A mechanism stages the gallons, one at a time, onto a 10-ft lug conveyor, where operators manually orient the handles into trailing position. As the bottles travel along the line at speeds of up to 50 units/min, a perpendicular conveyor moves the quart spray bottles into a secondary staging system. The starwheel then rotates them 33.3 deg and places them in front of the gallon bottles. The mated bottles then pass through a tapered forming head, which conforms to the bottles, reducing the amount of film needed to overwrap the multipack. The wrapped pack then travels to a shrink tunnel.

The system is also used for shrink-wrapping Clean Control's floor kit cartons. Changeover for this application requires the operator to raise the starwheel shaft, remove every other lug, and rotate the seal bar. As the cartons travel down the lug conveyor at speeds of up to 45 units/min, a static drag seal unit seals the bottom film overlap. A vacuum belt then pulls the cartons and film past a continuous-motion horizontal heat-seal bar that cuts and seals the film. The kits then travel through a dual-fan heat tunnel for shrinking.



More information is available:
Polypack, Inc., 727/578-5000.