Sandra Eagle

Going With The Flopak

With a motto of less waste, less weight and, more importantly, less cost, the small but closely knit group of guys at L3 Container Corporation in Mississauga, Ont., are ready to take on the world. Vertical form fill and seal systems are nothing new, but the Flopak machine developed by L3 is the first to feature a stand up beverage pouch with only one seam. It ships like a pillow-pak but it stands like a bottle. The extremely strong pouch can withstand the weight of a man without bursting.

Stefan Tobolka, vice-president of research and development, says reducing wasteful packaging was one of the early drivers in creating the Flopak prototype. "We wanted to get rid of the external straw first and reduce the amount of packaging that went into individual beverage serving packaging." It took about two and a half years from the drawing board stages before the machinery was ready for testing. David Kochan, vice-president, manufacturing, was the project leader, but "it was very much a team effort bringing this to reality," says Tobolka.

The Flopak system's twin head design is capable of producing up to 120 single-serve stand-up beverage pouches per minute – complete with a built in straw. That's about 115,000 packages for a typical day of two eight-hour shifts. However, the footprint of the Flopak is very small, about 5x10 feet. It only takes one person to operate the machine, a roll change-over takes about five minutes and only three metres of material is wasted in the set up process. The proprietary sealing technology of the unit make the edges of the package, so there is absolutely no packaging waste in the process, other than that needed for roll changeover. Dylis Innovative Systems of Mississauga, Ont., will manufacture the units. Projections from L3 hope to realize the sale of 500 units over the next five years. The machine has remote access capability from anywhere around the world.

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The cost savings for packaging material with this unit is considerable. Two pallets of Flopak film produces the equivalent of 240,000 PET bottles. L3 Container Corporation has reduced the package weight by as much as 80 per cent compared to conventional alternatives. The combination polyethylene/PET film can be purchased from numerous supply sources and can accommodate up to 10 colour graphics for packaging design capabilities.

As for the package contents, the Flopak system has worked well with spring water, but in reality can work with anything that flows, as long as it isn't carbonated. The Flopak system is now at the Guelph Food Technology Centre (GFTC) for a six-week research stint before it gets shipped to L3's first customer in California. The GFTC will run the unit through its paces, testing different beverages like milk or juice and perform shelf life capability studies. Consumers will appreciate that the handy 250 mL pouches can be thrown in the freezer and the top of the package can be ripped off to provide a handy built in straw.

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