Processed Meats
Their 'chemistry'
in SA

Tray-Ready Meat
Towards centralised
and MAP packing

Liquid Fructose
Production begins
in SA

Brand Extensions
The do's and don'ts

Biodegradable Bread Bags
Recycling debate rages

The news before it's used
World flavors of the US blends and packages a variety of seasonings, powdered coffee and drink mixes, requiring process equipment that prevents segregation of blended products and that can be sanitised quickly and thoroughly between changeovers, preventing cross-contamination.

Packaging manager Russ Perry says this is why the company runs eight flexible screw conveyors produced by Flexicon Corp, which are 4.6 metres in length and 10.2 cm in diameter. The conveyors consist of a polymer tube that encloses a flexible stainless steel screw driven by an electric motor. As it rotates, the screw propels material through the tube and self-centres, providing sufficient clearance between the screw and the tube wall to eliminate product degradation. We only use the model 1450 conveyor so that spare parts can be swapped out and used across all the lines.

Three of the conveyors run lines dedicated to cappuccino mix, while the other conveyors run a variety of spice blends.

He says: "We are diligent in preventing the separation of blended products as they move from blending to packaging. This is where the gentle rolling action of the inner screw comes into play - it moves blends with no separation throughout the entire length of the conveyor."

"Workers then combine ingredients and load each batch into one of seven blenders according to batch weight. Small batches weigh up to 136 kg, medium batches up to 635 kg and large batches up to 3,628 kg. Uniform blends are discharged from the blenders into 96 sq cm rigid plastic totes that hold 726 kg of the mix. After passing quality control, workers move the totes to a holding area."

He adds: "When a production run is reached on one of the eight packaging lines, a forklift operator sets a tote atop a flexible screw conveyor 96 cm-high, 0.226 sq metres-capacity hopper, which is configured with a cradle for the tote. The operator opens the 25 cm slide gate at the bottom of the tote and the material flows into the hopper. When the hopper is full, the operator activates the flexible screw conveyor, which conveys the material at a 45° angle, at a rate of 3.96 cu metres per hour, to an elevation of 3.7 metres for discharge into the packaging machine. High and low level sensors in the packaging machine signal a controller to stop or re-start the rotation of the flexible screw when the machine calls for material."