Q 26: Which Is the Preferred Frank Package?

A 26: Frankfurters, frequently also referred to as wieners, are a mass produced processed meat item. The product differs widely in its composition. In all cases, it has a very high percentage of water content, meat, a relatively high fat content, and in some instances also cereal, spices, preservatives, and a variety of other additives. The meat may consist of one or a mixture of the following: beef, pork, and chicken. The ingredients are finely ground, masticated, and eventually emulsified. This emulsion is fed into casings. The frankfurters are thus cured and practically cooked while moving through a smokehouse. The modern smokehouse accommodates huge volume and delivers finished franks at such rapid rates as to require automatic handling of same at the pack off end.

"Peeled" frankfurters are fed automatically (see Figure 26–1) by an autoflex or similar unit onto a flatbed machine such as the Flex Vac 6–14. This equipment takes Nylon composites in roll stock form and after heating same, thermoforms a pocket into which the Auto Flex unit places frankfurters automatically. The most common configuration is one in which two layers of five franks each are placed into a pocket. The larger capacity of smokehouses and the need to pack franks at a more rapid rate has given rise to a second generation of automated machines in which a 50% increase in packaging capacity has been achieved. Frankfurters are oriented, collated, transported, and finally filled into the preformed pouch. During this process some breakage and some "skips" are normally encountered. The packer employs observers to remove broken franks and replace them with good product and to fill in product where same has been missed by the
automatic filler. A high degree of breakage is indicative of either a mechanical problem or a product deficiency. Insufficient cure or formulation errors should be considered.

It is important to move the franks rapidly into the package and offer the product vacuum protection. Contamination and concomitant microbial growth normally occurs at the surface. One must remember that in the frank the surface area per unit volume is almost eight times as large as that in a bologna chub. Thus the chance for spoilage is considerably higher.

THE PACKAGE

The most common frankfurter package consists of a thermoformed pocket in which ten frankfurters are placed. This formed material is transparent and normally consists of Nylon and a heat seal medium. Frankfurters are arranged in two rows of five each, stacked on top of one another. Occasionally, one sees larger franks with only eight to a package. One may also encounter two packages of five each, banded together.

The pocket is closed off with a “lidding” material. This material is in most instances printed. Sometimes the print is flexographic and very frequently it is gravure printing. The design is very important since it establishes the image that the packer wishes to convey to his customer. Examples