

T.G.I. Friday's stands tall with **gusseted** bag

Grant Gerke, Associate Editor

Looking to enter the warehouse snack arena, Poore Brothers, Inc. believed a splash on supermarket shelves was needed for its new T.G.I. Friday's snack line. Poore Brothers decided a 7.5-oz standup bag for the line—Cheddar and Bacon Potato Skins, Quesadillas, and Firebites snack chips—was the answer to its merchandising challenge.

Poore Brothers of Phoenix, AZ, has been in the snack food industry for 16 years. Jay and Don Poore started the

business as a kettle-chip company and expanded into the fabricated snack food area with Tato Skins, Pizzarias and now, the T.G.I. Friday's line.

With the licensing agreement from T.G.I. Friday's, Poore Brothers focused on finding its market. Glen Flook, senior vice president of operations for Poore Brothers, says, "First, we decided not to compete with Frito Lay, and that led us to ask, 'how do we compete in the snack food arena?'"

"The warehouse snack bags can create a mess on the shelf, so we decided on a

gusseted bag," he continues. We made the decision to buy a standup pouch machine before ever producing a bag of product."

Chip packaging

Poore Brothers acquired its Bluffton, IN, plant approximately a year and a half ago from Keebler Snack Foods. The 140,000-sq-ft plant came equipped with food manufacturing machinery and was ready to produce chips immediately. A large plant provided an opportunity for more output and options for Poore Brothers. Flook explains, "We liked the

Poore Brothers, Inc. is processing and packaging a new line of snack chips under the T.G.I. Friday's brand name. The company believes a new 7.5-oz standup package and a new line of snack chips will create an imposing presence on grocery store shelves.





The bright bags, top, communicate a lively chip experience from the T.G.I. Friday's products. A 16-head rotary scale, above, weighs the Cheddar and Bacon Potato Skins before they move to a continuous hf/f/s machine.



Ten funnels rotate around an oval racetrack filling the 7.5-oz bags, two at a time.

manufacturing capacity and saw an opportunity to create some unique snacks."

Poore Brothers runs two packaging lines at the Bluffton plant. The first line packages T.G.I. Friday's chips for the vending, club and mass channels. The second packaging line features a Robert's C-1500 horizontal form/fill/seal machine, used for the 7.5-oz standup pouch. The continuous-motion poucher runs 85 bpm and started running at Poore Brothers in January. Flook says, "I wanted a very efficient machine that could run at high speeds, and the Robert's machine clearly stood out."

C-1500 hf/f/s

An eight-color flexographically printed film rollstock is supplied as a 26.5-in. web. This web is pulled intermittently through the C-1500 hf/f/s machine by a servo-draw roller assisted by a powered unwind. To create the gusseted bag, the C-1500 punches two holes through the film in the gusset area to assist in sealing the gusset tails together. The machine folds the front and back portions of the film to create the gusset or "W" fold.

The Fresh-Lock zipper closure, from Presto Products, feeds down between the two layers of film, and the top and bottom flanges are heat-sealed to the metallocene film layer—the product contact layer. The zipper is then plowed open before the side and bottom heat seals are made. An "apex" sealing station then makes the top seal for the gusset—where the four layers of film from the gusset meet the two layers—to ensure a hermetic seal. The holes punched through the film in the gusset area are then sealed to give the gusset strength. The last pouch-making station is the zipper crush area, where a series of multiple heat-seal dies flatten the zipper at the side seals.

At the next stage, a photoeye looks for the eyespot registration mark on the film. The photoeye registers the film and activates the vertical cutoff knife that cuts through the film, and an individual bag is created. The bag is then transferred into the continuous-motion filling section and into dual pouch clamps that hold the pouch on both sides. Reciprocating vacuum cups then pull open the bag. The bag's top half opens, and an air-jet pushes air into the bag to open the gusset. With the bottom opened, the bag moves to the filling station, where 10 funnels travel in an oval racetrack on the machine.

Traveling chips

The T.G.I. Friday's chips are transported on Smalley Manufacturing conveyors across the 140,000-sq-ft plant to a collating area above the Robert's hf/f/s machine. Above the poucher machine, the conveyor gives way to a Heat and Control Fastback feeding system. This 30-ft-long conveyor transfers chips to a vibratory accumulating conveyor also from Heat and Control.

At the accumulator, sensors control the discharge gate that opens to a Heat and Control vibratory-out conveyor. The vibratory-out conveyor moves the chips, approximately, 15 ft to a three-tiered, 16-head Heat and Control Ishida NZ scale.

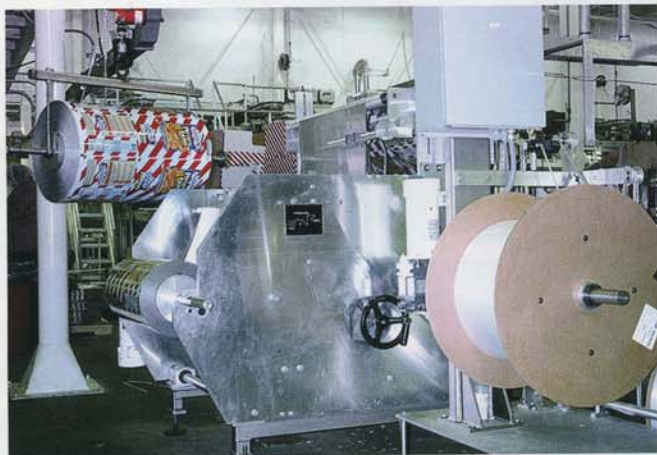
After being weighed by the scales, chips are released into oscillating timing hoppers, which then transfer the product into the 10 travelling funnels and continuously feed the chips into each pouch. A pouch-settling conveyor helps to settle the product into the pouches as they are being filled. The oscillating timing hoppers communicate between the Ishida netweigher and the Robert's hf/f/s machine. This added communication provides a safeguard for correct filling weights, and it strives to optimize uptime for the continuous-motion machine, PD is told. The Robert's f/f/s machine uses a Modicon Quantum programmable logic controller, and Emerson provides Axima 4000 servo drives.

After the bags move out of the filling area, a rotating brush cleans away any excess dust. Then, the bags move to a reciprocating top-seal and cooling station. This station travels back and forth, heat-sealing and cooling two pouches at a time. The cooling bars use recirculated, chilled water to set the seals and give the package a straight shape.

From there, a transfer belt takes the standup pouches from the dual pouch clamps to a hand-packer. Packers are able to fill 12 pouches into Smurfit-Stone corrugated cases. A Loveshaw Padlocker tapes the cases while a Cousins SM 7020 does the stretch wrapping.

Slick standup pouches

With the new continuous machine, Poore Brothers needed a film structure



Eight-color film rollstock is attached to the hf/f/s machine, while a second rollstock waits to be deployed.

that was reliable and a company that was familiar. "We had done a lot of business with Printpack prior to the standup bag. Printpack produces film for our Bob's Texas Style chip bag, and they have worked with Roberts Packaging in the past," Flook informs PD.

The film used to form the standup pouch is a five-layer structure. The film breakdown from outside: 48-ga polyester/ink/low-



Suction cups open the upper half of the pouch, while air-jets push open the gusseted bottom, above. The zipper closure feeds down between two layers of film and is sealed to a metallocene film layer, below.



density polyethylene/50-ga metallized poly-propylene/LDPE/1.5-mil PE sealant.

David Monk, senior product development engineer for Printpack, says, "Our experience with Robert's Packaging Company helped us decide on the right film structure for the standup pouch. The PET film is used because of its stiffness and resistance to stretching. This is very critical with the Robert's and other hf/f/s pouch machines."

The metallized PP provides both an oxygen and a moisture barrier. The 1.5-mil PE sheet on the inside provides thorough sealing characteristics and puncture-resistance, says Monk. It also provides

sealability for the applied zipper.

Flook says, "The PET and metallized PP films have excellent moisture and oxygen barrier features that provide a shelflife up to 180 days for the warehouse snack food market."

Packaging themes

The T.G.I. Friday's restaurant chain promotes a fun atmosphere, and Flook believes the chips and the package are an extension of this concept.

Flook adds, "The package prompts the first sale, and the product gets every sale after that. But, the first sale is the most important sale." Flook and Poore Brothers believe the standup will rise above the rest.

More information is available:

Hf/f/s machine: Robert's Packaging, Inc.,
616/962-5525