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Good Humor-Breyers Finds a Good Fit for Tamper Evidence

fter the events of Sept. 11, 2001, anthrax scares and other chemical and bio-terrorism threats, many food manufacturers have re-evaluated food security issues, especially those products that go directly to the consumer. While tamper-evident packaging is not required by law for food packages, many companies elect to use such features voluntarily. Continued concerns of terrorism are prompting more interest in packaging that assures consumers their food items have not been tampered with. Good Humor-Breyers Ice Cream, Green Bay, Wis., one of the largest manufacturers and marketers of branded packaged ice cream and novelty products in the United States, wanted to provide customers and consumers with the security of knowing their products were protected.

Good Humor-Breyers was looking to provide tamper evidence on all of its tubs and cartons of ice cream. Since Axon Corp., Raleigh, N.C., had originally supplied one tamper evident banding machine to Good Humor's Framingham, Mass. plant in July, 2000, the ice cream maker turned to them again. "Eventually, we wanted to add the value of a tamper band to our other Breyers products to further respond to this growing request," says Tim Markowicz, dir. of development & quality assurance at Good Humor-Breyers.

Good Humor considered, and in fact studied quite closely, other tamper evidence techniques and equipment, and in the end found the Axon tamper evident banding process most suitable for its requirements.

"The original installation was a success in terms of reliability and customer service from Axon," says Markowicz. In addition, since Good Humor-Breyers wanted to utilize 'Best Practice' and have similar equipment in all the facilities, Axon was called again.

Timing is crucial

Once Good Humor-Breyers concluded that it needed tamper evident banding on all of its carton lines, it was a matter of meeting aggressive implementation deadlines. This was critical because the company wanted to flood the market with the new tamper evident product, complete the turn on all inventory, and get tamper evident product on store shelves as fast as possible.



■ Axon's tamper evidence banding equipment offered Good Humor-Breyers features like exceptional band position control and energy-efficient heat tunnels.

"A key priority with the project was to make the transition as quickly as possible," says Markowicz. "Before we could fill retail shelves with securely packaged products we had to have all our plants running the new tamper evident equipment in just months."

Axon was approached by Good Humor-Breyers in October 2001 to place 16 machines into three manufacturing facilities by the start of 2002. The product would include all lines of 1/2-gallon rectangular tubs of ice cream. One month later, Ed Farley, Axon's director of sales & marketing, finalized the initial order for 16 machines to be shipped out immediately.

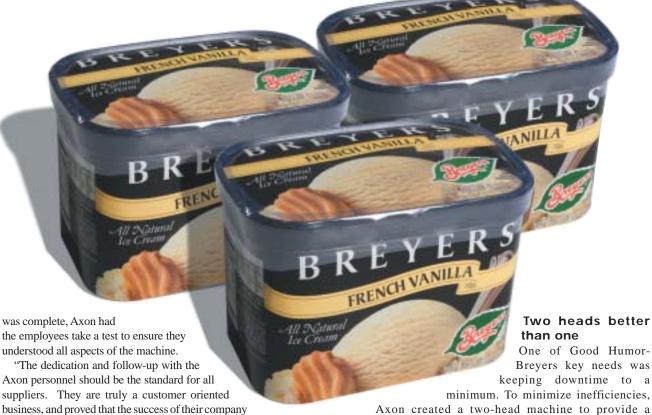
"Not only did Axon meet our time deadlines, but the training program was like no other we've ever seen." states Markowicz.

As part of the aggressive installation process, Axon technicians spent six straight weeks, 20-hours a day training key line operators at each plant. The hands-on training included preventative maintenance, adjustments, film threading and head changing. The trainers also went over adjusting knife blades and cylinders. After the hands-on training

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By January 10, 2002 all 16 heat shrinkable tamper evident banding systems were in place and ready to run. Breyers tamper evident banded ice cream products began hitting the retail shelves in July, 2002. "Good Humor-Breyers is the driving force that set a trend in tamper evident bands on ice cream containers," says Farley.

is based on the after sale relationship," says Markowicz.

Finding the right fit

In November, 2001, Bud Lane, president, Axon and David Felix, production/technical services manager, Axon visited Good Humor-Breyers corporate office to finalize the specification of the tamper evident band applicators. In the short span of a month, Axon and the Good Humor-Breyers engineering team worked together to design a system that would fit into any of the manufacturing facilities, despite the tightest of spaces. Good Humor-Breyers not only approved the small footprint (54" x 78"), but Axon's EZ-2-300 Tamper Evident Band Applicator and Heat Shrink Tunnels were able to integrate with Good Humor-Breyers existing conveyors.

"The largest challenge was fitting the machinery into the set packaging line layouts," says Markowicz. "Framingham was the biggest challenge due to tight equipment layout constraints, but Axon even helped us overcome that challenge, helping us brainstorm various layout options."

The systems were all the same, minimizing confusion on the plant floor, and included:

- EZ-2-300 Tamper Evident Band Applicator (dual head)
- Band Positioning System (supports bands prior to heat shrink tunnel)
- EZ-36-BR (heat shrink tunnel)
- Inspection/Rejection Station
- Product Spacing Device

Axon created a two-head machine to provide a redundancy in the operation. The two heads of the EZ-2-300 Tamper Evident Band Applicator cross communicate for dual function. If one head is to go down, due to running out of film or film jams, the second increases demand and keeps up with operation.

"The dual heads offer us insurance. The operators are extremely satisfied with the ease of operation and reliability. The head change is simple, so we can be back up to dual operation in minutes," says Markowicz.

Each Band Applicator head is equipped with a film unwind station and stepper motor to enhance accuracy and efficiency. A pull roll assembly accommodates infeed direction compatibility and a userfriendly operator interface panel assures ease of operation.

"The machines certainly do not require a full time operator. We've rearranged our crewing to accommodate the periodical attention the machines need for film roll changing," says Markowicz.

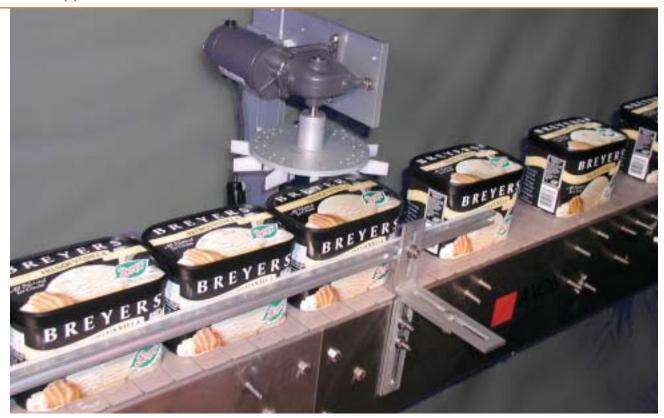
Another advantage of working with Axon is their multipatented technology that provides complete control over the bands through the entire operation. A unique band positioning system assures the tamper evident bands do not fall to the bottom of the containers on their way to the shrink tunnel. Support rails hold the bands in place after they are dropped onto the containers. The conveyor then moves the containers forward where pencil heaters spot shrink the tamper evident film bands into place as the container moves down-line to the heat shrink tunnel.

"Our band positioning system allows Good Humor-Breyers to place heat tunnels in various locations down-line without the bands falling out of place," says Farley. This was proven at the Huntington, Ind., plant, one of the more challenging installations, where a shrink tunnel had to be placed on a 45° angle.

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Good Humor-Breyers is using the system on 18 lines in three different facilities.

Axon's EZ-36-BR heat shrink tunnel offered Good Humor-Breyers the most energy efficient system. The re-circulating convection heat tunnel focuses airflow directly on the film. This minimizes heat exposure to the rest of the package.

Meeting specific needs

Depending on each plant's unique spacing requirements, Axon's inspection/rejection station is placed on-line before or after the heat shrink tunnel. An ultra-violet sensor detects the presence of the tamper evident bands on packages through UV impregnated film. If the safety seal is not on the container, it gets rejected and the operator can re-circulate it.

It wasn't a question of avoiding an investment for tamper evidence equipment, for Good Humor-Breyers. According to Markowicz, "We continuously look for ways to add value to our existing and new products, especially in terms of food safety. The compliments we receive from our customers regarding the initiative are the rewards we work towards every day."

After Good Humor-Breyers experienced such success with the initial 16 tamper evident applicator systems, the company ordered six additional systems for different SKU's of ice cream.

"The key to these Axon machines is that they are adjustable for a lot of package shapes and sizes," says Farley. "Good Humor-Breyers realized the EZ-Seal system would work for both the roundrectangular and round containers of ice cream."

In February, 2002:

- Two systems were installed to place tamper evident bands onto two-liter ice cream tubs.
- One system was installed to place tamper evident bands onto the Pints Plus ice cream container.

In March, 2002:

• One more system was installed to place tamper evident bands on one-liter ice cream tubs.

In June, 2002:

• Two systems were installed identical to the original 16.

"The Axon partnership that was created with Good Humor-Breyers Ice Cream through this project was world class. We certainly look forward to working with Axon on future tamper evidence projects, as well as other packaging equipment opportunities that arise," says Markowicz. "I've never worked with a more customer service oriented company, and certainly give credit to Dave Felix (Axon) who exceeded my expectations regarding planning, implementation, and follow-up."

Coming full circle

After the installation of the 22 new tamper evident systems, Good Humor-Breyers re-evaluated its original EZ-400 system. Learning that Axon had developed new technology over the years to enhance performance of older equipment, they upgraded the production capability of the initial system, and line speeds were increased accordingly.

Today, with 23 tamper evident lines running, Good Humor-Breyers is recognized for spearheading the movement to assure consumers product safety. What began as a trend towards alleviating concerns over threats from terrorism, has turned into a new standard of operation.

"Hopefully this will open the eyes of other food manufacturers to implement such safety features on their products," says Farley.

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