

# Automated Bag Closer/Tag Placer Ups Capacity



Boss Automation automated bag closer and tag placer to be installed at Richardson Seeds in Vega, TX.

Since its beginning in 1955, Richardson Seeds, Inc. (RSI) has specialized in producing sorghum seed. Most of RSI's seed is produced for other seed distributors, both domestic and foreign.

In 1999, RSI installed a new packaging line for 50-pound, 20-kg and 25-kg bags. New equipment included a Taylor Products bag filler, Rusco bag printer, Fischbein stitcher and a Conveying Industries low-level palletizer.

"Getting the palletizer to fit into our existing work space was a challenge," recalls President Larry Richardson. "The warehouse was built 25 years ago when the biggest equipment in there was a hand cart."

With a few bends in the conveyor, the palletizer was positioned between the warehouse support columns and the two former hand stackers were sent to work elsewhere in the RSI facility.

### 2005 Improvements

The 1999 equipment added enough capacity to enable RSI to package 10,000 bags per day. The bagging process, however, was not fully automated. A worker was still needed to manually position the various bag tags ahead of the stitcher, not the kind of work anyone enjoys, Richardson observes.

"Bagging had become a limiting factor in our packaging capacity," he says. "We lost capacity every time the 'tagger' took a break, went for lunch or went home at the end of the day. We needed to fully automate the packaging process."

One option would have been to replace the 1999 equipment with an all new, fully automated bag filler, tagger and closer system. Richardson thought that would have been a waste of perfectly good equipment.

"There had to be a way to tag and close the bags without getting rid of our good bag filler," he says. "Finding the right equipment to insert into our packaging line was more difficult than I expected."

### On-site Design

Hoss Farley, an engineer for **Boss Automation Industrial Controls**, Spearman, TX, visited RSI in hopes of providing a solution. Six months later, Farley and his team had developed a working prototype to automatically close the filled bags and position tags to be stitched by the existing stitcher.

To integrate the Boss tagger into RSI's seed flow controller, an electric eye was installed to monitor tag placement. Eventually, Richardson plans to add a video camera to oversee the bagging process. The video will be connected to a computer in Richardson's office.

"Automating that one step of placing tags and closing the bags has allowed us to substantially increase our daily packaging capacity," says Richardson. "The process does not stop for breaks or lunch. We have been able to utilize our existing equipment and free the tagger to work elsewhere in the plant. We can now more fully utilize the capacity of the equipment we added in 1999."

For more information:

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### Richardson Seeds, Inc.

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### Key Personnel

- Larry Richardson, Owner, President
- David Drinnon, CFO

### Facility Features

- Contract production of sorghum seed.
- Seed sales to United States, Mexico, Europe, and Asia.
- Family-owned seed business established in 1955.