

A New Spin on Seed Cleaning

Rotary spirals simplify adjustments, improve seed quality



Bullard Seed Co. seed production facility in Central Missouri. In 2016, the company installed Profile Industries rotary spiral separators to process soybean seed.

Bullard Seed Co. • Ashland, MO
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Key Personnel

- Joel Bullard, President/Owner
- Janet Bullard, Secretary
- Matthew Bullard
- Ryan Garrett

Company Profile

- Contract production soybean and wheat seed for MFA Incorporated.
- 2,500 acre family farm.
- 12–15 farmer seed growers.
- Family owned and operated.

Custom-size Cabinet

Profile's standard cabinet is four-inches too large to fit into Bullard's existing space. Profile Industries Owner Steve DeJong custom-designed a cabinet to fit.

Bullard's spirals are positioned ahead of the color sorter which in turn enables the sorter to become more precise in its sorting.

"I cannot explain it without visually showing you what they will do in operation – it is hard to explain until you actually see it run. This thing really works."

"They remove a small amount, yet they remove everything you want to remove," he says. "They are so easy to set. It takes longer to climb the ladder to the platform on the cleaning deck than it does to change the setting."

Bullard says they routinely check the spiral's discard throughout the day and when they change from variety to variety. The spirals are so sensitive that Bullard usually makes a slight adjustment for each different variety.

"I cannot say enough good about these rotary spirals. It gives us greater confidence in our product." Bullard says. "I feel every soybean plant should have them. It is a wonderful piece of equipment."

Joe Funk, editor

"Farmers expect the seed they purchase to be perfect," says Joel Bullard, a family-farm operator and owner/president of Bullard Seed Co. in Central Missouri. "That is what I expect when I open a bag of seed and that is what I expect of the seed we produce – it must be as close to perfect as humanly possible."

For 25 years, Bullard has been a contract producer of soybean and wheat seed for MFA Incorporated, a grain marketing and farm supply cooperative based in Columbia, MO.

In 2001, Bullard was the first U.S. seed producer to install a Satake color sorter in a soybean conditioning facility. "Our goal has always been to have seed quality better than anyone else," he says. "That is why we have used spiral separators from the beginning. They make a difference that is more than what we can get from an air screen or gravity separator."

In spite of their usefulness, the old-style spiral separators have one drawback – they are difficult, time-consuming,

and tedious to adjust.

"It frustrated me over the years every time we needed to adjust them," Bullard says. "We had to shut down, make the adjustment, and restart the line. Even with all that, we were losing an awful lot of good with the discard."

By the end of 2015, Bullard decided the old spirals needed to be replaced. He remembers seeing an article describing variable speed spirals. He sent his son-in-law Ryan Garrett to the Iowa State University Seed Laboratory, Ames, to see rotary spirals by **Profile Industries, Rogers, MN** (763-428-5858/www.profile-ind.com) in action.

"Garrett was impressed with their performance, but was not certain if what he saw in a lab setting would transfer to full-scale production," Joel Bullard recalls. "Then I talked with a friend in South Dakota who said he would not process a single bushel of seed without them. That convinced me to get the new, four-core rotary spirals."