



FARR APC
Air Pollution Control

Case Study

Seed Corn Processor Shucks Dust Issues with BRF

Product: Big Round Filter
Size: (2 Custom) 60BRF-10's Designed for 10,000 CFM Each
Application: Fugitive Dust from Corn Sheller and Cleaner
Customer: Holden's Foundation Seeds - Williamsburg, IA (2 Locations)
Representative: W.D. Patterson Company

Challenge

Holden's Foundation Seeds has been in the corn breeding and seed corn production business since 1947. The EPA required that they install dust collectors at their two facilities located on the east and west sides of Williamsburg, Iowa. Their outdoor sheller and cleaner equipment process ear corn from a conveyor 2 to 3 months every year, producing husks, silks, broken cobs and fines that must be collected and removed. Their engineering firm contacted Farr rep Jerry Ruggle of W.D. Patterson Company.



Solution

Jerry visited the plants and carefully evaluated Holden's situation. Based on the requirements, a modified Big Round Filter at each plant would be the solution. A custom tube sheet with 60 holes spaced extra far apart would reduce can velocities substantially to accommodate the range of particle sizes. The gentle back wash of the BRF fan cleaning system would clean the bags without sending an avalanche of material down like other medium pressure units would. A tangential inlet was specified by this customer, again making the BRF the logical choice. Finally, "The BRF is the best choice for sheller applications where compressed air is not available..." says Jerry.



As seen in the photo (left), the BRF at Holden's west location is installed next to the sheller and cleaner that are on an outside platform. The collector is mounted above a station where a truck parks underneath while the system is running.

The two BRF units were installed at Holden's two locations in June 2002 and are performing great at each year's harvest.

For further information regarding this application, contact Farr rep Jerry Ruggle of W.D. Patterson Company at 515-465-7786.