

Vortex® Blower Enhances Recycling Process Spencer supports non-profit's innovative program



A group of volunteers from Lincoln Financial Corporation sort and package donated red peppers. Regular Foodshare volunteers and staff are often joined in the recycling effort by local-company employees as well as school children on field trips.

The Spencer Turbine Company blended customer service, know-how and technology to add dividends to a customer's already award-winning produce recycling program.

Connecticut-based Foodshare—which collects donated food and distributes it to people in need—takes in produce along with non-perishables for area shelters, soup kitchens, and pantries. “But some of the produce is at the end of its usable life,” says Spencer’s area Sales Representative Tim Collins. “The food bank ends up with produce that can’t be used for human consumption. Previously they had to pay to have someone truck it to the landfill or waste incinerator.”

Back in the 1990s, Foodshare began a recycling program that sent some of the unusable produce to an area pig farm, but gradually the program grew, transforming into a recycling operation that yields vegetable slurry. Foodshare’s slurry makes a perfect ingredient for composting at two area commercial organic farms.

It became a model program and, in 2002, the Connecticut Department of Environmental Protection (DEP) recognized Foodshare’s Fresh Foods Specialist Steve Slipchinsky and the innovation he applied in the recycling process. With a DEP grant to investigate solutions for recycling food waste, he was the first in the United States to install a large food grinder that pulverizes the spoiled produce into liquid slurry inside a 6,000-gallon tank. In its first six weeks of operation in that year, 28,000 pounds of spoiled produce was kept from the local incinerator, and 3,000 gallons of slurry was recycled. To date, the operation has recycled more than 1.6 million pounds.

The enormous growth of Foodshare’s recycling program has meant significant savings for the non-profit organization. “The cost to dispose of the waste in a landfill or incinerator is about \$120 per ton,” Slipchinsky says. “The cost to recycle it is about a third of that. The savings of recycling is huge.”

So imagine how much bigger the savings would be with a more efficient tank. That’s where a 5-hp Spencer [Vortex® regenerative blower](#) is making an important difference in payback to Foodshare. The blower, a 480-volt, 3-phase, 60-cylce unit with a Totally Enclosed Fan Cooled (TEFC) motor, is now stirring the old produce. The blower keeps material from settling and accumulating on the bottom of the tank, creating a more homogenized slurry for pumping into trucks. “We can more completely empty our tank,” Slipchinsky explains, “and maximize the recycling process.”



A Spencer Vortex® blower and starter system like this one, which powers the Foodshare recycling process, represents a solution for a broad range of tank-agitation applications.

With a silencer and built-in sound absorption in the base, the Vortex model in the Foodshare system is extremely quiet. The quietness of operation was crucial to Foodshare because the tank is so close to areas where volunteers sort food in the warehouse. So Spencer provided engineering expertise to size the customer's blower properly and fit the silencer to the system.

Spencer has supported Foodshare in the past through grants from the Spencer Foundation, Collins points out. "This time, we were pleased to be able to support them with the ideal blower for their operation," he says. "The project was especially worthwhile because Foodshare has established itself as a leader in recycling, and I give full credit to Steve as the person who initiated the idea of using air to agitate the slurry. Spencer is pleased to be a part of it."



Spencer area rep Tim Collins observes as Foodshare's Steve Slipchinsky demonstrates how waste produce is moved into the tank. The Spencer Vortex® blower and starter in the background simplify the recycling process.

A Spencer representative was on hand during start up to answer questions and help with adjusting the pressure relief valve. The pressure relief valve is an add-on precaution that Spencer recommends on Vortex applications to ensure pressure surges don't occur when the machine is not in use for periods of time. In addition, the Service Department provided answers to electrical questions for this installation. The [Vortex blower](#) is also virtually maintenance-free, but Foodshare can get warranty services, replacement parts and repairs through Spencer's near-by factory or at one of the Authorized Service Centers.

Foodshare Executive Director Gloria McAdam says that Spencer's support has worked out even better than expected. "It completes the whole cycle of taking in food, distributing it to those in need, and helping to encourage local production," she says. "It's a solution that enables us to further Foodshare's mission."



A Foodshare truck backs up to the warehouse dock to load-up for one of its daily food deliveries to those in need.

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