

The 54 in. model cracks corn kernels open, without creating fines, at the rate of 150 tons per hour.



Conveyor carries grain up and dumps it into the "particulator's" spiked cylinder.

10 TIMES FASTER THAN TUB GRINDER OR ROLLER MILL

By Mark Newhall, Editor

New High Speed "Cracker" For Corn, Silage

"It's 10 times faster than a roller mill or tub grinder," says Clarence Sageman about a new high-speed corn "particulator", invented by his brother Frank, that grinds up corn and silage as fast as you can auger it through.

The design of the new "corn cracker" is simple. "It's got one rotating cylinder similar to a cylinder in a combine. The cylinder is spiked and turns inside a concave with about %-in. clearance, cracking the kernel open but without creating a lot of fines," says Sageman.

The machine is ideal for processing silage as well as shelled corn because it breaks down the kernels within the silage, making them more nutritionally available to livestock.

The particulator has a conveyor platform that carries grain up to drop it into the processing unit. A leveling auger halfway up the conveyor ensures an even flow. Material drops into the spiked cylinder where it's ground up at high speed and pushed out the end onto a conveyor or blower that carries it away. The 54-in. model, designed to process material going into bunk silos, processes 150 ton per hour. A smaller model, equipped with a 30-in. wide cylinder, is attached to a silo blower and processes material while filling silo.

"It has a high capacity but has a very low horsepower requirement. You can run even the biggest unit with the pto on a medium-sized tractor. It eliminates the problem of hammermills that require high horsepower, make too many fines,



Smaller 30 in. wide cylinder attaches to blower and processes corn and or silage as it's ensiled.

miss lots of kernels, have low capacity and lots of worn components. The cylinder and concaves in this unit show virtually no wear even after processing hundreds of tons of material," says Sageman.

Prototypes of the new machine have been operating on farms for three years. The Sagemans are looking for a manufacturer to take over production.

For more information, contact: FARM SHOW Followup, Clarence J. Sageman, 132 E. Huron Ave., Bad Axe, Mich. 48413 (ph 517 269-7122 or 738-7588).

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Airfoil on top of galvanized shroud directs air flow down along the back to eliminate turbulence and thus avoid problems with drift.

CUTS APPLICATION RATES

'Windproof' Sprayer

"It lets you spray anytime without worrying about wind conditions," says Terry Yoney, operations manager of Vertec Farm Equipment, Mayville, N. Dak., about the company's "Windproof" sprayer.

"One farmer reported that he sprayed during 25 mph winds, at a 7½ mph tractor speed, and still cut application rate 25%," says Yoney. "No-tillers really like the sprayer because they're forced to spray more often and are thus able to reap more of the resulting chemical savings."

Drift tests by a government research institute showed just a .4% drift in 17 mph winds. Besides eliminating drift, the Windproof sprayer uses less water and smaller spray droplets which translate into better plant coverage and chemical action. Conventional sprayers need larger droplets to fight drift, points out Yoney.

The Vertec sprayer's shroud is made of galvanized steel, not canvas which Yoney says indents and has turbulence problems. The shroud acts to limit air flow underneath. An air foil on top of the double-panelled

shroud directs air flow down along the back. This eliminates turbulence that would otherwise cause drift problems.

As you pull the sprayer through the field, an adjustable-height 6-in. zilon drape on the front of the shroud bends weeds forward exposing the bottoms to spray for better overall coverage.

Windproof sprayers are available with 600 and 950 gal. tanks and with a 66-ft. boom that pulls directly behind the spray tank. To check plugged nozzles you stop over a bare spot of ground. The company is working on a remote monitor.

A Windproof sprayer with a 950 gal. tank sells for \$8,335. Kits to retrofit onto conventional sprayers are in the works.

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