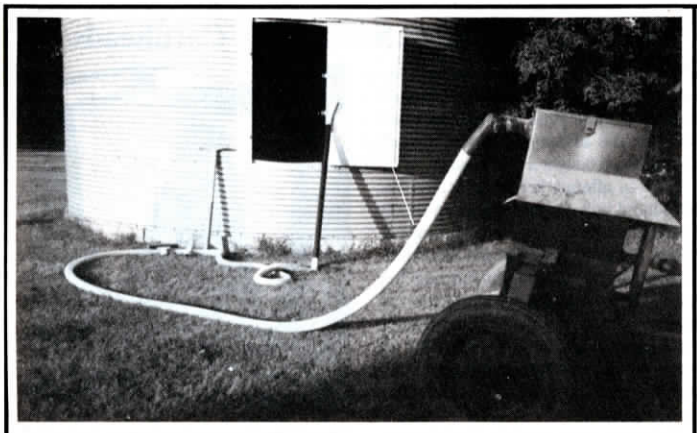


Crop Duster Converted To Low-Cost Bin Cleaner/ Shop Vac

Garnett Love, Le Prairie, Manitoba, salvaged an old pull-type crop duster to come up with a grain bin cleaner that also doubles as a shop vac.

The crop duster was originally equipped with a pto-driven fan, steel hopper, and 33-ft. boom with holes spaced 4 in. apart. The fan was mounted on the back side below the hopper and blew air into a manifold equipped with rubber hoses that led to each side of the boom. Love removed the boom and moved the manifolds onto the top of the hopper, then cut a hole into the bottom of the hopper that lines up with the air intake opening for the fan. He mounted a baffle made from corrugated tin inside the hopper, as well as a screen, to keep grain and dust from reaching the fan. He also mounted a rubber seal along the hopper lid to make it air tight.

A 3-in. dia., 25-ft. long air seeder hose hooks up to the manifold and is connected to two 5-ft. long shop vac hoses hooked together. Different shop vac nozzles can be hooked up to the hoses. Love used a length of pvc pipe to extend the reach of one nozzle that's used to clean bin walls.

"It has a lot more suction than a conventional shop vac so it really does a good job. I can get the bin walls so clean they almost look like new," says Love. "Another advantage is that there's no dust inside the bin while I'm working and no filters to get dirty. Small particles of dust or dirt are blown out the back of the machine through a homemade spout. Bigger particles are trapped inside the hopper. I use a trap door on the bottom of the hopper to empty it out."

Contact: FARM SHOW Followup, Garnet Love, Portage Le Prairie, Manitoba, Canada R1N 3A1 (ph 204 857-8120).

Home-Built Shelled Corn Grinder

When Dockery Cates, Enterprise, Miss., went looking for an inexpensive small grinder for corn, he couldn't find one. So he decided to build his own.

"I use it to creep feed cracked corn to my 50 cows. It really works good," says Cates.

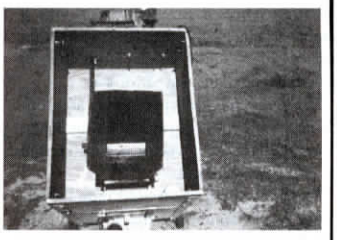
The grinder consists of a 3 by 2-ft. wooden box mounted on a pair of wheels, with a 1-bu. steel hopper inside. A pair of 8-in. long, 4 1/2-in. dia. steel rollers are positioned at the base of the hopper. One roller is belt-driven by a 1 1/2 hp electric motor while the other is stationary. As corn gravity feeds from the hopper, grooves in the top roller pull it in between the two rollers and crack it. Corn drops into the box and is unloaded out a chute on one end.

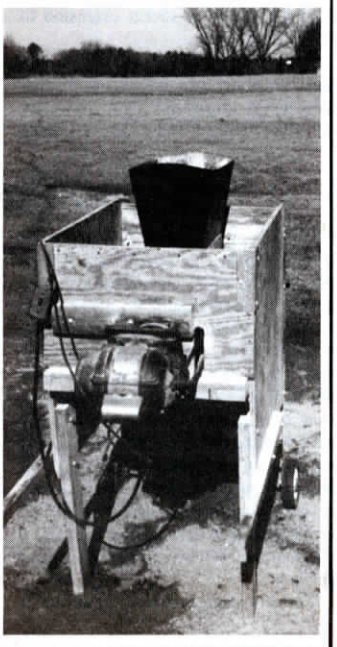
"It has paid for itself many times over. I even use it to custom grind corn," says Cates. "It cost about $400 to build. I can grind about 45 bu. per hour with it. Usually I grind about 100 bu. at a time. The position of the stationary roller can be adjusted to control the amount of grinding action on the kernels.

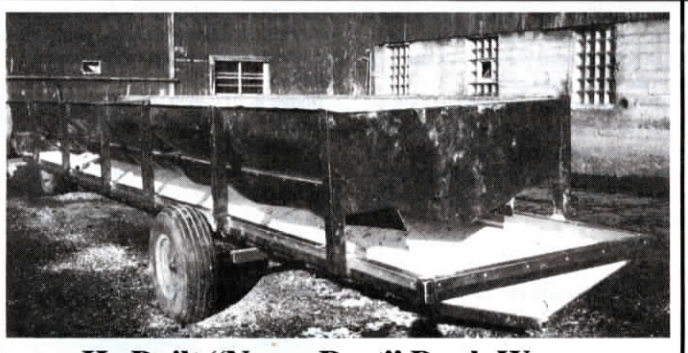
"The electric motor turns at 3,600 rpm's. I mounted a 2-in. dia. pulley on the motor and a 6-in. dia. pulley on the top roller to reduce the rpm's to about 1,800. I use a bucket to scoop corn into the hopper.

"I've built three models so far. I built my first one three years ago with 4-in. long rollers. I built another one for a friend with 10-in. long rollers for increased capacity."

Contact: FARM SHOW Followup, Dockery Cates, 5341 County Road 320, Enterprise, Miss. 39330 (ph 601 659-7744).







He Built "Never Rust" Bunk Wagon

"It's just a fact of life. Steel bunk wagons all rust out eventually, but my wagon should last 50 years or more," says Dale Oldenberg about a nearly maintenance-free feeder wagon he retrofitted with plastic.

He bought the wagon used at an auction. It's 30-ft. long by 5-ft. wide and held 3 tons of silage when it was new. But, as the pan rusted out over eight years, capacity diminished because feed fell through the bottom.

"I got to thinking about how we use plastic in our mangers and that we should be able to use it in our wagons to increase longevity," says Oldenberg. "Nobody makes a plastic-lined bunk wagon. that I know of."

To begin with, Oldenberg took the rusted out pan off the wagon, saving the uprights and flared top part of the wagon. Then he constructed new framework out of 2-in. by 4-in. steel tubing and welded one rail lengthwise on each side of the wagon chassis.

Next, Oldenberg welded the original uprights and flared top back on the new frame. He then used 2-in. thick T-bar stock to make a V-shaped gridwork for the wagon so gravity pulls feed to the middle as in a hopper wagon.

Oldenberg then got six 5-ft. by 10-ft. 1/4-in thick sheets of ag grade plastic from Badger Plastic & Supply Co., Plover, Wis. The company custom heat-shaped the plastic to fit into the V shape of the wagon.

He used three sheets of plastic per side, overlapping each sheet 2 in. so feed can't drop through. He used 18 ga. stainless steel caps in the four corners and around the top lip of the wagon to hold the plastic in place.

Including the plastic, which costs $150 a sheet, Oldenberg says he has about $1,200 in the wagon.

Contact: FARM SHOW Followup, Dale Oldenberg, W 4525 CTHO, Medford, Wis. 54451 (ph 715 748-3739).

Automatic Hog Weigher Saves Money, Helps Market

Keeping closer tabs on what your hogs weigh could save you big bucks in feed costs and help you market more efficiently, say researchers at the University of Kentucky who've developed an automatic weighing system that provides continuous weight information.

"Our idea was to have a simple weighing system that gives average weight, daily gain, minimum and maximum weights, and also lets you calculate daily gain," says Richard Gates, ag engineer. "It gives the producer a representative idea of overall performance so he can target feed rations to actual animal weight rather than guess at them. This system also provides timely weight information to better manage marketing decisions."

The system consists of a commercial computerized weight crate. The sole water supply for the area being monitored is placed so that each animal has to walk to the front of the crate to get a drink. The unit's microprocessor sends the weight of each animal measured to a desktop computer. Weight data can then be analyzed for growth performance.

After testing the system, Gates and others have concluded it's accurate to within 1% of weights detected in "spot checks" over an entire growing period.

"We can estimate the average weight of all animals in a pen and we can also determine the variation in weight between animals," Gates says.

So far the university has only produced a prototype. "We'd like to see somebody manufacture it," Gates says.

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