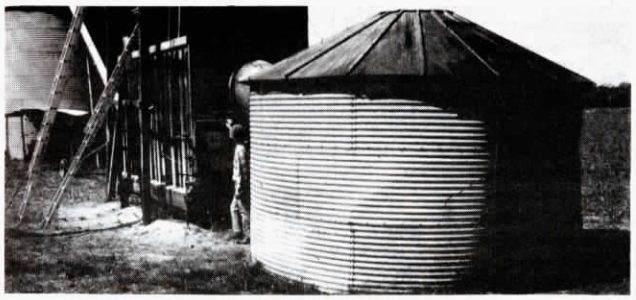
Old Grain Bin Captures Tractor Heat For Drying



George Wiemers, Greenview, Ill., has found out he can capture enough heat off his dryer tractor to raise the drying temperature 8°.

To do the job, Wiemers made use of an old 1,400-bu. grain bin which houses a 560 IHC tractor that powers the dryer fan.

Wiemers moved the bin up close to the dryer so the tractor pto shaft would reach the fan drive. He cut a large doorway in the opposite side so he could back in the tractor.

To move air from the bin to the dryer, Wiemers made a duct of an old gas barrel that reached diagonally to the suction fan on the dryer.

Wiemers did not make any changes in the tractor's cooling system. He does use plywood to adjust the door opening to keep the proper amount of fresh air coming in. The tractor has an automatic shut-off if it overheats. (It did shut off several times until he got the doorway properly adjusted.)

Fuel for the tractor is supplied from a 275 gal. tank just outside the bin. A fuel line is hooked directly to the tractor.

Wiemers recommends using unleaded gasoline, then use an elbow arrangement to shoot the exhaust into the dryer fan intake. At first he did not do this and he got a little too much heating of the bin roof, causing it to rust.

Wiemers says there has been no odor in the grain and no market discounts with this method of drying. He notes that the amount of air produced by the tractor is just a small fraction of the total air used by the dryer. He thinks an LP tractor would work well for this purpose. He's not sure about using a diesel.

Wiemers says if there is doubt about tractor exhaust being pulled into the grain, you can cut a hole in the roof and vent the exhaust into the open air.

Farmers who would like to try the idea but don't have an old bin could build an enclosure out of inexpensive plywood or old roofing metal, Wiemers points out.

Wiemers address is RR 1, Greenview, Il. 62642 (ph 217 968-6664).

"Old Cars Make Great Loaders"

"Old cars make great farm loaders," says Ralph Punton, Ayr, N. Dak., who built one from a 1963 Buick LeSabre.

To make the conversion, Ralph first removed the body and then reversed all the controls. He shortened the wheel base and driveline to 4 ft., 6 in. and then welded a conventional farm loader to the frame of the new front end. "I use it mainly for handling grain," says Ralph.

Huge (5,000 gal.) Manure Tank Wagon Carries Low ($2,700) Price Tag

A home-made 5,000 gal. manure tank wagon helps Iowa hog producer Leon Teske, of Eldora, empty his 500,000 gal. above-ground liquid manure Slurry-store holding tank "in about three days if I get an early start".

The huge tanker, which cost Leon $2,700 to build, is larger than anything he and his brother Marvin could find factory-made, and theirs cost much less than the biggest commercial tank wagon they could find. It held 4,200 gal. and cost $12,000, according to Leon. His brother Marvin helped design and build the low cost tanker.

The Teskes bought the used fuel tank, made of ¼ in. steel, already mounted on an old 2 ton truck chassis. The chassis was equipped with an earth-mover axle with wheels, and old but adequate tires. The wagon is two-wheel, and a lot of its weight rests on the tractor drawbar which, along with the 2-ft.-wide tires, prevents soil compaction from the payload weight of 50,000 lbs.

Leon told FARM SHOW that he's now installing a set of five knives on the rear of the tank at a cost of $3,200: "It'll slow me down from a spreading speed of ten minutes to about five." He can fill in 4½ min., using the storage tank's pump, and now unloads at 6 mph. The home-made tank wagon has been used three years. A 175 hp. row-crop tractor does the pulling, and supplies the hydraulics to pump out the tank.

Leon says he did get the tank and tractor stuck in mud once, but simply let out about a fourth of the load and drove away.

For more information, contact: FARM SHOW Followup, Leon Teske, Rt. 1, Eldora, Ia. 50627 (ph 515 858-5989).