

TANK RIDES ON RAMPS BETWEEN TRACTOR AND APPLICATOR

Tank "Caddy" Makes NH₃ Application Easier

By Bonnie Heidtke

It saves horsepower, time and labor, say the farmers who came up with a "nurse tank caddy" to carry an anhydrous tank between tractor and chisel plow.

Before coming up with their tank caddy idea, Minnesota farmers Steve Eickhoff and Wayne Hebrink carried anhydrous in a 500-gal. tank that mounted directly on the frame of the chisel plow. It took about 45 min. to fill the tank and it took two fills to empty a nurse tank.

"It put a lot of extra weight on the chisel plow which was creating some mechanical failures on the plow," says Eickhoff. "And when the tank was full, it was heavier in the center, causing a deeper cut in the soil so it wouldn't run evenly across the field until the tank got empty."

Hauling the nurse tank on a caddy in front of the chisel plow takes considerably less horsepower than towing a tank behind the plow because of drag caused by loose soil behind the plow, and it shortens up the entire rig, making turns easier. It also eliminates wheel tracks behind the chisel plow.

Before building the nurse tank caddy, the men built a model out of cardboard and tested it out with a toy 4-WD to get the right dimensions. The real thing is 10 ft. long with a 6-ft. tongue. The ramps the wheels back up onto are about 7 ft. apart. Eickhoff estimates total cost of building it came to about \$2,000.

The men figure they increased productivity 30 percent and they now do a better job. They also changed to a larger, 1,500 gal.



Nurse tank is hauled in front of chisel plow on caddy that's 10 ft. long with 6-ft. tongue.

nurse tank. It takes about 15 min. to switch tanks by flipping down two ramps and hooking a winch onto the back of the tank frame. The winch runs off a wired remote control so a person can stand in front of the wagon and steer it a little bit to help guide it up. Once on the ramps, the wheels can't roll off because there are sides on them.

The first year the cart was fitted with just two 16-in. wagon tires. Last year, they added a pair of terra tires for extra support. They also had to reinforce the axles, which

had begun to tear apart due to pressure on sidehills.

If they were doing it again, they would build it so the tank pulled up from the right side because when going down the highway with a loaded tank, the tongue sticks out into the roadway. Other than that, the men say they're pleased with the caddy's performance and strength.

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5-FT. WIDE WAGON UNLOADS FROM EITHER SIDE

Self-Powered Feed Wagon Fits Down Narrow Alley

David Lohman, Bow, Wash., converted an old Gehl self-unloading forage wagon into a self-powered feed wagon that's small enough to use in a narrow, dead-end alley inside his dairy barn.

The 10-ft. long, 5-ft. wide wagon is equipped with a two-way cross conveyor on back. Lohman uses a skid steer loader to push the wagon down the alley, unloading silage out one side onto the floor. Once he reaches the end of the 60-ft. alley he flips a toggle switch to reverse conveyor direction, then unloads feed out the other side as he pulls the wagon back out of the barn.

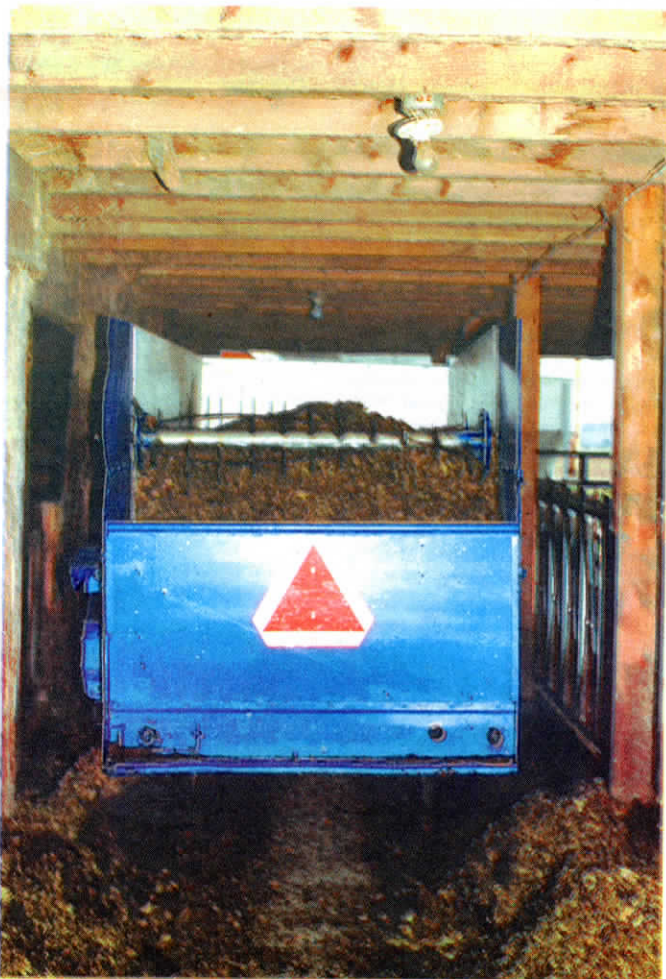
"It saves us a lot of time," says Lohman, who uses the wagon to feed corn and grass silage to 65 to 70 heifers a day. "The barn alley is only 6 ft. wide so it's too narrow for a conventional self-unloading wagon. We had been dumping silage off a truck at the end of the alley and using the skid steer to push the feed into the alley. However, we had to use a pitchfork to get it to the sides of the alley and that was a half-hour job. Now it takes only 5 minutes to feed. The wagon is 6 ft. high so it fits under the barn's low ceiling, and it has a single axle so it's easy to back up. It holds two tons of feed."

Lohman got the 8-ft. wide Gehl wagon free at an auction minus the running gear. He stripped it down, saving only the cross conveyor, unloading chains, gearboxes, and some of the sheet metal. He used 3-in. channel iron to build a new frame and plywood, along with the old sheet metal, to make the box. He mounted a mobile home axle and wheels under the wagon. A 10 hp Wisconsin engine mounts on a frame he attached to the front of the wagon. It belt-drives a shaft that runs lengthwise under the wagon. The shaft is equipped with sprockets that chain-drive both the unloading apron and the cross conveyor. A pair of car electric window motors are used to control apron speed and to change direction of the conveyor. The motors are hooked up to sliding jaw clutches mounted on the sprockets.

A window on front of the box lets Lohman see how much silage is left in the wagon. He built a special hitch attachment to go on the skid steer loader.

Lohman spent about \$1,000 to build the wagon.

Contact: FARM SHOW Followup, David Lohman, 1327 Sunset Road, Bow, Wash. 98232 (ph 206 766-7103).



The 10-ft. long, 5-ft. wide wagon is equipped with a two-way cross conveyor on back. Lohman uses a skid steer loader to push wagon down alley, unloading silage out one side onto floor. Once he reaches end of alley he flips a toggle switch to reverse conveyor direction, then unloads feed out other side as he pulls wagon back out of barn.