

**THEY PROVIDE INSTANT "COVER UP"
SO ANHYDROUS CAN'T ESCAPE**

Wing Tip Injectors For Chisel Plow Sweeps

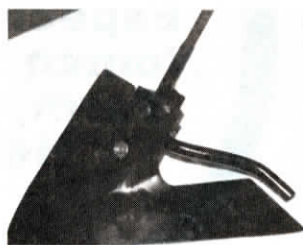
"We think it's the most cost efficient system on the market for applying anhydrous ammonia," says Dale Neidhart, of New Salem, N. Dak., who with his brother Jim manufactures wing tip injectors for chisel plow sweeps.

"With our system, you can combine anhydrous application with chisel plowing, along with granular herbicide application and incorporation, doing it all in only one pass over the field. The fuel savings on only 500 acres is enough to cover the cost of equipping a 30 ft. chisel plow with a set of our wing tip injectors. Some operators use them with air seeders," Dale points out.

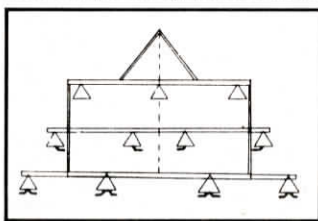
"We came up with the idea because we felt conventional knives and tubes allowed too much anhydrous to escape. Our injectors place anhydrous at the wing tips where it's immediately covered with soil. We get 95% or better efficiency, compared with only about 80% for injectors that place anhydrous behind the center of each sweep."

The Neidharts have used wing tip injectors on their own farm for six years, and have sold nearly 4,000 through small ads in state papers. They offer wing tip injector tubes in left, right and double left-right designs to fit 14, 16 and 18 in. sweeps. Cost runs right at \$15 per ft. of chisel plow or cultivator width.

The injectors, available for hot or cold flow systems, are made of seamless double



Injectors place anhydrous at wing tips where it's immediately covered with soil.



Drawing shows how left, right and double design wing tip injectors can be arranged on 3-rank chisel plows so a band of anhydrous laid down by one sweep won't be disturbed by other sweeps on machine.

and triple wall steel tubing for strength in rocky conditions. Tubes also available for wing-tip injection of liquid fertilizers.

Contact: FARM SHOW Followup, DJ Manufacturing, Rt. 1, Box 130, New Salem, N. Dak. 58563 (ph 701 843-7427, or 8687).



"Hay Guides" consist of a pair of 55-in. dia. rake wheels mounted on a frame that clamps to the front of your tractor.

**MAKE EVENLY-FORMED ROUND BALES
WITHOUT DRIVING ON THE WINDROW**

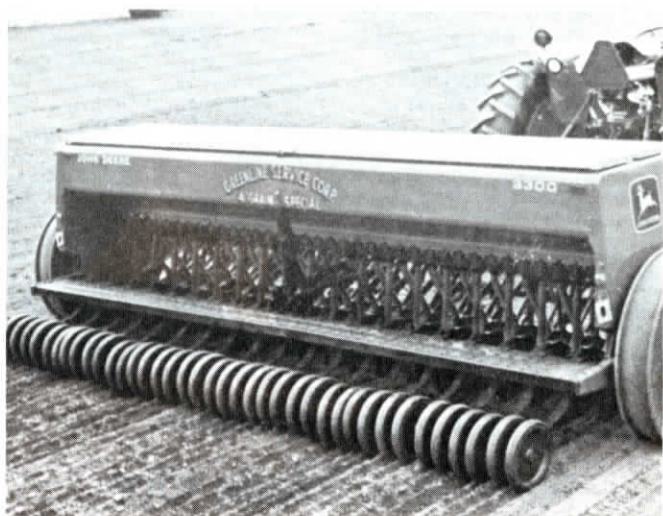
Hay Guides Help Make "Perfect" Bales

You can make perfectly-shaped round bales with these new front-mount "Hay Guides" without having to drive over the windrow even if your tractor wheels are set narrow, according to Milco, Council Bluffs, Iowa.

"Hay Guides" consist of a pair of 55-in. dia. rake wheels mounted on a frame made from 3-in. sq. steel tubing that clamps to the

front of your tractor. As you weave from one side of the windrow to the other while pulling a baler, they pile hay higher on the outsides of the windrow.

"They let you make bales that not only have a better shape, but have a greater density with tighter ends," says Fred Miller, owner. "If windrows are too wide, hay



This converted Deere 8300 drill plants small grains on 4-in. spacings.

**NARROW ROW CONVERSION
CROWDS WEEDS OUT OF FIELD**

"4-In. Drill" Stops Weeds, Boosts Yields

One of the hottest new cropping ideas sweeping the country is "double seeded" narrow-row small grains. By reducing row spacing in wheat and other small grains to 4 in. or less, growers are boosting yields and reducing weed problems. We've tracked down a company in Virginia that specializes in converting Deere drills to the narrow spacing.

FARM SHOW first reported on narrow row grain seeding in 1988 (Vol. 12, No. 3) when we told you about Dave Ryden, Hallock, Minn., who boosted yields 50% and totally eliminated the need for herbicides by "double seeding" wheat and barley with a home-built, 2-in-1 narrow-row grain drill built from two older model Deere drills. Seeding 3 1/2 in. spaced rows, Ryden reported that the densely seeded crops virtually eliminated weed infestations.

Since that time a number of stories been printed all over the country about "made-it-myself" narrow-seeding rigs, with farmers and university researchers reporting consistent yield increases of 10 to 30 percent even under dry conditions. The boosts in yields, coupled with reduced chemical cost, have created a lot of excitement. But farmers interested in the idea have had trouble following up because no one makes a drill that'll do the job. If you don't have the time or ability to build it yourself, you're out of luck.

Greenline Service Corporation, Freder-

icksburg, Va., custom-converts Deere drills to 4-in. spacing. To date they've converted model 8300, 515, 520 and 530 drills, both mounted and drawn. They say they can't convert Deere's new 750 drill because the row units are too big to move closer together.

"It's an expensive conversion but once you start planting in narrow rows with higher seeding rates, you almost totally eliminate weeds. We've had a lot of satisfied customers," says Jim Lafferty, of Greenline, a John Deere Dealer. The company also makes a Tramlite kit that was recently featured in FARM SHOW (Vol. 14, No.2).

Lafferty notes that plugging problems are more common with narrow row seeding due to the close proximity of row units, and soil moisture is much more critical. "You can't get into the field as quickly after a rain as your neighbor who has a 7-in. drill," he notes.

Converting a drill to narrow rows can nearly double the cost. For example, the cost of a 12-ft. 8300 trailing drill, which would normally be about \$8,000, increases to about \$14,500 when converted to 4-in. spacing. Lafferty will work on other makes and models of drills on a custom basis.

For more information, contact: FARM SHOW Followup, Greenline Service Corp., P.O. Box 7208, Fredericksburg, Va. 22404 (ph 703 373-7520).

usually overpicks the center of the bale. Baler-mounted hay guides work fine but unless the tractor wheels are set in a very wide position, you still have to drive on the windrow. Our front-mount hay guides let you transfer hay to the inside of the tractor wheel without driving on the windrow. Some farmers leave extra-wide windrows on purpose for fast drying, then use the front-mounted guides to narrow the windrow by half when they bale."

The frame can be adjusted from side to side depending on tractor wheel spacing,

forward or backward depending on tractor length and amount of clearance ahead of the front tires, or vertically depending on height of the tractor frame. Wheel angle can also be adjusted. Each side of the frame is hinged at the front and rear so the rake wheels can move up and down independently on uneven ground. The wheels are raised and lowered by a hydraulic cylinder.

Sells for \$1,249.

Contact: FARM SHOW Followup, Milco, Rt. 2, Box 156, Council Bluffs, Iowa 51503 (ph 712 366-2114).