



Drill supports two 500 gal. tanks and a 250 gal. tank. A 500 gal. tank also mounts on front of tractor.

## "CONSERVATION DRILL" PLACES FERTILIZER UNDER SEED, NOT OFF TO THE SIDE

# One-Pass Air Seeder Works Like No-Till Drill

"Our new heavy duty, one-pass conservation drill is a cross between an air seeder and a conventional no-till drill. It's equipped with a Valmar Airflow blower for uniform seed distribution and special-designed hoe openers that place fertilizer 2 in. below the seed in all types of terrain," says Wayne Neace, owner of AgPro Marketing & Mfg., Lewiston, Idaho.

The hoe opener configuration consists of a fluted coulters, hoe opener with point, and press wheel. Fertilizer runs through a tube down under the point. Seed is blown through a tube mounted on back of the hoe opener. The drill can support up to three tanks that carry liquid or dry fertilizer or anhydrous ammonia. The tanks mount on a separate frame that bolts onto the drill.

"It eliminates the need for any other trips through the field and has produced super yields over varying conditions," says Neace. "Some no-till drills can carry starter fertilizer, but most of them aren't built heavy enough to carry all the fertilizer needed by the crop during the growing season. Most no-till drills place fertilizer to the side of the seed where it's not as readily available. Our drill places fertilizer directly under the seed where it's immediately available to plant roots. It works better than a conventional air seeder because it has more fertilizer capacity and because the hoe openers place seed and fertilizer more accurately than shanks. Blower is equipped with individual metering cups for consistent seed placement."



Each row unit consists of a fluted coulters and hoe opener followed by a press wheel.

The tanks and blower are mounted at the center of the drill allowing the wings to be folded up for an overall 14-ft. transport width. The blower holds 60 bu. and can be powered by pto, hydraulics, or gas engine.

The photo shows a drill equipped with two 500 gal. tanks at the rear and a 250 gal. tank for starter fertilizer. Available in 18, 24, and 32-ft. widths. A fully-equipped 24-ft. model sells for \$70,000 to \$80,000.

For more information, contact: FARM SHOW Followup, Wayne Neace, AgPro Marketing & Mfg., Inc., 1112 1/2 Airway Ave., Lewiston, Idaho 83501 (ph 208 746-2212).



Bloomquist mounted two Morris drills together and pulls them behind a Blanchard air seeder, which carries 45 bu. of seed and 1,200 lbs. of fertilizer.

## CADDY DELIVERS SEED AND FERTILIZER TO MANIFOLDS MOUNTED ON DRILL FRAME

# Air Seeder Built From Drills

"It works as good as any air seeder on the market. I spent only \$8,500 to build it," says Rudi Bloomquist, Starkweather, N. Dak., who converted two 11-ft. Morris hoe drills into a state-of-the-art air seeder by removing the seed boxes and metering drives and mounting a pair of seed-distributing manifolds on the drill frame. A two-compartment Blanchard air seeder caddy delivers seed and fertilizer to the manifolds which then distribute them through tubes to each hoe opener.

One compartment holds 45 bu. of seed and the other holds about 1,200 lbs. of fertilizer. Seed and fertilizer are blown by a pto-driven fan through hoses from the caddy to the manifolds on the trailing drill. Then 1-in. dia. plastic tubes deliver the mixture to pipe shanks that support the drill's hoe openers.

"I've used it for six years and have been pleased with its reliability and simplicity," says Bloomquist. "I've looked at several new air seeders and can't see that they have any advantages over mine. I paid \$8,500 for the caddy and another \$500 for an extra set of manifolds (which I can also use on a 33-ft. field cultivator to apply granular herbicides). Many of my neighbors paid \$40,000 for their conventional 30-ft. air seeders.

"I used the two 11-ft. hoe drills together conventionally for five years. However, I wanted to switch to an air seeder delivery system because I wanted to apply dry fertilizer while seeding. The company offered an

add-on, gravity-feed dry fertilizer system for the drill, but it would have cost \$100 per foot or \$2,200. I would have had to mount the gravity-feed fertilizer boxes 8 1/2 ft. off the ground which would have made them difficult to fill. Also, I was worried that the extra weight of the fertilizer would have increased soil compaction. My air seeder tank takes the weight of the seed and fertilizer off the drill and is mounted on flotation tires that reduce compaction.

"I use a double hopper drill fill on my truck to fill the caddy. Tractor hydraulics operate two hydraulic motors that drive a pair of augers, allowing me to load seed and fertilizer simultaneously. The caddy holds as much seed as the drill did and allows me to seed 20 to 25 acres between fills. It takes only about 10 minutes to fill both compartments. I don't have to back up a truck and raise the hoist which saves time. Another advantage is that the drill has no disc openers or bearings so there's less maintenance than on a conventional drill.

"I chose the Blanchard air seeder because it has a simple, reliable metering system. The pto-operated blower runs at more consistent rpm's than a hydraulic-driven one and eliminates the possibility of overheating the tractor's hydraulic system.

Bloomquist used steel tubing to build his own extended markers for the drill.

Contact: FARM SHOW Followup, Rudi Bloomquist, RCB Farm, Starkweather, N. Dak. 58377 (ph 701 292-4131).

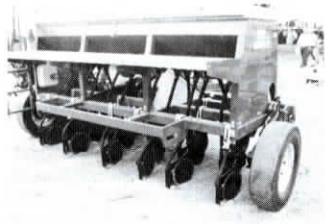
## New Multi-Purpose No-Till Drill

The hottest new no-till drill in Australia is now being sold in North America by a Canadian distributor. It's designed to plant a wide variety of crops either conventionally or no-till.

The "AgrowDrill" seedboxes mount above a 3-toolbar frame (a fourth toolbar can be added for high residue conditions). The two large seedboxes are equipped with 2 3/4-in. dia. fluted rollers that will distribute everything from light fluffy grasses to granular fertilizer in a variety of row spacings. According to the manufacturer, it works great for renovating pastures, seeding soybean/oat mixtures into alfalfa stands, establishing forage mixes in grain stubble, seeding winter wheat into corn stalks and bean stubble, spring grains into corn or bean residue, or silage corn, sorghum or beans into sod fields. Seeding

rates are adjusted by shifting a lever that controls a variable speed gearbox.

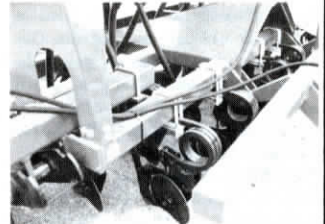
"T-boot" openers mount behind self-aligning coulters. The curved design of the opener creates a suction action that pulls the boot down into the ground. Because of its suction action, the T-boot opener requires only 4 1/2 lbs. of down pressure to penetrate soil (compared to 125 lbs. for a conventional 12-in. dia. coulters), reducing the weight of the drill and allowing it to be used on a conventionally tilled seedbed. A high carbon spring steel triple coil tine clamps onto the frame above each opener and has 390 lbs. of breakaway force for rock protection and to maintain the opener's digging angle. The vibrating action of the coil tine also causes the opener to vibrate, allowing it to shatter compacted soil and cover the seed. Helps create a nice, loose seedbed.



"AgrowDrill" seedboxes mount above a 3-toolbar frame (left). Row units mount on triple coiled shanks (right) that vibrate opener to shatter dry soil and cover seed.

The coulters are designed only to cut through surface residue and can be adjusted up or down (to expose the T-boot opener), depending on soil conditions. There's no need for extra weights which on conventional no-till drills can smear and further compact the seed zone.

A screw-adjustable hydraulic cylinder is mounted on each wheel arm to provide



positive depth control. Drill's wheels can be side or rear-mounted.

Liquid fertilizer application equipment is optional.

Contact: FARM SHOW Followup, David Acres, Tillage & Planting Systems, Box 517, Winchester, Ontario, Canada K0C 2K0 (ph 613 774-2834).