

Injector shoots anhydrous or propionic acid into bales at 3,000 psi.

PRESERVES BALES ON THE GO

“Syringe” Injects High Moisture Hay Bales

A USDA scientist says his “syringe” type injection system for hay bales, which injects preservative into the bale chamber as bales are formed, makes it possible to bale high moisture hay without worrying about spoilage.

A special foot-long “syringe”, made from a hydraulic cylinder, prevents waste by injecting an exact amount of liquid preservative (anhydrous ammonia or propionic acid) into each bale just after it’s formed. The syringe, powered by the tractor’s hydraulic system, draws the preservative from a tank mounted on the baler.

C. Alan Rotz, USDA ag engineer in dairy research, says the key to the system is the use of the hydraulic cylinder to force liquid preservatives into the bale under high pressure. The syringe cylinder is directly coupled to a second cylinder that’s powered by the tractor hydraulics. Liquid is drawn into the cylinder from a tank on the retraction stroke. On the forward stroke, the liquid is forced out through a pair of high pressure lines to jet nozzles on either side of the bale chamber. At pressures of about

3,000 psi, liquid shoots into the center of the bale.

Rotz says the patented system provides a relatively clean way to apply anhydrous or propionic acid to bales. “The problem with spraying preservatives onto hay as it’s picked up is that the acid gets all over the baler. This is also a much safer way to handle both acid and anhydrous. The biggest problem is getting adequate distribution throughout the bale,” says Rotz.

The injection system is trigger by a microswitch mounted on the baler’s star wheel. It triggers a solenoid that activates the hydraulics. All the operator has to do is keep the supply tank filled with preservative.

Rotz says no manufacturers have yet been licensed to manufacture the bale injection system.

For more information, contact: FARM SHOW Followup, C. Alan Rotz, Dairy Forage Research, Michigan State University, 206 Farrall Hall, East Lansing, Mich. 48824 (ph 517 353-1758).

READABLE FROM 150 FT. AWAY

Handy New Gauges For Propane, Anhydrous Tanks

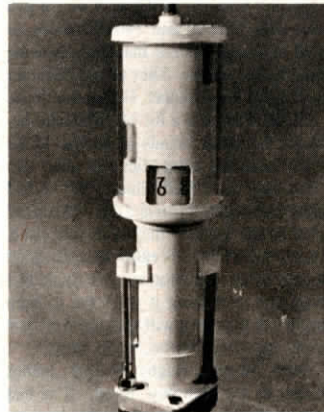
You can tell at a glance, from up to 150 ft. away, how much propane or anhydrous is in a tank if it’s equipped with a new E-Z Read gauge from Futuristic Mfg., Broken Bow, Neb.

The gauges, made of durable PVC plastic and clear antifreeze, mount on any tank equipped with top-mounted Rochester or Taylor gauges.

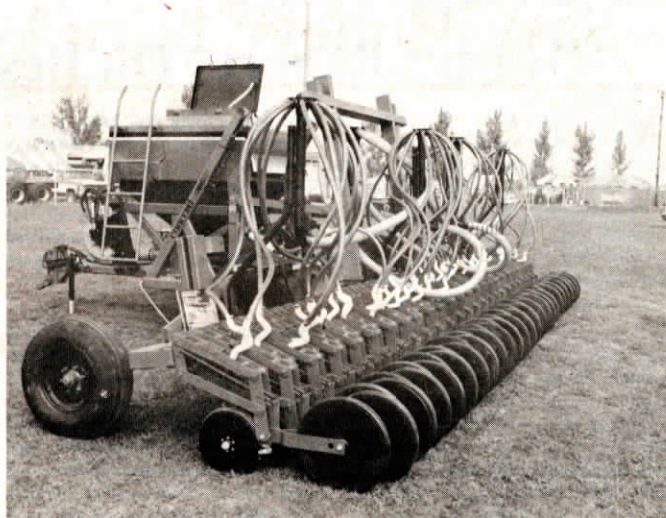
Four viewing windows allow 360° readability from ground level, thus eliminating the inconvenience of having to climb up on tractors or other equipment to check product level.

“Installation of the E-Z Read gauge is simple and can be accomplished regardless of the amount of product in the propane or anhydrous tank,” the manufacturer points out.

The propane and anhydrous gauges are the same except for different mounting brackets and both sell for \$49.95 each.



For more information, contact: FARM SHOW Followup, Futuristic Mfg., Box 57, Broken Bow, Neb. 68822 (ph 308 872-5176).



New drill’s 55 bu. supply tank is mounted on the hitch frame.

ROW SPACING FROM 7-1/2 IN. AND UP

New Air Drill Plants Both Small Grains, Row Crops

First on the market with an all-purpose planter specifically designed to plant both small grains and row crops, including corn and soybeans, is Concord, of Fargo, N. Dak.

The company’s new air press drill can be set up to plant in row spacings from 7-1/2 in. and up. It’ll plant wheat in 7-1/2 in. rows, for example, and soybeans, corn, and other row crops in “cultivable” 15, 22, or 30 in. rows, or even wider if desired.

“Our new planter, with its variable row spacing, works great for small grains, soybeans and even corn. However, it randomly spaces the corn and bean kernels. “We’re working on a metering attachment that will allow it to plant both corn and beans with equi-distant spacing between each plant,” Howard Dahl, president of Concord, told FARM SHOW.

Individual seeding/packing row units are spaced 7-1/2 in. apart. If you want to plant corn or soybeans in 15 in. rows, you simply lift every other row unit and plug the appropriate seed delivery manifold holes. Row units can be lifted in a variety of combina-

tions to provide row spacings of 7-1/2, 15, 22, 30 in. and up.

In the operating position, each row unit as a full 22 in. range of independent up and down travel to ensure precision depth control, trash penetration and packing, regardless of terrain, explains Dahl. He notes that the new drill’s toolbar rotates, putting up to 150 lbs. pressure on disc openers for greater trash penetration.

The new air drill’s 55 bu. supply tank is mounted on the hitch frame. It can be loaded with seed only, or divided to provide simultaneous “once over” dispensing of seed and fertilizer. During the growing season, the tank can be loaded with dry or liquid fertilizer and the drill used to side-dress corn, soybeans or other row crops, Dahl points out.

Available in 24 ft. (\$17,000), 30 ft. (\$21,000) and 40 ft. (\$25,000) models.

For more information, contact: FARM SHOW Followup, Concord Mfg., 2800 7th Ave. North, Fargo, N. Dak. 58102 (ph 701 280-1260).



Each row unit has a full 22-in. range of independent up and down motion.