

When the bale is 80% wrapped, it's injected with ammonia to triple protein content.

LETS YOU MOW AND BALE THE SAME DAY

"2 In 1" Machine Wraps And Injects Round Bales

Bale wrap machines that tightly seal round bales with layers of plastic wrap have become popular around the world the past few years. Now a Canadian company has developed the first machine that both wraps and injects bales with anhydrous ammonia.

Hi-Qual Manufacturing, Inc., Winnipeg, Manitoba, says its machine lets farmers cut and bale hay the same day. "Forage specialists say cutting hay the same day produces about 1/3 ton more hay per acre as a general rule," says company president Allan Akins. Anhydrous kills all molds and fungus that might form and boosts crude protein, digestibility and palatability.

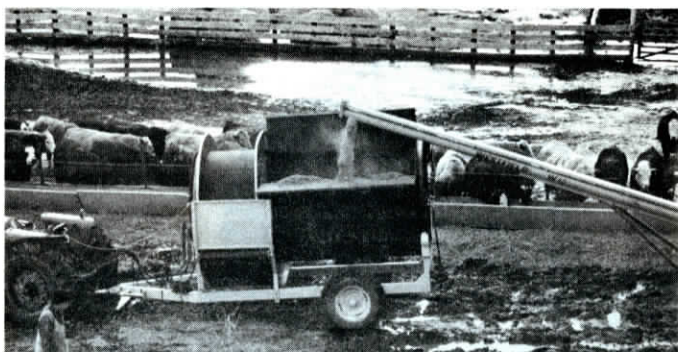
The self-contained "Injector Wrap" machine mounts on a 23 by 7 1/2-ft. trailer. One man can operate it, wrapping and injecting bales in minutes with microprocessor-controlled equipment. The wrapping table moves the bale in two directions at once as it wraps, applying layers of the clingy 20-in. wide plastic wrap. As soon as the bale's 80% wrapped, a round metal

injector spike pokes through the plastic and injects an automatically regulated amount of ammonia, calculated by an electronic microprocessor that weighs the bale and injects a set percent of anhydrous. Once injected, the wrapper completes its application of three layers of plastic.

Aikins says the treated bales can be stored indefinitely. In addition to treating hay, the company is promoting the machine as a way to boost nutritional value and palatability of straw, cornstalks and other roughage. Anhydrous breaks down cellulose in crop residue and triples protein content.

Hi-Qual Manufacturing sells machines to co-ops, dealers and custom operators who do the work on a custom basis. Treatment cost per bale is around \$12.

For more information, contact: FARM SHOW Followup, Hi-Qual Manufacturing, Inc., Box 158, St. Boniface, Winnipeg, Manitoba R2H 3B4 Canada (ph 204 224-3269 or 222-3175).



The 12-ft. model holds 215 bu. and requires only a 40-hp. tractor. Has no paddles, baffles or augers inside.

NO BEARINGS OR AUGERS

New "Low Maintenance" Tumbling Mixer-Feeder

"We've mixed over 10 million pounds of feed with it and haven't changed a thing. If this were an auger type mixer-feeder it would have already needed a new set of augers and bearings," says Lew Dalman, farmer and manufacturer of a new tumbling mixer-feeder that has no bearings or augers to replace and requires much less power to operate than conventional mixer feeders.

Dalman's barrel-shaped mixer-feeder has no paddles, baffles or augers inside. The only thing that causes the feed to rotate and mix is a single metal rebar that's welded in a spiral around the inside of the mixer. That's more than enough, says Dalman. "The mixer turns at just 10 to 12 rpm's, but it'll mix any forage and grain in any proportion in 4 to 5 min. in most cases.

The big rolling drum rotates on teflon rollers. A single #60 roller chain, driven by a small hydraulic motor, turns the drum. The mixer fills through big, hydraulically opened doors and an unloading apron un-

loads out either side through hydraulically-operated unloading doors. The bed of the unloading apron is made from teflon to decrease belt wear and prevent freeze-ups in cold weather.

The 12-ft. model holds 215 bu. "An equivalent size auger-type mixer feeder would require at least 100 hp. to operate. This needs just 40 hp. and two hydraulic valves," says Dalman, noting that the mixer-feeder has a built-in scale and a readout that's easily visible from the cab. "You can control the amount of feedout by adjusting the unloader door opening or changing tractor speed."

Prices for the 8-ft., 12-ft. and 16-ft. models range from \$12,000 to \$20,000 (Canadian).

For more information, contact: FARM SHOW Followup, Dalman Equipment, Inc., P.O. Box 261, Baldur, Manitoba R0K 0B0 (ph 204 535-2083).

PIVOTING HITCH CONTROLS FRONT AXLE

"Self Steer" Trucks Speed Up Harvest

You'll like these "self-steer" forage hauling trucks that quick hitch to rear of forage harvesters and steer themselves around corners, exactly following the tracks of the harvester.

Lowell L. Johnson, Viborg, S. Dak., rigged up three trucks with pivoting hitches that control the truck steering arms. A 2-in. square tube tongue on his New Holland chopper slips into the hitch at the rear of each truck. A steering arm extends off one side of the truck hitch, which is suspended on a pivot point below the truck frame. The hitch and steering arm pivot back and forth as the tongue from the chopper moves back and forth on turns. Rods that extend from the hitch steering arm up to the truck's front axle control the motion of the truck so that it follows exactly in the path of the chopper.

Johnson says the modified trucks steer normally once they're unhooked from the chopper. He rigged up three self-steer trucks so he can have one filling, one on the road and one dumping at his silage pit.

Contact: FARM SHOW Followup, Lowell L. Johnson, Viborg, S. Dak. 57070 (ph 605 326-5338).



Backward-moving truck follows exactly in chopper's path.