



Big round discs, equipped with spikes, grab each end to pick up bale and spin it for wrapping.

ONE MAN CAN WRAP A BALE IN 90 SEC.

First-Of-Its-Kind Bale Wrap Machine

New from Joe Lawless, Jacksonville, Ill., is a new bale wrap machine that lets one person automatically wrap a bale with plastic in 90 sec.

Lawless, who invented the original round bale protective sleeve, and has sold thousands of them all over the U.S. and Canada, recently received a patent for "The Wrapper". He says there's no other machine like it on the market even though some manufacturers have put plastic wrap attachments on their balers.

"Plastic wrap attachments on balers are just one more thing that can go wrong when you're trying to get hay in. If something happens to the bale wrap mechanism on a baler, you'll lose time fixing it or you might get hay baled but never get the bales wrapped. With this new machine, you can go in anytime after baling and wrap the bales at your own convenience." Lawless told FARM SHOW.

Lawless's prototype machine consists of flat carrying discs about the diameter of the average round bale. The discs are equipped with metal spikes that grab the bale when the discs, mounted on hydraulic arms, pick the bale up by its ends. Each disc

is equipped with an orbit motor that spins it, and thus the bale, as it is wrapped.

The plastic is carried on a roll above the bale. The entire wrapping process can be carried out from the tractor seat. A small metal arm on one disc pins a loose end of the plastic against the top of the bale and rotates with the bale as it turns, pulling plastic off roll. The bale is wrapped 1/4 times before the operator cuts the plastic with a rope-activated knife. In all, it takes about 90 sec. to wrap a bale.

Lawless notes that a twine tie could be added to the machine to hold the plastic in place if the bales are going to be moved around a lot. The wrap adjusts bales varying in size from 800 to 1,500 lbs.

The machine will be on the market sometime next year, Lawless hopes. He notes that there has also been some interest in developing the wrapper design into a new-concept baler.

For more information, contact: FARM SHOW Followup, Joe Lawless, Jr., Plastic Forage Savers, Rt. 2, Box 187, Jacksonville, Ill. 62650 (ph 217 673-4301).

FASTER, CHEAPER THAN CONVENTIONAL DRYERS

New Grain Dryer Uses Salt, Sand

It may still be five years down the road, but you could then be drying your grain by a new process that takes one-tenth as long and uses only 80% as much energy.

The revolutionary process uses salt or sand to bring heat to the grain and carry away its moisture.

"This drying concept has been under study for 10 years in Canada, and it's still being refined at the Agriculture Canada Research Station, Swift Current, Sask. A dryer prototype for use on farms or in elevators is now ready for commercial production.

"The dryer will thoroughly mix the

grain with heated sand or salt, then separate out the grain from the heated material," Sylvio Tessier, research engineer who has been developing the equipment, told FARM SHOW.

Salt is the usual drying agent for grain slated to be used for feed, and sand for grain that will be used for seed and other purposes. Tessier says there have been no problems in completely removing dust with conventional grain cleaning equipment. "In a taste test, a panel of tasters found paddy rice which had been dried with salt to taste no different than air-dried rice," he notes.

A farm-size prototype dryer is 13 ft.

"DUSTMASTER" SELLS FOR \$89

You'll Like This New Low-Cost Dust Helmet

If you've been looking for a lower-cost solution to grain dust, hay fever and other dust-related or allergy problems, the new \$89 Dustmaster from Racial Airstream may be the answer.

"I've tested it — I know it works," says Mike Nelson, a dust-allergic Minnesota farmer who, in the past six years, has built up a booming sideline business as the national agricultural distributor for Airstream anti-dust helmets. "I predict that, within a year or two, the new Dustmaster will be the biggest-selling dust helmet in the farm market," says Mike. "Its lower price will make it attractive to the hundreds of farmers and ranchers who are moderately allergic to dust but have lived with the problem rather than pay several hundred dollars for a deluxe dust helmet. Farmers with serious dust and allergy problems want and need the luxury features incorporated into Airstream's popular deluxe dust helmet, which sells for \$375. But, if all you need is occasional protection — while cleaning out a grain bin, for example — the new low-cost, lightweight Dustmaster is just the ticket."

It's battery-powered, with the motor/fan assembly, air filter system and batteries all worn at the waist, thus reducing the amount of weight carried on the user's head to less than a pound.

"Contaminated air is filtered in the unit and passes through the flexible breathing tube. It then enters the headpiece, made of Tyvek — a teflon-coated, tear-resistant material — and a flexible face shield. The cost (\$89) of the Dustmaster I system includes the main air filter unit, soft headcover, and five standard filters. An optional (\$9.90) activated charcoal filter protects the user from ammonia and other odors in livestock and poultry confinement buildings.



The Dustmaster sells for \$89 with a soft helmet, and for \$169 with a hard helmet fitted with a rigid visor, as shown in top photo.

Also available are the Dustmaster II system (\$109) which is the same as the basic system except that the soft helmet is fitted with a rigid visor for workers who need face impact protection, and the Dustmaster III system (\$169) which employs a lightweight hard hat and the rigid visor for total head, face and respiratory protection.

For more information, contact: FARM SHOW Followup, Nelson Equipment Sales, Rt. 1, Elbow Lake, Minn. 56531 (ph toll free 800 328-1792; in Minnesota call 612 284-2418).

long and has a capacity of 1,500 lbs. of grain per hour. A commercial-size prototype on test at MacDonald College in Quebec will dry 5 tons per hour.

Ideal drying mixture is about 1 lb. of sand or salt for each 3 lbs. of grain. Sand and salt are recycled through the dryer and, because of their heat holding capacity, there is not much new energy input required in each new cycle, explains Tessier.

He notes that, with salt or sand, the energy requirement is 20% less than air, and the drying is done 5 to 10 times as fast. For example, a bushel of corn at 18% moisture requires 8,200

btu of heated air to dry it down to 13%. But, with hot sand, only 6,500 btu are required.

Detailed design of the dryer is not available for publicity while patent proceedings are going on, but a patent is expected soon. In the meantime, Tessier is looking for prospective U.S. and Canadian manufacturers to make the dryer.

For more information, contact: FARM SHOW Followup, Sylvio Tessier, Agriculture Canada Research Station, P.O. Box 1030, Swift Current, Sask. S9H 3X2.