

Bottom tube carries grain. Top tube serves as a return for conveyor paddles and chain.

## ROUND PADDLES "PUMP" GRAIN TO MINIMIZE KERNEL DAMAGE

## New "Augerless" Grain Elevator

"We think it has important advantages over conventional augers, bucket elevators or air conveyors," says the manufacturer of the new Grain Pump, an "augerless" grain elevator introduced by Hutchinson Division, Lear Siegler, of Clay Center, Kan.

The revolutionary Grain Pump uses round paddles, spaced 13 in. apart on a continuous roller chain, to move grain in or out of storage.

"A common problem with bucket elevators is that they drop grain great distances, causing kernel breakage and cracking," notes Richard Fassler, sales manager. "Conventional augers also have a lot of metal-to-grain contact which causes kernel damage. With our new Grain Pump, there's virtually no kernel damage whatsoever. And, compared to air conveyors, it requires considerably less horsepower in relation to capacity."

Fassler notes that the Grain Pump is a scaled-down version of Hutchinson's Master Mover which uses square paddles and has a higher (5,000 or more bu./hr.) capacity. "Our new Grain Pump uses the same concept, except that it has round instead of square paddles and is rated at 1,500 to 2,000 bu./hr. capacity for a 6 in. dia. system. We'll soon be introducing an 8 in. dia. Grain Pump," Fassler told FARM SHOW.

The 6-in. dia. Grain Pump is available in a portable twin tube unit 61 ft.



Grain Pump's round paddles, spaced 13 in. apart, move grain, dry fertilizer and other materials in or out of storage.

long, or in a low-profile, stationary system for moving grain in or out of flat or conventional bin storage.

"A conventional grain auger loses upwards of 80% of its capacity when operated at its steepest angle. Our new Grain Pump is 90% efficient at its steepest angle, and handles a wide variety of grains at high moisture levels without plugging or other problems."

Retail cost of a stationary, closed loop Grain Pump system (6-in. dia.) is right at \$40 per running foot.

For more information, contact: FARM SHOW Followup, Hutchinson Division, Lear Siegler Inc., P.O. Box 33, Clay Center, Kan. 67432 (ph 913 632-2161).



Bag Boss loads 1,000 lbs. of silage per minute.

## SAVES AND FOLDS THE BAGS FOR REUSE

## Mechanical Unloader For Plastic Silage Bags

Two Iowans have teamed up to produce the world's first mechanical unloader for silage stored "sausage style" in long plastic bags.

"We think it's the biggest breakthrough in silage making since the relatively new concept of stuffing silage into long plastic bags was first introduced," says John Burgers, owner of John's Welding and Manufacturing of Inwood. He built the first prototype and is now "tooled up" to manufacture and market the mechanical unloader which was invented and patented by Vernon V. Johnson, of Galva.

Called the Bag Boss, it'll unload any plastic bag regardless of which make of machine - Silo Press, Ag Bag, Max-Pac, Roto-Press or whatever - does the ensiling. "So far, we've only tested the Bag Boss on haylage and silage. But we think it'll handle anything you can ensile in long plastic bags, whether it's corn silage, haylage, stalklage, ground ear corn, shelled corn or whatever," Burgers told FARM SHOW. As it eats its way into a pile of bagged silage, the Bag Boss scrapes the plastic clean. Power-driven rollers around the outer circumference gather in the plastic, keeping it intact and automatically folding it "accordian style" on a large spool for reuse.

"We anticipate that most bags unloaded within 12 months or so after filling can be reused several times," says Burgers. "However, even after longer-term storage, where the plastic has deteriorated too much for reuse, the Bag Boss automatically gathers in the plastic, keeping it out of the silage as the bag is unloaded."

Burgers notes that one man can operate the Bag Boss. "And, the same tractor used to pull the silage wagon you're loading into can be used to power the hydraulically-operated Bag Boss, which uses a cable to winch its way through the pile. It unloads the bag slick and clean, leaving no spilled silage to clean up afterwards.

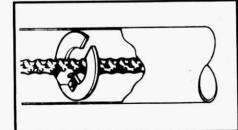
"Another advantage of the Bag Boss is that, if it's muddy, the machine will unload an entire pile of bagged silage without leaving any deep ruts, as can happen when using a big tractor and loader to do the unloading," Burgers points out.

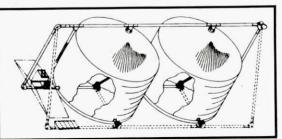
It takes the Bag Boss five to six hours to eat its way through a long plastic bag of silage measuring 150 ft. long and 9 ft. in dia., which figures out to about 1,000 lbs. of silage per minute. The machine can be steered, as needed, to direct it through piles with curves or bends in them.

"It only takes about 20 to 30 minutes to set up the Bag Boss and have it in operation," says Burgers. "You simply open up the tied end of the long plastic bag and thread it through the rollers and onto the machine's take-up spool. If the bag is filled way to the end, you may have to peel off a small amount of silage by hand to get the plastic threaded."

The machine, which converts to road transport in a matter of minutes, sells for right at \$12,500. The prototype is a 9 ft. dia. model. Custombuilt production models will be available for either 8 or 9 ft. dia. plastic bags. A self-propelled model equipped with a gas engine is in the hopper.

For more information, contact: FARM SHOW Followup, John's Welding and Manufacturing, John Burgers, Owner, P.O. Box 43, Inwood, Iowa 51240 (ph 712 753-4456).





Round plastic paddles are notched, as shown at left, to go around drive sprockets. System can be built under bins for new construction, or to the side (represented by dotted lines) of existing bins.