NO MORE HAULING

"Manurigation" System Pipes Slurry To Fields

"You don't waste time driving back and forth to manure storage," says Dan Branton, ag engineer, who's invented "Manurigation", a new system for injecting liquid manure in fields up to a mile away from liquid manure pits or slurry tanks, connected only by flexible hose and aluminum pipe.

Systems Design Ltd., of Delavan, Wis., has so far sold some 20 Manurigation systems. Using your own chisel plow equipped with a manure injector manifold, you can inject up to 1,000 continuous gal. per minute. The chisel plow and injector are connected by irrigation hose to the manure source. By following special driving patterns in the field, Branton says there are no tangle problems with the flexible hose which trails behind the plow. Aluminum pipe is used to reach fields more than 1,000 ft. away.

Branton told FARM SHOW that his system has been tested two years, and that the flexible hose will last as long or longer than the flexible hose commony commonly used on traveling irrigation guns.

A 660-ft. standard length hose covers 10-12 acres. The tractor powering the manure pump needs to be at least 125 hp., and it takes a 125 to 185 hp. tractor, depending on soil type, to pull the injector and flexible hose. Injection can be as deep as 12 in, using either 4 or 6 knives, or manure can be top-dressed. Swath width varies from 12 to 16 ft.

Branton explains that hog manure from pits works well and that any liquid needs to be thin — 10% solids or thinner — to work well.

Up to 12 acres can be covered before having to stop and make another hose hook-up. The injection system can be modified to fit onto a farmer's existing chisel or moldboard plow, or Branton's chisel-injector can double as a straight tillage tool.

The driver controls the rate of liquid injection from the tractor seat. Branton said he's used one flexible hose for a year and a half to knife in



A long hose (a mile or more in length) links chisel plow directly to slurry tank or pit for injecting manure into ground without having to do any hauling.

"millions of gallons," without wearing out the hose.

Cost of the system, including a 660-ft. flexible hose but not aluminum pipe, is \$23,000.

For more details, contact: FARM SHOW Followup, Systems Design Ltd., Box 311, Delavan, Wis. 53115 (ph 414 728-5181).



New oil filter adaptor, left, replaces Deere's conventional spin-on filter, right.

FIRST OF ITS KIND

Working Chute For Horned Cattle

"We've had horned Herefords for years, and I knew there had to be a better way to work horned cattle," says Dick Robbins, of Pratt, Kan. "So, for the last 5 years, I tinkered with a new concept for a chute and finally came up with this one in February this year. We've used it heavily and have found no problems."

Robbins calls it the Anchor D Longhorn Chute. It does everything a good chute is supposed to do, plus having the exclusive feature of being able to handle cattle with horns. It's a modified Powder River conventional chute with the frame made wide enough to clear the horns, and in a V-shaped design which tends to support the animal when held in the



squeeze position. You can work cattle from either the left or right side of the chute.

The heavy duty chute is 82 in. long, 47 in. wide and 87 in. high. The stanchions are 2 in. pipe frame with 16 ga. steel covers. Optional neck bar or nose bar give further restraint by holding the head down.

The chute is priced at \$1,995, knocked down, FOB Belvidere, Kan. Shipping weight is 1,300 lbs. Optional neck or nose bars are an additional \$14.

For more information, contact: FARM SHOW Followup, Dick's Ranch Supply, 423 N. Main, Pratt, Kans. 67124 (ph 316 672-5624).



V-shaped chute has plenty of room for handling cattle with long horns. Optional neck bar holds head down.

FOR DEERE TRACTORS

New Adaptor Cuts Oil Filter Costs

"I was tired of paying \$10 for John Deere spin-on oil filters," says Leo Kuiper, Archer, Iowa. "The cost adds up fast, especially when you change the oil every 100 hours."

To cut costs, Kuiper developed an adaptor designed for large 6 cylinder diesel engines on Deere tractors and combines with 404 or larger blocks.

"It takes just a minute to attach the adaptor because it screws on where the oil filter normally spins on," reports Kuiper. "Along with the adaptor comes a steel canister that holds the less expensive Baldwin (or other brand) filter and attaches to the adaptor. Now, farmers can use \$3 throw-away filters and save some money. Together, the can and adaptor weigh 6 lbs."

"We've used this invention on 3 of our tractors since last spring without any problems," Kuiper told FARM SHOW.



Filter adaptor fits most Deere tractors and combines.

A John Deere official cautions potential users to check with their local dealers to see how this unit might affect the warranty on new tractors.

Kuiper has no plans for building adapters for other tractors.

The adaptor, canister and five Baldwin filters sell for \$50.

For more information, contact: FARM SHOW Followup, Leo Kuiper, Rt. 1, Iowa 51231 (ph 712 723-5379).