

**ALSO BEING TESTED ON
"SLUGGED" SLURRY TANKS**

Sludge Eliminator For Manure Pits

"It's light enough so one man can handle it," says Kim Brokaw, designer-manufacturer of a new "sludge eliminator" for manure pits. The complete unit is narrow enough (6½ in. outside dia.) to slip into the pump-out portholes of manure pits.

The sludge-busting auger is powered by a hydraulic piston motor. "It's more durable than a gear type motor or an orbit hydraulic motor," explains Brokaw. "Although it normally is operated at 1800 rpm's for de-sludging solidified manure pits, it can be revved to 3,000 rpms and will develop up to 10½ hp. A comparable size electric motor would weigh considerably more, making the unit awkward and too heavy for one man to handle. Our complete unit —

motor and all — weighs only 130 lbs. Another reason we went with the hydraulic piston motor is that it can run submerged in liquid, which means we get by with a much shorter drive shaft than we would need if we had gone with an electric motor."

The auger is designed with inlets that have 3 times more area than the discharge outlets. This restraint forms a pressure which agitates, loosens and homogenizes liquid and solidified manure, turning it all into a combined slurry which a vacuum pump can suck out of the pit.

Brokaw hasn't tried his "sludge eliminator" in slurry tanks that have solidified with sludge but plans to test this particular application. "We've had a lot of inquiries from

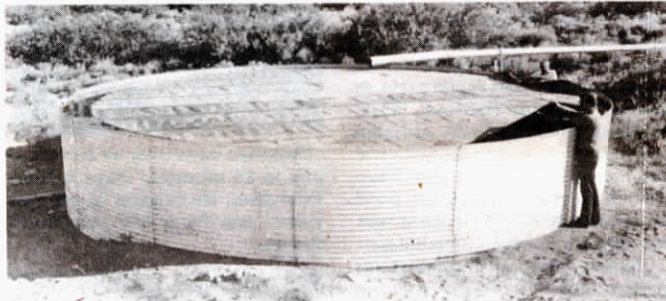


Entire Sludge Eliminator, motor and all, weighs only 130 lbs. and is only 6½-in. in dia.

owners of slurry tanks who have been looking for an easy, economical way to break up the accumulation of solids which, in many cases, has forced operators to close down complete systems. We're not making any promises that our sludge eliminator will solve the problem until we test it for this application, but we're hopeful that it can solve the problem, based on what the sludge eliminator has been able to do to break up the accumulation of solids in manure pits."

The sludge eliminator sells for \$1,640. It will operate off the hydraulic system of a small utility tractor and will homogenize accumulated solids and liquid manure within a radius up to about 40 ft., according to Brokaw. If the auger should happen to slug, it can be reversed to free the slug without hurting or damaging the motor.

For more details, contact: FARM SHOW Followup, KC Brokaw Co., 701 North Birch Street, Monticello, Iowa 52310 (ph 319 465-5171).



Yardarm floating covers are priced at \$.95 per sq. ft., which figures out right at \$47.75 for an 8 ft. dia. tank; \$107.44 for a 12 ft. dia. tank.

REDUCE EVAPORATION LOSSES UP TO 90%

Floating Stock Tank Covers

With increasing reports of water shortages around the country, a new evaporation-proof floating water tank cover could be a real boon to farmers and ranchers trying to conserve scarce water.

Yardarm Sailmakers, of Needham, Mass., is selling custom-fit tank covers made from ¼ in. thick foam rubber sheets. These sheets have reduced evaporation losses up to 90%. They also inhibit algae growth and keep the water colder since they block out sunlight. Bail holes throughout the covers permit rainwater to pass through without collecting on top.

"You can easily lose up to 7 ft. of water per year to evaporation on a 32 ft. dia. tank," explains Fred Benco, president of Yardarm Sailmakers. He says ranchers in the southwestern U.S. are showing the most interest. "Some have had to haul water to their

livestock at up to \$30 per 1,000 gals.," Benco told FARM SHOW.

The foam rubber covers stay on the tanks year-round. They also work on small ponds and lakes. Ice build-up won't damage them, according to Benco. He expects the covers to last a minimum of 10 years. Cost of the covers is right at 95¢ a sq. ft.

Benco suggests covering the entire tank with a floating cover and using the tank to feed an automatic waterer for livestock. He says there has also been some interest from livestock farmers for using the covers to seal odors in above-ground manure storage tanks, but he hasn't tested the covers for this purpose yet.

For more information, contact: FARM SHOW Followup, Yardarm Sailmakers, Inc., Fred Benco, 925 Webster St., Needham, Mass. 02192 (ph 617 444-7060).

ELIMINATES THE NEED FOR BACK FLUSHING

Manure "Mixer Pump" Solves Pit Problems

New from the Graham Co., Gibson, Iowa, is an electrically driven Turbo Mixer pump, designed to eliminate the accumulation of solids in confinement building manure pits without having to go to the expense of remodeling the building to make room for a larger and more expensive pressure-type pump.

"It also eliminates the time consuming job of back flushing with a manure pump," explains Scott Graham, inventor-manufacturer.

The Turbo Mixer is 11 ft., 3 in. long and small enough in diameter (6½ in.) to slip into standard 8 in. pump-out portholes. It combines liquids and solids into a thoroughly mixed slurry for easy removal with a vacuum pump, explains Graham. "Basically, it's designed for the hog operator who's having sludge accumulation problems in a confinement building manure pit and doesn't want to go a lot of time and expense in solving the sludge accumulation problem."

The unit is powered by a 3 hp. electric motor (220 or 110 V.) and weighs 245 lbs. It comes complete with a winch which works in conjunction with a tractor or skid steer loader for moving the mixer in and out of pump-out portholes.

The Turbo Mixer pulls liquid manure off the top and pumps it with force down into the sludge layer to completely homogenize the pit man-



Graham says his Turbo Mixer is for operators who don't want to spend a lot of time and money solving sludge-buildup problems.

ure into a slurry which a vacuum pump can easily handle, explains Scott. He hadn't established a retail price on the Turbo Mixer when this issue of FARM SHOW went to press.

For more details, contact: FARM SHOW Followup, Graham Co., Scott Graham, President, Gibson, Iowa 50104 (ph 515 634-2500).