

System consists of a fan-shaped network of pipes laid out in bottom of tank (above). Compressor sends air into tank through a series of pipe valves controlled by programmer (see photo below) that switches regularly between sections of tank.

"Bubbler" Agitates, Aerates Liquid Manure

"It's the most cost-effective and efficient liquid manure aerator/agitator system on the market," says the British manufacturer about the "Bubbler", an innovative aeration system for slurry tanks and lagoons.

The system consists of a fan-shaped network of plastic pipes installed in the bottom of the lagoon or tank. It features controls that let you pump air into the pipes sequentially, from one area of the tank to the next-rather than aerate the entire tanks at once-so it requires only a small single-phase motor, according to inventor Michael Lees.

The "Bubbler's" 6-vane rotary compressor forces air through pipework via solenoid valves sequentially controlled by a solid-state programmable timer. Air at 15 psi is pumped for two minutes into various sections of the pipe. Size of bubbles is carefully calibrated by type of nozzle and waste swine, dairy or beef - is being treated.

Handles from 1,000 to 1 million gal. Ranges from

about \$3,000 to about \$4,500.

Contact: FARM SHOW Followup, Rockbourne Civil Engineering Ltd., Old Brickyard Road, Sandleheath Industrial Estate, Fordingbridge, Hampshire, Great Britain SP6 1PA (ph 0425-652409/ 656969; fax 0425-656583).

New-Style Anhydrous Pump

Whether you apply your own anhydrous ammonia or have it custom applied, you'll want to take a look at Blue Jet's new GDI 200 pump.

"I don't know of anyone else that has a ground-driven pump for anhydrous," says Clay Malmberg, regional sales manager for Thurston Manufacturing Company, maker of Blu-Jet products. "It's ground- driven so it solves the problem of getting too little nitrogen on in cold weather when pressure in tanks tends to decrease. That's because the GDI 200 actually creates a 'suction action' in the tank. This new pump delivers superb ac-

curacy - less than 1 lb per acre drop - in field tests last fall at 30 degrees at rates up to 200 lbs. per acre. With any other pump you'd be lucky if it was only a 10% per acre drop."

Plus, unlike electronic pumps, the GDI 200 is fully serviceable in the field, Malmberg adds.

Lists for \$3,717.

Contact: FARM SHOW Followup, Thurston Manufacturing Company, Hwy 87A, P.O. Box 218, Thurston, Neb. 68062 (ph 800-658-3127, or 402 385-3041; fax 385-3043).

Square Bale Hay Feeder

"My new square bale hay feeder for hogs limits feed waste and doesn't take up much room. Works great for hogs of all ages," says John Murphy, Lena, Wis.

Made from galvanized steel, the hay feeder is equipped with a 4-ft. long, 20-in. wide, 16-in. high bale chamber mounted on two steel legs anchored to a base made from 2 1/2-in. angle iron. The chamber is tipped up at a 45 degree angle, with the top end open. The bottom end is covered by a bolt-on grille. After putting a bale in the feeder, you cut the twine at the end of the bale and remove it. When the chamber is about 3/4 empty you put in another bale in order to keep downward pressure on the first bale.

"It takes the work out of feeding hay to sows and is weatherproof. I put a flanged sheet metal end cap on it whenever I use it outside," says Murphy, who has a hog finishing operation. "Hogs really like it. It's kind of comical to watch them sit on



their rear end and pull hay out of the grille. There's less waste than throwing bales on the ground because hogs have to work at pulling the hay out. I think you could keep sows on pasture all winter by feeding them good alfalfa because there's no waste.

Sells for \$225

Contact: FARM SHOW Followup, John Murphy, Murphy Products, 6757 Hwy. 141 So., Lena, Wis. 54139 (ph 414 829-5129).

Deep Placement Dry Fertilizer Bander With Mid-Mount Toolbar

"Our new deep placement dry fertilizer bander has a separate air chamber for each row and is equipped with a midmount toolbar - positioned ahead of the tank - that makes it easier to stay on the row and improves the view from the tractor cab. By mounting residue cleaner attachments on the toolbar you can also use it to do strip tillage," says Verlyn Fast, Fast Distributing Inc., Mountain Lake, Minn.

The self-contained unit consists of a 5-ton fiberglass hopper mounted behind the coulter-equipped toolbar. The tractor's hydraulics are used to power a large blower mounted behind the hopper. The blower sends air into a series of stainless steel "acceleration chambers" mounted at the bottom of the hopper.

"Mounting the toolbar ahead of the hopper instead of behind it causes it to pull easier and also track rows better than deep banders equipped with rearmounted toolbars," says Fast. "The toolbar adds positive weight to the tongue and can be raised or lowered by the 3-pt. depending on soil conditions. The blower's individual acceleration chambers deliver the same amount of fertilizer to each row, resulting in more accurate placement of fertilizer over all rows. Air moves at a much slower speed than on other fertilizer rigs which re-



duces horsepower requirement. A 12-row model equipped with 18-in. dia. Auscherman coulters requires only about a 125 hp tractor.

"No other tools or implements are required as opposed to other types of air banding units which usually are only the delivery system and require a field cultivator or other tillage equipment. Our system can be adapted to no-till, ridge-till, or conventional till. We plan to test it this spring for planting soybeans."

Available in 6, 8, 12, and 16-row models. A 12-row model retails for about \$30,000.

Contact: FARM SHOW Followup, Verlyn Fast, Fast Distributing Inc., Rt. 2, Box 325, Mountain Lake, Minn. 56159 (ph 507 427-3861).



Mid-Mount Caddy Applies Dry Or Liquid Fertilizer

Progressive Farm Products, Hudson, Ill., says it will soon offer its deep placement "air blower" dry fertilizer bander with a 3-pt., mid-mount toolbar positioned ahead of either a dry fertilizer box or 1,000-gal. liquid fertilizer tank.

A rear telescoping hitch allows you to pull an anhydrous tank and apply dry fertilizer and anhydrous at the same time. By mounting residue cleaner attachments on the toolbar you can also use it to do strip tillage.

"The mid-mount toolbar makes it easier to stay on the row and improves the view from the tractor cab," says John Wolf, marketing manager. "The tractor's weight is transferred through the hitch, allowing the forward pull of the tractor to push the toolbar shanks into the soil."

Contact: FARM SHOW Followup, Progressive Farm Products, Rt. 1, Box 17, Hudson, Ill. 61748 (ph 309 454-1564).