Fan System Saves Energy Summer And Winter

A new-style air circulating fan saves energy and improves comfort in everything from calving barns to factories, warehouses, and even bars and restaurants. Any large, open layout is a good place for the compact air system, says inventor Keith Walker about his new Vortex fan system.

"One fan covers up to 2,000 sq. ft.," says Walker. "It keeps the temperature balanced in a room by continuously circulating the air."

Walker says satisfied customers find the fan keeps dairy barns drier and that it also seems to get rid of flies. The Vortex also keeps doors from freezing up in winter.

"Restaurant workers say it keeps them feeling fresher, and they don't feel as drowsy in the afternoon, and people in conference rooms say it keeps them more comfortable," says Walker. "In the summer, it will drop the temperature by 8 to 12 degrees and lower the humidity by dispersing it more evenly."

The Vortex system gathers warm air near the ceiling and forces it to the floor in a 2-ft. dia. column of air. The relatively low-pressure airflow then spreads out across the floor to walls, gradually rising to again be recirculated. Doing so disrupts air layer/stratification and eliminates warm and cold spots.

Walker says the Vortex fan is effective even in rooms with 50-ft. ceilings. However, even in much lower ceiling areas, the column of air isn't particularly noticeable.

"In a room with a 10-ft. ceiling, it would be like walking under a small hair dryer," says Walker. "You might feel something, but it's so gentle it won't bother you."

Walker has patented the unique design, which he reengineered from an earlier design. He is so confident of its effectiveness that he guarantees it will pay for itself in energy savings alone in four seasons of use.

"If you use it with both heating and air conditioning, it will pay for itself in 2 years with energy savings of 30 percent. Some customers see up to 50 percent savings," he says. "Machine shops and others heating with ceiling hung, gas-fired radiant heaters reduce fuel use by 50 to 80 percent."

The fully assembled units are designed for easy installation. Industrial units have larger

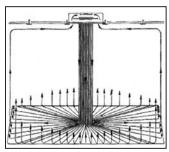
motors and are designed to be hung from a girder or other support. Only 18 in. wide by 10 in. high, a unit requires only 0.44 amps to power a 1,500-rpm motor. Commercial units fit a standard 2 by 2-ft. panel, are only 5 in. high and are designed for T-bar installation. "Once a unit is hung in place, simply plug

it in, and it goes to work," says Walker.

Suggested retail price for either the commercial or the industrial style unit is \$800. They are available through direct sale from Vortex Energy Savers, Ltd. or independent sales representatives.

Walker says the units can be installed in any size room. However, he admits the Vortex air system can be counterproductive if placed in a room that has the thermostat for an entire floor or building. While that room is comfortable, the other rooms may be too warm or too cool.

"It works fine in a 100-sq. ft. conference room," says Walker. "It helps air conditioners run 30 to 50 percent more efficiently by eliminating warm and cold spots in a room. People are more comfortable and, as a result.



Vortex circulating fan keeps the temperature balanced in a room by gathering warm air near ceiling and forcing it to the floor in a 2-ft. dia. column of air.

more attentive."

Contact: FARM SHOW Followup, Vortex Energy Savers, Ltd., 2210 Dale Ridge Drive, Oakville, Ont., Canada L6M 3L4 (ph 647 333-1856; kwalker8@vortexenergysavers. com; www.vortexair.ca).

Straw Bale Shredder Works Fast, Spreads Evenly

Midsota Manufacturing's new Hydra-Shredder chops and spreads bales for bedding quickly and evenly. It saves time and labor -- and as a bonus, it saves bales, too.

"Our customers tell us that where they were using three big round bales, they now need only two," says Joel Bauer, president of the Minnesota manufacturing company. The Hydra-Shredder Bale Processor consistently shreds the bale evenly in one pass through the barn.

Bauer notes that the company developed the new bale feeder at the request of dairy farmers who wanted an easier way to handle bales. They were using skidsteers and forks to knock bales apart in bedding packs and freestall barns, but the results were clumpy and uneven.

Midsota's shredder has three heavy-duty augers with cutting knives that run forward and backward. Its forks pick up the bale, then the hydraulically controlled unit is tipped back and the bale feeds into the augers. Chopped straw falls through. Most operators go to the end of the bedding area and back up, dropping and spreading the straw as they go.

Though designed for bedding, some farmers use it to pre-chop hay into TMR mixers to get a better blend and avoid plugging with long hay strands.

Bales can be run through the shredder without removing string and netting, which can be pulled off the rollers later when the shredder is taken off. Farmers appreciate that because they don't have to get in and out of their skidsteer for every bale.

The shredder has a universal quick tach mounting plate, is made with 1/4-in. steel, has replaceable shredding knives, 1 1/2-in. bearings and #60 roller chain. It's made heavy-duty to last, Bauer says.

The shredder weighs 750 lbs. and is 66 in. wide to handle any size round bale that the skidsteer can lift. It has a 1-year warranty and sells for \$5,900 through Midsota and its





Hydra-Shredder chops and spreads bales for bedding. Forks pick up bale, then unit is tipped back so bale rests on augers. Chopped straw then falls through to the ground.

dealers around the country.

A video on Midsota's website shows the shredder in action.

Contact: FARM SHOW Followup, Midsota

Manufacturing, 404 County Road 50, Avon, Minn. 56310 (ph 877 356-2407; www. midsotamfg.com).

Go-Anywhere Hot Shower For Livestock

After seeing a portable hot water shower designed for campers, it suddenly dawned on the staff at Schneiders, a horse supply company, that they could offer something similar for horses. "We approached the manufacturer and asked them to modify it," says Charles Pinnell, Schneiders representative.

The Insta-Hot washing system was introduced at the 2010 Quarter Horse Congress and orders have been pouring in ever since.

Insta-Hot hooks directly to a water supply and heats up within seconds. There are two dials. One controls the temperature from 80 to 150 degrees. The other sets the rate for the best pressure and temperature flow. Generally, a 20-lb. propane tank provides about 18 hrs. of washing at a flow of 1.4 gal./ minute.

The whole package, including gas hookup, sells for \$149.95. The unit's on/off switch requires two D batteries (not included). For convenience, Schneiders also offers a customized cart to hold the unit, hose, propane tank and grooming tools for \$64.95.

"Many of our customers are show horse people," Pinnell says. "And this unit is becoming popular with 4-H programs and



Insta-Hot portable hot water shower hooks directly to a water supply and heats up within seconds.

other show animal groups -- anywhere you need instant hot water. And people can still use it for themselves, too."

Contact: FARM SHOW Followup, Schneiders, 8255 E. Washington St., Chagrin Falls, Ohio 44023 (ph 800 365-1311; www. sstack.com).



Cole lays cement blocks out side by side in rows on top of metal screens that keep gophers from tunneling up under the blocks to get to the garlic.

"Cement Block Garlic" Grows Big

If you want to grow bigger-than-usual garlic, try growing it inside cement blocks, suggests Ted Cole of Fort Bragg, Calif., who recently sent FARM SHOW photos of the system he uses.

"I grow garlic in blocks set side by side in rows," says Cole. "First I lay 1/4-in. hardware cloth under all the blocks to keep gophers from tunneling up under them, and then I sprinkle about 1/8 of a cup of gypsum in the bottom of each block. Then I mix compost with blood meal, peat moss, phosphorous, potash, and a little cow manure. I fill the blocks with this mixture and then plant one clove into each of the holes in the block, about 1 to 1 1/2 in. deep. As the compost settles from watering, I keep it topped off with more of the mixture.



Cole shows off last year's crop

"I've found that garlic and raspberries grow well together, so you might think about planting them close to each other. Then, water and wait and be surprised at harvest time."

Contact: FARM SHOW Followup, Ted Cole, P. O. Box 871, Fort Bragg, Calif. 95437 (oceanspromises@toast.net).