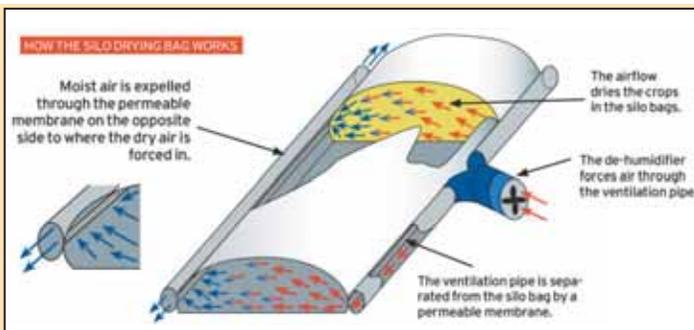




Grain is loaded into bag with standard bagging machine. Dryer hooks to plastic tube on side of bag, sending warm air through grain and out tube on other side of bag.



## Portable Crop-Drying System Dries Grain In Bags

A revolutionary portable grain drying system that allows you to aerate and dry your grain in a poly bag was on display at the recent Canada Farm Progress Show in Regina.

The flexible system dries and aerates grain and also doubles as a storage unit, allowing grain to be stored for up to 18 mo. in the field. It can be used for long term storage of corn, wheat, barley, canola, peanuts and other grains.

The system uses a specially designed 10-ft. wide by 180-ft. long, polyethylene bag with poly tubes attached to both sides. The tubes are fitted with a row of embedded membranes, allowing forced air to flow into the bag from one side and go through the bag to exit the other side.

Grain is harvested and loaded into the bag using a standard bagging machine. A trailer-mounted diesel engine and aeration fan unit is connected to the in-flow poly tubes. The engine drives the fan, which sends air flowing through the length of the tube and passing through the membranes and into the bag. Heat from the engine is pulled into the stream of air. Moisture is expelled through the membranes as the grain dries.

Once the grain has dried down, the bag is sealed with a heat sealer. Grain can be stored safely for up to 18 mo.

A standard debagging machine is used to remove grain from the bags.

The system comes from South Africa and is being distributed in North America by Setter Mfg., Russell, Manitoba. The company has already set up dealers across western Canada and just started selling systems this summer. They plan to set up dealers in the U.S. soon.

"Farmers have shown phenomenal interest in the system. It has been used on a wide variety of crops in Australia and South Africa, including soybeans, wheat and corn," says president Greg Setter, Setter Mfg. "It can be set up anywhere, even if there isn't electricity nearby. You don't have to wait for your grain to completely dry down before it's bagged. As a result, you can get your crop off the field sooner.

"Because air flows in a cross direction through the bag, you can use an actual fan



Blower is fully automated so it shuts itself off once grain is dried down.

instead of a centrifugal fan which results in a higher air flow. The in-flow poly tubes are black, which increases the air temperature inside the tubes by up to 2 degrees. Heat from the diesel engine passes through a heat exchanger, so exhaust fumes won't contaminate the grain. We also offer the option of using a gas engine-driven fan."

The air is pumped and regulated by a computerized electronic aeration control system. "The engine and heating system is fully automatic. It'll start itself and shut off, according to the humidity and temperature. The drying process takes 4 to 18 days," says Setter.

The system can be used with any conventional bagging machine or extractor. Bagging and debagging machines are also available from the company.

According to Setter, the DryloBag system costs about twice as much as a comparable standard grain bagger. "However, the operating cost of this drying system is low compared to other grain dryers on the market. It costs only a few cents per bushel to dry



Side tubes on latest bags are black, which raises the temperature of air blown into grain.

grain. You're pushing air only a short distance across the bag, and the horizontal air flow results in a lower static load which allows use of a high output fan.

"The warm air flows evenly through the bag so you don't get hot spots or areas where the air won't go through, which can happen with conventional bins," notes Setter.

Contact: FARM SHOW Followup, Setter Mfg., P.O. Box 686, Russell, Manitoba, R0J 1W0 Canada (ph 204 773-2218; greg@settermfg.com; www.drylobag.co.za).

### Vol. 41, No. 4, 2017

Harold M. Johnson  
Founder

#### Editor/Publisher

Mark Newhall (mark@farmshow.com)

#### Senior Editor

Bill Gergen (bill@farmshow.com)

#### Contributing Editors

Jim Ruen (edgcom@acegroup.ca)

Dee George (dee\_george@yahoo.com)

Lorn Manthey (redoakridge@mac.com)

#### Office Manager

Anne Lash (anne@farmshow.com)

#### Circulation (circulation@farmshow.com)

Shelly Mende, Mary Lunde, Kim

Trapp

**FARM SHOW** (ISSN #01634518) is published 7 times per year (bimonthly plus one special "Best of FARM SHOW" issue published in December) for \$25.95 per year (\$29.95 in Canada) by Farm Show Publishing, Inc., P.O. Box 1029, 8500 210th St. W., Lakeville, Minn. 55044. Periodicals postage paid at Lakeville, Minn., and Madelia, Minn. POSTMASTER: Send address changes to FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 952 469-5572; fax 952 469-5575; email: circulation@farmshow.com; website: www.farmshow.com). Single copy price is \$5.95 (\$7.50 in Canada). Publication No. 469490.

#### In Canada:

Publications Mail Agreement No. 40032660. Return Undeliverable Canadian Addresses To: Dycom Mail Svcs. 495 Berry St., Winnipeg, MB R3J 1N6; Email: circulation@farmshow.com

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July-August, 2017

## Outhouse Fitted With Modern Flush Toilet

When hunters visit Pat Murphy's Ozarks ranch, the remote cabin they stay in doesn't have an indoor bathroom.

Visitors are surprised and pleased when they open the door of the nearby outhouse to see a regular flush toilet.

"This cabin is 2 miles from our house and on a hill with a spectacular view. A lot of the guys bring their wives who find old-fashioned outhouses a little gross," Murphy explains.

Ozarks codes allowed Murphy to vertically bury a perforated 55-gal. steel drum wrapped with filter fabric and backfilled with gravel.

Murphy poured a concrete pad with a 4-in. hole that lined up with a hole in the top of the tank. The toilet flushes directly into it, fed by water from a 100-gal. tank behind the outhouse. The tank is filled by a pond that's 10 ft. higher than the toilet. The water flows through 200 ft. of 1-in. Pex pipe.

"A small 12-volt pump, powered by an ATV battery charged by a solar panel, fills the toilet tank," Murphy says.

Contact: FARM SHOW Followup, Pat Murphy, 18501 State Rd. K, Box 610, Beulah, Mo. 65462; (pmurphy@murphynet.com).



Visitors staying in a remote cabin at an Ozarks ranch are pleasantly surprised to find a modern flush toilet in the outhouse. A solar-powered, 12-volt pump fills the toilet tank.