

Where To Buy A Corn-Burning Stove

Business is booming for manufacturers of corn-burning stoves. Here's a list of corn stove manufacturers. All have been featured in past issues of FARM SHOW.

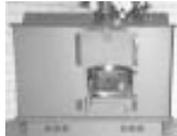
Ja-Ran Enterprises
3541 Babcock Road
Lexington, Mich. 48450
ph 810 359-7985

Pinnacle Stove Sales
4252 Dog Prairie Road
Quesnel, B.C.
Canada V2J 6K9
ph 250 747-1714
E-mail:
info@pinnaclepellet.com
Website:
www.pinnaclepellet.com

American Energy Systems Inc.
50 Academy Lane
Hutchinson, Minn. 55350
ph 320 587-6565

Big M Mfg. Co.
(A-Maize-Ing Heat)
928 East 1090 N. Road
Taylorville, Ill. 62568
ph 217 824-9372

SnowFlame, Inc.
Box 745
Arden, N.Carolina 28704
ph 828 684-4444; fax 5429
E-mail: info@snowflame.com
Website: www.snowflame.com



Grain Comfort Stove

Grain Stoves Inc.
RR 3
Blythe, Ontario
Canada NOM 1H0
ph 519 523-9897

Don Magelitz
13967 Thayer Rd. W.
Waverly, Ill. 62692
ph 888 856-8540
www.cornburner.com

Grain Comfort Stoves
6123 N. Co. Rd. 700E
Union City, Ind. 47390
ph 765 964-6412



Bulk tank feeds Magelitz corn stove

Corn-Burning Furnace Built For \$300

"I wanted a free-standing floor furnace and I didn't see anything on the market that I liked. I also thought I could build a more efficient heat exchanger than any on the market. And I did," says Kansas farmer Ira Eichman about his home-built corn-burning furnace. It was first featured in FARM SHOW's Vol. 18, No. 6.

Eichman's furnace is 20 in. long by 14 in. wide by 24 in. tall. Made out of 3/16-in. thick sheet steel, the furnace is the sole source of heat for his 1,100-sq. ft. one-story farm home.

The furnace kicks out about 100,000 btu's an hour, Eichman estimates.

The heart of the system is Eichman's heat exchanger which is made out of a system of 2-in. dia. pipes mounted in a rectangular frame. "I've got a partition between the combustion chamber and the outside chamber so heat goes up the inside of the pipes and circulates, then cool air comes down the outside of the pipes," Eichman says. "It's all self-circulating, not forced air, which makes it different from any commercial corn-burning furnaces I looked at." Heat rises from the base to the home's main floor through floor vents.

Eichman's burner is an 8-in. square box made of 1/4-in. thick stainless steel with holes drilled in the bottom. A 2-in. dia. electric fan blows air into the burner, while a 2-in. dia. flex auger with a variable speed drive, housed in a piece of 2 1/4-in. dia. car exhaust pipe, delivers corn from a hopper and gravity feeds it to the fire. Both fan and auger can be controlled from upstairs.

Eichman's grain hopper, made out of an old hog feeder, holds up to 40 bu. of corn, enough to last two or three months

in the coldest part of winter. During more moderate weather, Eichman only needs 20 bu. of corn at a time to last several weeks.

For convenient cleaning, Eichman's furnace features a removable floor plate underneath the heat exchanger. "I clean it out once a year, in the fall, before I start using it," he says.

Although Eichman doesn't know exactly how efficient his furnace is, he does have one good gauge. "I use 4-in. dia. plastic sewer pipe for an exhaust pipe," he says. "I've used the furnace three years and the pipe's still like new, so that should tell you how much heat escapes. That pipe isn't made to withstand high temperatures."

Eichman burns between 100 and 120 bu. of corn per heating season, compared with the old 60,000 btu propane furnace that used to use at least 800 gal. at 16 cents a gal. "One year, I heated with moldy corn, so that didn't cost anything," he says.

The most expensive component of Eichman's furnace was the gear reduction motor he bought for \$203 to run the auger. "There were cheaper ways to go," he says, "but I wanted it to last."

Contact: FARM SHOW Followup, Ira Eichman, R.R. 2, Westphalia, Kan. 66093 (ph 913 489-2386).



Business Is Booming For Windmill Companies

Windmills are popping up everywhere, particularly in the Western Corn Belt and Plains states.

There are only a handful of windmill manufacturers left in the U.S. Aermotor Windmill Co., San Angelo, Texas, in business since 1888, will sell a new 8-ft. motor, fan and tower for about \$3,200. If you have a windmill to restore, you can buy parts from the company.

But you don't have to pay new price for parts. There are two companies in South Dakota that are in the business of rebuilding and refurbishing used windmills. They'll sell you parts or completely rebuilt assemblies.

Muller Industries, Yankton, has been salvaging, refurbishing, and selling windmills for more than 20 years. Operated by Peg Muller, the company specializes in Aermotor windmills or those made by Fiasa, the manufacturer's Argentine sister company.

Dakota Windmill & Supply Inc., Hurley, is owned by Larry Rechnagel. Dakota Windmill restores windmills and also manufactures its own replacement parts as well as complete new windmills based on the old Chicago-style windmills.

Both companies sell through dealers, so if you're looking to buy a windmill or parts, your first contact should be your local well driller or other dealer who handles such things. If you don't know of a local dealer, you can contact either company or Aermotor directly to help locate one.

Rebuilt windmills sell for around \$600 and up, depending

Dakota Windmill stocks thousands of new and used windmill parts at its Hurley, S.Dak., warehouse.



on size. And this price doesn't include a tower or shipping to your location. New windmills may cost twice as much as a refurbished one.

In order to rebuild windmills, both Muller Industries and Dakota Windmill need windmills to rebuild and to salvage parts from. If you have a non-working windmill that you'd like to sell, you can expect anywhere from \$50 to as much as \$1,400 for it, depending on the style and model. Working Aermotors with no missing parts are worth more than non-working ones. You can call either company for an estimate, but neither company will buy sight-unseen, so you'll have to wait until a company representative has inspected the windmill to get a firm bid on it.

Contact: FARM SHOW Followup, Dakota Windmill and Supply, 28043 SD Hwy 19, Hurley, S. Dak. 57036 (ph 888 777-3772; fax 605 238-5668; E-mail: dws@dtgnet.com); or Muller Industries, Inc., 1102 W. 21st St., Yankton, S. Dak. 57058 (ph 605-665-1924; E-mail: mullerind@dtgnet.com).

Remember "Smolder Energy"?

FARM SHOW featured many "far out" energy-saving ideas during the energy crisis of the early 1980's. One of the most interesting was an underground pit furnace that generated something called "Smolder Energy" (Vol. 4, No. 1, 1980).

George Woods of Prospect, Ohio, simply filled a deep pit with compost and ran hot water pipes through the center of it. As the composting vegetation heated up, it warmed the water in the pipes, which ran to a radiator in his house. To keep the heat source going, Woods simply kept replenishing the material in the pit as it "smoldered" away.

We were unable to track down George for an update on his pit furnace, which he used for several years.



George Woods next to the smoldering pit of compost which heated his house.

Windmill Resource Guide

These companies and individuals work on windmills and also supply parts.

Aeromotor Windmill Co.
P.O. Box 5110
San Angelo, Texas 76902
ph: 800 854-1656 or
915 651-4951;
www.aeromotorwindmill.com;
inf@aeromotorwindmill.com

Dakota Windmill & Supply Co.
28043 SD Hwy. 19
Hurley, S. Dak. 57036
ph: 605 238-5110

O'Brock Windmills
9435 12th Street
North Benton, Ohio 44449
ph: 330 584-4681

Lake Michigan Wind & Sun
1015 County U
Sturgeon Bay, Wis. 54235-8353
ph: 920 743-0456; fax 740-0466
Remanufactures the old Jacobs "short case" and Jacobs "long case". Distributes Aergon Wind Generators.

Old Mill Manufactory
14778 State Gap Road
W. Fork, Ark. 72774
ph: 501 839-8269
Manufactures 12 and 32-watt wind generators that are compatible with old Delco systems.

Southwest Windpower Inc.
P.O. Box 2190
Flagstaff, Ariz. 86003
ph: 602 779-9463; fax 1485
Manufactures Windseeker 502 and 503, and AIR.

Paul's Windmill Service
214 County Road 2600 E.
Broadlands, Ill. 61816
ph: 217 834-3026

Verden Perma-Bilt Co.
(for new-style sucker rod)
2821 Mays Ave.
Box 7160-DJ
Amarillo, Texas 79114-7160
ph: 806 352-2761

Ralph Wiebusch
Rt. 1, Box 214
Zumbro Falls, Minn. 55991
ph: 507 753-2415

Trillium Windmills Inc.
1843 Marchmont Rd.
R.R. # 2
Orilla, Ontario, Canada L3V 6H2
ph: 705 326-6513; fax 2778
North American distributor of the British-made Rutland Windchargers (Marlec Engineering Co., Ltd.).

Windstream Power Systems
One Mill Street
P.O. Box 1604
Burlington, Vt. 05402-1604
ph: 802 658-0075; fax 1098
Manufactures Windstream.

World Power Technologies
19 Lake Avenue North
Duluth, Minn. 55802
ph: 218 722-1492; fax 0791
Manufactures Whisper wind generators.

Important Point!

Many of the companies listed on this page (and the next) were featured in previous issues of FARM SHOW. We've run stories on hundreds of energy-saving devices and ideas in past issues. Every story ever featured in FARM SHOW is contained on our CD-Rom (see page 17 for details).

We also have many copies of our back issues available for as little as \$2.00 a copy. See page 27 for more information, or call our office at 800 834-9665.