

## Big Bale Burners Heat Buildings, Dry Grain

Burning big bales to heat buildings and dry grain is an idea that makes sense to many farmers. Over the years, FARM SHOW has featured a number of innovative burners built by both farmers and manufacturers. Here's a collection of bale burners from past issues, and the most current information about each that we were able to find.

### Crop-Drying Furnace Burns Cornstalks

If you knew you could dry your entire corn crop with just 5 acres of cornstalks, would there be any reason to keep buying and using LP gas?

That was the question Minnesota farmer Greg Wieveck asked our readers back in January of 1979 (Vol. 3, No. 1) when we first featured his crop drying furnace. He used the cornstalk-burning furnace for six years to dry his entire crop (about 16,000 bu/yr) with one-ton stacks which he fed into the huge throat of the furnace with a 3-pt. mounted stack mover. He also burned big bales of straw. The furnace had a forced-air heat exchanger, meaning there were two layers to the entire structure. Heat passed from inside the large firebox to air between the double-walled furnace and chimney. The hot, clean air was then fed into the grain dryer.

FARM SHOW recently talked to Greg Wieveck, who now lives in Stewart, Minn. His farm was sold in 1985 after his father died. For the next 7 years, Wieveck traveled the country, consulting with other farmers who wanted to build their own crop residue burners. He still has detailed plans of all the bale and stalk burners he's built and would be willing to work with anyone interested in putting up their own crop-burning furnace.

Contact: FARM SHOW Followup, Gregory Wieveck, 57486 825th Ave, Stewart, Minn. 55385 (ph 320 562-2552).



### Bale Burner Turns Straw Into Asset

Imperial Metal Industries built its first bale-burning furnace in 1993. FARM SHOW wrote about it in 1995 (Vol. 19, No. 2). Since then, the company has built a number of units on a custom basis.

"They require a fairly large application since you have to draw off a lot of heat for them to burn efficiently," company spokesman Kelly Friesen told FARM SHOW recently. He says the units they've built have mostly gone to heat greenhouses, barns, and large shops.

"They're not cheap at \$15,000 to \$20,000 (Canadian) but we're in the boiler business so they're built well and they're built to last," says Friesen.

Contact: FARM SHOW Followup, Imperial Metal Industries, Inc., 111 Commerce Dr., Steinbach, Manitoba Canada R0A 2A0 (ph 204 326-6683).



### Bale Burner Built From Railroad Car

Hiawatha, Kan., farmer Doug Grimm burns wheat straw in this bale burner built from a converted railroad tank car to heat his greenhouses and a couple other farm buildings. It was first featured in FARM SHOW's Vol. 22, No. 1 issue.

He paid \$2,000 for a 26-ft. long, 10-ft. dia. section that had been cut off a 60-ft. long rail car. A steel divider was welded inside to separate it into a 16-ft. fire chamber and a 10-ft. long water tank that holds 3,000 gal. Heat is transferred to the water by a series of air tubes that run from the firebox through the water tank. Thermostatic-controlled pumps inside the buildings pull heated water out of the tank as needed.

Grimm built the bale burner strictly for his own use. Contact: FARM SHOW Followup, Doug Grimm, Rt. 3, Box 153, Hiawatha, Kan. 66434 (ph 785-459-2486).



### Straw-Fired Burner Cuts Drying Costs



Taking a cue from high-efficiency wood stoves, Terry Greer of Arenzville, Ill., built his straw-burning furnace to be air tight, equipped with forced air draft and thermostatic controls. This enables him to precisely control air temperature entering his drying bin.

A backup LP burner kicks in if temperature from the burner drops below 120°. The burning chamber is covered with a shroud so that heated air is drawn off at the far end and blown into his drying bin. He made the burner from an old fertilizer tank.

Greer's crop drying furnace was first featured in Vol. 7, No. 5, 1983. We were unable to contact Greer for this update.

### Underground Bale Furnace Heats Home, Shop

To get away from their expensive electric heat bills, Clarence and Duane Klimack, Russell, Manitoba, built a big round bale burner completely from scratch. It was first featured in FARM SHOW's Vol. 22, No. 5.

The father and son team burns about 40 5 by 6-ft. round bales of flax straw a month in the coldest weather to heat their shop and two houses. The furnace is buried in an earth berm next to a shed. It has a 6-ft. dia., 9-ft. tall firebox with 48 vertical pipes made out of 2-in. dia. sq. tubing spaced 2 in. apart around the outside.

It has a 3-ft. deep ash pan underneath and a lid with two 8-in. dia. smoke

stacks. The Klimacks feed bales into the furnaces with a tractor front-end loader, so they never have to touch the bales by hand. Water is pumped through the pipes surrounding the firebox and then pumped to an insulated holding tank until needed. Thermostatically-controlled pumps in the houses and shop pull water out as needed through underground pipes. Contact: FARM SHOW Followup, Clarence and Duane Klimack, Box 756, Russell, Manitoba Canada R0J 1W0 (ph 204 773-3148 or 2197).



## Outdoor Wood Furnaces

Skyrocketing fuel prices have caused renewed interest in outdoor wood furnaces. Manufacturers say sales are up sharply from a year ago.

Here's a list of some of the manufacturers of outdoor furnaces in North America:

**Aqua-Therm**  
Rt. 1, Box 1,  
Brooten, Minn. 56316  
ph 800 325-2760 or  
320 346-2264

**Canwood Welding & Fabricating**  
Box 242  
Canwood, Sask., Canada  
SOJ OKO  
ph 306 468-2282; fax 2283

**Central Boiler (Classic)**  
R.R. 1, Box 220  
Greenbush, Minn. 56726  
ph 800248-4681 or  
218 782-2575

**Hardy Manufacturing Co. Inc.**  
12345 Road 505  
Philadelphia, Miss. 39350  
ph 800 542-7395 or  
601 656-6948

**Heatmore Inc.**  
Hwy. 11 E, Box 787  
Warroad, Minn. 56763  
ph 800 834-7552

**Johnson Mfg. & Sales, Inc.,**  
N5499 Cty E,  
Ogdensburg, Wis. 54962  
ph 414 244-7581.

**Mahoning Furnaces**  
R.D.# 1, Box 250  
Mahaffey, Pa. 15757  
ph 800 692-5200 or  
814 277-6675



Heatmore Furnace



Taylor Furnace

**Northwest Manufacturing**  
P.O. Box 154  
Red Lake Falls, Minn. 56750  
ph 800 932-3629 or  
218 253-4328

**Pacific Western Inc.**  
Box 267,  
Atikokan, Ont. P0T 1C0  
Canada  
ph 807 929-1129

**Rik-Mar Fabricators, Inc. (Bryan)**  
P.O. Box 4232  
Bryan, Texas 77805  
ph 409 779-1616

**Sure-Flame, Inc.**  
245 Erie St.  
Huntington, Ind. 46750  
ph 219 356-1905

**Taylor Manufacturing Inc.**  
P.O. Box 518  
Elizabethtown, N.C. 28337  
ph 800 545-2293 or  
910 862-2576

**Warm Homes Of Wright Inc.**  
6756 Hwy. 210  
Wright, Minn. 55798  
ph 218 357-2911

## Waste Oil Stoves, Furnaces

**Waste Oil Furnace**  
Clean Burn Inc.  
83 South Groffdale Road  
Leola, Penn. 17540  
(ph 800 331-0183 or 205  
657-5191)

**Black Gold Corp.**  
Nashville, Tenn.  
ph 800 351-0643  
www.blackgoldcorp.com



Harold Electric's Waste Oil Burner Kit



Reznor Waste Oil Furnace

**Lanair**  
Janesville, Wis. 53546  
ph 800 753-1601  
www.lanairusa.com

**Reznor Inc.**  
McKinley Avenue  
Mercer, Penn. 16137  
(ph 412 662-4400  
www.tnb.com)

**Shenandoah Mfg. Co., Inc.**  
P.O. Box 839  
Harrisonburg, Va. 22801  
(ph 800 476-7436 or 703  
434-3838)  
www.shenmfg.com

**Harold Electric Co.**  
Walla Walla, Wash.  
ph 800 541-8910