



Big round bales are loaded into the 5-ft., 8 in. dia. burner by forklift. Rate of burn is controlled by electric blowers that feed in combustion air as needed.

HEATS SEVERAL FARM BUILDINGS

Round Bale Burner Turns Straw Into Asset

By Jim Houtsma, Associate Editor

Once every three or four years flax producer Chris Somerville is able to sell his flax straw to paper companies. "Otherwise, it's sort of a waste product," he says.

But now the Hartney, Manitoba, grain farmer has a new way to put his flax straw to work. He's going to burn it in his big new bale burner that will heat his shop, home and a couple of other farm buildings.

Somerville bought the bale burner last year winter from Imperial Metal Industries in Steinbach, Manitoba, who's been building small wood boilers for 11 years.

"We built a prototype in 1993 and burned eight big wheat straw bales in it that summer," says Harry Toews, inventor. "It worked better than we'd ever dreamed. The amount of smoke varies with the material you're burning and the moisture content of the bale. There are only a couple of pails full of ash left after burning because it burns so extremely hot. Ash is removed by an auger."

Based partly on technology from Denmark, where it's common for farmers to heat their homes and buildings with straw burners, the firebox on Toews' 6,500-lb. steel plate unit is 5-ft., 8-in. in dia. and 8-

ft. long. Big round bales are loaded into it with a forklift. The casing around the firebox holds 1,800 gal. of water, and the firebox and rear hold water in hollow cores as well.

The bale ignites through an opening in the back of the unit and electric blowers inject fresh air into the firebox to feed the fire, which lasts from four to 12 hours depending on the kind of straw being burned. Seven small pumps underneath the unit circulate water through pipes connected to a series of radiators. An aquastat keeps temperature in the water chamber steady, and a thermostat controls temperature in buildings, which are connected to the burner with underground pipes.

"This all started because, year after year, when we'd show our wood boilers at farm shows, farmers would come up and ask us if we couldn't build something to burn round straw bales in," says Toews. "Now that we've done it we get calls about the straw burner every day."

Contact: FARM SHOW Followup, Imperial Metal Industries Inc., 111 Commerce Drive, Steinbach, Manitoba, Canada R0A 2A0 (ph 204 326-6683; fax 326-5369).

"Power Broom" Moves Liquids, Grain

"Works great for clearing snow, cleaning out shops, sweeping grain out of Quonset huts, etc. It can even be used on liquid manure," says Ron Bergman, Bottineau, N. Dak., who invented the new "Power Broom" together with his partner Paul Sund.

The hand-held unit consists of a 22 1/2-in. wide rotating sweeper drum equipped with 12 rubber fins. The drum is mounted on a conventional Shindaiwa hand-held grass trimmer shaft equipped with a 1 1/2 hp 2-cycle gas pull-start engine. The drum rotates from the bottom forward to throw material directly ahead of the operator. By turning it upside down you can pull the fins back toward you, allowing you to pull in material from under trees, bushes, fences, etc.

An optional 13-in. high shield mounts just above the drum to keep material from being thrown back at the operator.

Sells for \$699.95. Shield sells for \$29.95.

Contact: FARM SHOW Followup,



Shindaiwa, Box 1090, Tualatin, Ore. 97062 (ph 503 692-3070) or Ron Bergman, 605 Main St., Bottineau, N. Dak. 58318 (ph 701 228-3842).



Manufacturer says this truck-pickup combo can haul 12 times as much as a Ford F-150 1/2-ton pickup and 6 times as much as a Ford F-350 1-ton pickup.

MAKES A PICKUP OUT OF A 21,000 GVW TRUCK

"Truck-To-Pickup" Conversion Kit

By Bill Gergen, Associate Editor

"Our new conversion kit lets you convert a 1995 Ford F-700 or F-800 truck into the heaviest-built pickup on the market. It gives you the power of a heavy-duty truck with the comfort and convenience of a pickup," says Tom Burgess, Titan Custom Trucks, Geneva, Ill., who unveiled the new kit at the recent National Farm Machinery Show in Louisville, Kent.

The kit includes a box (with frame rails specially formed to accommodate it), heavy-duty rear bumper, mud flaps, running boards, and mounting hardware. The conversion can be done either by Titan or by Ford dealers.

"It gives you a 21,000- to 25,000-lb. GVW pickup with more pulling power and hauling capacity than any pickup ever built," says Burgess. "You order the truck from Ford with just a cab and chassis, and then add our special-designed components."

"We saw a need for a truck like this because trailers keep getting bigger, yet no one offers a heavy-duty pickup big enough to handle them. The engines in today's pickups are bigger than they were a few years ago, but the engine doesn't make the pickup - it takes a complete package. If you have an inadequate transmission you'll have problems."

"The F-700 has a gas engine and the F-800 a diesel. We chose the Ford F-700 and F-800 series trucks because they come with a lot of different options designed for heavy pulling jobs, allowing you to custom build

a truck tailored to your needs. Ford offers 13 different diesel engines ranging from 160 to 300 hp for the trucks and 2 gas engines ranging from 216 to 240 hp. Top torque for the gas engine model is 360 lbs.; 850 lbs. for the diesel model. Three different automatic transmissions are offered - 4, 5, or 6-speed - and manual transmissions ranging from 5 to 13 speeds. All of the automatic transmissions are Allison's which we think are the best on the market. Other options include air suspensions, air brakes, and an air-suspended driver's seat.

"We think a popular package for farmers will be an F-800 equipped with a 10-liter, 230 hp diesel engine (605 lbs. torque), a 5-speed automatic Allison transmission, and air suspension.

"At the show we had an F-700 equipped with a 7-liter, 429 cu. in., 236 hp gas engine. It has 360 lbs. of torque, 6 tons of working weight, and a GVW of 21,000 lbs. It can haul 12 times as much as a Ford F-150 1/2-ton pickup and six times as much as a Ford F-350 1-ton pickup.

"We plan to also convert some GM trucks this spring."

The conversion kit sells for \$3,900, or about \$36,000 for the diesel setup described above.

Contact: FARM SHOW Followup, Tom Burgess, Titan Custom Trucks, 537 N. First St., Geneva, Ill. 60134 (ph 800 328-4826 or 708 208-8209).

Order Form For Subscribers (New & Renewal)

Yes! I want to be first to learn about latest new products. Please sign me up for FARM SHOW. I understand I can cancel at any time and receive a full refund if not satisfied. Check here to renew.

United States

- \$15.95 for 1 yr.
 \$29.95 for 2 yrs.
 \$39.95 for 3 yrs.

Canada (& foreign countries)

- \$18.95 for 1 yr.
 \$35.95 for 2 yrs.
 \$49.95 for 3 yrs.

My check (\$ _____) is enclosed. Bill me.

Name _____

Address _____

City _____

State/Prov. _____

Zip _____

Make check payable to FARM SHOW. Clip and mail this coupon to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 612 469-5572). VISA & Mastercard accepted.