

**FIVE HEATERS GANGED
IN SPECIAL CANOPY**

Waste Oil Fuels This Crop Dryer

Using waste oil to dry crops is an idea that works, according to Gordon Kanpp, Foxhome, Minn., who plans to expand his waste oil drying operation this year.

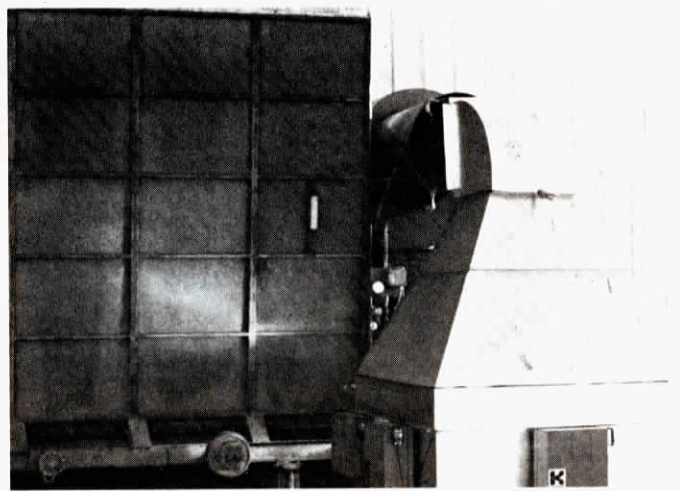
Last fall, he ganged five 90,000 btu waste oil burners under a metal canopy and used the heat to take 5 points of moisture out of sunflowers in his Hume batch dryer. He figures he saved 165 gal. of LP-gas per day.

Knapp used Kutrieb waste oil burners which have been featured in previous issues of FARM SHOW. "We burned about 50 gal. of oil a day which we bought from a local trucking firm and car dealer for 10 cents a gal. We didn't have to pay but doing

so guaranteed us a supply," Knapp told FARM SHOW.

The dryer's intake fan pulls heat directly off the smokeless, odorless Kutrieb heaters surrounding the 6 ft. sq. canopy, which cost about \$125 to build. This year, Knapp plans to use the new 500,000 btu Kutrieb waste oil burning furnaces that are slated for introduction soon. He'll build a new housing or canopy for them.

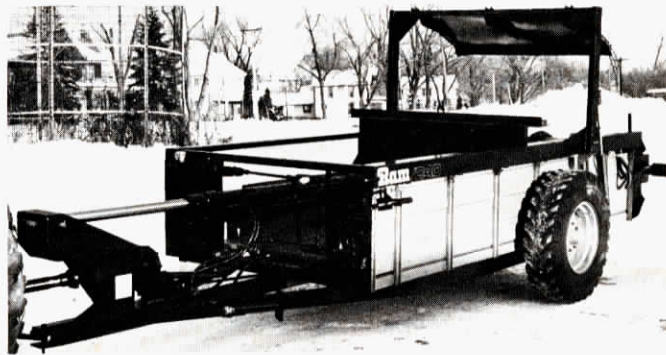
Knapp adds that filters on the Kutrieb waste oil burners have to be cleaned daily. "Except for this small bit of maintenance, they babysit themselves so long as you keep feeding them waste crankcase oil. It's amazing how much you can cut dry-



Hot air is sucked from the makeshift waste-oil furnace by the grain dryer's air intake duct.

ing costs." Knapp sells the Kutrieb waste oil heaters, and the new furnace soon to be introduced, in conjunction with his commercial seed operation.

For more details, contact: FARM SHOW Followup, Knapp Seed Farm, Foxhome, Minn. 56543 (ph 218 739-3366).



A hydraulic ram replaces the usual apron and chains on the totally-hydraulic spreader.

HAS NO APRON, CHAINS OR SPROCKETS

New All-Hydraulic Manure Spreader

"It's one of the few spreaders that will handle everything from sludge to frozen or solid manure," says LeRoy Wegner, sales manager for Farm Machine Products Inc., Wales, Wis., of the company's new "Apronless" hydraulic-powered "Ram" manure spreader.

Hydraulics replace the usual apron, chains, gears and sprockets found on conventional spreaders. A hydraulic motor drives the drum beater, thus eliminating drive chains. There's no need for special hydraulic attachments on the tractor because the self-contained hydraulic system runs off the tractor's PTO.

"The Ram unloads at maximum power — up to 40,000 lbs. per square in. — even with the tractor standing still," says Wegner. "Since no gap is needed for chain travel, the

spreader's drip-proof tail section seals tightly for sludge and semi-liquid manures."

The tail section (containing the beater and hydraulic motor) can easily be removed, leaving only the drip-proof endgate, which lifts out of the way hydraulically to deflect manure from the tractor. This allows the user to haul other materials and discharge them with ease using the hydraulic push ram, explains Wegner.

Available in five sizes ranging from a 120 bu. model to 500 bu. Prices start at \$2600.

For more information, contact: FARM SHOW Followup, Farm Machinery Products, P.O. Box 190, Wales, Wis. 53183 (ph 414 968-2556).

**WORKS ON COMBINE GRAIN TANKS,
GRAIN BINS OR SELF-FEEDERS**

New Device Signals When Bins Are Full

"We've sold more than 10,000 since we introduced it two months ago," says John Toso, sales manager for a new level-checking device from LaGrande Manufacturing Co., Alexandria, Minn., that tells you what level grain or feed is at inside a bin or feeder.

The Bin Check consists of a lightweight aluminum paddle balanced inside a bin against a red handle outside. When a bin is empty, the paddle hangs loose and the handle points straight down. When full, grain presses the paddle tight against the wall, pointing the handle out to signal that the bin is full. When grain goes out of the bin, the device resets automatically.

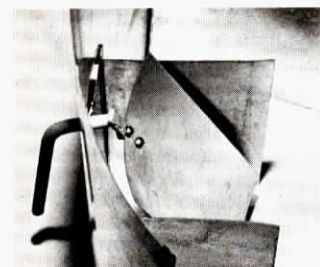
"You just drill a 1/2 in. hole in the side and slip the handle through. The fins on either side of the paddle are fastened with an extremely strong adhesive -- no holes are drilled for them," says Toso. "The handle is 3/8 in. diameter so you have a 1/8 in. gap

around it, which isn't enough to cause any moisture seepage problems in most cases."

The Bin Check can be used in any bin, corrugated or flat, and is said to be ideal for storage bins, wet bins and feeders. "Farmers are even mounting them on combine grain tanks, and turkey growers are using them on large range feeders in the field. We've put mercury bulbs on Bin Checks so they'll light up to signal when the bin is empty. You can rig the device with an electric switch that tells you, from a remote location, if a bin is empty or full."

The Bin Check paddle measures 4 in. by 6 in., and the handle is 5 in. long. Sells for \$12.95, or five for \$59.95.

For more information, contact: FARM SHOW Followup, John Toso, Sales Manager, LaGrande Manufacturing Co., RR3 Box 481, Alexandria, Minn. 56308 (612 763-7783).



When bin is empty, left, handle points straight down. At right, grain pushes paddle against bin side, lifting the handle to signal the bin is full.