

## New No-Till Planter Has Powered Coulters

This may be the no-till planter of the future — a planter with powered coulters that cut heavy plant residue and open the seed furrow.

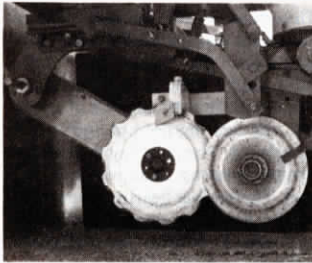
Developed by USDA research engineer, Donald Erbach, at Iowa State University, Ames, the new-style planter's powered coulters spin at 400 to 500 rpm's against the direction of travel. The coulters in each row passes between the front portion of a conventional double disk furrow opener and at the same depth.

After cutting a narrow slot in the soil, the notched coulters cut and moves plant residue to the side. By running against the direction of travel, rather than with it, as most rolling openers do, it avoids pushing residue into the seed furrow where it would interfere with growth of the seed.

"The idea is to plant seed in a uniform seedbed, regardless of the explains Erbach. "When residue goes into the seed furrow, the percentage of plant emergence goes way down."

Erbach's powered coulters are outfitted on a Deere 51 plate-type planter. They're pto driven by a drive shaft that runs the length of the planter and has chains running off two of the coulters.

His prototype planter has been successfully tested in a variety of conditions, including heavy sod, to show what it can do. It also has been used to plant sorghum in standing



Powered coulters, left, turns at 400 to 500 rpm's. Operates between disks of conventional double-disc opener.

rye and barley. "The object is to develop a universal row-crop planter that plants as well under conservation conditions as it does under regular field conditions," Erbach told FARM SHOW.

He says the powered-coulters idea will work on any double-disc opener to other makes. He's working on two other powered coulters systems designed for special soil conditions.

Erbach is interested in hearing from farmers or manufacturers interested in comparing notes on the powered-coulters concept.

For more details, contact: FARM SHOW Followup, Donald Erbach, Agricultural Research, USDA, 213 Davidson Hall, Iowa State University, Ames, Iowa. 50011 (ph. 515-294-4111).

## PRODUCES 500,000 BTU'S ON WASTE OIL YOU'VE BEEN THROWING AWAY

## Furnace Burns Used Crankcase Oil

If you have more waste oil on your farm than you know what to do with, you'll be interested in this new 500,000 btu waste oil furnace capable of heating 18,000 to 25,000 sq. ft. of space.

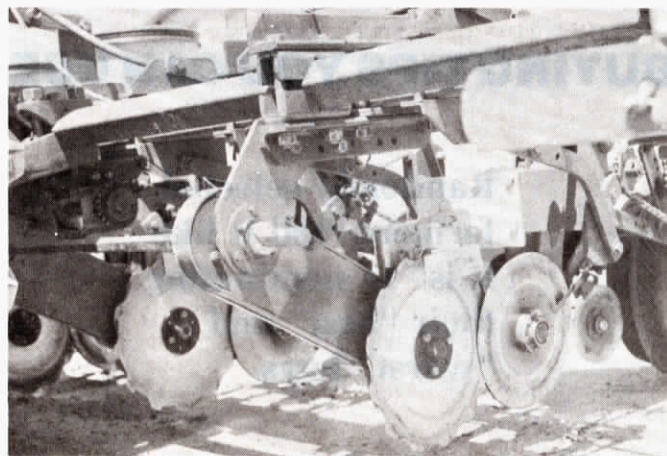
The Kutrieb Co., manufacturer of one of the most popular waste oil burners, and located in Milton, Wis., says hundreds of FARM SHOW readers responded to stories in previous issues on waste oil heaters, with many asking where they could buy a furnace large enough to heat a large barn or house.

"Farmers want them not only for heating buildings, but also for drying grain and other agricultural uses," says Les Marzahl, president of Lenan Enterprises, national Kutrieb distributor. "One farmer, for example, was ganging five 100,000 btu models

together under a canopy and pulling the warm air off to dry sunflowers. Now, he'll be able to buy just the one unit."

The new forced-air furnace can be tied into conventional duct work and large fuel storage tanks, and is at the same time fully portable with a 20 gal. fuel tank. Also features automatic ignition and shutdown with wall-mounted thermostat control. And, like other Kutrieb models, it's smokeless and odorless, says Marzahl.

He adds that the furnace will burn other used oils, including contaminated hydraulic fluid and industrial machinery drain oil, and in most cases burns about 3 gal. per hour. Although the oil can be obtained free from gas stations, car agencies or trucking firms, many users have begun offering a nominal fee of about



Pto-powered coulters, mounted on a Deere 51 plate type planter, could also be hydraulically driven, according to Erbach.

## FITS ANY FRONT END LOADER

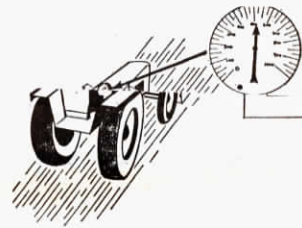
## Handy Scale For Tractor Loaders

Want to be able to weigh each scoopful of silage or other feed as you load it with your tractor loader?

Hydra-Weigh says, you won't give you a legal weight, but will tell you with 90% or better accuracy how much you're feeding," explains John Roberts, national distributor.

The scale consists of a dial, high pressure line and ball valve. It can be mounted at the operator's choice of location on the tractor. Using the tractor's hydraulic system, it's calibrated to read in 25-lb. increments.

The Hydra-Weigh Scale can be mounted on any tractor equipped with a front-end loader. To use it, you simply fill the scoop with silage or feed, raise the loader arm to the point designated by a marker on the loader, open the valve and read the weight on

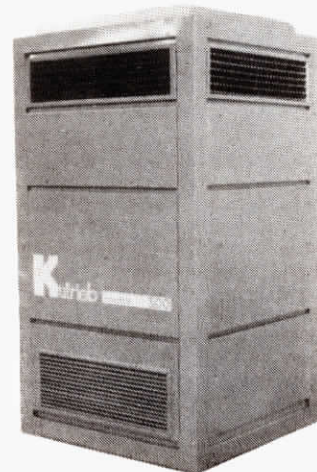


the dial.

"It costs much less than regular scales, yet is a reasonably accurate way of keeping records on feed consumption and costs," says Roberts.

Price, including scale, valve and marker, is \$297.50.

For more details, contact: FARM SHOW Followup, John Roberts Sales, Hydra-Weigh, Box 33, Sublette, Kan. 67877 (ph. 316 675-8390).



New Kutrieb furnace is 54 in. square, 90 in. tall.