## Oil Refiner

*Continued from cover page.*

ally any internal combustion engine. "With proper installation and service of the Phoenix Oil Refiner, engine oil may never have to be changed," says Priest. "Oil doesn't wear out — it only becomes contaminated," he points out.

A heating element in the Phoenix Refiner drives moisture out of oil. "This is the secret to its success," says Priest. "It incorporates top quality filtering with removal of water, acid forming contaminates and fuel dilution by controlled vaporization."

If the refiner should plug or malfunction, it operates on a bypass so no damage can result to the engine. The system reportedly works equally well with synthetic oils. The regular oil filter is retained when adding a refiner and seldom has to be changed.

Size of a refiner needed for a given engine is based on its crankcase capacity. The model 8 refiner, for instance, is for engines with up to 8 qts. crankcase oil capacity and sells for a suggested list of $87.95. Model 14 (for 14 qt. capacity engines) sells for $153.95; Model 24 for $186.95 and Model 60 for $247.48. The only maintenance the refiner requires is to change an internal filter about once every 15,000 miles on a car or pickup, or every 300 hours or so on a tractor.

For more details, contact: FARM SHOW Followup, Re-Fillco Corp., Glenn Priest, pres., Re-Fillco Corp., Div. of Thermodyne, Route 5, Box 127, Norman, Okl. 73069 (ph. 405 329-6812).

FARM SHOW

*For everyone in agriculture interested in latest new products.*

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**Editor-Publisher** — Harold M. Johnson
**Office Manager** — Joan C. Johnson
**Publication Office** — FARM SHOW
8500 210th St. W.
Johnson Building
Lakeville, Minn. 55044
ph. 612 469-3303

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**DETECTS HOT SPOTS BEFORE SPOILAGE OCCURS**

# New Monitor Automatically "Temperatures" Grain Bins

Marketing plans for a revolutionary monitoring system that automatically "temperatures" grain bins to detect hot spots before spoilage occurs were being finalized as this issue of FARM SHOW went to press.

Manufactured in England where it has been in the field for over a year, the new Crop Store monitor is being marketed in the U.S. by RDS Agricultural, headquartered in Walworth, Wis.

The unit provides a fast, accurate means of knowing from day to day what the temperature is inside grain bins, or potato storage areas. Each grain bin is prewired with eight temperature sensors. Four of these are placed in the center of the bin, spaced so the top sensor is approximately four feet under the grain surface, and the bottom one about six feet from the floor. The remaining two are spaced equally in between. The other four sensors are spaced equally around the bin, approximately four feet below the grain surface. "The center ten-foot core in a bin is usually the most vulnerable to heating, hence the location of the four sensors in this area," explains Jim Brown, president of RDS Agricultural. "It has been well established that the temperature rises more rapidly above a hot-spot than in any other direction. Therefore, the sensors are placed in the grain near the top."

You can then select one of several options for hooking a monitor to the sensors, depending on how automatic you want the system.

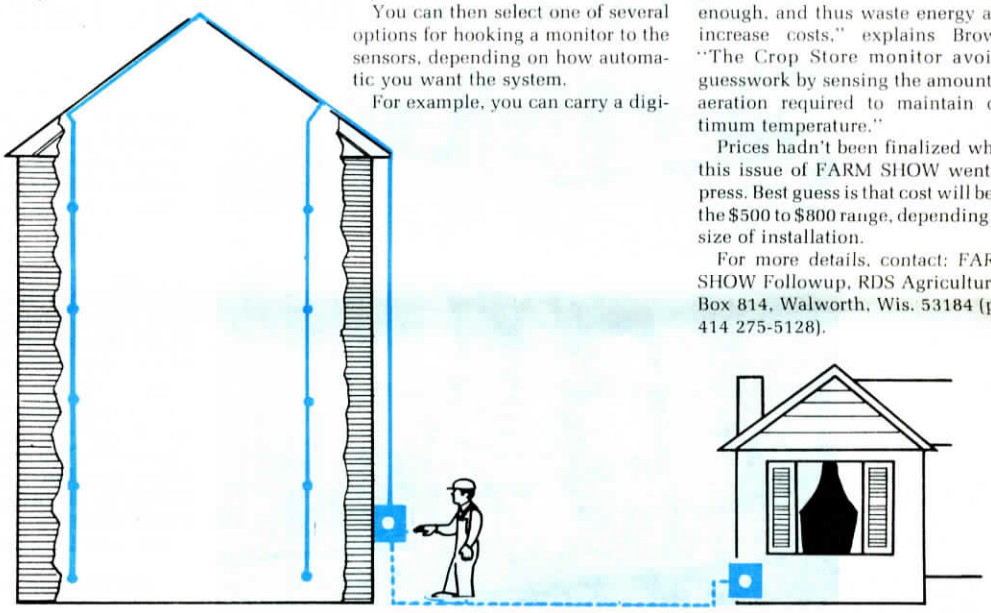
For example, you can carry a digital readout monitor from one "prewired" bin to the next, connecting it to external plugs wired to the sensors. Or, you can install a monitor on the outside of each bin, plus a horn or light that comes on to alert you to sudden temperature changes inside the bin. Another possibility is to install a monitor in your house or office, allowing you to "temperature" distant grain bins without having to go to the bin site.

In addition to detecting hot spots, the Crop-Store monitoring system makes it possible to stir and aerate stored grains more efficiently.

"Many farmers using aeration or grain stirring operate on the principle that more action is better than not enough, and thus waste energy and increase costs," explains Brown. "The Crop Store monitor avoids guesswork by sensing the amount of aeration required to maintain optimum temperature."

Prices hadn't been finalized when this issue of FARM SHOW went to press. Best guess is that cost will be in the $500 to $800 range, depending on size of installation.

For more details, contact: FARM SHOW Followup, RDS Agricultural, Box 814, Walworth, Wis. 53184 (ph. 414 275-5128).



**Sensors on inside of grain bin detect slightest changes in temperature of stored grain. Digital readout monitor can be located by the bin, at your house or office, or you can carry a monitor from one "prewired" bin to the next to quickly "temperature" stored grain.**

**REPLANTS SKIPS, MISSES**

# New Skip-Row Planter

Speediest system we've seen for replanting skips or misses in corn, soybeans, sorghum or other row crops is the new Skip-Row planter introduced by the West Plains Co., Plains, Kan. Here, according to Warren Priest, inventor, is how it works:

You buy the tailor-made 3 pt. hitch toolbar which is split in the middle with each half independently controlled by a hydraulic cylinder. You hang a planter unit of your choice on each side of the "split" 2¼-in. diagonal toolbar. It'll work with twin-row type planters and with most plate-type planters, and with air planters with an independent air supply and/or vacuum for each row.

Simply adjust spacing of the two planter units to correspond to the row spacing of the planted crop and you're all set to replant skips and misses. As you drive down the field, you hit the right or left control lever to independently raise and lower each planter unit as needed to replant missed areas. You can also use the toolbar planter as a two-row planter to finish off odd-shaped areas on the sides and ends of a field.

The toolbar adapts to category II or III 3 pt. hitches and retails for $595. "You could hang cultivator shanks on it and use it behind the tractor to take out wheel tracks," says Priest. He's field tested several prototypes and was finalizing plans to have the patented toolbar custom manufactured as this issue of FARM SHOW went to press.

For more details, contact: FARM SHOW Followup, Warren Priest, West Plains Co., Plains, Kan. 67869 (ph. 316 563-7212).