

Thermocouple Rope Prevents Deterioration in Stored Grains

A temperature indicator housed in a flexible steel rope for use in detecting deterioration in stored grains has been developed by Jones & Laughlin Steel Corp.

The indicator consists of a plastic coated copper circuit with thermocouples every 5 feet inside the wire rope.

The temperature indicator is supposed to help prevent deterioration of stored grain by either insects or moisture. When either moisture or insects are present in the grain, the affected area will heat up.

The thermocouple system makes it possible to take periodic temperature readings of the grain at various depths in the storage bin or elevator. The cable comes in lengths up to 190 feet with thermocouples every 5 feet. A remote control relay system has also been developed for large installations. **PE1**

Pirani Gage for High Vacuum Processing

A redesigned Pirani vacuum gage has been developed by the National Research Corp. Designed to operate in the high vacuum range, from 1000 to 1 microns Hg. These gages are used when fast accurate readings are needed in high vacuum ranges. The Pirani gage is based on measuring the electrical conductance of air, which will decrease as the air pressure decreases **PE2**

Solution Injection Nozzle Provides Better Ammoniation

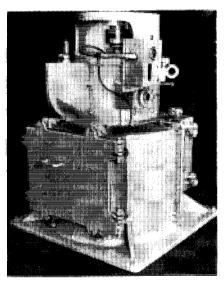
A solution injection nozzle which is supposed to provide better ammoniation of mixed fertilizers than can be obtained with conventional spray pipes is available from Thackston-Davis Supply Co.

The nozzle injects solution beneath the solids within 1 inch of the mixer flights.

The solution is brought into more intimate contact with the solids by deflection and diffusion.

This nozzle technique is claimed to eliminate fumes at normal ammoniation rates and minimize fumes at higher rates. **PE3**

Waterproof, Dust Tight Hammer Mill²for Liquids or Solids



The Rietz disintegrator is intended for use in size reduction and dispersion applications in the food and chemical process industries. Swing door body provides a waterproof and dust tight unit for processing liquids or finely divided solids **PE4**

Portable Meter Determines Surface Moisture

The Olivo moisture meter, an accurate, portable device for the measurement of surface moisture on granular material is available in the U. S. from Heyl & Peterson, Inc.

The device determines surface moisture in less than 2 minutes. When properly calibrated it is accurate to $\pm 2\%$ of surface moisture. **PE5**

Redesigned Process Timer Controls Electrical Equipment

A new line of process timers for accurate, adjustable time delay opening

and closing of electric contacts has been developed by General Electric.

The timers can control baking equipment, mixing machines, conveyors, and other process equipment. The timers are available in single or two circuit models. Combinations of timers can be used to control up to 10 or more circuits.

Operating on a power supply of 60, 50, or 25 cycles the timers have a contact rating of 10 amps. at 120 volts. **PE6**

Chemical Feeder Dispenses Small Proportions of Liquid Chemicals

A compact chemical feeder for simultaneously metering, controlling, mixing, and dispensing small proportions of liquid chemicals into liquid streams has been developed by Fischer & Porter Co. Called the Feederator, the unit contains a built-in ejector which eliminates the need for a proportioning pump. **PE7**

Redesigned Instrument to Speed Up Water in Milk Tests

Hortvet Cryoscope basic analytical instrument for the analysis of milk has been redesigned by the Fisher Scientific Co. The new instrument mechanizes the stirring and ether vaporization of the determination. The device is designed to work off 115 volt 60 cycle current, and meets the specifications of the A.O.A.C. and the A.Ph.A. **PE8**

