

NEW PRODUCTS AND EQUIPMENT

Piper Aircraft Adds New Features for Crop Dusting Plane

The Piper Aircraft Corp. has announced a number of changes and improvements for the 1954 model of the Piper PA-18-A crop dusting airplane. The Agricultural plane, a modification of the Super Cub, is the first applicator plane to be built in quantity with crop dusting equipment as an integral part of the plane. Type PA-18-A, shown below, is available in two different models—one with a useful load of 650 pounds, the other can carry up to 1100 pounds.

Cruising speed is about 100 m.p.h., but the stalling speed is about 40–45 m.p.h. Thus the planes can maneuver safely at tree top level at relatively low speeds.

Improvements in the 1954 model include equipment for high density application of chemicals, up to 15 gallons per acre. The cargo tank is convertible for liquid, or dry dust application. An air scoop directs a blast of air into the cargo tank to prevent caking of dry chemical.

PE1

Water Testing Kit

Field tests of water hardness sensitive to about 20 parts per million are possible with a "Speedy-Kit" developed by Hall Laboratories and available from Calgon Inc.

The test, based on a color change, represents a simplification of the Schwartzbach technique now widely used for industrial water testing. The

simplified test is expected to be of special value to those who frequently make routine water hardness tests. Hardness is expressed in grains of hardness, calcium carbonate, per gallon.

The kit consists of two bottles of test solution and a glass vial with instructions for use. There are sufficient reagents in the kit for 50 to 100 hardness tests.

PE2

Portable Atmospheric Hoods

A low cost light weight atmospheric hood is being manufactured by the P. M. Lennard Co. Constructed of inert light weight fiber-glass plastic material, the hood is 36 in. long, 20 in. deep, and 24 in. high.

The manufacturers claim that the controlled atmosphere hood creates a completely dry, sterile, inert, and dust free atmosphere. The hoods can be equipped with specialized attachments such as sterilizers, ultraviolet lights, and filter controls. The atmosphere is controlled by a simple filter system which can be connected to either a vacuum line or pump.

PE3

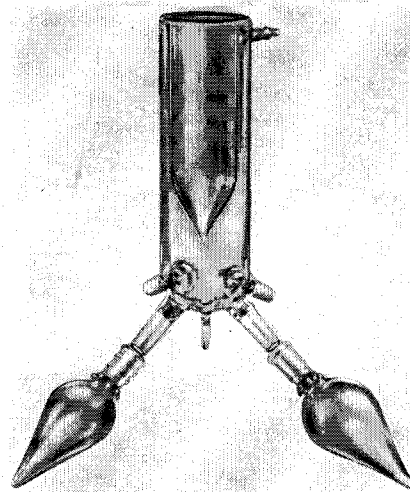
Diphenylamine for Precision Spectroanalysis of Nitrate

The Chemical Division of Fisher Scientific Co. has developed a pure preparation of diphenylamine for precision spectrophotometric analysis of nitrite and nitrate in a variety of products. The reagent is a white solid which yields almost colorless solutions in concentrated sulfuric acid, thus yielding low blanks.

In addition to analysis of biological materials like milk, and tobaccos, the reagent can be used for detection of chromium, iron, manganese, uranium, and zinc.

PE5

Freeze Drying Unit



Standard lyophilizing unit with a capacity of 400 ml. is being produced by Wakefield Industries Inc. Because of the many requests for custom-made lyophilizing units, Wakefield decided to produce this design as a standard item. The apparatus is made of Pyrex glass tubing and is furnished with 4 receiving flasks.

PE6

Conveyor Belt for Food Industries

An improved canner's conveyor belt used for all types of food handling is available from Goodyear Rubber Co. A modification of a previous product, the new belt has an improved rubber cover with improved wearing properties and elasticity. The stain, acid, and mildew resistance of the previous product has been retained in the new model.

PE7

Tractor Pump for Corrosive Fertilizer Solutions

Hydro Engineering Inc. has developed a stainless steel pump for handling corrosive liquid fertilizers. The pump has a pressure range from 0 to 350 p.s.i. and will deliver about 15 gallons per minute at 0 pounds pressure, 11 gallons per minute at 150 pounds.

Designed for direct drive from the tractor the unit is intended for general agricultural spraying applications.

PE8

Piper PA-18-A agricultural plane, shown here with sprayer configuration. The sprayer pump is located in the propeller blast, 24 nozzles are supplied on the standard booms for spray application. The plane is equipped with a cargo tank with a capacity of 110 gallons of spray or 18 cubic feet of dust.

PE4



▶ See coupon, page 268, for further information ▶