

Farm Chemical Aids Placed on Display

Mechanization trend in fertilizer manufacture seen in Chem Show exhibits . . . Anticaking agents for fertilizers . . . Emulsifiers for pesticides

PHILADELPHIA.—Extension of mechanization in preparation of pesticides and mixed fertilizers was featured by some manufacturers at the exposition of chemical industries here Nov. 30–Dec. 5. The exposition in previous years had been held in New York.

A fairly wide variety of mixers and blenders were displayed, and one exhibitor, Chemical and Industrial Corp., Cincinnati, presented an animated model of the PEC Carbonitric process which turned out fertilizer compounds in almost any desired ratio as between plant nutrients.

Phosphates for Foods

Mineral enrichment of foods with phosphate products was stressed by Victor Chemical Works. One of these, sodium iron pyrophosphate, was said to provide a nutritionally available form of iron for foods which contain fats, and which become rancid in contact with other iron salts.

In the pesticide field, a highly purified magnesium montmorillonite was shown by National Lead as a new gellant suspension agent, and emulsifier in aqueous media for insecticides and fungicides. At concentrations of 2 to 2.5% a thick thixotropic gel is obtained,

and use of 5% or more of the product yields firm, solid gels.

Great Lakes Carbon, dicalite division, featured among its diatomaceous materials specially processed products for use as anti-caking agents in fertilizers. They also prevent balling and keep the mixtures free-flowing. Materials were also shown as carriers for insecticides such as pyrethrum, derris root, and the like, or as fluffing agents for heavier dusts, and as absorbents in seed disease control.

Catalysts suitable for production of ammonia and other basic chemicals in the agricultural field were displayed at the exposition by the Girdler Co., gas processes division, Louisville, Ky. One was a nickel base catalyst (G-29) containing approximately 27% nickel, used in the production of ammonia synthesis gas and various hydrogen-carbon monoxide synthesis gases.

Nickel Catalyst

A highly active nickel catalyst (G-12) was shown in the form of 1/4" and 3/8" tablets with gross densities of 70 and 65 pounds per cubic foot, respectively. This catalyst has a service life of over four years, and requires no regeneration in hydrogen and ammonia processes.



J. C. Totter (left), Bemis Bag Co., demonstrates the automatic bag sewer which fills, weighs, and sews bags automatically for operation of conveyor filling lines



Some of the advantages of the rotary tablet press are demonstrated by H. B. Hollidge (right) of Arthur Colton Co. to E. G. Heines of McNeil Laboratories

Right: B. M. O'Hara of the Chemical and Industrial Corp. has a group of interested visitors examining a scale model of a plant designed to make nitrophosphate fertilizers by the PE process. Center: Robert Loomis of the Fuller Co. (elbow on table) points out the merits of the Airslide conveyor for moving pulverized materials. Left: E. L. Timm (center) of the Pulverizing Machinery Co. is discussing the operation of the Mikro pulverizer for foods, drugs, and chemicals

