

peanut, wheat millfeeds, distiller's and brewers' dried grains, and fish meals are all down. Holding up and ahead of last season are: linseed cakes and meals, copra cakes and meals, gluten feed and meal, rice millfeeds, and alfalfa meal.

Western Capacity for Tin Plate Now Half Its Needs

Further progress toward area self-sufficiency was made for the western canning industry in the middle of this month when Columbia-Geneva Steel Division of U. S. Steel Corp. completed a 68% boost in capacity of its tin plate and sheet steel mill at Pittsburg, Calif. Some 20% of the 5.2 million tons of tin plate currently produced in the U. S. is consumed in the West, and addition of a second high-speed electrolytic tinning line and another cold reduction mill by Columbia-Geneva raises western capacity for tin plate to about half its needs. Rounding out the expansion picture at Columbia-Geneva are several auxiliary pieces of equipment, including a second continuous pickling line and additional annealing furnaces.

Columbia-Geneva's tin plate capacity has been doubled to about 400,000 tons per year, and sheet steel capacity is now 250,000 tons per year. While the canning industry's interest naturally centers on the tin plate expansion and mill. The new mill is used for sheet steel, and the older five-stand mill is more available for rolling tin plate, where the extra stand is necessary to reach the lighter tin plate gages.

The company says the new electrolytic tinning line is one of the three most modern in the country. The first such line at Pittsburg was installed during an earlier expansion completed in 1948. Cost of the present expansion was \$35 million. Alden G. Roach, division president, says no further expansions are planned at the moment. As a matter of fact, the mill is not yet operating at capacity because not enough sheet steel is available.

Revised Labeling Manual Issued by MCA

With the increasing tendency of the state and federal governments to regulate the labeling of hazardous chemicals, the recent announcement of the third revision of the Manufacturing Chemists' Association Labeling Manual should be welcome news to chemical manufacturers and formulators. The MCA publication "Manual L-1: Warning Labels," prepared by the association's committee on labels and precautionary information (LAPI), presents the principles of proper warning label information and includes illustrative labels for



Representatives of the British chemical industry recently conferred with the MCA labeling committee. The British representatives are interested in developing a manual for their industry. C. W. Richards of Imperial Chemical Industries, Ltd. (left); Frank Lewe, Food Machinery & Chemical; and Peter D. Moll, ICI

about 250 industrial and agricultural chemicals.

In addition to providing a sound basis for labeling information the manual has also served as a guide for state regulations. Four of the five states and territories which now have chemical labeling codes essentially follow the recommendations of the manual.

Most of the suggested labels present information beyond that required by the federal laws. In this respect the MCA seems to follow the premise that the federal regulations are the minimum requirements and the manual labels are for use in addition to, or in combination with, those required by law.

Copies of the 98 page booklet are available from the Manufacturing Chemists' Association, Inc., 246 Woodward Bldg, Washington 5, D. C., price \$1.20.

Research

Vitamin K₁ Prepared From Synthetic Isophytol

A vitamin K₁ with racemic phytyl side chain which, in its properties, differs only slightly from natural vitamin K₁ with the optically active phytyl side chain, has been prepared, using synthetic isophytol and 2-methylnaphtho-hydroquinone.

At the meeting of chemists held in Innsbruck, Austria, recently, O. Isler and K. Doebel reported on these recent syntheses in the vitamin K series. The conference was a joint meeting of the Association of Austrian Chemists, the Society of German Chemists, and the Swiss Chemical Society.

The new compound shows the same ultraviolet spectra and gives the same combustion analysis as the natural vitamin. Its biological effectiveness on

vitamin K-deficient chicks and on rabbits with dicumarol-prothrombin anemia has been reported to be equal to that of the natural compound, within the margin of experimental error.

The conventional syntheses of vitamin K₁ and of the dihydro-vitamin K₁

GE Opens Lab for Studying Cold Sterilization

Dedication of General Electric's cathode ray sterilization research laboratory brought almost 100 scientists to Milwaukee, Wis., for a discussion of progress in the irradiation sterilization of food and drugs. The scientists saw a demonstration of GE's 1 million volt x-ray unit modified for cathode ray production. Starting a demonstration are: Herbert Schreiber, Jr. (left), Harold Boeker, and Joseph Ranftl of GE's x-ray division

