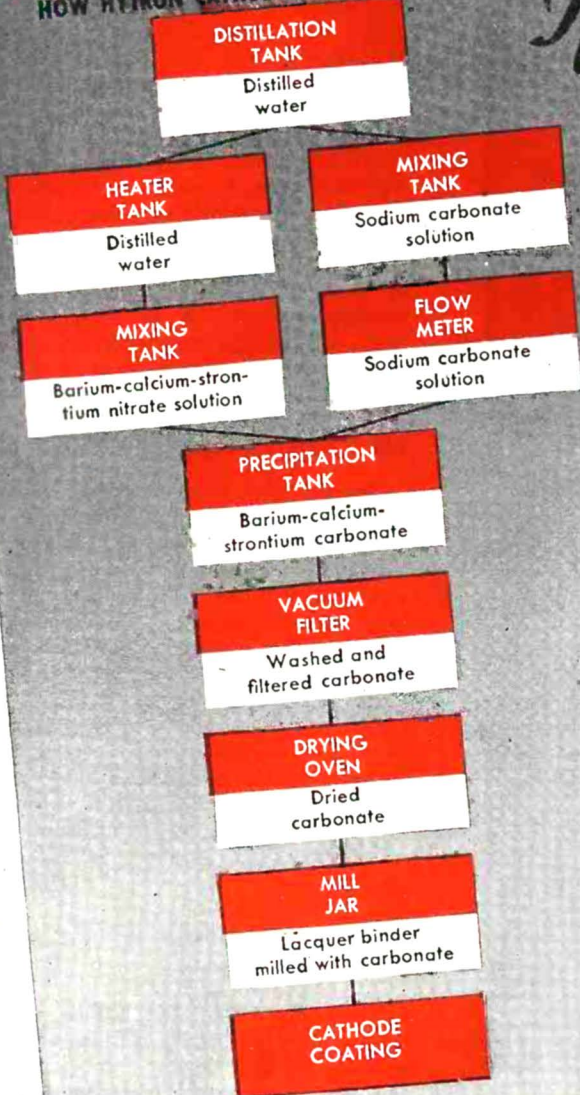


MAKING TUBES IS EASY...

If YOU KNOW HOW!

HOW HYTRON CATHODE COATINGS ARE MADE



First floor of Hytron chemical precipitation system. Note the flow meter, precipitation tanks, and ceramic vacuum filters. Spotless cleanliness is vital to avoid contamination of carbonates precipitated for cathode coatings.

AGAIN HYTRON KNOW-HOW WORKS FOR YOU...

THIS photograph and flow chart may look strange in an advertisement on radio tubes. Chemistry and metallurgy, however, are a vital part of Hytron engineering. The picture illustrates the first of three floors used by Hytron's chemical system which precipitates the carbonates for cathode coatings.

Prewar, Hytron purchased such carbonates—as did most other tube manufacturers. Wartime mass production demanded much better quality control than suppliers offered. By doing the job itself, Hytron gained extra know-how which serves you in peacetime.

For these carbonates, absolute control is required of formulation, crystal size and shape, density, purity, and

viscosity. Most cathode coatings are prepared from carbonates compounded of barium, calcium, and strontium. The percentage of each of these elements affects the performance of different types of tubes. Crystal size and shape, density, freedom from impurities, all determine the degree of electronic emission. Variations in viscosity must be minimized to assure uniform application of coating on the cathode.

There is still much "black magic" in obtaining proper cathode emission. But Hytron makes easier the problems involved by accurate chemical and metallurgical controls. No research is too tough or too unrelated, if it leads to know-how which will give better performance of the Hytron tubes you buy.

OLDEST MANUFACTURER SPECIALIZING IN RADIO RECEIVING TUBES



HYTRON

RADIO AND ELECTRONICS CORP.

MAIN OFFICE: SALEM, MASSACHUSETTS

