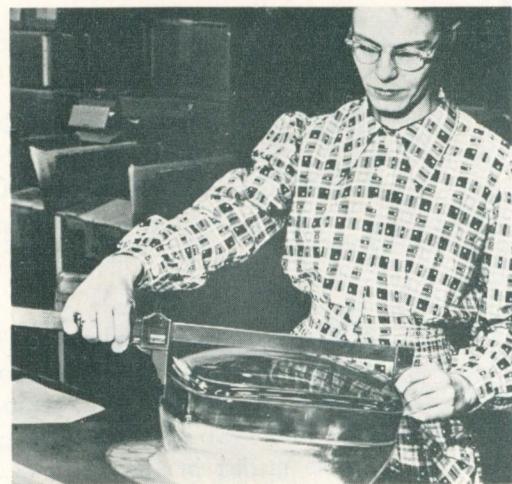
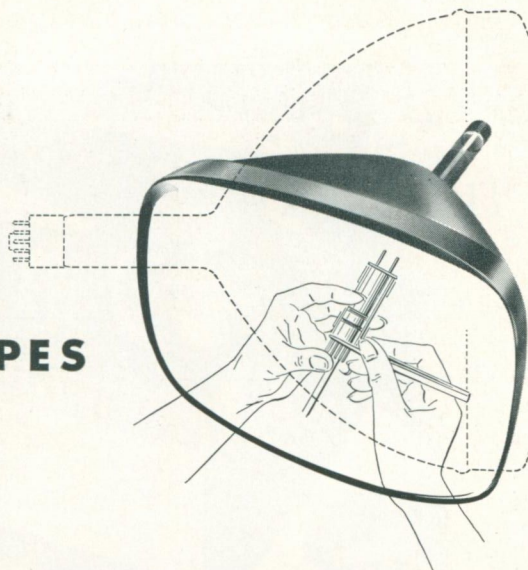


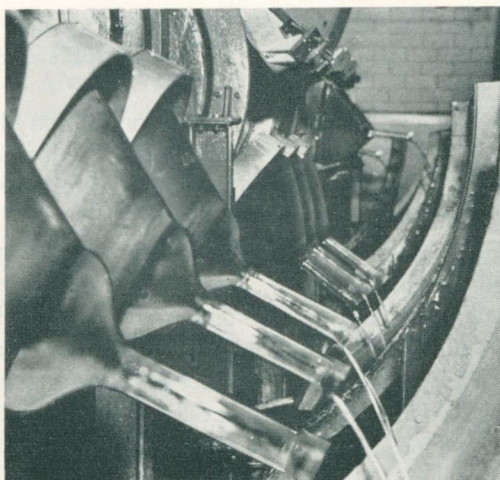
HOW *RCA* KINESCOPIES are made



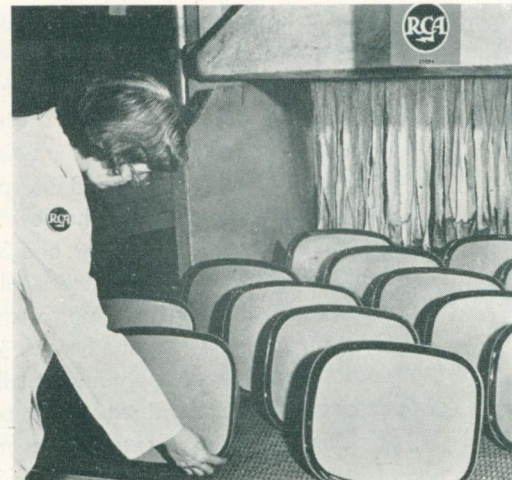
Manufacturing process begins with inspection of all parts comprising the tube, whether glass or metal-shell type.



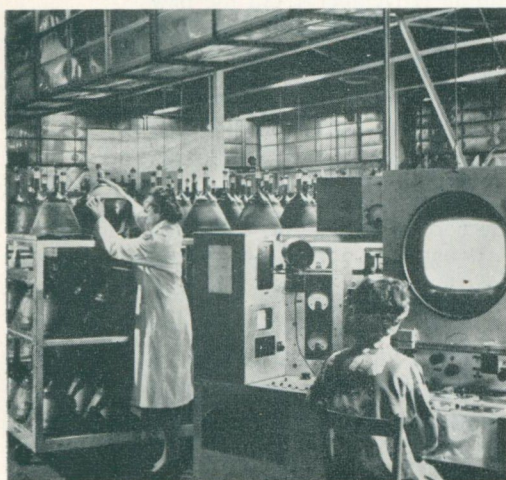
Metal tubes are placed on a crawling conveyor belt to permit the phosphor to settle on the face-plate.



At the end of the settling belt, automatic machinery tips the tube and decants the remaining liquid.



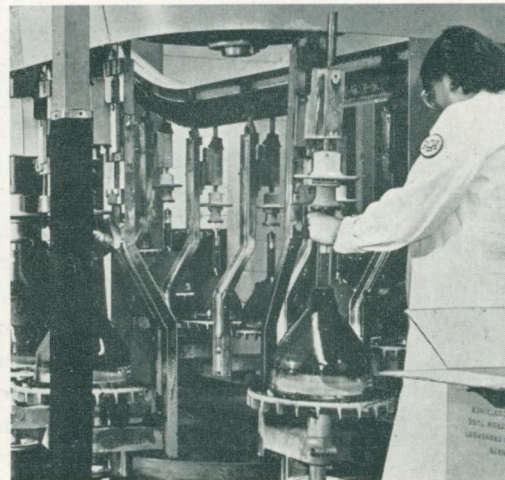
Kinescopes are baked in huge ovens to "boil" out impurities and to dry the inside graphite coating.



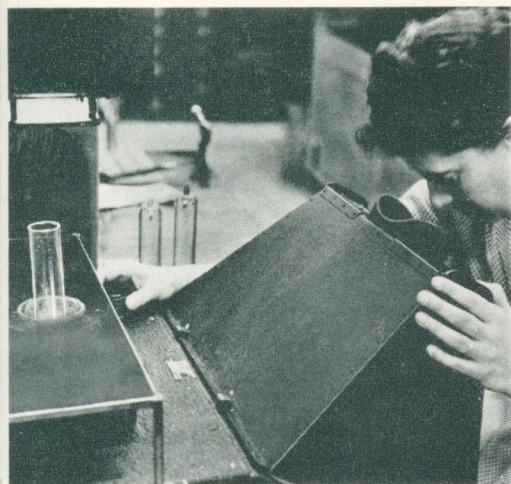
As a tube approaches completion it is tested for picture brightness under home lighting conditions.



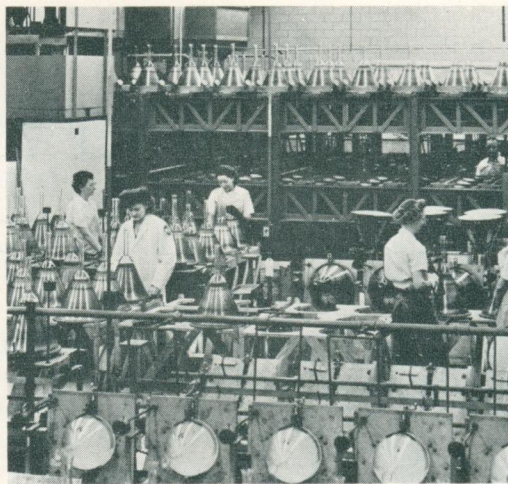
Final tests are made to insure that the tube will give a well-centered perfectly-focused picture.



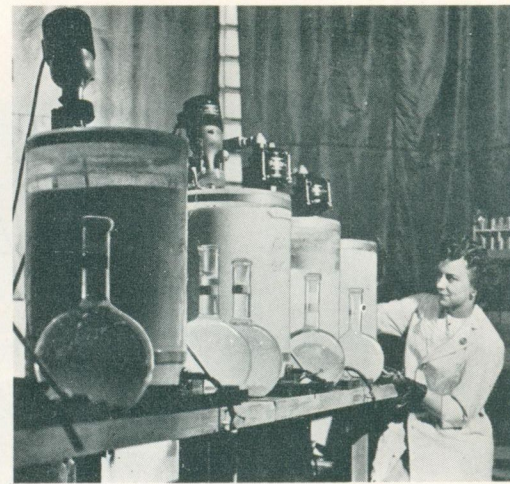
After the tube has passed all tests it is given its final washing before paint is applied to the outside.



Seals between glass and metal parts are checked by polarized light, and by air under high pressure.



The phosphor solution is poured into the envelope where it settles to form the tube's luminous screen.



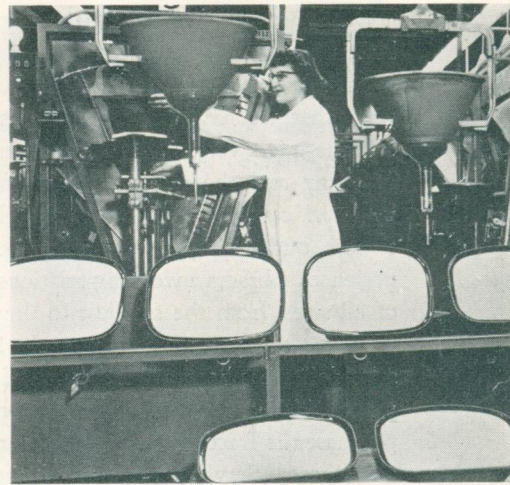
Purity of the phosphor solution is rigidly inspected to prevent the entrance of injurious foreign material.



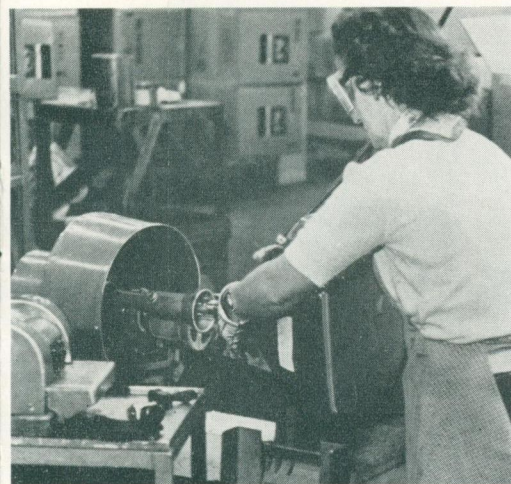
Electron guns are assembled here then microscopically tested to watch-makers' rigid specifications.



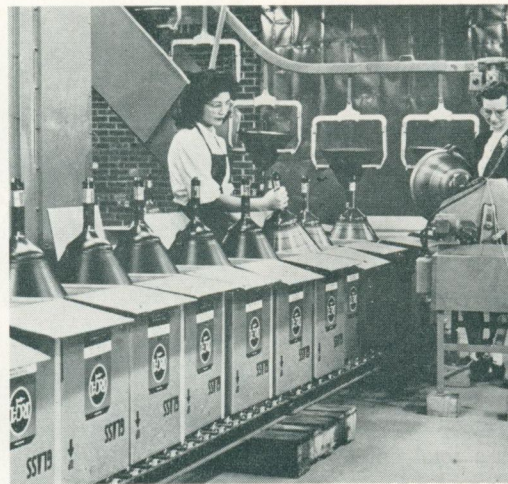
In this rotary machine the stem supporting the electron gun is sealed into the neck of the envelope.



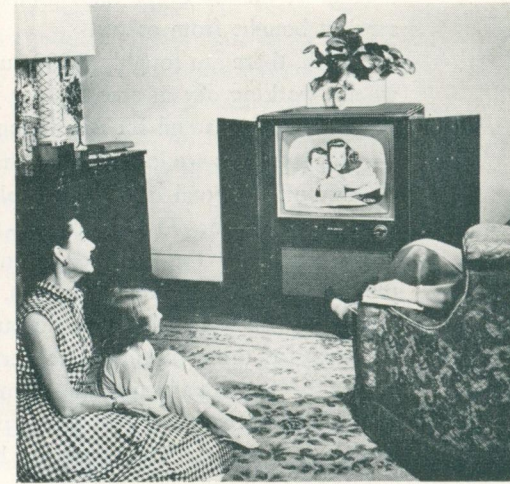
The tubes are now ready for the pumping system which removes all air and gases.



The kinescope is now branded with the RCA trademark, which is a warranty of top-quality picture tubes.



Having received the stamp of approval, the tube is given a final polish and placed in its shipping carton.



The RCA kinescope is now ready to provide the customer with the best picture his set can produce.

2019.0882

Three-Speed Record Player Announced by RCA Victor

A NEW and improved type of "Victrola" three-speed record player, which makes it possible, with a single turntable to provide quality reproduction from records of all three established revolving speeds, has been placed on the market by the RCA Victor Division. Under development for more than a year, the new instrument, available in four models, marks the introduction of RCA's first three-speed record-playing system.

Heart of the new instrument is a novel slip-on 45-rpm spindle which houses the automatic record-changing mechanism of the 45-rpm system. The larger slip-on spindle fits over the permanent spindle and converts the new record player into an authentic 45-rpm instrument, with all the engineering advantages and performance features of the "45" system. With the slip-on spindle removed, the instrument, at the twist of a selector knob, will play either 78-rpm or 33 $\frac{1}{3}$ -rpm discs.

Completely automatic, the new record player: Plays up to 14 45-rpm records at one loading; plays up to ten 12-inch or twelve 10-inch standard or long-playing discs at one loading; plays up to ten intermixed sizes of 78-rpm, or the same number of 33 $\frac{1}{3}$ -rpm records of intermixed sizes; stops automatically after playing last record of any of the three speeds; provides two separate pick-up points in a single tone arm, one for playing 78-rpm discs and another for the 45-rpm and 33 $\frac{1}{3}$ -rpm records, and eliminates the need for record inserts.

The new all-speed "Victrola" instruments include a record-player attachment which can be connected to any radio, phonograph, or television set. Other models are a self-contained phonograph with a built-in speaker and amplifying system; a self-contained portable unit housed in a luggage-type carrying case, and a three-speed table model "Victrola" radio-phonograph.

"Engineering advances now make it possible to integrate '45' facilities in an all-speed changer that provides reproduction of equally high quality from all types of records and, at the same time, retains all the advantages found only in 45-rpm instruments," said H. G. Baker, vice president in charge of the company's Home Instrument Division.

Reflecting the simplicity of 45-rpm engineering, the new all-speed Victrola instrument features a single, lightweight tone arm for records of all speeds; a twin-point stylus which is quickly rotated for playing either 78-rpm or 45- and 33 $\frac{1}{3}$ -rpm records by turning a tiny



Three-speed record player installed in combination table-model radio-phonograph.

lever mounted on the tone arm; a "guard position" protects the stylus when not in use; a single speed-selection control knob, and a single knob for on-off-reject control.

For 45-rpm, the operator need only turn the speed-selector knob to the proper speed. For either 78-rpm or 33 $\frac{1}{3}$ -rpm, the only additional step required is to lift the large spindle off the permanent spindle, and adjust speed-selector knob and stylus. Every RCA Victor 3-speed record player has a specially designed receptacle to conceal the 45-rpm spindle when not in use.

Toscanini to Lead NBC Symphony In 14 Concerts This Season

Maestro Arturo Toscanini is to conduct the NBC Symphony Orchestra in fourteen concerts during the 1952-1953 season, beginning November 1. In the new series, Toscanini's sixteenth successive season as conductor, he will direct two more concerts than in the last winter season. Guido Cantelli, who starts his fourth season as a guest conductor of the NBC Symphony, will direct the remaining eight concerts of the twenty-two week series.

Toscanini will conduct concerts on the following dates: November 1, 8, 15, 22 and 29; January 3, 10, 17, 24 and 31, and March 7, 14, 21 and 28. Mr. Cantelli's eight dates will be December 6, 13, 20 and 27 and February 7, 14, 21 and 28. Conductors of the current summer series of the NBC Symphony will include Laszlo Halasz, Samuel Antek, Wilfred Pelletier, Richard Korn and Massino Freccia.

Small Businesses Essential to Progress of American Industry

RCA Executive Reveals that Approximately Half of Annual Sales Dollar Has Gone to Outside Manufacturers of Materials and Components

The following text is taken from a statement by Vincent deP. Goubeau, Vice President in Charge of Materials, RCA Victor Division, before the U. S. Senate Small Business Committee on May 3, 1952.

WE are proud of the relationships we, at RCA, have built up with our suppliers. We like to think of them as friends as well as business associates. Over the many years that we have been in business, we have learned that there is a very strong inter-dependence between our company and the many organizations with which we work in carrying out our responsibilities to our customers, our employees, and our stockholders. This experience embraces a working relationship with companies of all sizes, from the smallest to the largest.

Over the years, approximately half of our annual sales dollar has been spent for materials and components purchased from outside organizations. The proportion purchased is fractionally less in regard to equipment for the Armed Services because of the large amount of engineering development involved. And yet, in reviewing our records, it is remarkable to note how closely this over-all figure has held to 50 per cent — in peace, in war, or — as at present — in time of semi-mobilization.

For the year ended December 31, 1951, RCA spent 50.3 cents out of every sales dollar for materials and services bought from others.

In all, there are roughly 5,000 suppliers with whom we are working day in and day out producing for both the Armed Forces and for the nation's consumers.

Our suppliers are located in 42 states.

Out of this total of 5,000 suppliers, approximately three-fourths — or 75 per cent — are small business organizations by the accepted definition of "500 employees or less." In round figures, that makes 3,750 small concerns with whom we do business.

Many of these suppliers are very small companies. I know of one in particular that is making for us a vital part of an electronic system being manufactured under Air Force contract. This company has a total employ-

ment of six, including the president.

But while this is somewhat unusual, a more significant fact is that of all 3,750 small businesses contributing to our production, about half employ less than one hundred people.

It is pertinent to inquire at this point how we determine the amount of our business to be subcontracted, or indeed why we subcontract at all. Why, for example, does a large company like RCA not manufacture all its needs?

The answer begins with our policy that, on items with large volume for which we have manufacturing facilities and know-how, we normally divide our procurement between our plants and our suppliers. We do this in order to have more than one source of supply and to insure our getting the best price for the items that go into our product.

Considering the variety and volume of parts entering into our product, we cannot profitably make all the parts we require because of the capital outlay required to pur-

Walkie-Talkies for the Armed Forces get final tests at end of production line at RCA Victor plant in Camden, New Jersey.

