

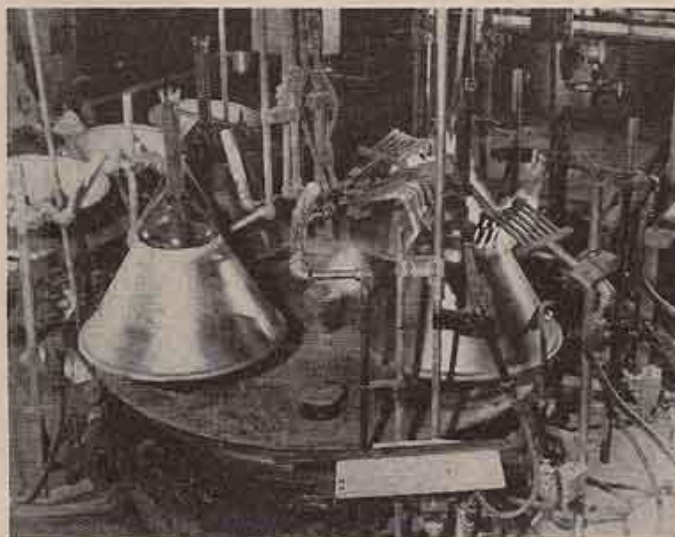
TV is BIG Business: DuMont opens new

MILLION-TUBE-A-YEAR-PLANT

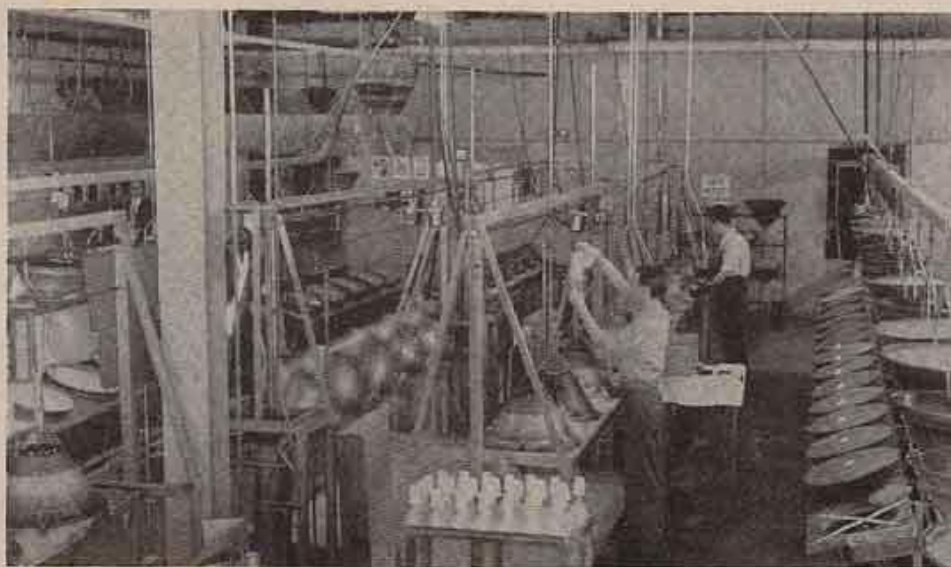
Phenomenal growth of TV continues unabated. Current multi-billion dollar TV business already eclipsing previous record radio production volume. Will soon be one of country's top industries, rivaling — if not exceeding — the automobile industry. Service technicians will share this progress

Dedication of DuMont's new plant at Allwood, N. J., which will be devoted exclusively to the production of television picture tubes, marks another milestone in the continued progress of TV. Equipped with the latest production machinery, it is expected to turn out \$25,000,000 worth of picture tubes a year. Add to this the record volume produced by the other manufacturers, and you will get an idea of the size to which television has grown in little over three years. Soon

there will be as many teletests in this country as there are cars, each containing about five times as many parts as the average a-m set; and radio, which had been considered of major proportions until recently, will appear small. If you still have any doubts as to the magnitude of TV and its future, remember that it is already running at a level higher than that of the automobile industry in the twenties. For the technician this means prosperous days ahead.



In the pictures that follow, the essential steps in the production of picture tubes are illustrated. At left, one of the first operations is executed: sealing metal cone to glass neck. These tubes are of the short-neck, metal variety. Dr. DuMont foresees larger direct view tubes. He considers a 4 x 5 ft tube very likely.



Depositing screen material on face of tubes. After screen has been deposited, solution is decanted. The tubes just left of center, appearing somewhat blurred, are in the process of being decanted. Both natural glass and dark faced tubes are produced, although DuMont receivers do not use the dark-faced variety.



Here is one of the most difficult problems in the early stages of metal tube production: sealing glass face plate to metal cone. The machine is completely automatic, heats the glass to 2200° F.

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Applying Dixonac coating to inside of funnel and neck of DuMont 19AP4. The Dixonac drying conveyor at right of center is in motion. This operation is performed manually.



Inspecting cathode and grids. The microscope measures the spacing between cathode and grid. Assembly of the bent electron gun involves such delicate operations that only women are employed in this section of the plant.



Basing and aging processes at DuMont's Allwood plant. Oven conveyor, on the right, cements base to the neck of the tube. Tubes are aged on conveyor at left while operated at normal potentials.



Railroad exhaust. A nearly perfect vacuum is obtained as each tube passes through the various evacuation processes automatically. The tubes pass high-temperature ovens to drive all the gases out of the tube material.

