

SUBJECT:

## RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION. TUBE DEPT. STANDARDIZING

HARRISON, N. J. LANCASTER, PA.

MOLDING & SINTERING MATRIX CATHODES

Process Specification

DATE July 9, 1954 PAGE 1

STANDARDIZING NOTICE

34-14-72A MAY

1955

SUPERSEDED DATE Aug. 16, 1952

Initially for 5946

1. EQUIPMENT a. Molding jig, Model L717WW. Part AX45.

b. Scoop ...

c. Camels hair brush, No. 2 Osborne.

d. Hydrogen furnace.

e. Rayon gloves.

f. Small steel mallet.

MATERIALS

a. Cathode

- As specified in tube construction data. b. Nickel Powder)

## 3. PROCEDURE

a. Insert cathode in jig making sure cathode is seated in lip at bottom of jig.

b. Holding cathode centered with fingers pour \*\*\* of nickel powder around cathode using scoop.

c. Holding cathode centered tap jig \*\*\* with mallet.

d. Brush off any excess powder or if there is a deficiency, of powder pour more powder around cathode using scoop and repeat tapping and brushing operations.

e. Fire cathode and jig in hydrogen for 15 minutes at 1100°C.

\* f. Remove cathode from jig by tapping side of jig with mallet until cathode falls out.

g. Fire cathode in dry hydrogen for 30 minutes at 1200°C.

h. Always wear a glove when touching cathode and then never touch nickel matrix.

> ENGINEERING SECTION STANDARDIZING