

SUBJECT STANDARDIZING NOTICES -
NUMBERING & FILING SYSTEM

SUPERSEDED DATE 10/28/43

1. INTRODUCTION

Standardizing Notices for electron tube manufacturing activities consist of a group of major subjects. These subjects are divided into four main sections:

1. Electron Tube Construction Data
2. Materials
3. Processes
4. Electron Tube and Parts Packing

A complete list of the sections or subjects is given on page 2 of this Standardizing Notice. Under each main heading are listed the individual notices grouped according to closely related subjects, each notice having its own number. This list may be supplemented from time to time with additional major subjects as experience may prove necessary.

2. STANDARDIZING NOTICE NOMENCLATURE

The numbers used for these Standardizing Notices for electron tube manufacturing activities consist of three parts. The first part is the number of the major section, the second, a subdivision of the first section and the third, a subdivision of the second section.

Examples of Stdzg. Notice Numbers

3-1P-211, 10-1-2, 14-1-1MCH, 33-N-7

- a. The first part; 3, 10, 14 or 33, is the major section as shown on page 2.
- b. The second part; -1P, -1, or -N, is a subdivision of the major subject, the P in 1P representing a further subdivision within the second part. The N in 33-N-7 is a material classification letter.
- c. The third part; -211, -2, -1MCH or -7, is a subdivision of the second part. The MCH is a further subdivision within the third part.

* Notices are to be filed in numerical order followed by alphabetical order according to their successive major numbers and subdivision numbers, and should only be filed with Electron Tube Standardizing information.

3. STANDARDIZING NOTICE STATIONERY

Stationery used by the Standardizing Section of the Engineering Department for Electron Tube Standardizing Notices is a 16 lb. Hammermill Bond or equivalent, either white, yellow or green.

- a. White paper indicates that the data included are definitely standardized unless otherwise specified.
- b. Yellow paper indicates that the data included are tentative or recognized deviations from standard, i.e., Development Construction and Testing Data are issued on yellow paper.
- c. Green paper indicates that the data included are strictly confidential.



4. STANDARDIZING NOTICES

SectionDescription

1 STANDARDIZING PROCEDURES, ETC.

- 1-1-0 Number & filing system for Standardizing Notices
- 1-1-1 Index to prefix designation letters for tube parts and parts nomenclature
- 1-1-2 Standard symbols for basing connections
- 1-1-3 PC system
- 1-1-4 Binders for Standardizing Notices
- 1-1-5 Permanent & Temporary Standards

2 CHANGE NOTICES

3 CONSTRUCTION DATA FOR TUBES

- 3-0-0 Index to construction data
- 3-0-1 Tubes manufactured or sold by RCA & construction data section; index
- 3-0-5 U.S. Government JAN, CRC & VT Tube Types in the RCA Line
- ** 3-0-10 Designation System For Receiving Tubes
- ** 3-0-14 Complete Mfg. Data For Specially Based Rec'g Tubes with "X" & "Y" suffixes
- ** 3-0-17 Explanation of Page Arrangement in Construction Data Section and Use of Bill-of-Materials.
- 3-1-0 Tube outlines and general data pertaining to construction of all tubes in Section 3-1-(tube type)
- 3-1-(tube type) Construction data for standard commercial glass receiving tubes using "old standard" bases, allied glass receiving tubes and glass special tubes, except those made at Lancaster, and acorn tubes
- 3-1D-0 Tube outlines and general data pertaining to construction of tubes in section 3-1D-(tube type)
- 3-1D-(tube type) Construction data for standard commercial glass miniature tubes
- 3-1G-0 Tube outlines and general data pertaining to construction of all tubes in 3-1G-(tube type)
- 3-1G-(tube type) Construction data for standard commercial octal (G & GT) glass receiving tubes
- 3-1K-0 General data pertaining to construction of tubes in 3-1K-(tube type)
- 3-1K-(tube type) Construction data for standard commercial cathode-ray tubes
- 3-1L-0 General data pertaining to construction of tubes in 3-1L-(tube type)
- 3-1L-(tube type) Construction data for standard commercial phototubes
- 3-1M-0 Tube outlines and general data pertaining to construction of tubes in 3-1M-(tube type)
- 3-1M-(tube type) Construction data for standard commercial metal tubes
- 3-1P-0 General data pertaining to construction of all tubes in 3-1P-(tube type)
- 3-1P-(tube type) Construction data for standard commercial power & transmitting tubes and any other tubes made in Lancaster power tube factory

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*General Revision

5-489-7-2

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SUBJECT NUMBERING & FILING SYSTEM FOR ELECTRON
 TUBE STANDARDIZING NOTICES

SUPERSEDED DATE 4/29/47

4. STANDARDIZING NOTICES (Cont'd)

<u>Section</u>	<u>Description</u>
3	CONSTRUCTION DATA FOR TUBES (Continued)
3-2--(tube type)	Construction data for developmental tubes made at Harrison and Indianapolis
3-2K--(tube type); 3-2L--(tube type); 3-2P--(tube type)	Construction data for developmental tubes made in Lancaster cathode-ray tube, phototube, and power tube factories, respectively.
8	GRIDS, AND GRID MAKING PROCESSES
8-0-1	Grid Handling - Critical Designs
8-0-6	Grid Handling and Control Procedures
8-0-7	Grid Side Rod Diameter Tolerance Specifications
8-0-8	Grid Designs and Wound Grid Shapes
8-0-18	Kershaw Grids, General Specifications and Wound Grid Equivalents
8-1-1	G factory assembled grids
8-1-2FGK	FGK assemblies, grid-cathode assemblies
8-5-3	Lubricating Grid Wire with Graphite
8-6-1	Lint and Dust Removal From Grid, Plates, Bulbs and Mounts
9	PLATES, BEAM-PLATES AND PLATE MAKING PROCESSES
9-1-1	P plates, PH half plates, PQ quarter plates, PS sixth plates
9-1-1B	PB beam plates
9-1-2FP	FP assemblies, plate assemblies
9-5-4	Processing Carbon Plates-Heat treating, firing & brushing
9-29-1	Lubricant for Plates at Forming
10	GLASS TUBING AND CANE SPECIFICATIONS
10-1-0A	Glass Tubing - Glossary of Terms
10-1-1	Glass Tubing - Soft Glass Quality Specifications
10-1-2	Glass Tubing - Hard Glass Quality Specifications
10-1-3	Glass Tubing - Diameter Inspection Limits (Tables)
10-1-5TG	Glass Tubing - Detail Specifications
10-3-1	Physical Property Tables
10-3-2	Expansion Curves
10-3-3	Viscosity Curves
10-3-4	Glass Density Determinations
10-4-1	Glass Tubing & Cane Data (Tables) RCA
10-4-2	Glass Tubing Dimensional Data (Tables) Bridgeville Glass Works of General Electric Company
10-4-3	Glass Tubing Dimensional Data (Tables) Corning Glass Works

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4. STANDARDIZING NOTICES (Cont'd)

Section Description

12 STEMS

- 12-0-1 Standard Flange & Exhaust Tube Lengths for Glass Stems
- 12-0-5 Standard Flange Dimensioning - Cut Lgth's for Std. Flange Ht's.
- 12-0-8 Prepressed Flanges
- 12-1-0 FS press type stems
- 12-1-0A FSM metal-sealed button stems and lead forming
- 12-1-0B FSB large glass button stems and lead forming
- 12-1-0D FSD miniature & button stems and lead forming
- 12-3-1 Button Stem Making Process
- 12-5-18 Weld Cups
- 12-9-3 Miniature Stems - Cleaning Inner Lead Wires in #2
- 12-11-1 Annealing Stems - In Rotary Electric Annealer
- 12-29-1 Stem Forming Machine Lubricant

13 MISCELLANEOUS PARTS AND SUPPORTS

- 13-1-1 A C & E style filament hooks and supports
- 13-1-1(EM) EM parts, eyeleted micas
- 13-1-1H H Parts made by machining
- 13-1-1HC Cast metallic parts
- 13-1-1(I) I Parts, insulators and spacers
- 13-1-1(IM) IM " , made of mica
- 13-1-1(IM), FEM and FIM assemblies, eyeleted mica assemblies and mica assemblies
- Page 0-12
- 13-1-1(IT) IT Parts, Tubular Insulators
- 13-1-1L L " , Tubular Insulators Wire Cloth
- 13-1-1M M " , Miscellaneous Assemblies
- 13-1-1MH MH " , Header Assemblies
- 13-1-1R R " , Miscellaneous parts, made of Metal Strip
- 13-1-1RA RA " , Aperture Discs
- 13-1-1RB RB " , Stem Collars
- 13-1-1RC RC " , Cooling Collars
- 13-1-1RD RD " , Miscellaneous Supports made of Metal Ribbon
- 13-1-1RE RE " , Eyelets
- 13-1-1RG RG " , Grid Shields
- 13-1-1RH RH " , Headers
- 13-1-1T T " , Miscellaneous Parts made of Metal Tubing
- 13-1-1W W " , Miscellaneous Parts made of Wire
- 13-1-2FC FC Assemblies, Bead Assemblies
- 13-1-2FM FM " , Miscellaneous Factory Assemblies
- 13-1-2FR FR " , Radiator Assemblies and Sub-Assemblies
- 13-1-2FW FW " , Wire Part Assemblies
- 13-9-1 Apply Insulating Coating to Mica - Hand Process
- 13-11-1 Apply Insulating Coating to Mica - Machine Process

(Continued on page 5)

*General Revision



4. STANDARDIZING NOTICES (Cont'd)

Section

Description

14 FILAMENTS AND CATHODES

14-1-1FF	FF Parts, Non-coiled Filaments.
14-1-1FH	FH Parts, Non-coiled Heaters.
14-1-1MCF	CF Parts, Uncoated Coiled Filaments.
14-1-1MCF	MCF Parts, Insulator Coated Coiled Filaments.
14-1-1MCH	CH Parts, Uncoated Coiled Heaters.
14-1-1MCH	MCH Parts, Coated Coiled Heaters.
14-1-2K	K Parts, Cathodes made of Tubing.
14-1-2KS	KS Parts, Special Shaped Cathodes made of Strip.
14-1-2KW	KW Parts, Wrapped Cathodes made of Strip, and Integral Tab Wrapped Cathodes made of Strip.
14-1-3MKS	MKS Parts, KS Cathode Assemblies, Uncoated.
14-1-4FK	FK Parts, K Cathodes Coated and Tabbed.
14-1-4FKS	FKS Parts, KS & MKS Coated Cathodes.
14-1-4FKW	FKW Parts, KW Cathodes Coated and Tabbed, and Integral Tab Cathodes Coated.
14-4- & up	Wire Manufacturing, Swaging Metal and Wire Drawing.

15 GETTERS AND ACTIVATORS

15-1-1Z	Z Parts, Getter and Activator Pellets.
15-1-2FZ	FZ Parts, Getter and Activator Assemblies.

17 BULBS

17-1-0	FB Parts, Glass Bulb Asslys.
17-1-1	FBM Parts, Metal Bulb Asslys.
17-7-2	Bulb Design Formulae.
17-7-2	FP,G,GT,J,S,ST,T Parts, Glass Bulb Drawings.
17-7-3	MT,MTT Parts, Metal Bulb Drawings.
17-8-1	Soft Glass Bulb Inspection Specifications.
17-8-1A	" " " " " " special for magic eye tubes.
17-8-2	Hard " " " " "
17-8-3	Cathode-ray " " " "
17-8-4	Molded Flare Inspection Specifications.
17-8-5	Molded Glass Flares.
17-9-1	Flanged Bulbs (Acorn Type - Mfg. of,)

18 SEALING PROCESSES

19 EXHAUST APPURTENANTS

19-6-3	Nomenclature for designating High Frequency Induction Heater Coils.
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** 20 SALVAGE PROCEDURE (Parts, Assemblies, or Unfinished Tubes)

22 CARBONIZING & CARBURIZING PROCESSES

(Continued on page 6)



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 TUBE STANDARDIZING NOTICES

SUPERSEDED DATE 11/19/46

4. STANDARDIZING NOTICES (Cont'd)

<u>Section</u>	<u>Description</u>
23	MASTER SPECIFICATION SHEETS (MSS)
23-1-()	MSS for standard commercial tubes
23-2-()	" " developmental tubes
23-4-(Serial No.)	Test specifications
23-5-1	Quality Tests
23-6-1	Salvage Schedules
24	BASES, CAPS, CONTACT PINS, MOLDED FLARES
24-1-1	Base and cap drawings
24-1-1A	Base molded inscriptions
24-1-1BC	BC parts, contact pin drawings
24-1-2	MB parts, base and cap asslys
24-1-5	Base inspection criteria
24-2 & up	Base and cap cements, basing and capping processes
25	SHRINKAGE DEFECT SYMBOLS, INSPECTION
26	LIFE TEST DATA
27	TUBE MARKING
27-1-1A	Schedules showing markings on commercial tubes
27-1-1G	Marking for tubes with Government numbers
27-1-2	Details of marking stamps (inscription styles)
27-3-	Identification marking codes for tubes
29	PACKING
Up to 29-29	Parts packing
29-29 & above	Commercial tube packing
29-29-5	Government tube warehouse packing
29-80	Code marking on pkg. to identify place and date of manufacture, construction and selections
33	MATERIAL HANDLING SPECIFICATIONS

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9-489-7-2

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4. STANDARDIZING NOTICES (Cont'd)

Section

Description

- 34 PROCESSES (All processing in sec. 8, 9, etc. will eventually be transferred to this Section)
- 34-1-1 Misc. treatment schedules
- 34-4 " cleaning processes
- 34-8 Processes pertaining to grids
- 34-9 " " " plates
- 34-12 " " " stems and lead wires
- 34-13 " " " miscellaneous parts and supports
- 34-14 " " " filaments and cathodes
- 34-15 " " " getters and activators
- 34-16 " " " mounts and mounting
- 34-17 " " " bulbs
- 34-18 " " " sealing
- 34-19 " " " exhaust
- 34-22 " " " carbonizing and carburizing
- 34-24 " " " basing and capping
- 34-25 " " " shrinkage
- ** 34-29 Lubricants used in processing parts
- 34-34 Miscellaneous processes
- 34-36 Plating processes
- 34-37 Material testing procedures
- 34-38 Firing and heat treating processes

40 WIRE SPOOLS AND BALL MILLS

44 MEASURING DEVICES (Instruments & Gauges)

49 FURNACES

CONFIDENTIAL STANDARDIZING NOTICES

- 2C CHANGE NOTICES
- 13C INSULATING PREPARATIONS AND COATINGS
- 14C EMISSION COATINGS, WIRE MAKING PROCESSES
- 15C GETTERS AND ACTIVATORS
- 22C CARBONIZING PREPARATIONS
- 27C MARKING INKS
- 33C PURCHASING SPECIFICATIONS
- 34C MISCELLANEOUS PREPARATIONS AND COATINGS

ENGINEERING SECTION
STANDARDIZING

*General Revision,
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10-489-7-2

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