

JOINT SERVICE SPECIFICATION

K 1006

ISSUE No. 3 JANUARY 1964

ELECTRONIC VALVES

FOR USE WITH CV VALVE SPECIFICATIONS OTHER THAN THOSE
WHICH ARE REQUIRED TO BE READ IN CONJUNCTION WITH K1001

ISSUED ON BEHALF OF THE TECHNICAL VALVE COMMITTEE BY:-

MINISTRY OF AVIATION
TL5b, T.V.C. OFFICE
CASTLEWOOD HOUSE
77/81 NEW OXFORD STREET
LONDON, W.C.1.

THE QUALIFICATION AUTHORITIES REFERRED TO IN THIS SPECIFICATION ARE:-

ADMIRALTY

The Capt. Superintendent,
Admiralty Surface Weapons Establishment,
Portsmouth, Gosport, Hants.

The Officer-in-Charge,
Services Valve Test Laboratories,
Haste Hill, Haslemere, Surrey.

MINISTRY OF AVIATION

The Director,
Royal Radar Research Establishment,
St. Andrews Road, Malvern, Worcs.

The Director,
Royal Aircraft Establishment,
Farnborough, Hants.

The Director,
Signals Research and Development Establishment,
Christchurch, Hants.

GENERAL POST OFFICE

The Engineer in Chief,
(S. Branch) State House,
Holborn, London.

U.K.A.E.A.

The Director,
Atomic Energy Research Establishment,
Harwell.

The Approving Authority for an individual valve is stated in the heading of its Test Specification.

This specification consists of:-

SECTION 1

THE AMERICAN MILITARY SPECIFICATION MIL-E-ID dated 31st March 1958 plus latest amendment.

Note: 5th Amendment changes are in blue

SECTION 2

U.K. AMENDMENTS TO MIL-E-ID

- (1) Amend '60 cycles' to read '50 or 60 cycles' throughout.
- (2) Section 2
 - (i) Paragraph 2.1 (Page 2) Delete MIL-STD-105 and substitute DEF-131.
 - (ii) Paragraph 2.1 (Page 2) Delete the sub-paragraph (small type), beginning 'Copies of specifications' and substitute 'Obtainable from T.V.C. Office'.
 - (iii) Paragraph 2.2 (Page 2) Add in the sub-paragraph, following the address of the American Standards Association, 'or British Standards Institute, 2 Park Street, London, W.1.'
- (3) Paragraph 3.7 (Page 31)

Delete paragraphs 3.7 to 3.7.9 inclusive (3.7.8, 3.7.8.1 and 3.7.9 included by Amendment No. 5) and substitute 'Unless otherwise stated the Marking of valves shall be in accordance with Specification K1001/4 and, in addition, the valves shall be marked with the American Tube Type number'.
- (4) Paragraph 3.8 (Page 33)

At the end of paragraph insert "(See Appendix B for guidance.)"
- (5) Paragraph 3.9 (Page 33)

Delete the second sentence beginning 'The individual (line 8) (See 6.6)' and substitute, 'The applicable specification sheets are those C.V. Specifications which are to read in conjunction with K1006'.
- (6) Paragraph 4.1 (Page 37) (Inserted by Amendment No. 5, Pages 3 and 4)
 - (i) Sub paragraph (b) Delete 'Standard MIL-STD-105' and substitute 'DEF-131'.
 - (ii) Sub paragraph (b) Unless the Approving or the Inspection Authority requests otherwise on any particular valve type, the sentences beginning 'The Manufacturer shall make available for (fifteenth line from end of paragraph) was granted (third line from end of paragraph)' are deleted.

- (7) Paragraph 4.1.1.2.2 (Inserted by Amendment No. 5, Page 6)

Delete (fifth line) 'Armed Services Electro-Standards Agency (ASESA)' and substitute 'Qualification Approval Authority'.

- (8) Paragraphs 4.1.1.2.3, 4.1.1.2.4, 4.1.2 (Inserted by Amendment No. 5 Pages 6 and 7)

Delete MIL-STD-105A and substitute DEF-131 (Insp. Level in 4.1.1.2.3 to be IA).

- (9) Paragraph 4.1.4 (Inserted by Amendment No. 5 Page 7)

Sub-paragraph (a) Amend the second line to read "at another location not under the inspection control of the manufacturer, Group C (inoperatives) shall be per -"

- (10) Paragraph 4.1.5 (Inserted by Amendment No. 5 Page 7)

(i) This paragraph being read in conjunction with sub-paragraph (a) to be deleted. (See new paragraph 4.5.1).

(ii) Sub-paragraph (b) Delete this paragraph and substitute:-

"Tubes which have passed Government inspection and have subsequently been held in storage for a period of 6 months or longer shall be retested for Group C (inoperatives) in accordance with the applicable acceptance-inspection procedure, prior to branding and shipping."

- (11) Paragraph 4.2 (Page 39)

Unless the Approving Authority requests otherwise for any particular valve type, paragraph 4.2 shall be superseded by Section 15 of Specification K1001.

Amend (11a)

Paragraph 4.3 (Page 39)

See page 7 of this document

- (12) Paragraph 4.5 (Page 39)

Insert new sub-paragraph 4.5.1.

4.5.1. Holding Period

All valves shall be subjected to the holding period specified in K1001 Section 16.

- (13) Paragraph 4.9.6.1 (Page 45)

Delete the third sentence 'The test during manufacture'.

- (14) Paragraphs 4.9.18 to 4.9.18.1.10 inclusive (Pages 49, 50 & 51)

Where valves are required to be packaged in accordance with Specification K1005, these paragraphs will not apply, unless otherwise stated.

- (15) Paragraph 4.10.1.5 (Page 55)

Amend the '10 μ S' (end of second sentence) to read '12.5 μ S'.

- (16) Paragraph 4.10.3.3 (Page 59)

Sub-paragraph (a) amend to read "Background noise or sustained microphonics over 2 seconds in duration having greater than $\frac{1}{2}$ mW output power level.

- (17) Paragraph 4.11.1 (Page 76)

Sub-paragraph (b), fourth line, amend to read "not more than -10% or + infinity, pro."

- (18) Paragraph 4.11.2 (Inserted by Amendment No. 5 Page 19)

Insert at end of paragraph, additional sentence as follows:-

'In the case of expensive devices, by agreement with the Inspectorate, tubes which are rejected for non-relevant parameters e.g. defective plating, mechanical dimensions, face and screen defects etc., can be selected for the sample.'

- (19) Paragraph 4.11.5 (Page 79)

(i) Sixth line: Delete the word "uniform".

(ii) Eighth line: After "hours" insert additional sentence "The maximum frequency of interruption shall be one interruption per hour".

- (20) Paragraph 4.11.7 (Page 80)

Amend the third line to read "not less than 1 minute on and not less than 1 minute off".

- (21) Paragraph 4.12.5.4 (Page 83)

Fifth line of sentence following, sub-paragraph (h). Delete 'Amend Services Electro-Standards Agency (ASESA)' and substitute 'Qualification Approval Authority'.

(22) Paragraph 4.14.3 (Page 87)

Fourth line: Delete "in a Government Laboratory designated by the bureau or service concerned" and substitute "to the satisfaction of the Qualification Approval Authority".

(23) Paragraph 4.14.3.1 (Page 87)

Fourth line: Delete "at a Government laboratory designated by the bureau or service concerned" and substitute "to the satisfaction of the Qualification Approval Authority".

(24) Section 5 (Page 113)

Delete this section.

Valves shall be packaged in accordance with K1005.

(25) Paragraphs 6.1 and 6.2 (Page 113) (Paragraph 6.2 inserted by Amendment No. 5 (Page 31)) Delete these clauses.

(26) Paragraph 6.4. (Page 114)

Delete Standards MIL-STD-200 and substitute "Services List of Preferred Valves".

(27) Paragraph 6.6 (Page 114)

Delete "Custodians etc., Other interests etc. and Preparing activity etc."

(28) Appendix A. (Page 115)

The Qualification Inspection requirements, unless otherwise stated shall be in accordance with the requirements specified in K1001 Section 15.

(29) Appendix B (Page 122)

Delete existing paragraph and substitute

"This appendix establishes uniform criteria for defects for an individual tube. The criteria shall serve as a guide to tube quality in case of dispute between the acceptance Inspectorate and the contractor on matters of Visual and Mechanical inspection. It is not intended to be a list of mandatory tests."

(30) Appendix C. (Page 141 to Page 149)

Paragraphs 10.1, 20.1.1, 20.2.3, 20.2.5.2.1(b) and (c) (twice), 20.2.5.2.2(a), (b) and (c), 20.2.5.3(b) and 20.3.1.3. In each case delete "Standard MIL-STD-105A and substitute 'DEF-131'.

[Note: U.K. Amendment due in reel]

SECTION 3

References to K1001, BS448 and any other British Specifications in an individual CV Specification supersede the equivalent items in other parts of the Specification or in K1006.

January, 1963

(N.196254)

- 7 -

(11a) Paragraph 4.3 (Page 39)

Delete sub-paragraph (a) and substitute:-

The particular test conditions specified on the tube specification sheet, except that where the test paragraph of Kiob quoted differs from the corresponding paragraph of MIL-F-1D, the test conditions of Kiob shall take precedence over any compatible conditions or notes quoted for that test on the tube specification sheet.

Joint Service Specification K1006 issue No 3.

Amendment No. 2.

Section 2(3) Paragraph 3.7 (page 31)

Delete the text in toto and replace with :-

"Delete paragraphs 3.7 to 3.7.9 inclusive (3.7.8, 3.7.8.1 and 3.7.9 included by ^{MIL} Amendment No 5) and substitute Unless otherwise stated the marking of tubes shall be in accordance with Defence Standard Specification 59-60, Part 1, Annex B."

December 1975

SLR 23 for RRE

JOINT SERVICE SPECIFICATION K1006, ISSUE No3, DATED JANUARY 1964

ELECTRONIC VALVES

AMENDMENT No. 1

Insert the following amendment on page 4 (between paragraphs 11 and 12) of Section 2 - U.K. Amendments to MIL-E.1D.

"(11a) Paragraph 4.3 (Page 39)

Delete sub-paragraph (a) and substitute:-

The particular test conditions specified on the tube specification sheet, except that where the test paragraph of K1006 quoted differs from the corresponding paragraph of MIL-E.1D, the test conditions of K1006 shall take precedence over any compatible conditions or notes quoted for that test on the tube specification sheet."

January 1967

T.V.C.

N. 445441 ____

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