

SPECN. NO. A0266

ALTERATION SHEET

ALT. NO. AUTHORITY

DESCRIPTION

INITIAL

DATE

1. DY.CEE/TMD PARA - 5 FOR PACKING AND MARKING ADDED.
REF. NOTE NO. EL/TM/2039 DT. 24-3-98.

5/5/98 05-5-98

2. DY.CEE/TMD Para 4 modified Ref. L/NO. EL/TM/2013 dt. 26-5-2K

5/5/98 27-5-2K

3. DY.CEE/TMD PARA 1 MODIFIED AND NOTE 6 ADDED.
VIDE. NOTE NO. EL/TM/2013 DT. 01.12.2004

15-01-2005

4. DY.CEE/TMD. PARA. 3 OF ANNEX. A MODIFIED
VIDE NOTE NO. EL/TM/2039. DT. 13.7.06

31.07.2006

SPECIFICATION OF POLY-
IMIDE MICA TAPE (KUAT-CZ)

CHITTARANJAN LOCOMOTIVE WORKS
WEST BENGAL, INDIA.

NO. 10W.702-666

DATE- 05-5-98

DY. C.E.E. (T.M.D.)

Signature
Verified

Digitally signed by
BYOMKES MAHAPATRA
Date: 2022.04.22 09:08:40+05'30'

Reason: IRRPS-CRIS
Location: New Delhi

| SPEC. NO. | TITLE |
|-----------|------------------------------------------------|
| 40266 | Specification of Polyimide Mica Tape (KUAT-CZ) |

1. Scope

ALT. 3

This specification describes Polyimide ^(Kapton) Film Backed Uniform Mica Tape (KUAT-CZ) (hereafter abbreviated as mica). Mica is reconstituted type ^{is it shall} and ^{contain 5% aromatic (AROMATIC POLYAMIDE) fibres by weight and binder} is silicone resin.

2. Classification, dimension and tolerance

Classification, dimension and tolerance of this mica are given in Table 1.

Table 1

| Symbol | Nominal thickness (mm) | Nominal width (mm) | Nominal length (m) | Tolerance | | | |
|--------------------|------------------------|--------------------|--------------------|------------------------------|------------------------|------------|--------------------------|
| | | | | Thickness of each point (mm) | Average thickness (mm) | Width (mm) | Length |
| KUAT-CZ -0.1x□□ | 0.1 | 19 | 30 | +0.02 | 0 | ±0.5 | More than nominal length |
| | | 25 | | -0.03 | -0.02 | | |
| | | | | | | | |

Note : a : Width b : Length

3. Quality

Quality of this mica is given in Table 2.

| | | |
|----------|----------|---------|
| Quantity | Material | Hitachi |
| 1000 | SE | |

Table 2

(Testing method : JIS C2116)

| No. | Item | Unit | Quality | | Remarks |
|-----|----------------------------|------------------|-----------------|-------|---------|
| | | | KJAT-CZ -0.1 | | |
| 1 | Weight | g/m ² | 120±15 | | |
| 2 | Mica content | % | 56±4 | | |
| 3 | Binder content | % | 10±3 | | |
| 4 | Tensile strength | N/15mm | ≥ 60 | | |
| 5 | Breakdown voltage | Average | kV | ≥ 5.5 | |
| | | Minimum | kV | ≥ 4.5 | |
| 6 | Winding property | - | Good | | |
| 7 | Rewinding property to roll | - | Good | | |
| 8 | Accelerator content | g/m ² | 2.5 | | |

ALT. 3

4. Shelf life

Shelf life of this mica is ¹⁰ months after manufacturing-date in normal condition (20±15°C, 65±20% RH).

5. Packing and marking ALT. 4

The tapes shall be wound on a hard tubular core/spool with sufficient tension to form a compact roll without deforming the construction of the tape and having internal diameter of 45 to 50 mm and width equivalent to that of tape. The tape shall be wound tightly over the core such that edges are not uneven and shall not get loosened when dropped over a floor from one meter height.

Each roll of tape shall be suitably packed for transportation.



MDX
HEP
HEP-MDX35600

MATERIAL
SPEC.

HEP-MDX35600

HEP-MDX35600

SPECN. NO. AO266

120/4

The Supplier's name, description of tape and length per roll, batch no. and date of manufacture shall be suitably marked on inside of the spool so as to enable identification at any stage during use and storage.

Each Packing shall be marked with number of rolls and order no.

6. ANNEXURE 'A' SHALL FORM THE PART OF THIS SPECIFICATION.

CHD.

DRN.

SPECIFICATION OF POLYI-
MIDE MICA TAPE (KUAT-CZ)

DY. C.E.E. (T.M.D.)

CHITTARANJAN LOCOMOTIVE WORKS
WEST BENGAL, INDIA.

NO. 10W. 702-666

DATE- 05-5-98

FORM NO. 3.TBP. 000.027

44

ANNEXURE 'A'
TO SPECN. NO. A0266
FOR POLYIMIDE (KAPTON) MICA TAPE
(KUAT-CZ)

1 **Sampling:**

In case of KUAT-CZ, the no. of rolls to be selected for sampling shall be as per table-1 in para.3 of IS-8402'1987

2 **Application/Windability test**

This test shall be carried out as per clause 17 of JIS No.C2116'1992

3 **Flexibility Test**




To judge quality of the tape from the point of view of the flexibility, the test shall be carried out as per para.19 of JIS No.C2116'1992 as a routine measure/test. *

4.0 **Tape shall satisfy the following criteria for acceptance:**

- 4.1 No delamination of Polyimide and Mica shall take place.
- 4.2 No tearing of Mica layer of tape shall take place while applying hand pressure (tension) of about 2 (two) kgf during winding/tapping.
- 4.3 Mica shall not fall from the tape.
- 4.4 Flexibility of tape shall be such that it (tape) shall stick to the coil profile/faces and shall not become loose while releasing hand tension.

*

FOLLOWS: KUAT-CZ TAPE IS TO BE APPLIED ON A DUMMY ARM COIL OF DIMENSION OF 7x17 mm. WITH A CORNER DIA. OF 1.6 mm. THE ACCEPTANCE TO BE GIVEN FINDING THE RESULTS THERE ON i.e. THERE SHALL BE NO CRACK OF MICA PAPER AND TEARING OF THE SUBSTRATUM KAPTON FILM.

| | | | | |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  DNR |  CHKD | PART OF SPECIFICATION NO A0266 FOR POLYIMIDE (KAPTON) MICA TAPE (KUAT-CZ) |  DY. CEE/TMD | CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL NO. LDW. 702.666 DATE: 15.01.2005 |
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