



# INSULATION SYSTEMS ENGINEERING

IN. SK. 46100

Rev. No.: 00

ANNEXURE TO QUALITY PLAN FOR MICA TAPED  
CONDUCTOR TO BHEL SPEC. BP28189/ IN.SK.46044  
(QA PLAN NO. : QA/MT/BOI/049)

Rev. Dt.: 25/07/2018

Sht. 1 of 3 shts.

SL. NO.	DESCRIPTION	VENDOR'S RESPONSE
		COMPLIANCE (YES / NO)
1)	<p>The mica tape is to be procured by the insulated copper conductor manufacturers directly from any of the following vendors in the specified grades only :</p> <p><b><u>Polyester film backed epoxy resin bonded mica paper tape to BP25185 (0.09 X 12 mm)</u></b></p> <p><u>For insulated conductors to spec. In Sk 46044 (H2)/ BP28189</u></p> <p>a) M/s Lakshmanan Isola Pvt. Ltd., Bangalore as per BP25185</p> <p>b) M/s Cogebi, Malaysia (Supplier Grade - KALASTIK 45.030)</p> <p>c) M/s Isovolta, Austria (Supplier Grade - CONDUCTOFOL 2009)</p> <p>d) M/s Von Roll, Switzerland (Supplier Grade - SAMICAFILM 315.14)</p> <p>e) M/s Krempel, Germany (Supplier Grade - KREMICA.FLEX K1034-09)</p> <p><u>For insulated conductors to spec. In Sk 46044 (H1)</u></p> <p>a) M/s Cogebi, Malaysia (Supplier Grade - KALASTIK 45.030)</p> <p>b) M/s Isovolta, Austria (Supplier Grade - CONDUCTOFOL 2009)</p> <p>c) M/s Von Roll, Switzerland (Supplier Grade - SAMICAFILM 315.14)</p> <p>d) M/s Krempel, Germany (Supplier Grade - KREMICA.FLEX K1034-09)</p>	<p>YES / NO</p> <p>YES / NO</p>
Seal and sign of vendor's representative →		

Distribution:	Date of Rev. 00: 25/07/2018	Name	Signature
CIM	1	Prepared by	Abha Otti
MDX	1	Checked by	Nidhi Gupta
AME	1	Approved by	Bishwanath Oraon
QCI	1	Issued by	Abha Otti
ISE	1		
BHEL BHOPAL			



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Sht. 2 of 3 shts.

SL. NO.	DESCRIPTION	VENDOR'S RESPONSE
		COMPLIANCE (YES / NO)
2)	The polyester film is to be procured by the insulated copper conductor manufacturers directly. The polyester film used should be of following makes and grades only.  <u>Polyester film non-adhesive tape to BP22887 (0.019 X 12 mm)</u> a) E.I. DuPont India Pvt. Ltd. (Supplier Grade – Mylar A or Melinex S) b) Mitsubishi Polyester film GMBH (Supplier Grade – Hostaphan RNK 19)	YES / NO
3)	Mica tape to spec. BP25185 to be stored at $\leq 25^{\circ}\text{C}$ in dry and dust free environment. Shelf life expired material not to be used.	YES / NO
4)	The insulated conductor manufacturer may be asked to send mica tape/ polyester film tape sample (from regular lots) to BHEL Bhopal for inspection and testing, if required, on surveillance basis. The tape/ tapes if found not meeting BHEL specification/ application requirements or having other application/ visual defects may be put on hold by BHEL until further decision regarding pending lots. Vendor is also advised to get the mica tape/ polyester film tested on regular basis either in BHEL (on chargeable basis) or through other third party NABL accredited Lab to ensure the quality of insulation being used.	YES / NO
5)	BHEL may visit the vendor's works for inspection of mica tape, storage conditions etc., on surveillance basis. If inadequate storage/ expired shelf life material found in use at vendor's works, the whole lot is liable to be rejected/ put on hold.	YES / NO
6)	Suitable action shall be taken against vendors found using shelf life expired tape/ tape not meeting BHEL spec. requirements.	YES / NO
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Sht. 3 of 3 shts.

SL. NO.	DESCRIPTION	VENDOR'S RESPONSE
		COMPLIANCE (YES / NO)
7)	Insulated conductor should be free from visible defects such as wrinkles/ flaking in taping, improper overlap, presence of foreign substances, separation of mica from polyester, tackiness in insulated conductor, spots on bare copper, etc.	YES / NO
8)	This insulated conductor will be used in manufacturing of stator coils for AC rotating electrical machines, which is a regular product at BHEL Bhopal for last several years. The insulated conductor is also liable to be rejected if any issues/ defects related to the insulated copper conductor are observed at a later stage of coil manufacturing/ processing.	YES / NO
Seal and sign of vendor's representative →		

## Note:

- Compliance to above requirements is mandatory. In absence of compliance of above requirements, vendor's offer is liable to be rejected.
- BHEL reserves the right to verify the information submitted by the vendor. In case the information submitted is found false or incorrect, the offer will be rejected and the vendor is liable to be blacklisted.

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