

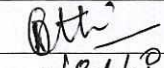
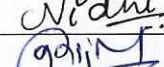
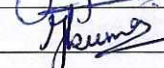
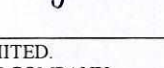
 An ISO 9001:2015 Company	TECHNICAL PRE-QUALIFICATION REQUIREMENTS (PQR) FOR VENDORS	PQR/ISE/BP25181/EOI/2020/49
	INSULATION SYSTEMS ENGINEERING	Rev. No.: 00
	PRE-QUALIFICATION REQUIREMENTS (PQR) FOR PROCUREMENT OF RESIN POOR EPOXY RESIN BONDED POLYESTER FILM BACKED MICA PAPER TAPE TO BHEL SPECIFICATION BP-25181 THROUGH EOI	Rev. Dt.: 31/01/2020
		Sht. 1 of 5 shts.

BHEL is manufacturing various types of rotating electrical machines (motors & generators) for power plants / industries / traction applications etc. In these machines, various types of insulating materials are required for providing proper electrical isolation between live and earthed parts. These motors and generators have a very long expected working life.

This specification details the Pre-Qualification Requirements for vendors for supplying resin poor, epoxy resin bonded, polyester film backed mica paper based tape to BHEL spec. BP 25181. This material is used as main insulation in stator coils of electrical machines with Class-F VPI insulation. This PQR is being issued for identification/ location of additional vendors for this material.

Pointwise compliance to this PQR to be submitted by interested vendors as per details below.

Cl. No	Description	Vendor to comment	
		Complied	Relevant supporting documents to be submitted
1.	Offers of only original manufacturers or their authorized distributors are acceptable. Traders/dealers/agents are not acceptable & their offer will be rejected.	Yes/No	Certificate/ documentary evidence of being original manufacturer of this item For authorized distributor : Valid letter of authorization from the principal
2	Complete compliance to technical specification BP25181	Yes/No	Clause by clause acceptance or signed & stamped copy of specification BP25181 to be submitted.

Distribution:	Date of Rev. 00: 31/01/2020	Name	Signature
CIM MDX QCI AME ISE	Prepared by	Abha Otti	
	Checked by	Nidhi Gupta	
	Approved by	Anirudha Tijare	
	Issued by	Gautam Kumar	
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			Sht. 2 of 5 shts.

Sl. No	Description	Vendor to comment	
		Complied	Relevant supporting documents to be submitted
3.	The firm must have adequate manufacturing facilities at their works/ in-house for manufacturing this material.	Yes/No	1. List of plant & machinery facilities available for manufacturing the said item, at manufacturer's works to be provided. 2. Photographs of manufacturing facility to be submitted.
4.	Testing facilities required to conduct all the tests as per spec. BP 25181 must be available with the firm. List of outsourced facilities, if any, to be submitted. Outsourced labs/ firms should be Govt/ NABL/ ISO/ IEC accredited	Yes/No	1.Details of testing facilities available with the firm required for testing of said item along with list of outsourced facilities (if used), to be provided 2. Photographs of testing facility to be submitted.
5.	The company should be ISO 9001 certified	Yes/No	Valid ISO 9001 certificate to be submitted
6.	The firm should have minimum manufacturing capacity of 12000 SM of mica based tapes per month.	Yes/No	Confirmation to be provided
7.	Vendor to disclose the type/ grade/ source of mica paper and polyester film used for manufacturing this tape (*Refer Note A).	Yes/No	Details of type/ grade/ source of mica paper and polyester film to be provided

*** Note A : Epoxy bonding resin used for manufacturing this tape shall be supplied by BHEL for manufacturing sample tape and few initial lots (after sample clearance) on sale basis (Vendor shall have to purchase this varnish from BHEL Bhopal). Later on, after successful development, the vendor will have to manufacture the bonding varnish on their own with technical details provided by BHEL Bhopal after signing an NDA with BHEL Bhopal.**

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Cl. No	Description	Vendor to comment	
		Complied	Relevant supporting documents to be submitted
8.	Vendor to furnish QAP that shall be followed during manufacturing of tape to BP25181 as per Annexure-1	Yes/No	QAP duly filled & signed
9.	Manufacturing facilities assessment may be carried out by BHEL at supplier's works if required. Vendor to confirm the same	Yes/No	Confirmation to be provided
10.	The firm should have manufacturing and supply experience of at least 12000 SM of same/ similar (epoxy resin bonded mica paper based tape) material during the last 5 years.	Yes/No	Copies of unpriced POs / invoices
11	In case of technical qualification in the above points 1 to 10, vendor to supply a free sample (at least 2 rolls of 50 m each) for testing. Based on testing results, BHEL may further ask for approx. 20 rolls of 50 m each of this tape (free of cost) for lab evaluation, shop trials and detailed technical evaluation. (*Refer Note A)	Yes/No	Confirmation to be provided

Non-Qualifying information to be submitted by the vendor

12	Year of Establishment	-	Certificate to be submitted
13	Whether the vendor is registered with BHEL Bhopal or any other unit of BHEL?	Yes/No	If yes, the name of BHEL unit where registered along with vendor code and list of items for which registered to be provided.

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New Vendors will have to get themselves registered in BHEL as per BHEL's standard vendor assessment & registration procedure. Note: - Vendors qualifying in the above requirements (Clause 1 to 11) and successful sample evaluation will be considered for placement of development/ trial orders for small quantities. After successful completion/ execution of trial orders, the vendor will be considered for addition in BHEL's list of approved vendors for supplying this material. (*Refer Note A) - This PQR is applicable for compliance by manufacturers. In case of authorized distributor, compliance of OEM to be given. - 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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		Sht. 5 of 5 shts.

ANNEXURE -1

QAP to be submitted by vendor shall cover following

- 1.0 Organization chart clearly bringing out the quality set up.
- 2.0 Qualification of quality control personnel.
- 3.0 Process flow chart indicating step by step process of manufacturing of final product from raw material.
- 4.0 Quality Assurance System covering the following steps:
 - i. Incoming material
 - ii. Process control
 - iii. Product Control

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