

 BPC 0007	ENQUIRY TWO PART BID	भारत हेवी इलेक्ट्रिकल्स लिमिटेड, पिपलानी, भोपाल - ४६२०२२(भारत) सामग्री प्रबंधन विभाग BHARAT HEAVY ELECTRICALS LIMITED, PIPLANI, BHOPAL – 462022(INDIA) MATERIALS MANAGEMENT DIVISION TIN NO. 23573600001 ECC NO. AAACB4146PXM009 MPCT NO. HEL/05/01/0001/S15/11/79 PHONE: 91-755-2500100 (7 LINE) FAX: 91-755-2500023 WWW.BHEL.BHOPAL.COM	ENQUIRY NO E5143225 ENQUIRY DATE 23/12/24 ENQUIRY DUE DATE 02/01/25
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SUPP NAME AND ADDRESS	SUPP CODE	REV CD	REV NO	REV DATE	NO OF CATY2	NO OF CATY3	ENQ NO OF ITEMS	INDENT NO
OFFICE COPY		1	0	NA	0	0	1	120543036
	GUARANTEE CERTIFICATE		Y	SUPPLY CONDITION IDENTIFICATION MUST				
	TEST CERTIFICATE		Y					
	INSTRUCTION BOOKLET		N	TECHNICAL CONDITION AS PER PI				
	SAMPLE		N					
	GATE PASS		Y	INSPECTION CONDITION BY TPIA AT VENDOR'S WORKS				

NOTE: QUOTE PRICE BOTH IN FIGURES & WORDS.IN CASE OF MISMATCH PRICE IN WORDS WILL BE VALID,QUOTATIONS NOT BEARING ENQUIRY NO AND DUE DATE LIABLE TO BE REJECTED.

SL NO	MATERIAL CODE	DESC	UNIT	ITEM QTY	LOT NO	LOT QTY	DEST	DELIVERY DATE
1	BP9094877724	BELLOWS AS PER BHEL DRG. NO. 24450105052 REV.00, ITEM 01 & ITEM 02. (QAP:-QAP/QTm/VENDOR QAP/2023-24/TM3004/BELLOW FOR AIR INLET ARRANGEMENT DTD.12.12.2023. REV.00)	ST	128.000	2	28.000	205	17/03/25
					1	100.000	205	17/02/25

REMARK REFER NIT IN NIC E- TENDER PORTAL FOR DETAILS.

DRAWING Y PURCH SPEC Y CATALOUGE N PLAN Y TWO PART BID Y

S.NO	INDENT NO	ITEM NO	CATEGORY	ENQUIRY QTY.
1	120543036	1	598100	128.000

NOTE:BHEL,BHOPAL'S Standard Terms & Conditions BP4255/MM5533 rev02 for imports and BP4255/MM5527 rev03 for indigeneous procurements form a part of this Enquiry.Bidders may obtain from us copies of these terms and conditions if not already available.

SPECIAL REMARKS	NAME : SHRI MANOJ KUMAR DUBEY DESG : ENGINEER SIGN & SEAL
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TENDER DETAILS**ENQUIRY NO. – E5143225, DUE ON 02-01-2025**

Description: RATE CONTRACT FOR BELLOWS AS PER BHEL DRG. NO. 24450105052 REV.00, ITEM 01 & ITEM 02. (QAP: -QAP/QTm/VENDOR QAP/2023-24/TM3004/BELLOW FOR AIR INLET ARRANGEMENT DTD.12.12.2023. REV.00).

TENDER QTY: 128 Sets +/- 30%

DELIVERY REQUIREMENT – DELIVERY FOR THE 1ST LOT OF 100 SETS (CUMMULATIVE) SHALL BE WITHIN 60 DAYS FROM THE PO DT. & THEREAFTER FOR SUBST. LOT OF 28 SETS. (CUMMULATIVE) SCHEDULED DELY. DT. SHALL BE WITHIN 30 DAYS FROM THE SCHEDULED DELY. DT. OF THE PREV. LOT.

IT IS HEREBY MENTIONED THAT THIS IS E-TENDER SO OFFER SUBMITTED THROUGH E-PROCUREMENT PORTAL (www.eprocurebhel.co.in) SHALL ONLY BE CONSIDERED.

NOTE: ALL THE TERMS OF SUBJECT TENDER SHALL BE IN ACCORDANCE WITH “GENERAL TERMS AND CONDITIONS TO ENQUIRY BP 200102B”. VENDORS ARE REQUIRED TO COMPLY AFORESAID ENQUIRY TERMS OF BHEL.

1) RATE CONTRACT TERMS: WE INTEND TO ENTER INTO RATE CONTRACT FOR ORDERING UPTO 12 (TWELVE) MONTHS FROM RC FREEZING DATE.

2) NO. OF BID PARTS: 2 (TWO)

3) DELIVERY TERMS: F.O.R. DESTINATION

4) DELIVERY AT: CRX, BHEL, BHOPAL- 462022

5) VALIDITY OF OFFER: 90 DAYS FROM TECHNICAL BID OPENING DATE

6) PRICE BASIS: FIRM.

7) BHEL STANDARD PAYMENT TERMS: 100% payment in 90 days of receipt (45 days for Micro & Small and 60 days for Medium enterprises as registered in Udyam certificate as per relevant MSME act in force) and subject to acceptance of material and relevant documents at BHEL. PI refer GTC BP200102B.

8) PENALTY: APPLICABLE, AS PER ATTACHED GTC BP 200102B and LD WILL BE APPLICABLE ON UNDELIVERED QTY. OF LOT.

9) INSPECTION CONDITION: BY TPIA AT VENDOR'S WORKS

10) SUPPLY CONDITION: IDENTIFICATION MUST

11) TECHNICAL CONDITION: AS PER DRG, PQR, QAP & SPECIFICATION ETC AS ATTACHED

12) GUARANTEE CERTIFICATE: YES

13) TEST CERTIFICATE: YES

14) SAMPLE: NO

15) TOOLS / GAUGES / FIXTURES CONDITION: NA

16) EVALUATION CRITERIA: OVERALL L1 BASIS (SINGLE LINE ITEM IN TENDER)

17) SPLITTING OF ORDER: APPLICABLE

RATE CONTRACT TO BE FINALIZED ON TWO SOURCES WITH QUANTITY DISTRIBUTION RATIO OF 65% & 35% TO L-1 VENDOR AND THE OTHER BIDDER ACCEPTING L-1 RATES RESPECTIVELY, SUBJECT TO MINIMUM 3 QUALIFIED BIDDERS. FOR ASCERTAINING BIDDER FOR 35% QUANTITY, HESG EQUIVALENT RATES OF L-1 BIDDER WILL BE SEQUENTIALLY COUNTER-OFFERED TO L-2, L-3 AND SO ON BIDDER UNTILL ANY BIDDER ACCEPTS THE SAME. INCASE OF ONLY 2 QUALIFIED BIDDERS, BHEL RESERVES THE RIGHT FOR DISTRIBUTION/ NON-DISTRIBUTION BETWEEN 2 BIDDERS. IN CASE OF ONLY ONE QUALIFIED BIDDER OR IN CASE NO BIDDER AGREES TO ACCEPT THE COUNTEROFFERED HESG EQUIVALENT RATES OF L-1, BHEL MAY DECIDE TO AWARD ENTIRE 100% QUANTITY TO L-1 BIDDER. DISTRIBUTION IN COMPLIANCE WITH LATEST GUIDELINES FOR MSE AND MII WILL ALSO BE FOLLOWED FURTHER

18) TENDER FEE: NOT APPLICABLE

19) REVERSE AUCTION: APPLICABLE

It is declared upfront that Enquiry No. E5143225 shall be subjected to Reverse Auction (RA). Bidders may kindly note the Reverse Auction (RA) field as mentioned and asked for in enquiry template & ensure to proceed with choosing "YES" against same when asked during submission of their offer to give their acceptance for participation in RA.

"BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among the techno- commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking."

20) EVALUATION CURRENCY: SHALL BE INR.

21) QTY. VARIATION: QTY. IS TENTATIVE & MAY VARY UPTO +/-30%

22) QAP: APPLICABLE.

23) ADDITIONAL TENDER REMARKS:

ENQUIRY IS FOR RATE CONTRACT WHICH IS TO BE KEPT VALID FOR ORDERING UPTO 12 MONTHS FROM RC FREEZING DATE. ORDERING WILL BE DONE AGAINST FIRM REQUIREMENT AS & WHEN NEEDED AND RC MAY BE CLOSED AT ANY TIME WITHOUT ASSIGNING REASONS WHATSOEVER IT MAY BE.

SUBMIT YOUR TENDER IN TWO PART BID BASIS.

ANNEXURE-IX OF NIT TO BE DULY FILLED / SIGNED & SHOULD FORM PART OF TECHNO-COMMERCIAL OFFER.

SPECIAL / GENERAL TERMS & CONDITIONS OF ENQUIRY, RA TERMS AND CONDITIONS AS PER NEW GUIDELINES, PQR ETC. ARE ENCLOSED.

UNREGISTERED VENDORS ARE REQUESTED TO SUBMIT THE REQUISITE DOCUMENTS FOR REGISTRATION BY BHEL ONLINE REGISTRATION PORTAL (<https://supplier.bhel.in>).

SPECIAL CONDITIONS OF NIT:

1. For this procurement, Public Procurement (Preference to Make in India) Order (PPP-MII Order), 2017 vide No. P-45021/2/2017-B.E.-II dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract / PO / WO against this NIT.

2. Technical Pre-Qualification Requirements (PQR) for procurement of Item: Technical PQR for "BELLOWS – 128 Set, +/- 30%" is attached as a part of NIT. The same is to be followed and complied with. Duly filled PQR shall be submitted along with the offer along with desired documents as per PQR.

3. FINANCIAL PQR IS APPLICABLE: NO

4. DULY FILLED INTEGRITY PACT FORMAT – NOT APPLICABLE.

5. Offers of suppliers who are in 'Hold/Banned' status in BHEL Bhopal PMD shall not be considered.

6. ANY DEVIATION OF GTC BP200102B (GENERAL TERMS & CONDITIONS OF ENQUIRY ATTACHED) WHERE VENDOR RESPONSE IS NOT AFFIRMATIVE TO BE CLEARLY INDICATED, ELSE BHEL WILL CONSIDER THAT ALL THE TERMS & CONDITIONS OF GTC BP200102B ARE ACCEPTABLE TO VENDORS.

7. IDENTIFICATION MUST AS PER TENDER TECHNICAL (DRAWING, SPECIFICATION ETC.) TERMS. REJECTION CLAUSE APPLICABLE AS PER GTC BP 200102B.

8. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER:

IN THE COURSE OF EVALUATION, IF MORE THAN ONE BIDDER HAPPENS TO OCCUPY L-1 STATUS, EFFECTIVE L-1 WILL BE DECIDED BY SOLICITING DISCOUNTS FROM THE RESPECTIVE L-1 BIDDERS.

IN CASE MORE THAN ONE BIDDER HAPPENS TO OCCUPY THE L-1 STATUS EVEN AFTER SOLICITING DISCOUNTS, THE L-1 BIDDER SHALL BE DECIDED BY A TOSS / DRAW OF LOTS, IN THE PRESENCE OF THE RESPECTIVE L-1 BIDDER(S) OR THEIR REPRESENTATIVE(S).

RANKING WILL BE DONE ACCORDINGLY. DECISION OF BHEL IN SUCH SITUATIONS SHALL BE FINAL AND BINDING.

9. THE BIDDER DECLARES THAT THEY WILL NOT ENTER INTO ANY ILLEGAL OR UNDISCLOSED AGREEMENT OR UNDERSTANDING, WHETHER FORMAL OR INFORMAL WITH OTHER BIDDER(S). THIS APPLIES IN PARTICULAR TO PRICES, SPECIFICATIONS, CERTIFICATIONS, SUBSIDIARY CONTRACTS, SUBMISSION OR NON-SUBMISSION OF BIDS OR ANY OTHER ACTIONS TO RESTRICT COMPETITIVENESS OR TO INTRODUCE CARTELIZATION IN THE BIDDING PROCESS.

IN CASE, THE BIDDER IS FOUND HAVING INDULGED IN ABOVE ACTIVITIES, SUITABLE ACTION SHALL BE TAKEN BY BHEL AS PER EXTANT POLICIES / GUIDELINES.

10. No request for extension of tender due date will be entertained after due date and time of tender opening under any circumstances. Hence all vendors are requested to submit their bid well within due date and time only.

11. The bidder / supplier / contractor will, when presenting his bid, declare whether other family firms or sister concern affiliates / subsidiary firms are participating in the same tender, so as to eliminate the possibility of cartel formation. Format for declaration is available in the NIT documents for this enquiry.

12. For this procurement, Public Procurement (Preference to Make in India) Order (PPP-MII Order), 2017 vide No. P-45021/2/2017-B.E.-II dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract / PO / WO against this NIT.

In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable.

13. Vendors to also inform:

- a. Self-certification of Minimum Local content if more than 50%: Yes / No.
- b. Spell out details of location of value addition.

Bidders or successors can be debarred for false declarations for up to 2 years. Debarred suppliers not eligible for preference in any other procuring entity.

14. Margin of purchase preference to make in India is 20% as per Govt. of India Order No. P-45021/2/2017-BE-II DTD 15.06.17, 28.05.2018, 29.05.2019 & 04.06.2020 and subsequent Orders issued by the respective Nodal Ministry. Suppliers to comply & take a note of the same.

15. For this procurement, the local content to categorize a supplier as a Class I local supplier / Class II local Supplier / Non-Local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.

16. FRAUD PREVENTION POLICY: THE BIDDER ALONG WITH ITS ASSOCIATE / COLLABORATORS / SUB-CONTRACTORS / SUBVENDORS / CONSULTANTS / SERVICE PROVIDERS SHALL STRICTLY ADHERE TO BHEL FRAUD PREVENTION POLICY DISPLAYED ON BHEL WEBSITE [HTTP://WWW.BHEL.COM](http://www.bhel.com) AND SHALL IMMEDIATELY BRING TO THE NOTICE OF BHEL MANAGEMENT ABOUT ANY FRAUD OR SUSPECTED FRAUD AS SOON AS IT COMES TO THEIR NOTICE. BHEL CONCILIATION SCHEME SHALL BE APPLICABLE.

17. GST TDS CLAUSE: VIDE NOTIFICATION NO. 50/2018 DATED 13.09.18, SECTION 51 CGST HAS BEEN IMPLEMENTED BY CBIC WHICH PROVIDES FOR GST TDS @ 2% (IGST 2% OR CGST 1% + SGST 1%) & SHALL BE APPLICABLE WHERE CONTRACT VALUE IS MORE THAN RS. 2.5 LAKHS & SUPPLIER IS REGISTERED UNDER GST. TDS RETURN SHALL BE FILED AND TDS CERTIFICATES SHALL BE ISSUED BY BHEL AS PER APPLICABLE PROVISIONS. AS PER SEC 51 OF CGST ACT READ WITH NOTIFICATION 50 OF CENTRAL TAX DATED 13TH SEP 2018, TDS SO DEDUCTED SHALL BE REFLECTED ON THE GST PORTAL OF THE VENDOR / CONTRACTOR. IT SHALL BE AS PER PREVAILING GOVERNMENT NORMS AS APPLICABLE.

18. As you are kindly aware that Government e-Marketplace (GeM) is a one stop portal to facilitate online procurement of Goods & Services required by various Government Departments/ Organizations/ PSUs. GeM aims to enhance transparency, efficiency and speed in public procurement. Detailed Instructions/ Guides/ Videos/ FAQs for registration and processes are available on the portal (<https://gem.gov.in>).

BHEL being a PSU, would like that its suppliers / contractors also have visibility on this portal so that GeM can be used for procurement by BHEL.

Hence, you are requested to get yourselves registered on GeM.

19. "The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the firms debarred across BHEL, shall be rejected. The list of firms debarred across BHEL is available on BHEL web site www.bhel.com.

1.0 Integrity commitment, performance of the contract and punitive action thereof:

1.1. Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

1.2. Commitment by Bidder/ Supplier/ Contractor:

1.2.1. The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

1.2.2. The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

1.2.3. The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in malpractices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on [www. bhel.com](http://www.bhel.com) and/or under applicable legal provisions”.

20. "A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a) they have controlling partner (s) in common; ·

or

b) they receive or have received any direct or indirect subsidy/ financial stake from any of them;

or

c) they have the same legal representative/agent for purposes of this bid;

or

d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder,·

or

e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from. one bidding manufacturer in more than one bid;

or

f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:

1. The principal manufacturer directly or through one Indian agent on his behalf; and
2. Indian/foreign agent on behalf of only one principal, ·

or

g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid, ·

or

h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "

21. PERFORMANCE SECURITY: NOT APPLICABLE

GENERAL & SPECIAL TERMS AND CONDITIONS OF ENQUIRY AND INDIGENOUS P.O., BHEL SPECIFICATION, DRAWINGS, DECLARATION AGAINST CARTEL FORMATION ARE ENCLSOED. PLEASE FILL UP TECHNO-COMMERCIAL ANNEXURE AND DECLARATION AGAINST CARTEL FORMATION DULY SEALD AND SIGNED PROPERLY AND SEND IT ALONG WITH YOUR OFFER.

Techno-Commercial Annexure
(To be filled by supplier and submit with offer)

Tender No.		E5143225 due on 02/01/2025		
Description :		RATE CONTRACT FOR BELLOWS AS PER BHEL DRG. NO. 24450105052 REV.00, ITEM 01 & ITEM 02. (QAP:-QAP/QTm/VENDOR QAP/2023-24/TM3004/BELLOW FOR AIR INLET ARRANGEMENT DTD.12.12.2023. REV.00) TENDER QTY.: 128 Sets, +/- 30% Delivery required as per NIT.		
Sr. No.	ELEMENTS	Standards	To be offered/confirmed by supplier	Remarks, if any
1	Quotation reference no. & date	As per supplier		
2	HSN / SAC code	As per supplier		
3	Quotation currency	In INR		
4	Contact person	As per supplier		
5	Phone / Mobile	As per supplier		
6	E-Mail	As per supplier		
7	Order to be placed on (Also provide supplier code at BHEL Bhopal, If registered)	As per supplier		
8	Address	As per supplier		
9	Please specify delivery in weeks/ days (Specify item wise, lot wise as per RFQ)	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
10	Rate quoted on "Firm" price basis	Yes		
11	Quoted for all the items of tender enquiry	Yes / No. (If "No" please mention item number of regreted items)		
12	Technical specifications	Accepted as per NIT / Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
13	Inspection	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
14	Test certificate & Gurantee certificate as per NIT, Drawings and specification will be submitted along with each consignment	Yes (In case of "No" your offer may be rejected).		
15	Brand name, if any.	As per supplier		
16	Supply from	As per supplier		
17	Terms of delivery ("FOR DESTINATION " means freight & insurance upto destination in supplier's scope (Destination: CRX Divn, BHEL Bhopal)	Accepted/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
18	Transit insurance (In supplier's scope)	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
19	CGST RATE (IN %)	As per supplier		
20	SGST RATE (IN %)	As per supplier		
21	IGST RATE (IN %)	As per supplier		
22	UGST RATE (IN %)	As per supplier		
23	Are you manufacturer of quoted item (s).	Yes / No		
24	Are you registered under MSMED ACT 2006 as small or micro. NOTE: - Firms registered under medium scale shall not be considered eligible for MSE benefits.	Yes / No (If select Yes, please enclosed valid UDYAM certificate)		

Techno-Commercial Annexure
(To be filled by supplier and submit with offer)

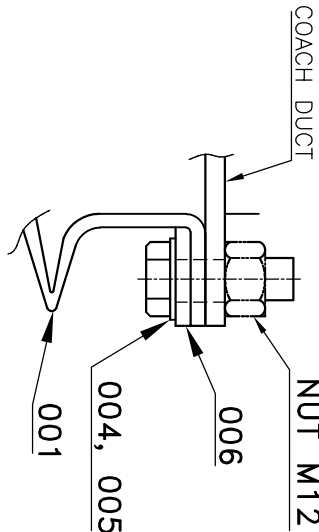
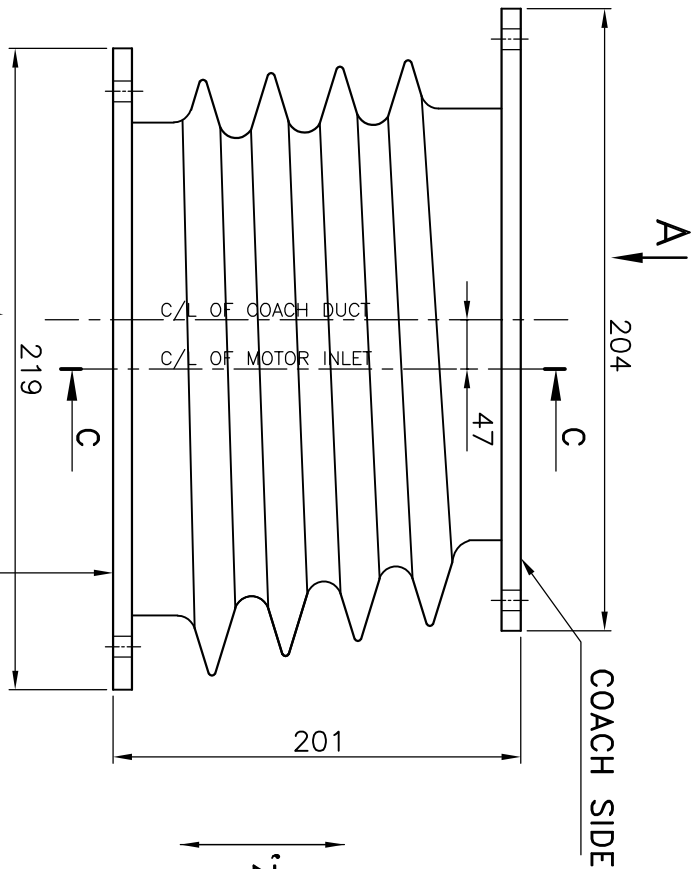
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Sr. No.	ELEMENTS	Standards	To be offered/confirmed by supplier	Remarks, if any
25	Terms of Payment (100% payment in 90 days of receipt (45 days for Micro & Small and 60 days for Medium enterprises as registered in Udyam certificate as per relevant MSME act in force) and subject to acceptance of material and relevant documents at BHEL. Pl refer GTC BP200102B)	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
26	SELF CERTIFICATION OF MINIMUM LOCAL CONTENT, IF MORE THAN 50% VALUE ADDITION IS IN INDIA. (Note- In case of tenders worth more than Rs. 10 crores, Suppliers shall necessarily submit certificate from statutory auditor or cost auditor or cost accountant or CA) Please also specify the amount of local content in India. EXAMPLE :if 100% INDIGENOUS (MADE IN INDIA) MARK "Y"/100%	As per supplier		
27	Details of location of value addition / manufacturing	As per supplier		
28	Other Charges (If any)	Applicable / Not Applicable. (If applicable please mention percentage (%) / Value (along with type of charges).		
29	Penalty for delayed performance as per BP200102B & NIT	Yes / No (In case of "No", your offer will be loaded suitably)		
30	Confirmation that documents pertaining to technical PQR & Financial PQR has been submitted	Yes / No		
31	Acceptance to "REVERSE AUCTION" if conducted (As per BHEL's RA policy)	Yes / No		
32	Submission of Declaration format with duly sealed & signed (Annexure IX, refer attached) regarding whether other family firms or sister concern affiliates / subsidiary firms are participating in the same tender.	(Yes / No) If No please specify the reason.		
33	General terms and conditions of enquiry (Form No. BP-200102B) and BHEL PO Terms & Conditions is Acceptable.	Yes (In case of "No" your offer may be rejected).		
34	Quotation Validity will be 90 days from the date of techno-commercial bid opening.	Yes		
35	Tender fees submitted	Yes / Not Applicable	Not Applicable	

QUALITY PLAN NO. -QAP/QTM/VENDOR QAP/2023-24/ IM3004/ BELOW FOR AIR INLET ARRANGEMENT DTD. 12.12.2023 REV 00
Reference Document- PO DRAWING/SPECIFICATION

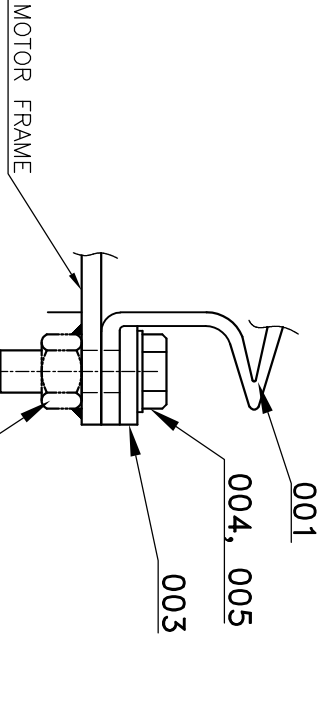
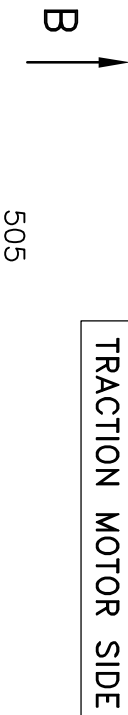
SL. NO	COMPONENT	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	INSPECTION AGENCY	REMARKS
				TP	TP/A					
1)	Raw material (leather for bellows)	1. Physical test 2. Chemical test	TC verification	100%	100%	As per specification mentioned in drawing	As per specification mentioned in drawing	MTC	BHEL/TP/A	1. TC from NABL Lab/ raw material manufacturer to be submitted along with supply. 2. Supplier to get the raw material TC correlated with material TC
2)	Dimension	Dimension	TC verified & Measurement	100%	10%	As per drawing & specification	As per drawing & Specification	Supplier record	BHEL/TP/A	Dimension to be Witnessed
3)	Type test	As per specification	TC verification	1 sample per PO	1 sample per PO	As per drawing & specification	As per drawing & Specification	Supplier record	BHEL/TP/A	Record verification
4)	Routine test	As per specification	TC verification	1 sample per lot	1 sample per lot	As per drawing & specification	As per drawing & Specification	Supplier record	BHEL/TP/A	Witness
5)	Identification vendor name, PO & job serial no.	Visual	Visual	100%	10%	As per drawing & specification	As per drawing & Specification	Supplier record	BHEL/TP/A	Witness

Issued By

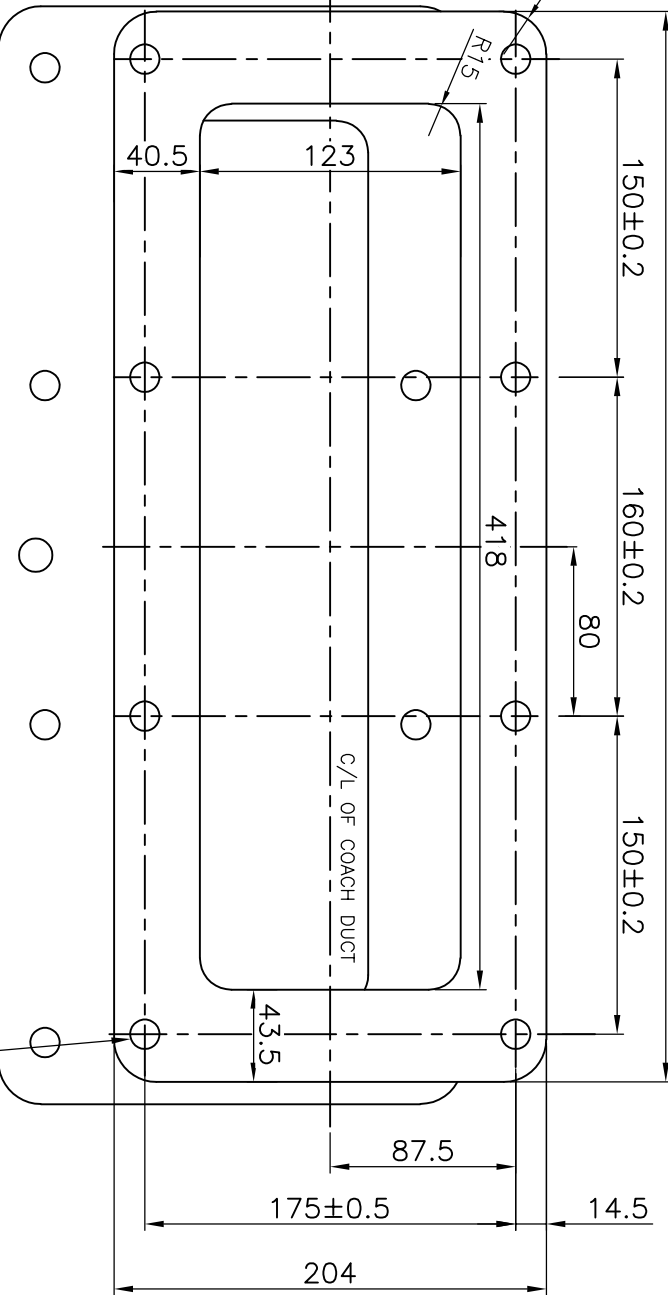
QTM



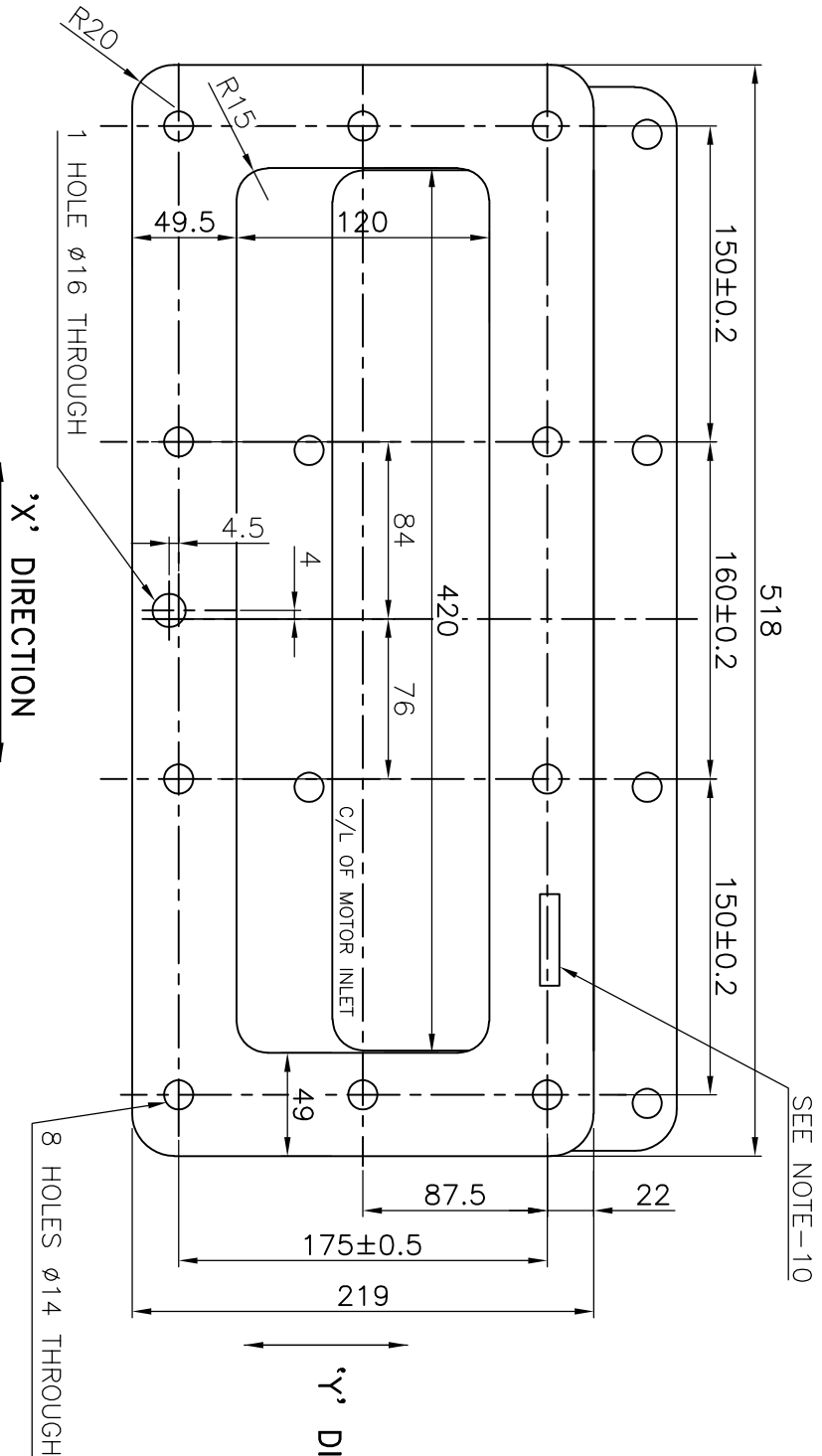
COACH SIDE FIXING ARRANGEMENT



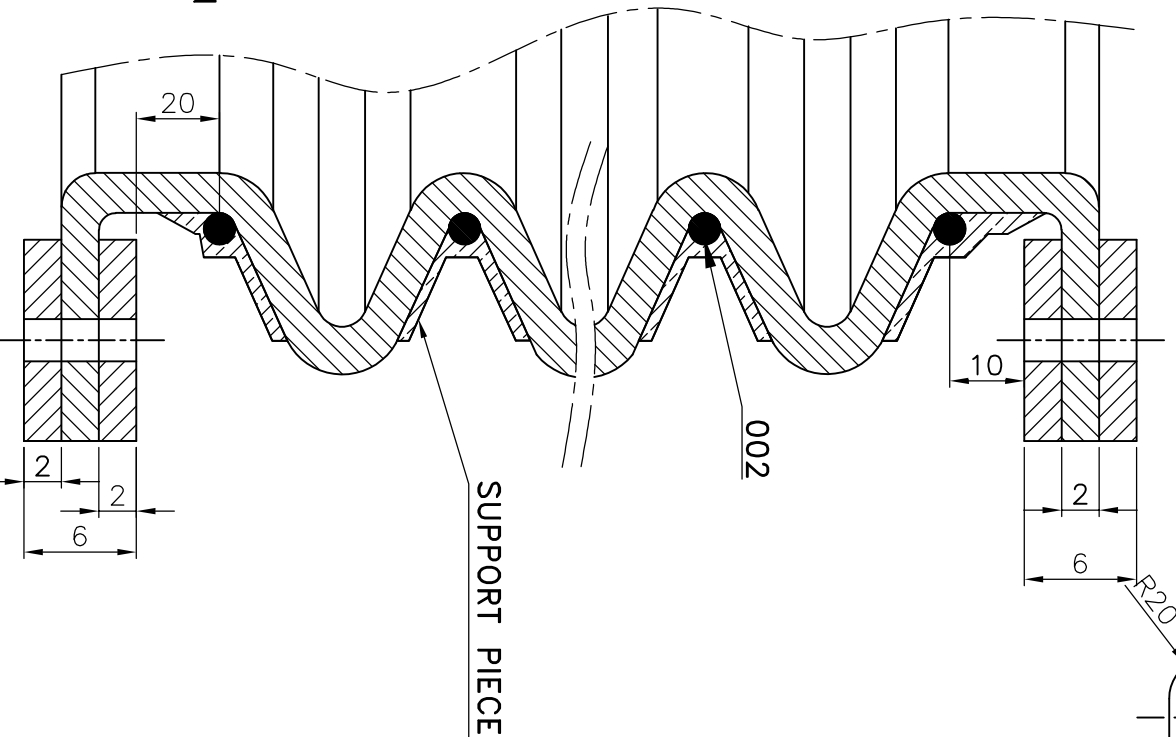
MOTOR SIDE FIXING ARRANGEMENT



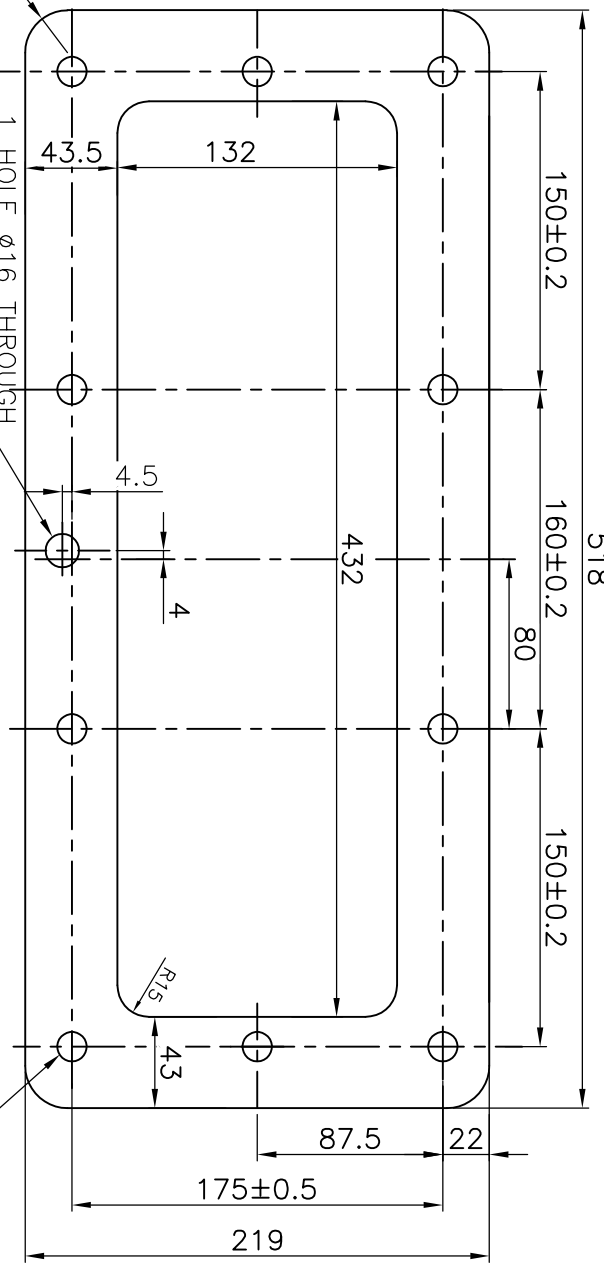
VIEW-A
COACH SIDE MOUNTING AND CUTOUT DETAILS



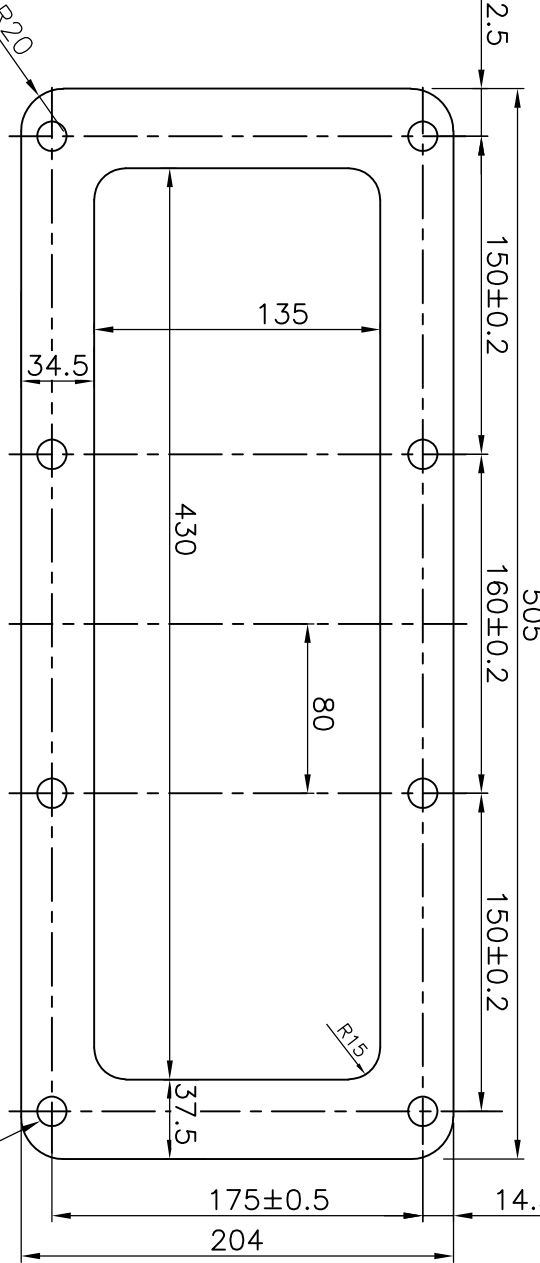
VIEW-B
TRACTION MOTOR SIDE MOUNTING AND CUTOUT DETAILS



SECTION-CC



ITEM-003



ITEM-006

NOTES:-

1. BELLOW SHALL BE ABLE TO MEET FOLLOWING DISPLACEMENTS:
A. Z DIRECTION: ± 155 MM VERTICAL.
B. X DIRECTION: ± 85 MM LATERAL.
C. Y DIRECTION: ± 85 MM LONGITUDINAL.
2. A. MATERIAL SHALL COMPLY TO R7 FIRE SAFETY REQUIREMENT OF HL-2/HL-3 TO EN45545-2 AND CERTIFICATE OF THE SAME SHALL BE FURNISHED BY SUPPLIER.
B. MATERIAL SHALL BE AS FOLLOWS:
i. METRA ARAMID / PARA ARAMID FABRIC WITH SILICON RUBBER COATING AS PER ROSO SPEC. NO. ROSO/PE/SPEC/0197-2020.
ii. ALTERNATIVELY BELLOW CAN ALSO BE MANUFACTURED BY USING ANY SIMILAR MATERIAL MEETING BELLOW DISPLACEMENT AND OTHER DRAWING REQUIREMENTS.
3. BELLOW SHALL BE AIR LEAK PROOF.
4. SUPPORT PIECES WILL BE GULDED AND STITCHED ALL ROUND THE BELLOW PLEATS.
5. 8 SWG GALVANISED IRON WIRE FOR REINFORCEMENT.
6. DOUBLE STITCH ALLROUND EXCEPT ON IRON WIRE REINFORCEMENT WITH 2-3 STITCHES PER CM WITH 10KG (UTS STRENGTH) NYLON THREAD LENGTH 1000 MM.
7. 0.11 IRON WIRE REINFORCEMENT SINGLE 2-3 STITCHES PER CM SHALL BE PROVIDED.
8. TOLERANCE ON THICKNESS ± 0.5
9. RING IS PLACED ON OUTSIDE FULLY REINFORCED WITH FABRIC OR SIMILAR MATERIAL SELECTED AS PER NOTE-2.
10. TOP OF THE FLANGE SHOULD BE SMOOTH AT JOINTS.
11. SPACE FOR MARKING SUPPLIER'S NAME, MONTH & YEAR OF MANUFACTURE AND BHEL PO NO.
12. ITEM NO. 002 TO BE AS PER THE REQUIREMENT TO MEET THE MINIMUM & MAXIMUM LENGTH AS PER NOTE-1.
13. ITEM NO. 004 TO ZINC PLATED TO PREVENT AGAINST CORROSION.
14. IT. 005 SHALL BE AS PER SL. NO. 2 OF TABLE-1 OF DRG. NO. 34391560001.

VAR.00	ITEM NO.	DESCRIPTION	DRAWING NO.	QTY.	UNIT	WT.	ZONE
001	001	FITMENT BASE PLATE	34450105053	002	KG		
018	005	SERRATED LOCK			KG		
018	004	WASHER M12			KG		
018	004	BOLT HEX. A M12X40-8.8 Zn Plated			KG		
001	003	FITMENT BASE PLATE	34450105053	001	KG		
	002	8 SWG G.I. WIRE			KG		
001	001	BELLOW			KG		
59	64	75	78	79	25	27	29
VAR.00	ITEM NO.	DESCRIPTION	DRAWING NO.	QTY.	UNIT	WT.	ZONE
28	CARD TYPE-3	28	CARD TYPE-1	28	CARD TYPE-2	28	CARD TYPE-2

STATUS OF DRAWING	TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT
DISTRIBUTION OF PRINTS TIME-1 TXM-3 TXN-1	IM3004AZ

REV.	DATE	ALTERED	CHECKED	APPD.	ZONE
01	24.09.24				

REV.	DATE	ALTERED	CHECKED	APPD.	ZONE
01	24.09.24				

Duly filled Technical Pre-Qualification Requirements to be submitted along with the offer by vendor

For uploading along with the enquiry

Ref No: TME/PQR/IM3004AZ/Air Bellow Rev.01

Dated: 16/12/2024

Technical Pre-Qualification Requirements (PQR) for "Air Bellow"

Vendor should comply with the following clauses in order to qualify for supply of Air Bellow (duly filled PQR shall be submitted along with the offer by vendor):

Cl. No.	Description	Vendor to comment	
		Complied / Not complied	Supporting relevant document to be submitted along with offer
1	Vendor shall supply Air Bellow as per drawing no. mentioned in enquiry without any deviation.	Yes/No	Not Required
2	Specify whether vendor is a manufacturer or authorized trader/distributor. In case vendor is a trader/distributor, vendor to furnish authorization certificate from manufacturer of tendered item for its supply.	Manufacturer/ Trader/ Distributor	In case vendor is a trader/distributor, vendor to furnish authorization certificate from manufacturer of tendered item for its supply.
3	Manufacturer of tendered item should have experience of manufacturing & supplying any similar* bellow, in preceding 5 years from enquiry opening date. Vendor to ensure that documents submitted against c) shall correlate with the submitted PO copy. *Similar bellow i.e. bellow with features of flexibility for compression, expansion & sideways movement.	Yes/No	a. PO copies b. Drawing/Photograph of supplied item c. Supply proof i.e. invoice
4	Vendor to confirm that material that shall be used for manufacturing of tendered item complies with R7 fire safety requirement of HL-2/ HL-3 to EN45545-2. Vendor to submit HL-2/ HL-3 test certificate of material that shall be used.	Yes/No	Vendor to submit HL-2/HL-3 test certificate of material that shall be used.
5	For verification of information furnished by vendor, additional documents proofs etc. may be required by BHEL. Vendor to confirm providing the same.	Yes/No	Not Required

Notes:

1. Compliance of all the points in above T-PQR is mandatory. In absence of compliance of above, vendor's offer is liable to be rejected.
2. Information / compliance / documents submitted by vendor shall be authentic in all aspects. In case any deviation / false information / forged documents are observed, BHEL is free to initiate appropriate punitive proceeding against the supplier.

Important: This document is to be filled and submitted along with the offer. This document must be signed by authorized representative of the vendor and should contain the name of representative & seal of the company.

Date:

4.0 INDICATIONS ON DRAWINGS:

If general tolerances in accordance with this standard shall apply, the following information shall be indicated.

Example: AA0230208 m

5.0 REJECTION

Unless otherwise stated, work pieces exceeding the general tolerance shall not lead to automatic rejection provided that the ability of the work piece to function is not impaired (see clause A4).

6.0 NOTE:

6.1 For “permissible deviations for Un-toleranced dimensions of castings” refer AA0230402.

6.2 For “Tolerances and machining allowances for flame cutting” refer AA0621101.

6.3 For “General tolerances for welding construction for length and angles” refer AA0621104.

6.4 For “General tolerances for welded structures form and position” refer AA0621105.

Table 1 – Permissible deviations for linear dimensions except for broken edges
(external radii and chamfer heights, see table 2)

Values in millimetres

Tolerance class		Permissible deviations for basic size range							
		0.5 ¹⁾ Up to 3	Over 3 Up to 6	Over 6 Up to 30	Over 30 Up to 120	Over 120 Up to 400	Over 400 Up to 1000	Over 1000 Up to 2000	Over 2000 Up to 4000
Designation	Description								
f	Fine	±0.05	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-
m	Medium	±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2
c	Coarse	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	±4
v	Very coarse	-	±0.5	±1	±1.5	±2.5	±4	±6	±8

1) For nominal sizes below 0.5 mm, the deviations shall be indicated adjacent to the relevant nominal size(s).

1) For nominal sizes below 0.5 mm, the deviations shall be indicated adjacent to the relevant nominal size(s).

Table 2 – Permissible deviations for broken edges (external radii and chamfer heights)

Values in millimetres

Tolerance class		Permissible deviations for basic size range		
Designation	Description	0.5 ¹⁾ up to 3	Over 3 up to 6	Over 6
f	fine	±0.2	±0.5	±1
m	medium			
c	coarse	±0.4	±1	±2
v	very coarse			

1) For nominal sizes below 0.5 mm, the deviations shall be indicated adjacent to the relevant nominal size(s)

Table 3 – Permissible deviations of angular dimensions

Tolerance class		Permissible deviations for ranges of lengths, in millimetres, of the shorter side of the angle concerned				
Designation	Description	Up to 10	Over 10 Up to 50	Over 50 Up to 120	Over 120 Up to 400	Over 400
f	fine	±1°	±0°30′	±0°20′	±0°10′	±0.5′
m	medium					
c	coarse	±1°30′	±1°	±0°30′	±0°15′	±0°10′
v	very coarse	±3°	±2°	±1°	±0°30′	±0°20′



Annex A (informative)

Concepts behind general tolerancing of linear and angular dimensions

A.1 General tolerances should be indicated on the drawing by reference to this standard in accordance with clause 4.

The values of general tolerances correspond to tolerance classes of customary workshop accuracy, the appropriate tolerance class being selected and indicated on the drawing according to the requirement of the components.

A.2 Above certain tolerance values, there is usually no gain in manufacturing economy by enlarging the tolerance. For example, a feature having a 35 mm diameter could be manufactured to a high level of conformance in a workshop with “customary medium accuracy”. Specifying a tolerance of ± 1 mm would be of not benefit in this particular workshop, as the general tolerance values of ± 0.3 mm would be quite adequate.

However, if, for functional reasons, a feature requires a smaller tolerance value than the general tolerance values, these should not be indicated adjacent to the dimension but should be stated on the drawing as described in clause 4. This type of tolerance allows full use of the concept of general tolerancing.

There will be “exceptions to the rule” where the function of the feature allows a larger tolerance than the general tolerances, and the larger tolerance will provide manufacturing economy. In these special cases, the larger tolerance should be indicated individually adjacent to the dimension for the particular feature, e.g. the depth of blind holes drilled at assembly.

A.3 Using general tolerances leads to the following advantages:

- a) drawings are easier to read and thus communication is made more effective to the user of the drawing;
- b) The design draughtsman saves time by avoiding detailed tolerance calculations as it is sufficient to know that the function allows a tolerance greater than or equal to the general tolerance;
- c) The drawing readily indicates which feature can be produced by normal process

capability, which also assists quality engineering by reducing inspection levels;

- d) Those dimensions remaining, which have individually indicated tolerances, will, for the most part, be those controlling features for which the function requires relatively small tolerances and which therefore may require special effort in the production – this will be helpful for production planning and will assist quality control services in their analysis of inspection requirements;
- e) Purchase and sub-contract supply engineers can negotiate orders more readily since the “customary workshop accuracy” is known before the contract is placed; this also avoids arguments on delivery between the buyer and supplier, since in this respect the drawing is complete.

These advantages are fully obtained only when there is sufficient reliability that the general tolerances will not be exceeded, i.e. when the customary workshop accuracy of the particular workshop is equal to or finer than the general tolerances indicated in the drawing.

The workshop should therefore

- Find out by measurements what is customary workshop accuracy is;
- Accept only those drawings having general tolerances equal to or greater than its customary workshop accuracy;
- Check by sampling that its customary workshop accuracy does not deteriorate.

Relying on underlined “good workmanship” with all its uncertainties and misunderstandings is no longer necessary with the concept of general geometrical tolerances. The general geometrical tolerances defines the required accuracy of “good workmanship”.

A.4 The tolerance the function allows is often greater than the general tolerances. The function of the part is, therefore, not always impaired when the general tolerance is (occasionally) exceeded at any feature of the work piece. Exceeding the general tolerance should lead to a rejection of the work piece only if the function is impaired.

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सत्यमेव जयते

भारत सरकार
रेल मंत्रालय

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**अनुसंधान अभिकल्प एवं मानक संगठन
RESEARCH DESIGNS AND STANDARDS ORGANISATION**

एल.एच.बी. डिजाइन वातानुकूलित यानों के आर.एम.पी.यू. में लगने वाले फेश, सप्लाई एवं रिटर्न एअर बेलो डक्ट के लिये दोनों ओर सिलीकान रबर की कोटिंग के साथ मेटा अरमाईड/ पेरा अरमाईड फेब्रिक्स की विशिष्टि

SPECIFICATION FOR FRESH, SUPPLY AND RETURN BELLOW DUCT MADE OF META ARAMID/ PARA ARAMID FABRIC WITH SILICON RUBBER COATING ON BOTH SIDES FOR RMPU FOR LHB EOG/HOG TYPE AC COACHES OF INDIAN RAILWAYS

आर०डी०एस०ओ०पी०ई०/स्पेक/ए०सी०/0197-2020(परिशोधन.0)
RDSO/PE/SPEC/AC/0197- 2020(Rev. 0)

S. No.	Date of amendment	Revision	Reason

अनुमोदित
APPROVED

[Signature]
15/5/2020

प्रमुख कार्यकारी निदेशक/ एस ई
PED/SE

Prepared By <i>[Signature]</i>	19	Checked by <i>[Signature]</i>
DSE/TL-AC & System Design		

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Ankit Duley

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1.0 FOREWORD

- 1.1 At present, the Cotton Canvas Bellow Duct for connecting fresh, return & supply air from RMPU to the coach shell is being provided as per RDSO specification No. RDSO/PE/SPEC/AC/0136-2009 (Rev.0).
- 1.2 As per specification, canvas cloth should have service life of 18 months whereas POH periodicity of LHB AC coaches is 36 months. Moreover, of late, number of premature failures of cotton canvas on account of getting torn/perished etc. have been reported by Railways resulting into less cooling, water ingress into the coach etc. besides requiring un-scheduled attention/replacement.
- 1.3 The issue of pre-mature failures of Cotton Canvas has been discussed in the various forum/platform of Indian Railways. It has been the unanimous consensus that duct should last POH to POH (36 months) under prevalent service conditions.
- 1.4 Bellow air duct made of material which is strong enough to survive POH to POH in difficult service conditions and complying other essential requirements viz. water proof, fire-retardant etc. thus appear to be need of hour.
- 1.5 Earlier RDSO has issued FRS RDSO/PE/FRS/AC/0028-2018 (Rev-0). This specification has been prepared based on FRS and subsequent interactions with prospective vendors.

2.0 SCOPE OF SUPPLY

- 2.1 Unless otherwise specified in tender the manufacturer shall supply the coated fabric complete with metallic frames at both the ends of the duct i.e. RMPU side & coach shell side as per RDSO drawing No. RDSO/PE/SK/AC/0069-2004 (Rev.3), 2 nos. each for fresh air & return air and one no. for supply air per RMPU. EPDM (Fire retardant) gasket for both RMPU and coach shell sides should also be supplied.

3.0 OPERATING AND SERVICE CONDITIONS

- 3.1 The material of the bellow duct shall be sturdy and suitable for the following service conditions, which are normally to be met in Railway rolling stock service:

- (i). Ambient: -10 to +55 deg Celsius
- (ii). Relative Humidity: Up to 98% during rainy season
- (iii). Atmosphere: Extremely dusty, foggy, and desert terrain in certain areas. The dust concentration in air may reach at high value of 1.6mg/cubic meter.
- (iv). Rainfall: Very heavy in certain areas.
- (v). Coastal area: The equipment shall be designed to work in humid salt laden and corrosive atmosphere. The

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maximum values of the condition shall be as under:

- a) Maximum Ph value : 8.5
- b) Sulphate : 7 mg/litre
- c) Max. concentration : 6 mg/litre of chlorine
- d) Max. conductivity : 130 micro Siemens/cm

4.0 GOVERNING SPECIFICATIONS

Referenced Specification/Document	Description
IS:13501	Determination of flammability by oxygen index
IS:7941	Method for determining the water repellency of fabrics by cone test
IS:391	Method for determining resistance to penetration by water of fabrics by hydrostatic head test
IS:1390	Methods for determination of pH value of aqueous extracts of textile materials
IS: 6911	Stainless steel plate, sheet and strip
ASTM D751	Standard test methods for coated fabrics.
UIC 564-2 OR	Regulations relating to fire fighting measures in passenger carrying Railway vehicles or assimilated vehicles used on international services.
EN 45545-2	European Railway standard for fire safety

Note: Latest version of the above specification / standards shall apply and should be available with the firm before commencement of the prototype testing.

5.0 TECHNICAL & CONSTRUCTIONAL REQUIREMENTS & TESTS

- 5.1 Fabric of the bellow duct shall be of Meta Aramid/ Para aramid with silicon rubber coating on both sides.
- 5.2 Finished meta aramid/ para aramid fabric with silicon rubber coating on both sides shall have the following properties/parameters –

S. No.	Parameters	Unit	Test method/ Instrument/ Standards/ Specification	Acceptable limit/grade
1.	Flame retardant	Grade	EN 45545-2	R1/HL-1; R7/HL-2
2.	Thickness (min)	mm	ASTM D751	1.2
3.	Breaking Strength	N	ASTM D751	X Direction- ≥800 Y Direction- ≥800
4.	Working temperature range	Deg C	-	From -20 to +180
5.	Resistance to spread of flame	-	Appendix-5 of UIC 564-2 OR	Class - A
6.	Limiting oxygen index (min.)	-	IS:13501	28

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7.	Toxicity, (CIT) Conventional index of Toxicity (at 50 kW/m ² heat flux)	-	EN 45545-2	≤0.1
8.	Deterioration of visibility due to smoke	-	Appendix-15 of UIC 564-2 OR	Class - A
9.	Water proofness i) Cone test ii) Hydrostatic head test	-	i) IS:7941 ii) IS:391	i) Water should not leak through cloth. ii) Resistance of water fabrics, water head in cm special proofed 23.
10.	Weight (min)	g/m ²	ASTM D751	1300
11.	pH value	-	IS: 1390 (cold method)	6.0-8.5

5.3 The testing shall be got done from any of the NABL /Govt. recognized/ ILAC (International Laboratory Accreditation Co-operation) laboratory on finished coated fabric and the test report complying with the above properties/parameters shall be submitted to Production unit/RDSO.

5.4 Some of the test mentioned in clause no 5.1 may be carried out at RDSO/Lab, for which supplier has to submit the sample of suitable size to RDSO free of cost.

5.5 The service life of the above bellow duct material under actual prevailing conditions on IR in open environment shall not to be less than 60 months.

5.6 Supplier/ Manufacturer have to declare the OEM of Meta Aramid/ Para Aramid fabric with silicon rubber coating along with documents submitted to RDSO/PUs.

5.7 The Metallic frames at both ends of the duct i.e. RMPU side & coach shell side shall be as per RDSO drawing No. RDSO/PE/SK/AC/0069-2004 (Rev.3) or latest.

5.8 During, acceptance test, inspecting authority may ask for previous test reports of above carried out tests from NABL /Govt. recognized/ ILAC (International Laboratory Accreditation Co-operation) accredited lab at expenses of firm. All tests on fabric shall be repeated afresh after every 3 years. However, test may be asked to be got done in between the specified period in case of major warranty failures reported by Zonal Railways/ PUs.

5.9 Mounting arrangements of Meta Aramid Para Aramid fabric should be through sealant, Rivet/nut bolt arrangement only.

6.0 OTHER REQUIREMENTS

6.1 This document is being issued keeping in view the long service life of the bellow material to be used for fresh, supply & return air duct in LHB RMPU.

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- 6.2 Manufacturer/ Supplier's request for registration shall be accompanied by following documents:
- (i). Satisfactory Test report of the material from any of the NABL /Govt. recognized/ILAC (International Laboratory Accreditation Co-operation) laboratory, complying the parameters as mentioned in clause No. 5.2.
 - (ii). Declaration that duct will have service life of 60 months (min.). In the event of pre mature failure, complete set of ducts of full coach (2 RMPUs) shall be replaced free of cost.
 - (iii). Maintenance instructions, if any.

6.3 Past supply performance for same applications, needs to be furnished to RDSO/PUS.

7.0 FITMENT:

7.1 The manufacturer/supplier in coordination with RMPU manufacturers & PU/ Zonal Railway shall arrange for fitment of bellow duct on few RMPUs. After fitment Railway/PUs shall provide feedback as per format in Annexure-C.

8.0 SUPPLIER'S RESPONSIBILITY

- 8.1 The supplier shall be fully responsible for ensuring that product is entirely fit for the purpose and no part of this specification shall, in any way remove or reduce his obligation in this respect.
- 8.2 The supplier shall supply any purpose built or special tools or equipment that may be necessary for the correct fitment & servicing of the product.
- 8.3 If supplied item fails to achieve any of the stipulated requirements, the same shall be modified/ replaced at the supplier's expense and within a time line to be agreed with purchaser/consignee/RDSO.

9.0 MARKING AND PACKING

9.1 Frame shall be provided with following information preferably in embossed pattern:

- a) Name and Address of the manufacturer.
 - b) Month of the manufacture.
 - c) Serial number (The first two digits shall indicate the year of manufacture and next two digits shall indicate month. Further next four digits shall indicate manufacturing serial number.)
 - d) Specification number.
- 9.2 Item shall be packed in suitable packing material such as suitable sheets/bubble sheet and filling material as suited to protect it to prevent damage in transport/storage.

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10.0 GUARANTEE/WARRANTY

Guarantee/Warranty obligation of the complete item shall be 60 months from date of supply.

11.0 INFRINGEMENT OF PATENT RIGHT

11.1 Indian Railway shall not be responsible for infringement of patent rights arising due to similarity in design, manufacturing process, use of similar components in design & development of this item and any other factor not mentioned herein which may cause such a dispute. The entire responsibility to settle any dispute/matters lies with the manufacturer/supplier.

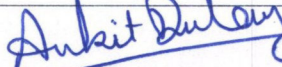

11.2 It shall be responsibility of firm to ensure that details/design/documents given by them are not infringing any IPR and they are responsible in absolute and full measure instead of Railways for any such violations. Data, specifications and other IP as generated out of interaction with Railways shall not be unilaterally used without the consent of RDSO and right of Railways/RDSO on such IP is acceptable to them.

12.0 CARTEL FORMATION

The firm will not engage in cartel formation with other firms and will also submit a declaration in this regard as per attached Annexure –A.

13.0 ANNEXURES

SN	Annexure	Description
1	Annexure A	Undertaking against Cartel Formation.
2	Annexure B	RDSO drawing no. RDSO/PE/SK/AC/0069-2004 (Rev.3)
3	Annexure C	Format for feedback given by user railways regarding performance of finished meta/ para aramid fabric with silicon rubber coating on both sides.

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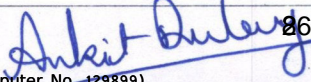
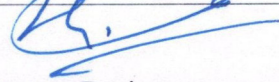
Annexure- A**UNDERTAKING AGAINST CARTEL FORMATION**

We, hereby, give an undertaking that as a Registered Vendor for manufacture and supply of will not be a part of a cartel with other vendors and will be quoting competitive rates in the tenders invited by the Indian Railway/Production Units.

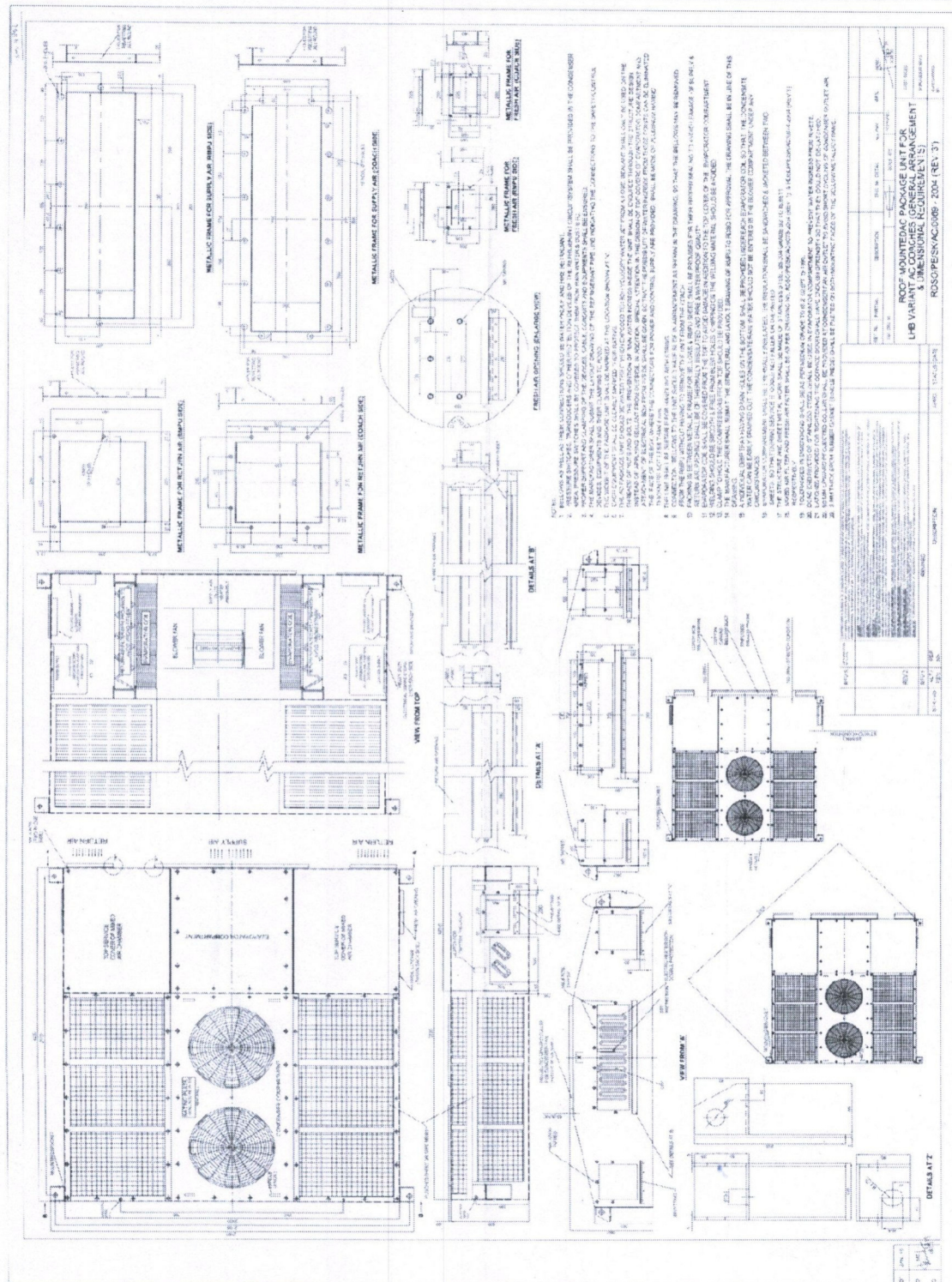
We are aware of the fact that the Registering Authority i.e. RDSO may de-list the name of our firm from the Master List of Approved Vendors, if complaint is received about such cartel formation from any of the Railways/Production Units.

Seal and Signature
(Authorized signatory of the firm)

Date:
Place:
Seal

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Annexure- B



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Annexure- C

**FORMAT FOR FEEDBACK GIVEN BY USER RAILWAYS REGARDING
PERFORMANCE OF FINISHED META ARAMID/ PARA ARAMID FABRIC
WITH SILICON RUBBER COATING ON BOTH SIDES**

S. No.	Parameter Check/ Test to be Done	Remarks
1.	a) Date & Place of fitment b) RMPU S. No. & make c) Coach no. d) No. of days completed after fitment.	
2.	Physical degradation of the item from environmental exposure.	Yes/No
3.	Intactness of the fabric with the metallic frame.	Yes/No
4.	Any other remarks (other than those prescribed).	

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DISTRIBUTION LIST

PRINCIPAL CHIEF MECHANICAL ENGINEER:	
1	Northern Railway, Baroda House, New Delhi – 110 001.
2	Central Railway, II Floor, Parcel office, CST Mumbai – 400 001.
3	Eastern Railway, Fairlie Place, Kolkata – 700 001.
4	South Eastern Railway, Garden Reach, Kolkata – 700 043
5	Southern Railway, ParkTown, Chennai – 600 003.
6	Western Railway, Churchgate, Mumbai – 400 020.
7	South Central Railway, Rail Nilayam, Secunderabad – 500 371.
8	East Central Railway, DighiDistt. - Vaishali, Hajipur Bihar- 844 101.
9	North Central Railway, North Central Railway, Block A, Subedarganj, Allahabad-211033.
10	South Western Railway, 1 st Floor, DRM Office, Hubli 580 020
11	South East Central Railway, Bilaspur.495004
12	North East Frontier Railway, Maligaon, Guwahati - 781001
13	North Eastern Railway, Gorakhpur – 273001
14	North Western Railway, Jaipur – 302006
15	West Central Railway, Jabalpur - 482001
16	East Coast Railway, Bhuvneshwar, Orrisa – 751016
PRINCIPAL CHIEF ELECTRICAL ENGINEER:	
1	Konkan Railway, Belapur Bhavan, Sector-11, Belapur, Mumbai - 400614
2	Integral coach factory, Perambur, Chennai - 600038
3	Rail Coach Factory, Kapurthala (Punjab) – 144 602
4	Modern Rail Coach Factory, Lalganj, Raebareli (UP)-229120
CHIEF WORKS MANAGER:	
1	Matunga Workshop, Central Railway, Mumbai - 400 019.
2	Liluah Workshop, Eastern Railway, Howrah
3	C&W Workshop, Northern Railway, Alambagh, Lucknow-226 05
4	C&W Workshop, Rly., Jagdhari – 135 002
5	Mechanical Workshop, NER, Gorakhpur – 273 012
6	Carriage Workshop, Southern Railway, Perambur, Ayanavaram, Chennai – 600023.
7	SCR, Lallagudda Workshop, Lallaguda, Secunderabad - 500017
8	Carriage Workshop, Western Railway, Lower Parel, Mumbai-400013
9	CRWS, W. C. Railway, Nishatpura, Bhopal-462010
10	Carriage Workshop, NW Rly, Ajmer - 305001
11	Carriage Repair Workshop, Gadag Road, SWR, Hubli – 580 020
12	Carriage Workshop, S.W. Railway, MysoreVishwanath.
13	Carriage Workshop, SE Rly., Kharagpur - 721301
14	New Bongaigaon , Railway Workshop, Danttal, Distt. Bongaigaon, Assam-783380
15	Carriage and Wagon Workshop, N. C. Rly., Jhansi – 248003
16	Carriage and Wagon Workshop, WC Rly., Kota - 324002
17	Carriage and Wagon Workshop, Eastern Rly., Liluha - 711204
18	Carriage and Wagon Workshop, W. Rly., Pratap Nagar, Vadodara - 390004
19	Carriage and Wagon Workshop, N Rly., Amritsar - 143001
20	Central Workshop, Goldenrock, S. Rly., Trichi - 620004
1	Director, IRIEN, Nasik Road (Maharashtra) - 422101
2	Senior Professor (Elect.), RailwayStaffCollege, Lalbaug, Vadodara. - 390004
3	Director, IRCAMTECH, Maharajpur, Gwalior – 474 020.

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