

Bid Price: Rs. 1180/-

JMRC/O&S/RS/2023-24/NIB/007



**JAIPUR METRO**

**JAIPUR METRO RAIL CORPORATION LTD.**

Directorate of Operations & Systems  
Mansarovar metro train depot,  
Bhrigu path, Mansarovar Jaipur - 302020  
Website: <http://transport.rajasthan.gov.in/jmrc>  
Email: [edrs@jaipurmetrorail.in](mailto:edrs@jaipurmetrorail.in)

**Supply with Installation and commissioning of Damper Testing Machine.**

BID DOCUMENT



**Check sheet for document submission by Bidders with Bid Document**

S. No.	Documents	Enclosed Yes/No	Remarks
<b>(A)</b>	<b>To be deposited Physically at JMRC up to last date of submission of bid (In Original)</b>		
i.	DD/proof of fee deposition for Bid cost in favour of Jaipur Metro Rail Corporation Ltd, Jaipur.		
ii.	Proof of Processing Fee payable in favor of MD, RISL, Jaipur		
iii.	Proof of EMD/Bid security amount in favour of Jaipur Metro Rail Corporation Ltd, Jaipur.		
iv.	Notarized form A on non judicial stamp paper of Rs. 100/-		
<b>(B)</b>	<b>Through Online Mode on Eproc.rajasthan.gov.in (Signed &amp; Scan copy)</b>		
v.	Complete, filled Bid document with seal and signed with any addendum/corrigendum/pre-bid meeting minutes of meeting if issued.		
vi.	Copy of GST Certificate & PAN Certificate with Seal and signed		
vii.	Cancelled Cheque for future payment reference(optional)		
viii.	Copy of LOAs / POs/Work Orders along with their individual work completion certificates mentioning Period of the contract, work completion date, name of the work and Amount paid for the contract		
ix.	Copy of work experience certificate completed similar works of Supply with Installation and commissioning of Damper Testing Machine during last five financial years and the period ending last day of month previous to the one in which the Bids are invited in current financial year.		
x.	Proof of annual turnover of last 3 audited financial years		
xi.	Any other document if bidder wants to submit		

The Financial Bid shall be submitted online through the prescribed website as per the instructions on the webpage therein. The prices shall be submitted online in the Financial Bid

**NOTE:** Prices Shall Be Indicated Only In The Financial Bid. **Price should NOT be indicated at any place in the Technical Bid**, otherwise the Proposal shall be summarily rejected.



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**1. NOTICE INVITING BID**

**JMRC/O&S/RS/2023-24/NIB/007**

Jaipur Metro Rail Corporation (JMRC) Ltd. invites on line **open e-bids (Single- stage Single cover method)** bidding process for **"Supply with Installation and commissioning of Damper Testing Machine"**

**KEY DETAILS:**

a)	Designation and address of inviting authority	Executive Director (Rolling Stock), JMRC JAIPUR
b)	UBN No.	
c)	NIB/Bid No	JMRC/O&S/RS/2023-24/NIB/007
d)	Name of Work	"Supply with Installation and commissioning of Damper Testing Machine"
e)	Approximate Estimated Cost of Work	Rs. 36,76,880/- (Including 18% GST)
f)	Cost of Bid Document (None-Refundable)	Rs. 1180/- including 18% GST, By cash or by bank demand draft, banker's cheque in favour of Jaipur Metro Rail Corporation Ltd., Jaipur
g)	Processing Fee	Rs.500/- by Demand Draft / Bankers Cheque in favour of MD, RISL, Jaipur payable at Jaipur.
h)	Earnest Money Deposit (EMD) / Bid Security.	Bid Security shall be 2% (Rs.73,538/-) of the estimated value (Refer Clause 2.3).
i)	Performance security	(5 % of LOA/PO Amount) in the form of Banker's Cheque/ Demand Draft/ Bank guarantee of a Scheduled Bank in favour of "Jaipur Metro Rail Corporation Ltd." payable at Jaipur. (Refer Clause 2.7 )
j)	Online Bid Document Availability Period	<b>From 17:00 hrs of 30.06.2023 to 14:00 hrs of 27.07.2023</b>
k)	Date and Place of Pre Bid Conference	1130 hrs on 10.07.2023 Conference Room-D10, Mansarovar Metro Train Depot, Workshop Building, Bhrigu path, Mansarovar Jaipur - 302020 Email: jgmrs@jaipurmetrorail.in mgrrs2@jaipurmetrorail.in
l)	Websites for downloading Bid Document and subsequent clarification/ modification, if any	<a href="http://transport.rajasthan.gov.in/jmrc">http://transport.rajasthan.gov.in/jmrc</a> <a href="http://www.sppp.rajasthan.gov.in">www.sppp.rajasthan.gov.in</a> <a href="https://eproc.rajasthan.gov.in">https://eproc.rajasthan.gov.in</a>
m)	Last date for receiving queries/clarifications BY Email/Post/hand	Up to 10.07.2023 at 17:00 hrs
n)	Up loading of Remarks of Metro Administration to the Issues raised by Bidders BY Email/Post	Up to 14.07.2023 at 17:00hrs
o)	On line submission start date & time	On 15.07.2023 at 09:00 hrs
p)	Last Date & Time of online submission of Bid	On 27.07.2023 at 15:00hrs
q)	Venue and Last Date of Physical	On 27.07.2023 at 15:00 hrs.



	Submission of Bid Cost, Bid Security, Processing Fee and Notarized form A on non judicial stamp paper of Rs. 100/-	Office of Manager(RS), Room no. 509, DCOS Building, Metro Train Depot, Mansarovar, Jaipur - 302020
r)	Time & Date of Opening of Online Bid	On 24.07.2023 at 15:30 hrs.
s)	Validity of Bid	90 days from the last date of submission of Bid.
t)	Delivery/Installation/Commissioning of Item	120 days from the date of issue of LOA (Letter of Acceptance)/PO
u)	<p><b>Eligibility Conditions</b></p> <p>a) Bidder should have valid GST registration certificate issued by competent authority and shall enclose GST certificate along with bid submission.</p> <p>b) Applicant should have valid PAN certificate/ card issued by the Income Tax Dept. of GOI and enclose PAN certificate.</p> <p>c) <u>Work Experience:</u> The bidder firm should have <b>satisfactorily completed similar works of Supply with Installation and commissioning of Damper Testing Machine for during last five financial years and the period ending last day of month previous to the one in which the Bids are invited in current financial year</b> AND should be either of the following:</p> <ol style="list-style-type: none"> <li>Three similar completed contracts each of contract value not less than 40% of estimated cost OR</li> <li>Two similar completed contracts each of contract value not less than 50% of estimated cost OR</li> <li>One similar completed contracts each of contract value not less than 80% of estimated cost.</li> </ol> <p>d) <u>Financial Standing (Annual Turnover):</u> The average annual turnover of applicant during last three audited financial years should not be less than 40% of estimated cost. To substantiate the Annual Turnover, Contractor needs to submit the Chartered Accountant (CA) Certificate.</p> <p><b>Note:</b></p> <p><b>I. Bidder is required to submit the details as per Form along with supporting documents:</b> The Bidder shall attach copy of LOAs / POs/Work Orders along with their individual work completion certificates issued by the authorized signatory preferably on their letter head of the contract/work awarding agency, mentioning Period of the contract, work completion date, name of the work and Amount paid for the contract, BOQ.</p> <p><b>II. Definition of similar works:</b></p> <ol style="list-style-type: none"> <li>The works completed here shall mean having physically completed that particular work.</li> <li>The bidder firm should have work experience of successful completion of Contract related to Supply /Installation/ Testing and Commissioning/ maintenance/ repairing/Non Comprehensive Annual Maintenance Contract /Annual Maintenance Contract of Supply with Installation and commissioning of Damper Testing Machine for related work at any Central Govt. Department /State Govt. Department /PSUs of Central or any state Govt./ Any Metro Rail Projects in India/ Indian Railways or it's PSU's/ Autonomous body of Any Govt.</li> </ol>	





	e) Firm shall not be blacklisted by Central Government, any State Government or any Government agency or Public sector undertaking (PSU). Firm shall submit an undertaking to this effect as per Form A.
v)	<b>Bank Account details should be attached with bid document by bidder on their letter-head duly signed and stamped or should be supported with one copy of cancelled cheque. (Form J: Bank details)</b>
w)	<p>The complete bid document can be downloaded from the state e-procurement Website <a href="https://www.eproc.rajasthan.gov.in">https://www.eproc.rajasthan.gov.in</a> and interested bidders will have to submit their offer in electronic formats both for technical and financial proposal on this website with their digital signatures. The complete bid document can also be seen on Corporation's website <a href="http://transport.rajasthan.gov.in/jmrc">http://transport.rajasthan.gov.in/jmrc</a> and state procurement portal i.e., <a href="http://www.sppp.raj.nic.in">www.sppp.raj.nic.in</a></p> <p>Bidders who wish to participate in this bidding process must register on <a href="https://eproc.rajasthan.gov.in">https://eproc.rajasthan.gov.in</a>. To participate in online bids, as per Information Technology Act, 2000, Bidders will have to obtain Digital signature Certificate (DSC) from any agency approved by Controller of Certifying Authorities (CCA). Bidders who already have a Valid Digital Signature Certificate need not to obtain a new Digital Signature Certificate. This DSC will be used to sign the bids submitted online by the bidder. Unsigned bids will not be entertained and will be rejected outright</p>
<b>At any stage if it is found that bidder has not met any of the above eligibility criteria, his bid will be summarily rejected and action shall be taken as per terms and conditions of this bid documents.</b>	

Note:

1. All bidders or their authorized representative may attend the opening of Bid.
2. Corrigendum, Addendums and subsequent clarifications on bid terms, if any, can be down loaded from the above mentioned websites. Intimation for change in the schedule of Bid opening etc. shall be published on above mentioned websites only. Keep visiting these websites for any subsequent clarifications & modifications.
3. If same firm/company quoted bid more than one at different branches for bidding process, all such that bid will be rejected as per Rule 81 of RTPPR, 2013.
4. In case of any further details/clarification required, the same can be collected/clarified from the office of Manager(RS)

Office of Manager (Rolling Stock),  
Room no. D-05, Workshop Building,  
Mansarovar metro train depot, Bhriгу path, Mansarovar, Jaipur-302020  
Mob. No.-7728895707, Email: [mgrrs3@jaipurmetrorail.in](mailto:mgrrs3@jaipurmetrorail.in)

**NOTE:** - Approved GCC is uploaded and available on the JMRC website, By Signing the Bid document, firm agrees to accept the GCC.  
The Contract is governed by latest RTPP Rule, 2013. Bid has been prepared and submitted in accordance with the instructions given herein.



## 2. INSTRUCTIONS TO BIDDER

### 2.1 GENERAL

Online Bid is invited for the Bid No. JMRC/O&S/RS/2023-24/NIB/007 towards "Supply with Installation and commissioning of Damper Testing Machine" by Jaipur Metro Rail Corporation Limited hereinafter called the 'Employer', for Goods/Services/Works in accordance with this Bid Package. The Bid consist of the following documents, along with their Tables, appendices, addenda, corrigenda and errata if any.

- (i) Notice Inviting Bid
- (ii) Instructions To Bidder (ITB)
- (iii) Special Conditions of Contract (SCC) and Scope of Work
- (iv) Formats forming part of technical bid
- (v) Financial Bid - Bill of Quantities

Bids shall be prepared and submitted in accordance with the instructions given herein. This bid is under RTPP Act 2012 & RTPP Rules, 2013.

### 2.2 BID DOCUMENTS

#### CONTENTS OF BID DOCUMENTS

The Bidder is expected to examine carefully all the contents of the Bid documents including instructions, conditions, forms, terms, specifications and take them fully into account before submitting his offer. Failure to comply with the requirements as detailed in these documents shall be at the Bidder's own risk. Bids, which are not responsive to the requirements of the Bid documents, will be rejected.

### 2.3 SUBMISSION OF BIDS

#### COST OF BID DOCUMENT AND BID SECURITY /EMD

1. The BID should be submitted in the prescribed Bid document, which may be purchased, cost of bid document as specified in NIB by Cash or DD/Banker Cheque drawn in favour of Jaipur Metro Rail Corporation Ltd., payable at Jaipur. The complete bid document can also be downloaded from the website <http://transport.rajasthan.gov.in/jmrc> or [www.sppp.rajasthan.gov.in](http://www.sppp.rajasthan.gov.in) or [www.eproc.rajasthan.gov.in](http://www.eproc.rajasthan.gov.in). In case the bid document is downloaded from website, the cost of bid document is to be submitted in the form of DD/Banker's Cheque along with the Bid document submitted. The cost of the Bid document is non-refundable.
2. EMD can be deposited in the form of Demand Draft/ Bankers Cheque of amount defined in NIB key details, drawn in favour of Jaipur Metro Rail Corporation Ltd., payable at Jaipur, shall form part of the bid.
3. Bid security shall be 2% of the estimated value of subject matter of procurement. In case of Small Scale Industries of Rajasthan it shall be 0.5% of the quantity offered for supply and in case of sick industries other than Small Scale Industries, whose cases are pending with Board of Industrial and Financial Reconstruction; it shall be 1% of the value of bid. (Please refer rule 42 of RTPPR i.e. Rajasthan Transparency in Public Procurement Rules, 2013. Proof of such exemption has to be submitted with the bid document.





4. The Bid Security of unsuccessful bidders shall be refunded soon after final acceptance of successful bid and submitting performance security.
5. The Bid Security taken from a bidder shall be forfeited, including the interest, if any, in the following cases, namely: -
  - a) When the bidder withdraws or modifies its bid after opening of bids;
  - b) When the Bidder fails to commence the supply of the goods or service or execute work as per supply/ work order within the time specified;
  - c) When the Bidder does not deposit the performance security within specified period after the supply/ work order is placed; and
  - d) If the Bidder breaches any provision of code of integrity, prescribed for bidders, specified in the bidding document.
6. Notice will be given to the Bidder with reasonable time before Bid Security (EMD) deposited is forfeited.
7. No interest shall be payable on the Bid Security (EMD).
8. In case of the successful Bidder, the amount of Bid Security may be adjusted in arriving at the amount of the Performance Security, or refunded if the successful Bidder furnishes the full amount of performance security.
9. The procuring entity shall promptly return the Bid Security of the participants Bidder after the earliest of the following events, namely: -
  - a) The expiry of validity of Bid Security;
  - b) Issue of LOA for procurement and performance security is furnished by the successful Bidder;
  - c) The cancellation of the procurement process; or
  - d) The withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.

## **2.4 DOCUMENTS COMPRISING THE BID**

### **2.4.1 BID PACKAGE**

**An online single- stage Single cover selection procedure shall be adopted. The Bid is in single part, viz. Techno-Financial Bid:**

- 2.4.1.1 TECHNICAL BID:** This Part should contain the Technical Bid consisting of a pdf copy of this Bid Document with each page digitally signed by the Bidder in acceptance of the terms and conditions therein, along with scanned copy of all the required documents, comprising the following:

#### **1. Bid cost, Bid Security/EMD and processing fee**

- a. These original Instruments should be submitted as per venue and date defined



- in NIB key details "**clause-q**" with forwarding letter mentioning the NIB No., Name of Work and particulars of these financial instruments.
- b. At the backside of every instrument, firm needs to mention Name of Firm, NIB No. and Mobile No. of authorized signatory of the firm.
  - c. Scanned copy of Bid cost, Bid Security/EMD and Processing Fee Instruments need to be submitted with the online Bid and these original instruments are to be submitted as per schedule.
  - d. If firm fails to submit the original instruments in the desired form and amount by the stipulated date and time then its Technical and Financial Bids shall not be opened and it shall be summarily rejected.
  - e. If scanned copy of or all of these instruments (i.e. Cost of Bid Form, Processing Fee and Bid Security/EMD) Submitted with Technical Bid does not match with the original instruments submitted by the firm then Technical and Financial Bids Submitted by the firm shall be liable for rejection.
2. **Notarized Form-A:** scanned copy of Notarized Form-A on non-judicial stamp paper of Rs. 100 need to be submitted with the online bid and original copy of Notarized Form-A on non-judicial stamp paper of Rs. 100 are to be submitted as per schedule before last date of submission physically as mentioned in "**clause-q**" of key details of NIB.
3. **Copy of the Bid Document** - The bidder shall enclose digitally signed and stamped, (lead member in case of Consortium) copy of the Bid Document except the Financial Bid (BOQ). Bids, digitally signed without any of the information desired in the prescribed formats will not be considered. Besides this all other associated / required documents shall be submitted duly numbered and digitally signed/ stamped by the bidders.
- Documents as listed below:
- a. Notice Inviting Bid
  - b. Instructions to Bidder
  - c. Special Conditions of Contract
  - d. Technical Specifications and Scope of Work
  - e. JMRC's General Conditions of Contract
- All such Annexure should be duly filled, signed & scanned (in pdf format) and digitally signed on each page and to be submitted online as part of technical bid.

**NOTE: PRICES SHALL BE INDICATED ONLY IN THE FINANCIAL BID. Price bid should NOT be indicated at any place in the Technical Bid, otherwise the Proposal shall be summarily rejected.**



#### 2.4.1.2 FINANCIAL BID – BILL OF QUANTITIES

1. The Financial Bid shall be submitted online through the prescribed website as per the instructions on the webpage therein. The prices shall be submitted online in the Financial Bid Format as per Sample Format clause-7 -Financial Bid (BILL OF QUANTITIES) of Bid enclosed.

These prices should include all costs associated with the contract

2. Utmost care is taken to upload Financial Bid. Any change in the format of Financial Bid file shall render it unfit for bidding. Following Steps may be followed in submission of Financial Bid:
  - a. Download format of financial bid in XLS format (Password protected file).
  - b. This XLS file is password protected file. Don't unprotect the file. Price has to be filled in this file and the same has to be uploaded.
  - c. Fill Bidder Name, Rates as per format of BOQ in down loaded Financial Bid format as specified (in XLS format only) in green back ground cells. Don't fill in any other back ground cells.
3. Save filled copy of downloaded financial bid file in your computer and remember its name & location for uploading correct file (duly filled in) when required.
  - a. Documents to be submitted by the bidder under bid package have been described under the respective Clause. This list of documents has been prepared mainly for the convenience of the bidder and any omission on the part of the Employer shall not absolve the bidder of his responsibility of going through the various clauses in the bid Documents including the specifications and to submit all the details specifically called for (or implied) in those clauses.

#### 2.4.2 SUBMISSION OF PROPOSAL

##### 2.4.2.1 PREPARATION FOR ONLINE SUBMISSION:

1. Online bids will have to be digitally signed and submitted in time on the website <http://eproc.rajasthan.gov.in>.
2. To participate in online bidding process, bidders must procure a Digital Signature Certificate as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, safe crypt, N code, etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC.
3. The bidder should get him registered on procurement portal (<https://eproc.rajasthan.gov.in>) and create users and assign roles on this portal. Further to this, bidder shall download Notice Inviting Bids (NIB) and copy of Bid Document from this site.



4. Deadline for Submission of Bids: - Bids shall be received online on website <http://eproc.rajasthan.gov.in> with uploading of all relevant documents not later than the time and date communicated by the department or extended date thereof.
5. The bids will be submitted online only at web site <http://eproc.rajasthan.gov.in>. In no case bid will be submitted physically.

**2.4.2.2 ON LINE SUBMISSION:-**

1. Bidder shall submit their bid in electronic format digitally signing the same. Bidder (authorized signatory) shall submit their offer on-line in Electronic formats both for Techno-financial Bid. The Technical Bid should also contain scanned copy of Financial Instruments (Cost of Bid Form, E-bid Processing Fee, Bid Security & Notarized Form-A on non-judicial stamp paper of Rs. 100). However, the original financial instrument for Cost of Bid Form, E-bid Processing Fee, Bid Security/EMD & Notarized Form-A on non-judicial stamp paper of Rs. 100 should be submitted in a sealed envelope physically/by post at the following address of JMRC by the scheduled date and time as per NIB.

**Office of Manager, Rolling Stock – Room no. S09,  
DCOS Building, Metro Train Depot,  
Mansarovar, Jaipur – 302020**

**Contact No.:- 7728895707, Email id: [mgrrs3@jaipurmetrorail.com](mailto:mgrrs3@jaipurmetrorail.com)**

2. All pages of the bid document and the addendums/amendments uploaded by the JMRC on the website <http://eproc.rajasthan.gov.in> shall be deemed to have been initialed and accepted by the persons signing the bid when they submit their electronic bid.
3. The documents listed in ITB along with the addenda uploaded till the date of bid submission, shall be filled by the bidder to bind the bidder to the contract. All the pages of the bid and documents shall be digitally signed.
4. The uploaded documents for technical-bid or bid fee or processing fee or any other document required for e-bidding cannot be changed after closing date of bid and same documents are to be produced in original physical form in the office whenever asked to do so.
5. Utmost care to be taken to name the files /documents to be uploaded on portal. There should not be any special character or space in the name of file, only underscores are permissible. All Bids in which any of the prescribed conditions are not fulfilled or which have been vitiated by errors in calculations, totaling or other discrepancies or which contain over-writing in figures or words or corrections not digitally initialed and dated, may be liable to rejection.
6. Bids sent telegraphically or through other means of transmission (Email, Tele-fax etc.), which cannot be delivered in a sealed envelope, shall be treated as defective, invalid and shall stand rejected.



7. The uploaded documents for e-bidding cannot be changed after closing date of bid and same documents are to be produced in original physical form in the office whenever asked to do so.

## **2.5 EVALUATION OF BID**

1. The bid will be opened online on website at the time and date as per schedule specified in the Notice Inviting Bid in the presence of Bidder's or their authorized representative's who may choose to be present at the time of bid opening, if the bidder wishes. Participating bidders can view and access the outcome of technical bid online also.
2. The bids shall be opened in one part both technical and financial bid will be opened at the same time and evaluated for the responsiveness of the bidders by the competent authority.

### **Preliminary Examination of Bids**

- a. The contents of the documents of the individual bids will be examined summarily in order to assess their formal conformity and agreement with the instructions and guidance to the Bidders and the completeness as per eligibility criteria and technical responsiveness. Any bid not conforming to any of these requirements may be disqualified forthwith at the discretion of Jaipur Metro Rail Corporation.
- b. **The ranking of L1, L2, L3 etc, will be done on basis of least Cost for overall items of financial BOQ.**

## **2.6 NEGOTIATION**

1. Except in case of procurement by method of single source procurement or procurement by competitive negotiations, to the extent possible, no negotiations shall be conducted after the pre-bid stage. All clarifications needed to be sought shall be sought in the pre-bid stage itself
2. Negotiations may, however, be undertaken only with the lowest or most advantageous bidder under the following circumstances-
  - a) When ring prices have been quoted by the bidders for the subject matter of procurement; or
  - b) When the rates quoted vary considerably and considered much higher than the prevailing market rates.
3. The bid evaluation committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.  
The lowest or most advantageous bidder shall be informed in writing either through messenger or by registered letter and email (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency the bid evaluation committee, after recording reasons, may reduce the time, provided the lowest or most advantageous bidder has received the intimation and consented to regarding holding of negotiations.
4. Negotiations shall not make the original offer made by the bidder inoperative. The bid evaluation committee shall have option to consider the original offer in case the bidder decides to increase rates originally quoted or imposes any new terms or conditions.  
In case of non-satisfactory achievement of rates from lowest or most advantageous bidder, the bid evaluation committee may choose to make a written counter offer to





the lowest or most advantageous bidder and if this is not accepted by him, the committee may decide to reject and re-invite bids or to make the same counter-offer first to the second lowest or most advantageous bidder, then to the third lowest or most advantageous bidder and soon in the order of their initial standing and work / supply order be awarded to the bidder who accepts the counter-offer. This procedure should be used in exceptional cases only.

In case the rates even after the negotiations are considered very high, fresh bids shall be invited.

## **2.7 AWARD OF CONTRACT & PERFORMANCE SECURITY DEPOSIT**

1. The Employer will award LOA/PO to the bidder, whose bid has been determined to be substantially responsive, technically & financially suitable, complete and in accordance with the bid documents.
2. The successful Bidder shall submit a Performance Security Deposit equal to 5 % of LOA/PO, in the form of Demand draft/FDR or Bank Guarantee from any scheduled bank in favour of Jaipur Metro Rail Corporation Ltd within 30 days from the date of issue of LOA/PO.
3. The Bank Guarantee has to be from a Scheduled Bank based in India and the Form of Performance Security provided in this Volume shall be used.
4. The Performance Bank Guarantee (Security Deposit) should remain valid for a minimum period of 60 days beyond the date of completion of warranty and all contractual obligations of Agency.
5. If the Bidder fails to deposit the required Performance Security Deposit, such failure will be treated as a breach of the terms and conditions of the bid and will result in forfeiture of the Earnest Money/Bid Security, in part, or in full at the discretion of the Procuring Entity. This failure shall also result in cancellation of bid.
6. Performance Security will be returned after completion of all contractual obligations of the Bidder.
7. No interest shall be payable on the Performance Security Deposit.

## **2.8 Additional Performance Security:-**

- a. In addition to Performance Security as specified in rule 75, an Additional Performance Security shall also be taken from the successful bidder in case of unbalanced bid. The Additional Performance Security shall be equal to fifty percent of Unbalanced Bid Amount. The Additional Performance Security shall be deposited in lump sum by the successful bidder before execution of Agreement. The Additional Performance Security shall be deposited through e-Grass, Demand Draft, Banker's Cheque, Government Securities or Bank Guarantee.

Explanation: For the purpose of this rule,-

- i. Unbalanced Bid means any bid below more than fifteen percent of Estimated Bid Value.
  - ii. Estimated Bid Value means value of subject matter of procurement mention in bidding documents by the Procuring Entity.
  - iii. Unbalanced Bid Amount means positive difference of eighty five percent of Estimated Bid Value minus Bid Amount Quoted by the bidder.
- b. The Additional Performance Security shall be refunded to the contractor after satisfactory completion of the entire work. The Additional Performance Security shall be forfeited by the Procuring Entity when work is not completed within stipulated



period by the contractor. Provision for 'Unbalanced Bid' and 'Additional Performance Security' shall be mentioned in the Bidding Documents by the Procuring Entity."

## **2.9 SIGNING OF AGREEMENT**

1. The successful bidder shall prepare the Agreement on non-judicial stamp as per stamp act, in the Performa, included in this Document, duly incorporating all the terms of agreement between the two parties. Within 30 days from the date of issue of the letter of acceptance, the successful bidder will be required to execute the Contract Agreement. One copy of the Agreement duly signed by the Employer and the contractor through their authorized signatories will be supplied by the Employer to the Contractor. The stamp duty of agreement will be born by the successful bidder.
2. Prior to signing of the Contract Agreement, the successful bidder shall submit the following documents within a period of 30 days from the date of issue of the Letter of Acceptance:
  - a. Performance Security (Performance Guarantee)
  - b. Detailed Consortium or Joint Venture Agreement (duly signed and executed) Incorporating (if applicable):
    - i. Percentage Participation of each member/partner.
    - ii. Joint and several liability of the partners

## **3 GENERAL CONDITIONS OF CONTRACT**

### **3.1 GENERAL Terms & Conditions**

#### **3.1.1 Contract Documents:**

Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.

#### **3.1.2 Scope of Supply**

Subject to the provisions in the bidding document and contract, the execution of complete scope of work shall be executed as specified in the purchase order/LOA which will be issued by JMRC to the successful bidder.

#### **3.1.3 Delivery**

- i. Subject to the conditions of the contract, materials should be delivered within time as mentioned in NIB.
- ii. If national holiday is being declared on bid due date then bid will be opened on next suitable working day.
- iii. The above material shall be delivered at Custody Store section, Room no. D20, Workshop Building, Train Maintenance Depot Mansarovar, Near - Ganga Jamuna Petrol Pump, Mansarovar -Jaipur-302020.
- iv. The Contractor shall arrange supplies within the stipulated time period mentioned in NIB.



- v. The firm will ensure the delivery of item within specified time limit failing which action will be taken under the penalty clause.

#### **3.1.4 Inspection**

The item may be inspected by nominated JMRC staff. During and after installation & commissioning, Inspection will be carried out at JMRC premises. Final inspection of the item will be done after installation and commissioning at the JMRC premises and joint inspection report will be prepared.

#### **3.1.5 Termination**

1. Termination for Default The Bid sanctioning authority of JMRC may, without prejudice to any other remedy for breach of contract, by a written notice of default of at least 30 days sent to the supplier/ Contractor, terminate the contract in whole or in part: -
  - a. If the supplier/ Contractor fails to deliver any or all quantities of the service within the time period specified in the contract, or any extension thereof granted by JMRC; or
  - b. If the supplier/ Contractor fails to perform any other obligation under the contract within the specified period of delivery of service or any extension granted thereof; or
  - c. If the supplier/ Contractor, in the judgment of the Purchaser, is found to be engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the contract.
  - d. If the supplier/ Contractor commits breach of any condition of the contract.
2. If JMRC terminates the contract in whole or in part, amount of Performance Security Deposit may be forfeited.
3. Before cancelling a contract and taking further action, advice of senior most finance person available in the office and of legal adviser or legal assistant posted in the office, if there is one, may be obtained.

**Note:** In addition to the conditions specified above, the approved GCC are applicable and available on the JMRC website. The successful bidder shall submit a declaration for acceptance of the terms and conditions mentioned the GCC.

#### **3.1.6 Warranty:**

12 months from the date of Commissioning or 18 Months from the date of supply whichever is earlier for any material/ manufacturing defects and scheduled & unscheduled maintenance by the contractor during the warranty period.



### **3.1.7 Price Fall Clause:**

1. The prices under a rate contract shall be subject to price fall clause. A clause regarding price fall shall be incorporated in the terms and conditions of rate contract. Price fall clause is a price safety mechanism in rate contracts and it provides that if the rate contract holder quotes / reduces its price to render similar goods, works or services at a price lower than the rate contract price to anyone in the State at anytime during the currency of the rate contract, the rate contract price shall be automatically reduced with effect from the date of reducing or quoting lower price, for all delivery of the subject matter of procurement under that rate contract and the rate contract shall be amended accordingly.
2. The firms holding parallel rate contracts shall also be given opportunity to reduce their price by notifying them the reduced price giving those fifteen days time to intimate their acceptance to the revised price. Similarly, if a parallel rate contract holding firm reduces its price during currency of the rate contract, its reduced price shall be conveyed to other parallel rate contract holding firms and the original rate contract holding firm for corresponding reduction in their prices. If any rate contract holding firm does not agree to the reduced price, further transaction with it, shall not be conducted.

## **4 SPECIAL TERMS AND CONDITIONS OF BID & CONTRACT**

### **4.1 Bidders to Bid for all Items**

- 4.1.1 Bidder must quote for all the items mentioned in the BOQ (Bill of Quantities). In case, a Bidder does not quote for any item, the bid shall be summarily rejected.

### **4.2 Payment Terms and Penalty**

- 4.2.1 If material not supplied within contract period as mentioned in NIB, then contractor shall be held responsible for liquidated damages. The liquidated damages is compensation of loss on account of late delivery (actually incurred as well as notional) where loss is pre-estimated and mutually agreed to procuring entity may recover from the contractor, as agreed, the liquidated damages a sum equivalent to 0.5(one half) percent of the prices of any portion of stores delivered late, for each week or part thereof of delay. The total damages shall not exceed 10(Ten) percent of the value of delayed goods. However decision of procuring entity shall be final in this regard. The offer shall be unconditional and duly signed.
- 4.2.2 Advance Payment will not be made by JMRC.
- 4.2.3 Due payments will be made promptly, after submission of an invoice or request for payment by the supplier/ Contractor, and the purchaser has accepted it.
- 4.2.4 The currency or currencies in which payments shall be made to the supplier/ Contractor under this Contract shall be Indian Rupees (INR) only.
- 4.2.5 All remittance charges will be borne by the supplier/ Contractor.
- 4.2.6 Payment of the work executed shall be made only when the work completed as specified in this bid, and the work is found to be satisfactory and accepted by the inspecting authority.





#### 4.3 Other Special Terms

- 4.3.1 Bidders are advised to carry out extensive survey and site visit and analysis at their own cost, before submitting the bid as per JMRC extent procedures and permission.
- 4.3.2 Accidents - It shall be the entire responsibility of the contractor to adopt all the safety measures in deploying personnel who are adequately trained in safety. If any accident occurs due to negligence on the part of the contractor's personnel, it shall be the full responsibility of the contractor.
- 4.3.3 Contractor shall be responsible for insurance and safety of the labor involved in executing the scope of work of this BID.
- 4.3.4 The contractor shall make sure that no harm or damage is made to JMRC property and assets while executing the scope of work of this BID. The performance security/payment shall be forfeited or shall be refunded/ made only after making the adjustments for any such damage made by the contractor and his staff.

#### 4.4 Variation

- 4.4.1 Procuring entity has the right to vary the quantity/period as per RTPPR-2013
- 4.4.2 If the procuring entity does not procure any subject matter of procurement or procures less than the quantity specified in the bidding documents due to change in circumstances, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding documents.
- 4.4.3 Repeat orders for extra items or additional quantities may be placed, on the rates and conditions given in the contract. Delivery or completion period may also be proportionately increased. The limits of repeat order shall be as under-
  - (a) 50% of the quantity of the individual items and 50% of the value of original contract in case of works; and
  - (b) 50% of the value of goods or services of the original contract.

### 5 SCOPE OF WORK:

#### **PARTICULAR SPECIFICATION OF DAMPER TESTING MACHINE**

##### 5.1 General Description of the Works

- 5.1.1 The Works shall comprise **(but not limited to)** the design, manufacture, supply, installation, testing, and commissioning of Damper Testing machine at Depot cum Workshop of Jaipur Metro Rail Corporation. The machine shall be tooled up for different operations and complete with all accessories to make it fully functional.
- 5.1.2 The machine shall be capable of testing the dampers at inclined position at various angles from 0-90 degree. The supply shall include all equipment and accessories even if not particularly mentioned, but are considered necessary to achieve installation and specified operating condition.
- 5.1.3 Civil & E&M Work required for installation of Machine (if required), the supplier shall perform such kind of work at site.





## 5.2 Purpose and capability

- 5.2.1 The machine as per Annexure-I parameter shall be capable of testing various types of shock absorbers used in JMRC, particulars as given in Annexure-II respectively for performance and compression in accordance with test procedure.
- 5.2.2 The dampers shall be used with or without adapter/attachments/auxiliary tools as required for fixing of damper.
- 5.2.3 Testing a damper means testing the damping forces at certain bump and rebound speeds of the damper. The machine shall be capable of checking load-damping characteristics in tension as well as compression. The correlation between force and displacement shall be represented in a force-stroke diagram.
- 5.2.4 The machine shall provide an output force in tension and compression that is directly proportional to the relative velocity between the two ends of the dampers. The diagram which enable to determine whether the damper is still working within its specifications or corrective actions are required.
- 5.2.5 The machine shall be capable of working in a non-air conditional normal workshop environment with an ambient temperature up to 55 deg. and relative humidity up to 95%.
- 5.2.6 The machine should be operated through computer, with duly interfaced drive system which should be hydraulic and should have print out facility. The computer shall be capable of recording the test data and shall be able to produce capacity diagrams for tension and Compression of shock absorbers as detailed under clause 5.8.
- 5.2.7 The machine shall be **capable of testing five no. of shock absorbers in one hour** including mounting and dismounting time of shock absorber.
- 5.2.8 The machines shall be capable of holding all types of shock absorbers indicated in Annexure-II.

## 5.3 GENERAL DESIGN REQUIREMENTS

- 5.3.1 The following general requirements on equipment design shall apply to all equipment.
- 5.3.2 Equipment shall be designed for a 25-year design life of heavy-duty workshop use with an aggregate of 16 hours per day, 7 days per Week and 52 weeks per year.
- 5.3.3 Equipment that requires an electricity supply shall be compatible with the system voltage 360 to 440V, TPN, frequency from 47.5 to 51.5 Hz.
- 5.3.4 The equipment shall be designed and/or selected to allow operation without over stressing, damaging or interfering in any way whatsoever with other equipment in the Depot.
- 5.3.5 The Contractor shall, to the extent that he is responsible for the design or component selections of equipment items recognize and Implement all safety requirements and ensure that the design and performance of the equipment are compatible with the safety Standards of the Project.
- 5.3.6 Equipment shall be "fail-safe" and "overload protected". The equipment shall incorporate all necessary safety devices to protect the equipment, operators, buildings and all other people and things in the vicinity of the equipment. No



failure of the equipment shall cause or give rise to any damage or catastrophe of any nature whatsoever.

- 5.3.7 Equipment design shall take into consideration fire protection, elimination of dust and dirt by means of suitable traps or the like, minimum maintenance requirements and ease of access for cleaning, routine maintenance and general disassembly.
- 5.3.8 Guards/Grids shall be fitted to all exposed moving parts of the Equipment where the environment and working processes of the system dictate that there is a foreseeable risk of injury or causing ill health to personnel from source such as moving parts, electricity, coolant, noise and vibration, dust and fumes, etc.
- 5.3.9 Moving parts of the equipment shall be efficiently lubricated to ensure quiet operation as well as durable and reliable service life. Lubrication points shall be clearly identified for easy replenishment with minimum removal of other equipment components.
- 5.3.10 The environment within which the equipment is to operate shall be taken into consideration in the equipment design.

#### 5.4 DESCRIPTION AND SCOPE OF SUPPLY

- 5.4.1 **Description :** The specification covers supply and commissioning of a computer controlled **servo hydraulically operated** shock absorber testing machine for testing various types of shock absorbers used in JMRC. Detail may be provided in the bid. Leading parameters of the machine shall conform to Annexure-1.
- 5.4.2 **Scope of supply:** The scope of supply shall include all equipment and concomitant accessories as detailed in this specification and any other equipment, which is essential to make the machine fully operational when installed and connected to power source.

#### 5.5 Concomitant Accessories

- 5.5.1 The scope of supply shall include all concomitant accessories required to make the machine fully functional on installation. Cost of such accessories shall be included in the basic price of the machine.

i.	First fill of oils and lubricants for initial commissioning (Quantity of each shall be indicated in the bid)	01 set
ii.	Fasteners for installation of the machine (Quantity of each shall be indicated in the bid)	01 set
iii.	Operation and maintenance tools (List of tools to be furnished in the bid)	01 set
iv.	Fixtures/adaptor and Toolings for testing shock absorbers used on JMRC	02 sets
v.	Data analyzer of latest configuration as per clause 5.8	01 set
vi.	Electric cable to connect the machine with mains (Rate per meter beyond this is indicated separately.)	10 meter



vii.	Proving rings (cap. 3T) certified by NPL (National Physical Laboratory)/ or international recognized laboratory	01 no.
viii	Transducers as per clause 5.8.5	01 set
ix	One set of service tools and special tools	01 set
x	Interface for remote maintenance via user's interface	01 set
xi	DRO for indication of load, velocity and stroke travel	01 set
xii	Computer, peripherals and software as per clause 5.8 and 5.9	01 set

5.5.2 Any other accessory besides those given above which in the opinion of the bidder is essential to make the machine fully operational when installed and connected to power source shall be quoted separately as concomitant accessory. Cost of such accessories shall be indicated separately in the offer for the information of the purchaser.

## 5.6 BASIC DESIGN FEATURES

### 5.6.1 General Characteristics

The general characteristics of the machine shall be as per Annexure-I.

### 5.6.2 Specific Characteristics Machine Structure

The machine shall be robust and of sturdy construction. The main body of the machine shall either be C-frame shape to provide accessibility from front and sides or could be a freestanding load frame with two long vertical columns. The crosshead with two hydraulic locking jacks, slides over these column that could be clamped anywhere over the entire length. Crosshead shall be capable of being lowered or raised with long travel.

5.6.3 The machine frame shall be a rigid and robust, stress relieved, malleable cast iron casting conforming to IS: 14329-2000 (or latest) or fabricated steel conforming to IS: 2062, grade - B or equivalent international standard duly stress relieved structure capable of withstanding 1.5 times the normal developed force.

5.6.4 The machine shall be provided with a load cell. The structure of load cell shall be such that it can be loaded both in tension and compression for testing the various types of shock absorbers as indicated at (Annexure-II). The load cell shall be of dynamic type capable of measuring loads in dynamic condition. The detailed catalogue and technical details of the load cell shall be included with the bid. The load cell shall have overload capability of 150% with resolution of 1 Kg.

5.6.5 The shock absorbers are to be mounted between the upper end of the connecting link and the outer end of the rocker arm sub-assembly through appropriate fixtures. Arrangement provided in the machine for mounting and demounting of shock absorbers as indicated at Annexure -II shall be explained in the bid **with a schematic diagram.**

- 5.6.6 Height of the working platform shall not be more than 900mm from the floor level. If not, contractor shall provide necessary platform to maintain height of the working platform up to 900 mm from the pedestal.

#### **5.7 Drive System**

- 5.7.1 The main drive shall be through squirrel cage motor/DC motor with gear or vane pump. Details of the drive system shall be furnished in the bid. Motor of Siemens/NGEF/Crompton/Kirloskar/ABB and pumps of Vickers and Yuken makes only would be accepted.
- 5.7.2 Suitable arrangement shall be provided to protect the drive elements against shock loading during operation of the machine.

#### **5.8 Recording System**

- 5.8.1 A computer based recording system should be provided for recording the test results through a RS-232 port or any other suitable port. The system shall be capable of recording various parameters like time, load applied during extension & compression, stroke length, displacement and various test velocities. The machine shall also be capable of printing the test results, which can also be seen after the completion of the test on the monitor and for comparison with predefined values (design parameters) with specified tolerances to ascertain the suitability of the shock absorber as per drawings enclosed.
- 5.8.2 It should be able to give the graph of velocity versus damping force and be able to compare the values to the permitted values and ascertain whether the values are within tolerance limits. The velocity shall be variable firstly by varying the stroke and keeping the frequency constant at 1.67 hz, and then by keeping the stroke constant and varying the frequency, in accordance with clause 5.18. The system shall also have provision to program the velocity directly. The machine must have facility of recording ambient temperature while testing. It must be able to show the results with temperature compensation if required. The details of this feature must be adequately explained in the bid.
- 5.8.3 Recording system shall be provided for indicating dynamic load against varying piston speeds. Details of the recording system shall be furnished in the Bid along with sources of supply for the consumables. The recording system shall be capable of recording dynamic load as per Annexure-I and speed from 0 to 100 cm/sec.
- 5.8.4 The transducers used shall be of reputed make. The makes offered along with accuracies and range shall be given in the offer. Linear variable displacement transducers shall be in built with panel and shall have capability of 200mm with 20mm buffer stroke on each side for Annexure-I. Minimum resolution and least count of LVDT should be 0.1 mm.



- 5.8.5 Data recorded shall be date and time stamped. Data files shall be convertible to Excel files format automatically after the completion of test cycle.
- 5.8.6 Login id for Admin and User shall be made separate. Only Admin shall have authorization for editing the program. User login id shall only have access to that program. The output report can be changed by supervisor. The creation of programs shall be included in the training provided for the user.
- 5.8.7 The computer based recording system shall comprise of the following or better for static and dynamic testing. The machine CNC shall be PC based and shall offer all PC interface like LAN/ WAN connectivity and shall have ample storage capacity to store damper testing data.

It shall be compatible with standard software, suitable for remote diagnostic. Multimedia PC with extreme performance wide screen notebook, mobile technology, i5 processor, 500GB HDD/SDD, 4GB RAM, 6 USB Port. The computer system should be of COMPAQ/HP/ IBM/sony/dell make only. The configuration should be as specified here or **better** as per the latest available at the time of supply.

102-key keyboard and 19" LCD Screen

Windows latest version

1000 VA UPS of Elnova/Bluebird/APC/Elent/Logicstat or equivalent with **1hour** back up time.

**Laser printer** of HP make model No.3030 or better as per the latest available at the time of supply.

## 5.9 Software

- 5.9.1 The system shall have following testing software features:
  - Set up of the test with a special user interface for direct entering of the test stroke, the test velocity and the number of cycles in a simple table.
  - Store and reload of defined test procedures
  - Evaluation of damper hysteresis with several velocity
  - Evaluation of force and velocity curve to shows the nominal gage of hysteresis in the shock absorber.
  - Evaluation of work for each velocity step
  - Prints of the protocols
- 5.9.2 Printout of test result including all the service information can be made and also recorded in the PC for future purpose. The history file of formerly tested damper can be reused in order to keep track record of the damper.
- 5.9.3 The application software being supplied should be capable of recording all the parameters and analyzing the same as stated under clause 5.8. The analyzed information shall be stored in the PC, to be printed either simultaneously or at a later date.
- 5.9.4 The application software should also be capable of generating the test results like number of cycle adjustable (idle/acting) cycles, each shock absorber provided with a unique S. No. input etc. Detailed write-up on the features of the offered software package should be submitted with the offer.
- 5.9.5 There shall be a drop down menu in the display panel to the testing cycle of different type of dampers. When the damper type is chosen in the menu, the





software will automatically select the appropriate test cycle. This test cycle shall consist of range in-and-outward movements at various speeds.

- 5.9.6 The system automatically generates the test results from the measurements and specified tolerance bands. This will eliminates interpretation mistakes of the test results. Pass/Fail indication shall be display in the test report.
- 5.9.7 At each individual speed the system will compare the test result with the defined tolerance band, and shall provide one of the following indications; OK, LOW or HIGH.
- 5.9.8 Finally the monitor will show the resulting test diagram for the complete test cycle and include an overall Good or Fail indication. The diagram shall be detailed to show small characteristic shape deviations to display. This diagram can be printed or saved for later reference.
- 5.9.9 The system shall be simple and flexible configured. The software with its intuitive graphical user interface shall easy to learn and to operate. A few mouse clicks are enough to configure and start simple or complex test sequences. Before the test procedure starts the following data shall be displayed to feed into the system.
- Damper Type, serial number and Test date
  - Rpm, Stroke, Testing speed
  - Force scale, Kilometer run and Car no.
- 5.9.10 A licensed copy of application software along with all documents shall be preloaded on the system. The application software should be of WINDOWS based and shall be capable of operating under XP (Professional)/vista or latest.
- 5.9.11 Detail functioning of the following controller cards with input & output signal shall be provided:
- a) Load signal conditioning card,
  - b) Displacement sensor signal conditioning card,
  - c) PID controller card,
  - d) Wave generator card,
  - e) Power supply card

#### 5.10 Fixtures

- 5.10.1 Fixtures shall be required to mount shock absorbers with thread type and eye type end mountings on the machine. Details of fixtures offered for types of shock absorbers as indicated at Annexure-II shall be furnished in the bid with drawings. Material specification of fixtures shall be indicated in the bid.

#### 5.11 Lubrication System

- 5.11.1 A suitable lubrication system preferably an automatic lubrication system shall be provided for ensuring requisite lubrication in the machine. The lubrication system shall be explained in the bid with a lubricating diagram.
- 5.11.2 Grade of suitable lubricant shall be indicated in the bid. Equivalent grades and their availability in India shall also be indicated.



#### 5.12 Electricals and Controls

- 5.12.1 All operational controls shall be provided at a centralized control panel, which is ergonomically designed. Details of controls provided shall be furnished in the bid.
- 5.12.2 The controls of the movement of the ram through the computer with respect to the signal input on feed back basis either from load coil or displacement sensor.
- 5.12.3 Special care should be adhered in designing for mounting of electrical panel to prevent vibration on panel.
- 5.12.4 Cubicle fan for cooling shall be provided in pump motor starter assembly cabinet and in electronics cabinet also.
- 5.12.5 Electrical wires shall be numbered properly and same shall be incorporated in the maintenance manual.
- 5.12.6 Sleeve shall be provided on cables.

#### 5.13 Calibration

- 5.13.1 The machine shall be provided with the facility of calibration of machine with the help of load cell and proving ring supplied as a concomitant accessory. The arrangement provided for calibration shall be explained in the bid with a schematic diagram.
- 5.13.2 Any alternative arrangement other than specified shall also be acceptable on superiority basis. Details of offered arrangement shall be clearly explained in the offer with help of diagram.
- 5.13.3 Procedure for damper testing & load cell calibration shall be provided with pictorial view.

#### 5.14 Safety Features

- 5.14.1 The machine design shall ensure safety of the operator and the machine at all times including accidental slipping/damage of the damper under test. Details of safety features provided in the machine shall be furnished in the bid.
- 5.14.2 To eliminate the possibility of injury to operator due to breaking/slipping of damper under testing, suitable safety door/guards/grids shall be provided and interlocked with ram movement.
- 5.14.3 An emergency stop shall be provided at operator panel.
- 5.14.4 A tilting angle indicator shall be provided for testing at various angle position of damper.
- 5.14.5 The machine shall also be provided with the following indicators:
  - a) Machine working lamp indicator,
  - b) Oil temperature indicator,
  - c) Overload indicator,
  - d) Single phase indicator,
  - e) Safety door open indicator,
  - f) Machine working hour indicator



### 5.15 Hydraulic System

- 5.15.1 A gear or vane pump shall be provided for the high-pressure oil circuit. Type and model number of pump shall be indicated in the bid. Only Rexroth/Vickers make pumps shall be accepted. Model number of each hydraulic element shall be indicated in the bid only. Rexroth/Vickers/Peary make of elements shall be acceptable. The minimum working pressure shall be 170 Kg/cm<sup>2</sup>.
- 5.15.2 The hydraulic system shall be provided with suitable air breather, oil gauges, and overflow, dust protection and drainage connections.
- 5.15.3 Filter of 10 micron ( $\mu$ ) shall be provided in the pressure line and 25 micron provided in return line. Type, make and model number of each filter element shall be indicated in the bid. If reusable filters are provided, the procedure and periodicity of cleaning shall be indicated in the bid.
- 5.15.4 Bypass valves shall be provided to operate in case of clogged filters. The bidder shall clearly mention the percentage of clogging after which the bypass valve shall operate. A clogging indicator shall be provided to indicate clogged filters. Details of the clogging filters shall be furnished in the bid.
- 5.15.5 Hydraulic pipes shall be corrosion resistant and made out of cold drawn/seamless tubes capable of withstanding high working pressure. The type and make of hydraulic pipes shall be furnished in the bid.
- 5.15.6 The hydraulic system shall be capable of performing efficiently in the ambient temperature range which may vary from 0° C to 50° C. A forced air-cooled heat exchanger shall be provided for cooling of hydraulic oil. Temperature controller should be provided to prevent heating of hydraulic oil beyond 60° C, with an arrangement to cool the oil if oil temperature exceeds 60° C. The manufacturer should guarantee satisfactory performance of the hydraulic system. The bidder should explain in detail the hydraulic system and its cooling system, giving supporting literature and drawing/diagrams.
- 5.15.7 The hydraulic fluid used in the hydraulic system should be non-corrosive, stable and safe for the operator. Technical details of the hydraulic fluid should be furnished in the bid along with equivalent brands of the same available in India.
- 5.15.8 A hydraulic circuit diagram giving full details about pipe sizes, working pressure, peak pressure, type, makes and model number of the pumps and hydraulic elements should also be furnished in the bid. The hydraulic circuit diagram should be properly labeled clearly bringing out the various elements used.
- 5.15.9 Glycerin filled calibrated pressure gauges should be provided at all places where pressure is to be set or indicated. The bidder shall provide the make, capacity and the least count of the gauges being provided for the same.
- 5.15.10 Safety valve for every hydraulic circuit shall be provided to cater to the need of pressure relief valve failures during service.
- 5.15.11 Anti vibration pad shall be provided under hydraulic tank.



#### 5.16 TECHNICAL LITERATURE:

- 5.16.1 One copy of the printed illustrative catalogue showing features of the machine and its elements must be enclosed with each copy of the bid.
- 5.16.2 The successful bidder shall furnish for each machine 2 copies of spare parts catalogue giving the part list number of each component with exploded views and assembly drawings. Maintenance manual, trouble-shooting guide, operational manual of the machine and all electrical circuit diagrams including PCB circuits to the consignee directly. The bidder shall furnish a list of documents to be supplied with the machine. The technical literature shall be provided for the complete machine including imported and indigenous components/sub-assemblies.
- 5.16.3 Latest and revised manuals including hydraulic and electrical diagrams shall be provided.
- 5.16.4 Illustrated part catalogue (list) & maintenance manual needs to be provided (mechanical & electrical both).
- 5.16.5 The successful tenderer shall furnish a list of other bough out items/sub assemblies/assemblies/concomitant accessories/spares, which are proposed to be fitted in the machine/equipment to be supplied. The list should specifically mention sources of procurement indicating the country of origin, along with the manufacturer's name, brand and model as per Performa of Annexure IV.
- 5.16.6 All operating and maintenance manuals of Machine required for operation, maintenance and troubleshooting must be provided in hard copy(2 numbers) and soft copy.

#### 5.17 Tests

- 5.17.1 Tests for shock absorbers for overall force-velocity characteristics shall be carried out as per details given in drawings enclosed. However the tests should be possible to be done on other types of dampers fulfilling the leading parameters given in Annexure-I.
- 5.17.2 There shall be two categories of characteristic tests for shock absorbers as follows.

#### 5.18 Comprehensive test:

The tests shall be carried out at different test velocities varying from 20 mm/ sec onwards to maximum velocity of the shock absorber (as specified by the manufacturer) in steps of 40 mm/ sec and damping forces for both compression and tension strokes recorded.

**Tension / compression value in the software profile to be indicated in Newton. Upper / lower value to be indicated as compression / tension value respectively.**

Variation in velocity shall be achieved in following two manners and recording done separately for both the cases:-

- by varying frequencies at a constant stroke of 19 mm.
- by varying strokes at a constant frequency of 1.67 Hz.

  
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**5.19 Check Tests:-**

The test shall be carried out at test velocity of 100 mm/sec. with frequency and strokes being 1.57 Hz and 19 mm respectively.

Damper testing machine shall fulfill all criteria as mentioned in test procedure of

RS08 manual. Test procedure is attached as Annexure-V.

**5.20 TRAINING**

5.20.1 The training of competent JMRC rolling stock staff about operation and maintenance of Damper testing Machine should be given in both theoretical and practical demonstrations (minimum 2 man-days i.e. minimum two manpower in one day),

**5.21 INSTALLATION, COMMISSIONING AND PROVING TESTS**

**5.21.1 Joint Check**

The contractor or his agent would be required to carry out a joint check at the consignee's end, along with the consignee, before unpacking is done, to avoid subsequent complaints regarding short shipment/transit damages. It is necessary that this joint inspection be done immediately on receipt of the machine by consignee to avoid commissioning delays due to shortages/transit damages.

5.21.2 The consignee shall be responsible for:

- a. Provision of a clear covered site for installation and space for storage of material/equipment of machine as per the schedule given by the supplier to ensure its readiness before arrival of machine at site.
- b. Unloading of the machine on receipt and its movement to the site of installation
- c. Electricity, water and compressed air, free of cost.
- d. In case a road mobile crane has to be arranged by the supplier for material handling, a clear approach for it up to the site has to be provided.

5.21.3 The supplier shall be responsible for:

The bidder shall offer complete installation and commissioning of the machine on a turnkey basis. The turnkey offer shall include the following activities:

5.21.4 The bidder shall install and commission the machine on anti vibration mounts of suitable size and capacity.

5.21.5 **Cabling from mains to machine control panel (up to 10 meters)** as well as within the machine, with supply of all materials shall be carried out by the bidder. He shall separately quote a rate per meter for extra cabling if required at site which will not be included in the evaluation but will be paid after certification from consignee.

5.21.6 Provision of all tools and equipment, technical and unskilled manpower, **material handling equipment** and material for installation and commissioning.

5.21.7 Advise consignee in time regarding schedule for requirement of clear site for installation and commissioning of machine.

5.21.8 Any other resources / facilities required may be spelt out in the offer.

5.21.9 The supplier shall demonstrate machine performance and prove out the claimed capability for successful commissioning at the consignee's works as





given in clause 2 for a period of four 8 hour shift. After such successful demonstration as herein before the consignee shall take over and watch the machine **performance for a period of one month**, before the final proving test certificate is issued.

- 5.21.10 The machine shall be deemed to be "Commissioned" at consignee premises on the date when it is tested and meets with the specified capabilities/functions according to this technical specifications and Annexure-I parameters.
- 5.21.11 If an assembly/sub-assembly requires to be taken back to the manufacturer's premises for repair/replacement either before commissioning or during warranty, the manufacturer or his agent would be required to submit an indemnity bond. In case the entire machine has to be taken back, a Bank Guarantee would have to be submitted. The indemnity bond/bank guarantee should be of adequate value so as to cover the cost of the assembly/subassembly/paid up cost of the machine.

## 5.22 FINISH

### 5.22.1 Painting

External surfaces: brushing, degreasing or sand blasting and blowing.  
Anti-corrosion treatment: application of a coat of anticorrosion paint.  
Hollow parts: the internal parts shall be treated prior to assembly.  
Metal parts in the equipment shall be coated with non-polluting of epoxy PU paint. The second coat shall be applied over the first coat when it is still wet.  
The contractor shall touch up at site any paint as may be necessary.

### 5.22.2 Unpainted parts

All rubbing parts or those to remain polished shall be covered with a coating designed to protect them from oxidation until such time as the equipment enters the service.

### 5.22.3 Identification

**Weight of loading frame & power pack to be mentioned / stamped on the machine.**

The equipment shall be delivered with an identification plate giving:

- The manufacture's name,
- The year of manufacture,
- Description and type of the supply,
- Gross weight of the machine

### 5.22.4 MAINTENANCE

The damper testing machine shall be maintained for the scheduled and unscheduled maintenance by the successful tenderer during the defect liability period (warranty period) from the date successful commissioning of damper testing machine to the employer.



5.22.5 **ANNEXURE- I**

S.No.	LEADING PARAMETERS	
<b>1</b>	<b>MAJOR PARAMETERS</b>	
<b>1.1</b>	Max. permissible damping force (in compression and tension)	20 KN or more
<b>1.2</b>	Capacity of the load cell	3T or more
<b>1.3</b>	Testing stroke length infinitely variable	0-200mm or more
<b>2</b>	<b>OTHER PARAMETERS:</b>	
<b>2.1</b>	Max. length of shock absorber to be tested	1000 mm or above
<b>2.2</b>	No. of strokes per minute	0-200 (infinitely variable)
<b>2.3</b>	Test velocity	0-40 cm/sec (infinitely variable)
<b>2.4</b>	Power supply	415V $\pm$ 0%, 50Hz. $\pm$ 3%
<b>2.5</b>	Noise without damper	72dbA at 1.2m distance
<b>Accuracy of parameter to be measured by data acquisition system</b>		
<b>a</b>	No. of strokes/min.	1
<b>b</b>	Displacement	0.1 mm
<b>c</b>	Load	1 Kgf
<b>d</b>	Temperature	1 °C

**Note:** (a) For details of types of shock absorbers in use on JMRC please see the attached Annexure-II & drawing.

(b) The bidder shall provide information as per Annexure-III



5.22.6 **ANNEXURE- II**


**VARIOUS TYPES OF SHOCK ABSORBERS WHICH ARE TO BE TESTED**

S. No.	Type of Shock Absorber	Capacity		Length			Testing Stroke	Drawing No. (Enclosed)
		Tension	Comp.	Comp. (mm)	Nominal (mm)	Extended (mm)		
1	SACH-T50/20X170 SV-401300001216	7000±1050N	7000±1050N	439±3	535±5	609±3	±50	555-83027
2	SACH-T50/20X142H 401300001217	4500±675	4500±675	318±3	380±5	443±3	±50	555-82009
3	ESCORTS-T50/20X170	7000±1050N	7000±1050N	439±3		609±3	±50	1D109020001
4	ESCORTS-T50/20X125H	4500±670	4500±670	318±3		443±3	±50	1D109030001

5.22.7 **ANNEXURE- III**

**The following information shall also be furnished in the bid:**

- a. Motor power
  - b. Overall dimensions
  - c. Weight
  - d. Minimum length of shock absorber held
  - e. Facilities required:
- 
- i) **Space and foundation:**
    1. Floor area
    2. Clear height above floor level
    3. Foundation required: Yes/No (if no, then type of flooring required at site)
    4. Foundation on turn key: Yes/No
    5. Constraints, if any of proximity to vibrating machines and/or electrical/radio frequency.
  - ii) **Electricity:**
    1. Total load
    2. Maximum current
    3. Continuous rating
    4. Starting current
    5. Voltage stabilizer: Ordered/not ordered
  - iii) **Compressed air:**
    1. Pressure
    2. Flow rate
    3. Requirement: Continuous/intermittent (if intermittent, then details)
    4. Quality of air: special requirement, if any
  - iv.) **Water:**
    1. Pressure head
    2. Flow rate
    3. Requirement: Continuous intermittent (if intermittent, then details)
  - v.) **Requirement of industrial gases:**
    1. Gases required
    2. Quality requirement
    3. Purity level of gases
  - vi.) **Facility to be provided by consignee for installation/ commissioning:**
    1. Safe custody of consignment on receipt
    2. Provision of electricity, water, compressed air as required



5.22.8

**ANNEXURE-IV**

S.No.	Item (Assembly/Sub-Assembly/ Concomitant Spares /Maintenance	
1.	Brief description	
2.	Model No.	
3.	Make	
4.	Quantity / machine	
5.	Manufacturer's name and complete	
6.	Whether imported or indigenous	
7.	Country of origin	

**5.22.9 Annexure -V**

**1. Secondary lateral damper**

Test Content of Secondary Lateral Damper

**a. Damper force characteristic test**

Equipment	Dynamic testing machine
Control position	Not less than 2° from the horizontal plane for lateral damper
Piston position	Nominal installation length: 380mm, (see damper drawing)
Input signal	sinusoidal motion
Test stroke	Nominal testing stroke: $\square 25\text{mm}$ , (see damper drawing)
Velocity	Nominal testing velocity: $0.1\text{m/s}$ ( $\approx 0.64\text{Hz}$ ) and $0.3\text{m/s}$ ( $\approx 1.9\text{Hz}$ ); (see damper drawing)
Pre-test conditioning	Three cycles before measurement
Measurements	The maximum extension and compression forces are determined during the 4th cycle.
Diagram	Force-displacement diagram is recorded in all testing velocities. The scale used shall enable the easy reading of the diagram (in particular for low velocities). The extension and compression characteristic shall be plotted on the same diagram. The measured values of the testing stroke, the testing velocities and the damping forces are listed in the same diagram.
Analysis	For every testing velocity, the measured values must be located within the tolerance specified in the relevant damper drawing, any deviation must be indicated. Nominal Values, (see damper drawing): $4500\text{N}/4500\text{N}/0.1\text{m/s}$ , $0.64\text{Hz}$ , $\square 670\text{N}$ $9250\text{N}/9250\text{N}/0.3\text{m/s}$ , $1.9\text{Hz}$ , $\square 1380\text{N}$





## 5.22.10 Secondary Vertical damper

Test Content of Secondary Vertical Damper

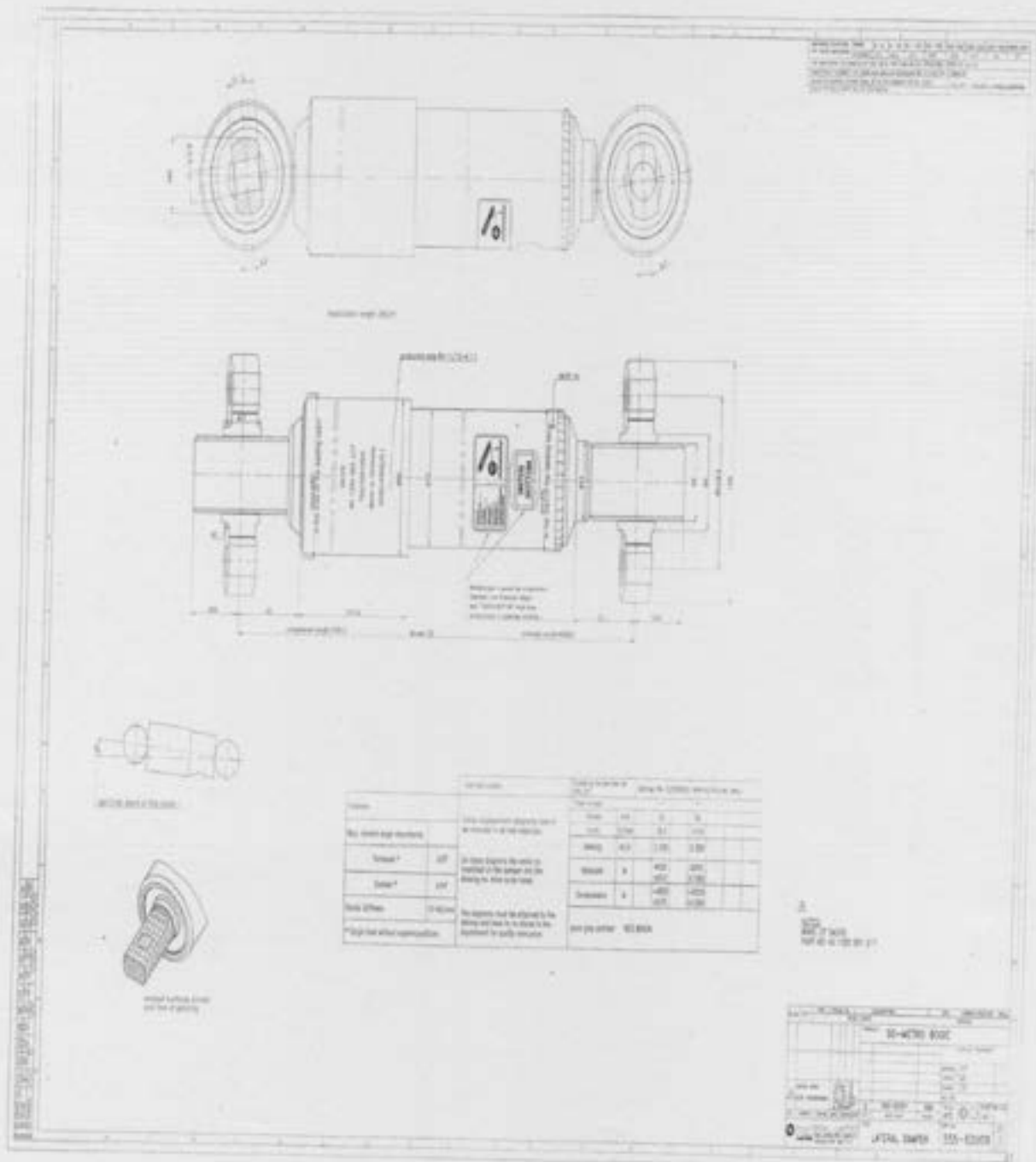
### a. Damper force characteristic test

Equipment	Dynamic testing machine
Control position	The vertical plane
Piston position	Nominal installation length: 535mm
Input signal	sinusoidal motion
Test stroke	Nominal testing stroke: $\square 25\text{mm}$ , (see damper drawing)
Velocity	Nominal testing velocity: $0.1\text{m/s}$ and $0.3\text{m/s}$
Pre-test conditioning	Three cycles before measurement
Measurements	The maximum extension and compression forces are determined during the 4th cycle.
Diagram	Force-displacement diagram is recorded in all testing velocities. The scale used shall enable the easy reading of the diagram (in particular for low velocities). The extension and compression characteristic shall be plotted on the same diagram. The measured values of the testing stroke, the testing velocities and the damping forces are listed in the same diagram.
Analysis	For every testing velocity, the measured values must be located within the tolerance specified in the relevant damper drawing, any deviation must be indicated. Nominal Values, (see damper drawing): $7000\text{N}/7000\text{N}/0.1\text{m/s}$ , $0.64\text{Hz}$ , $\square 1050\text{N}$ $12000\text{N}/12000\text{N}/0.3\text{m/s}$ , $1.9\text{Hz}$ , $\square 1800\text{N}$



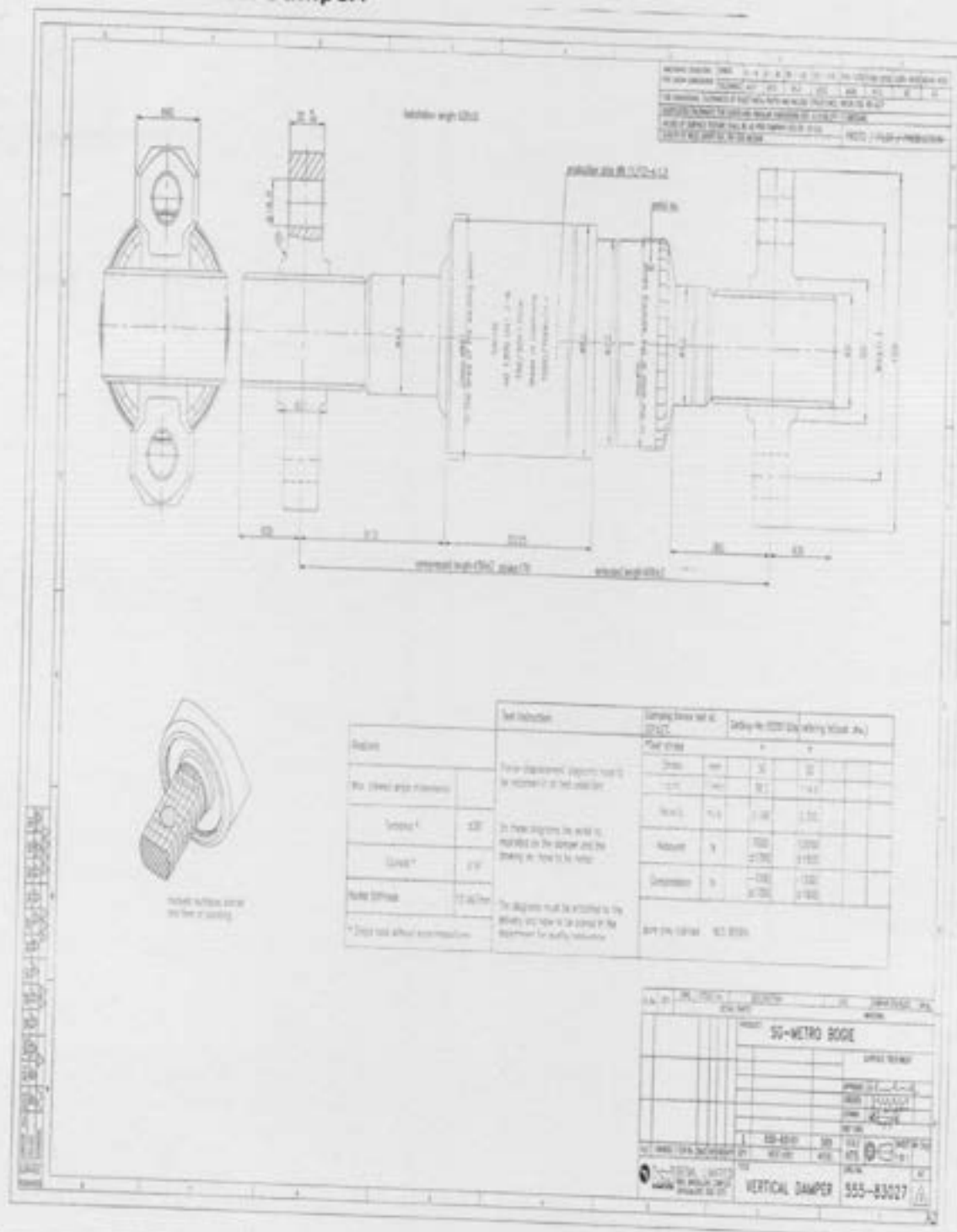
## 5.23 Technical specification

### 5.23.1 Lateral Damper:

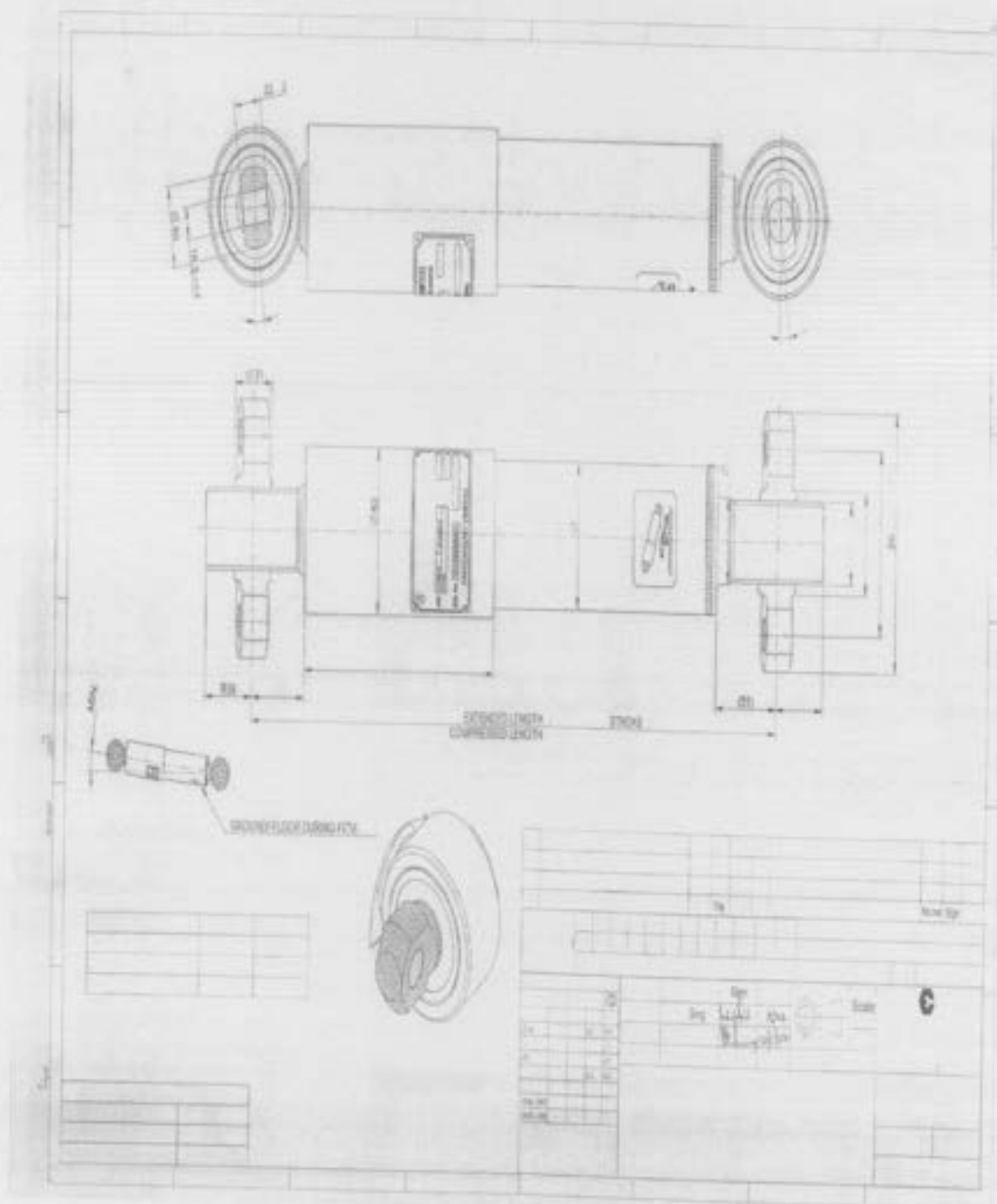


*[Signature]*

5.23.2 Vartical Damper:

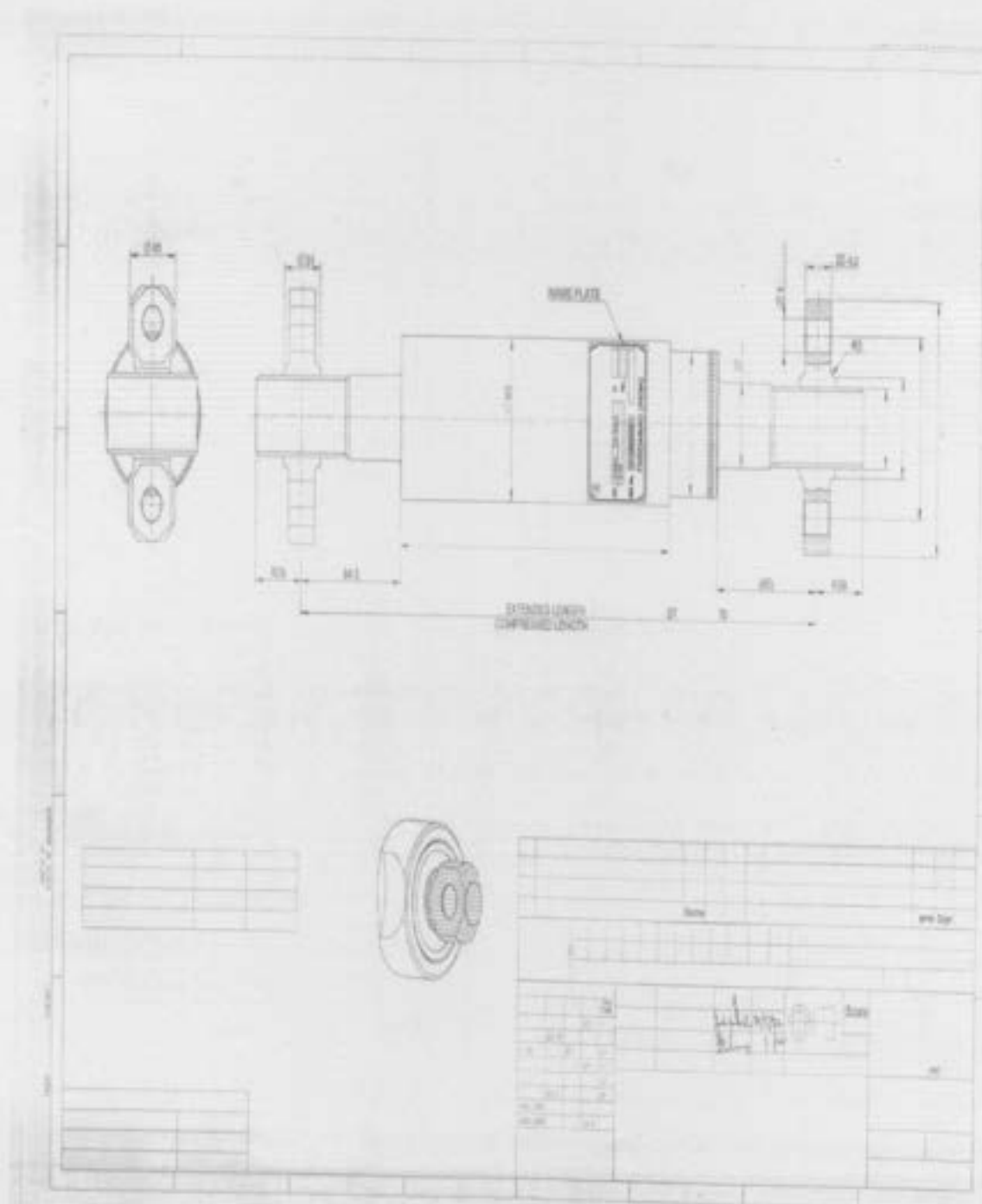


### 5.23.3 Escorts Secondary Lateral Damper:



Q. 22

#### 5.23.4 Escorts Secondary Vartical Damper:





**6 FORMATS FORMING PART OF TECHNICAL BID**

INDEX	FORM
Affidavit	A
Form of Bid	B
Format of Bank Guarantee for Performance Security	C
Pro forma for Statement of Deviations	D
Form of Agreement	E
Form of Power of Attorney	F
Form of Self declaration	G
Form of Code of Integrity	H
General Information	I
Bank Details for E- Payment	J
Grievance Redressal During Procurement Process	K



**6.1 Form: A- AFFIDAVIT**

**FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY BIDDER ALONG WITH THE BID DOCUMENT**

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs.100/-. The stamp paper has to be in the name of the Bidder) \*\*

- I ..... (Name and designation)\*\* Appointed as attorney/authorized signatory of the Bidder (including its constituents), M/s ..... (hereinafter called the Bidder) for the purpose of the Bid documents for the work of as per the Bid No..... of Jaipur Metro Rail Corporation Ltd., do hereby solemnly affirm and state on the behalf of Bidder including its constituents as under:
1. I/We the Bidder(s) am/ are signing this document after carefully reading the contents.
  2. I/We the Bidder(s) also accept all the conditions of the Bid and have signed all the pages in confirmation thereof.
  3. I/We hereby declare that I/We have downloaded the Bid document from Jaipur Metro Rail Corporation Ltd. website [sppp.rajasthan.gov.in](http://sppp.rajasthan.gov.in) and printed the same. I/we have verified the contents of the printed document from the website and there is no addition, on deletion or no alteration to the contents of the Bid document in case of any discrepancy noticed at the stage i.e.; evaluation of Bids, execution of work or final payment of the contract, the master copy available with the JMRC administration shall be final and binding upon me/us.
  4. I/ we declare and certify that I/We have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
  5. I/we also understand that my/our offer will be evaluated based on the documents/ credentials submitted along with the offer and same shall be binding upon me/us.
  6. I/ we certify that I/ we are not blacklisted by Central Government, any State Government or any Government agency or Public sector undertaking (PSU).
  7. I/we declare that the information and documents submitted along with the Bid by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.
  8. I/we understand that any of the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of Bids, it shall lead to forfeiture of Bid EMD besides suspending of business for one year. Further, I /we (insert name of the Bidder) \*\*.....and all my/our constituents understand that my/our offer shall be summarily rejected.
  9. I/we also understand that if any of the certificates submitted by us are found to be false/forged or incorrect at any time the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD and Performance guarantee besides any other action provided in the contract.

DEPONENT  
SEAL AND SIGNATURE OF THE BIDDER  
VERIFICATION

I/we above named Bidder do hereby solemnly affirm and verify that the contents of my above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT  
SEAL AND SIGNATURE OF THE BIDDER

Place:  
Date:



Signature of Authorized Signatory of Bid

\*\*The contents in italics are only for guidance purpose. Details as appropriate are to be fill in suitably by Bidder. Attestation before Magistrate / Notary Public.

**6.2 Form: B FORM OF BID**

Note:

- I. The Appendix forms part of the Bid.
- II. Bidder is required to fill up all the blank spaces in this Form of Bid and Appendix.


Name of Work: **Supply with Installation and commissioning of Damper Testing Machine**

To

Executive Director (RS),  
Jaipur Metro Rail Corporation Ltd.,  
3<sup>rd</sup> Floor, Admin Building, Train Maintenance Depot,  
Bhripath, Mansarovar, Jaipur - 302020  
Email: [edrs@jaipurmetrorail.in](mailto:edrs@jaipurmetrorail.in)

1. Having visited the site and examined the General Conditions of Contract, Specifications, Instructions to Bidders, for the execution of above named works, we the undersigned, offer to execute and complete such works and remedy defects therein in conformity with the said Conditions of Contract, Specifications, and Addenda for the sum of Rs. \_\_\_\_\_ (Amount in figures and words) for \_\_\_\_\_ or such other sum as may be ascertained in accordance with the said conditions.
2. We acknowledge that the Appendix forms an integral part of the Bid.
3. We undertake, if our Tender is accepted, to deliver the material within 120 days of issue of the LOA/purchase order.
4. If our Bid is accepted, we will furnish at our option a Bank Guarantee for Performance as security for the due performance of the Contract. The amount and form of such guarantee or bond will be in accordance with General Conditions of the Contract and as indicated in the Appendix.
5. We have independently considered the amount as per the General Conditions of Contract as liquidated damages and agree that they represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed in time.
6. We agree to abide by this Bid for a minimum period of 90 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extended period mutually agreed to.
7. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
8. We declare that the submission of this Bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services, or any

Signature of Authorized Signatory of Bid



other item of work related to the award and performance of this Contract. We further confirm and declare that no agency commission or any payment, which may be construed as an agency commission has been, or will be, paid and that the Bid price does not include any such amount.

9. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Bid to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
10. We understand that you are not bound to accept the lowest or any Bid you may receive.
11. If our Bid is accepted we understand that we are to be held solely responsible for the due performance of the Contract.

Dated this.....day of..... 2023

Signature .....

Name..... in the capacity of .....

Duly authorized to sign Bids for and on behalf of.....

Address .....

Date .....

Name

Place .....

Address



### 6.3 Form: C Format of Bank Guarantee for Performance Security

This deed of Guarantee made this day of \_\_\_\_\_ between Bank of \_\_\_\_\_ (hereinafter called the "Bank") of the one part, and Jaipur Metro Rail Corporation Limited (hereinafter called "the Employer") of the other part.

Whereas Jaipur Metro Rail Corporation Limited has awarded the contract for **"Supply with Installation and commissioning of Damper Testing Machine"** Bid No. JMRC/O&S/RS/2023-24/NIB/007 (here in after called "the contract") to M/s \_\_\_\_\_ (Name of the Contractor) (here in after called "the Contractor").

AND WHEREAS the Contractor is bound by the said Contract to submit to the Employer a Performance Security for a total amount of Rs. \_\_\_\_\_ (Amount in figures and words).

Now we the Undersigned \_\_\_\_\_ (Name of the Bank) being fully authorized to sign and to incur obligations for and on behalf of and in the name of \_\_\_\_\_ (Full name of Bank), hereby declare that the said Bank will guarantee the Employer the full amount of Rs. \_\_\_\_\_ (Amount in figures and Words) as stated above.

After the Contractor has signed the aforementioned Contract with the Employer, the Bank is engaged to pay the Employer, any amount up to and inclusive of the aforementioned full amount upon written order from the Employer to indemnify the Employer for any liability of damage resulting from any defects or shortcomings of the Contractor or the debts he may have incurred to any parties involved in the Works under the Contract mentioned above, whether these defects or shortcomings or debts are actual or estimated or expected. The Bank will deliver the money required by the Employer immediately on demand without delay without reference to the Contractor and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank the liability or damages resulting from any defects or shortcomings or debts of the Contractor. The Bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this guarantee shall be absolute and unequivocal.

This Guarantee is valid for a period of \_\_\_\_\_ Months from the date of signing. (The initial period for which this Guarantee will be valid must be for at least sixty days longer than the Defect Liability Period).

At any time during the period in which this Guarantee is still valid, if the Employer agrees to grant a time extension to the Contractor or if the Contractor fails to complete the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under above para, it is understood that the Bank will extend this Guarantee under the same conditions for the required time on demand by the Employer and at the cost of the Contractor

The Guarantee hereinbefore contained shall not be affected by any change in the Constitution of the Bank or of the Contractor.





The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this deed.

The expressions "the Employer", "the Bank" and "the Contractor" hereinbefore used shall include their respective successors and assigns.

In witness whereof I/We of the bank have signed and sealed this guarantee on the \_\_\_\_\_ day of \_\_\_\_\_ (Month) 2023 being herewith duly authorized.

For and on behalf of the \_\_\_\_\_ Bank.

Signature of authorized Bank official

Name:

Designation : .....

I.D. No. : .....

Stamp/Seal of the Bank: .....

Signed, sealed and delivered for and on behalf of the Bank by the above named \_\_\_\_\_

In the presence of:

Witness 1.

Signature .....

Name .....

Address .....

Witness 2.

Signature .....

Name .....

Address .....

\* The Performance Bank Guarantee will be executed on stamp paper of minimum 0.25% of value of Bank guarantee under Rajasthan Stamp Act.



**6.4 Form: D PROFORMA FOR STATEMENT OF DEVIATIONS**

The following are the particulars of deviations from the requirements of the Instructions to Bidder, "General Conditions of Contract", "Special Conditions of Contract and Bid Specifications:

Clause	Deviations	Remarks (including justification)	Price adjustment for withdrawal of each Deviations

Signature of Bidder

**Note**

1. Where there is no deviation, the statement should be returned duly signed with an endorsement indicating '**No Deviations**'.
2. The Bidder shall indicate price adjustment against each deviation, which he shall like to add to the Bid price for withdrawing of his deviations if the same are unacceptable to the Employer.



**6.5 Form: E AGREEMENT**

This Agreement is made on the \_\_\_\_\_ day of \_\_\_\_\_ 2023  
Between Executive Director(Rolling Stock),Jaipur Metro Rail Corporation Ltd, 3<sup>rd</sup>  
Floor, Admin Building, Train Maintenance Depot, Bhrigu path Mansarovar Depot,  
Jaipur- 302020 herein after called "the Employer" of the one part  
and \_\_\_\_\_ (Name and Address of Contractor) hereinafter called  
"the Contractor" of the other part. Whereas the Employer is desirous that (certain  
Goods and Services should be provided and) certain Works should be executed, viz  
Contract No. "JMRC/O&S/RS/2023-24/NIB/007" contract for "Supply with  
Installation and commissioning of Dampener Testing Machine" of Rail/Metro  
Corridor of Jaipur MRTS Project hereinafter called "the Works" and has accepted a  
Bid by the Contractor for the execution and completion of such works (\*\* as well  
as guarantee of such works) and the remedying of defects therein.

Now This Agreement Witnessed as follows:

In this Agreement words and expression shall have the same meanings as are  
respectively assigned to them in the Conditions of Contract hereinafter referred to.

The following documents shall be deemed to form and be read and construed as  
part of this Agreement, viz:

- (a) Letter of acceptance
- (b) General Conditions of Contract
- (c) Special Conditions of Contract
- (d) Notice Inviting Bid and Scope of Work
- (e) Bill of Quantities
- (f) Form of Bid with Appendix
- (g) Addendums, if any
- (h) Other conditions agreed to and documented as listed below:
  - (i) Bidder's Work Schedule as amended if required.
  - (ii) Statement of deviations (if applicable)
  - (iii) Any other item as applicable

In consideration of the payments to be made by the Employer to the Contractor as  
hereinafter mentioned, the Contractor hereby covenants with the Employer to  
execute and complete the works by \*\*and remedy any defects therein in  
conformity in all respects with the provisions of the Contract.

The Employer hereby covenants to pay the Contractor in consideration of the execution  
and completion of the works and the remedying of defects therein, the Contract Price of  
\*\*Rs \_\_\_\_\_ being the sum stated in the letter of  
acceptance subject to such additions thereto or deductions there from as may be made  
under the provisions of the Contract at the times and in the manner prescribed by the  
Contract.



#### OBLIGATION OF THE CONTRACTOR

The contractor shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. The contractor shall submit copies of acknowledgements evidencing filing of returns every year and shall keep the Employer fully indemnified against liability of tax, interest, penalty etc. of the contractor in respect thereof, which may arise.

#### JURISDICTION OF COURT

The Courts at Jaipur/Jaipur shall have the exclusive jurisdiction to try all disputes arising out of this agreement between the parties.

IN WITNESS WHEREOF the parties hereto have caused their respective Common Seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

#### For and on behalf of the Contractor

Signature of the authorised official

Name of the official

Stamp/Seal of the Contractor

#### For and on behalf of the Employer

Signature of the authorised official

Name of the official

Stamp/Seal of the Employer

#### SIGNED, SEALED AND DELIVERED

By the said

Name: \_\_\_\_\_

on behalf of the Contractor in the presence  
of:

Witness \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

By the said

Name: \_\_\_\_\_

on behalf of the Employer in the  
presence of:

Witness \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Note:** To be made out by the Employer at the time of finalization of the Form of Agreement.

**\*\*** Blanks to be filled by the Employer at the time of finalization of the Form of Agreement.



**6.6 Form: F Power of Attorney for Signing of Bid**

Know all men by these presents, We.....(name of the firm and address of the registered office) do here by irrevocably constitute, nominate, appoint and authorize Mr./Ms.(name)..... Son/daughter/wife of..... and presently residing at....., who is presently employed with us and holding the position of.....as our true and lawful attorney (hereinafter referred to as the "Attorney")to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid no. JMRC/O&S/RS/2023-24/NIB/007 for qualification and submission of our Bid for the works, including but not limited to signing and submission of all Bids, bids and other documents and writings, and other conferences and providing information/ responses to JMRC, representing us in all matters before JMRC, signing and execution of all contracts including the Contract and undertakings consequent to acceptance of our bids, and generally dealing with the JMRC in all matters in connection with or relating to or arising out of our Bid for the said Projects and/or upon award thereof thousand /or till the entering into of the Contracts with JMRC.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.  
In Witness Whereof We , .....The Above Named Principal Have Executed This Power Of Attorney On This .....Day Of.....,2023.

For (Signature)

(Name, Title and Address) Witnesses:

Accepted

.....Signature)

(Name, Title and Address of the Attorney)

(Notarized)

**Notes:**

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. Also, wherever required, the Applicant should submit for verification the extract of the charter documents and documents such as a resolution/power of attorney in favors of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.





**6.7 Form: G Form of Self Declaration**

To,

Executive Director (RS),  
Jaipur Metro Rail Corporation Ltd.,  
3<sup>rd</sup> Floor, Admin Building, Train Maintenance Depot,  
Bhrigu path, Mansarovar, Jaipur - 302020  
Email: [edrs@jaipurmetrorail.in](mailto:edrs@jaipurmetrorail.in)

In response to the NIB Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for  
{Project Title}, as an Owner/ Partner/ Director/ Auth. Sign. of

\_\_\_\_\_, I/ We hereby declare that presently our  
Company/ firm \_\_\_\_\_, at the time of bidding,:-

- a) possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
- b) have fulfilled my/ our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
- c) is having unblemished record and is not declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central government/ PSU/ UT.
- d) does not have any previous transgressions with any entity in India or any other country during the last three years
- e) does not have any debarment by any other procuring entity
- f) is not insolvent in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and is not the subject of legal proceedings for any of the foregoing reasons;
- g) does not have, and our directors and officers not have been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
- h) Does not have a conflict of interest as mentioned in the bidding document which materially affects the fair competition.
- i) Will comply with the code of integrity as specified in the bidding document.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken as per the provisions of the applicable Act and Rules thereto prescribed by GoR, my/ our security may be forfeited in full and our bid, to the extent accepted, may be cancelled.

Thanking you,

Name of the Bidder: -

Authorized Signatory: - Seal of the Organization: -

Date: \_\_\_\_\_

Place: \_\_\_\_\_



Signature of Authorized Signatory of Bid

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**6.8 Form: H Compliance with the Code of Integrity and No Conflict of Interest**

Any person participating in a procurement process shall -

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest:-

The Bidder participating in a bidding process must not have a Conflict of Interest. A Conflict of Interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

- i. A Bidder may be considered to be in Conflict of Interest with one or more parties in abiding process if, including but not limited to:
  - a. have controlling partners/ shareholders in common; or
  - b. receive or have received any direct or indirect subsidy from any of them; or
  - c. have the same legal representative for purposes of the Bid; or
  - d. have a 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 influence the decisions of the Procuring Entity regarding the bidding process; or
  - e. The Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
  - f. the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
  - g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/consultant for the contract.



**6.9 Form: I GENERAL INFORMATION**

Notes:

- I. *Attach an attested photocopy of Certificate of Registration and ownership as well as of Constitution and legal status.*
- II. *In case of Joint Venture / Consortium, attach an attested photocopy of Agreement indicating inter alia distribution of responsibilities among the members / constituents.*

1. Bidder Company details (in case of consortium, details of Lead Partner)
  - (a) Name of Bidder Company:
  - (b) Address of the corporate headquarters and its branch office(s), if any, in India:
  - (c) Date of incorporation and/ or commencement of business:
2. Particulars of the Authorised Signatory of the Applicant:
  - (a) Name:
  - (b) Designation:
  - (c) Address:
  - (d) Phone Number:
  - (e) Fax Number:
3. PAN Number (attach photocopy):
4. GST Reg. No (attach copy of the registration certificate):
5. Bank Account Details (for purpose of receiving payment from JMRC) :
  - a. Name of the Account Holder:
  - b. Name of the Bank:
  - c. Branch Address:
  - d. 9-digit MICR Code:
  - e. Account type (SB, Current, Cash Credit A/c, etc.):
- (Yes/No)
6. In the case of a consortium:

Signature of Authorized Signatory of Bid

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- a. Names of participating members / constituents
- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_
- b. Address, telephone, Tele-fax and email of each members / constituent.
- | Registered Office | Office for correspondence |
|-------------------|---------------------------|
| (a) _____         | _____                     |
| (b) _____         | _____                     |
| (c) _____         | _____                     |
- c. Distribution of responsibilities among partners / constituents. (Among other details, specify the sub-items of works for which each of the partners / constituents would be responsible).
- d. Date and place of joint Venture/ Consortium Agreement.
- e. Names and Addresses of Bankers to the Joint Venture/ Consortium
- f. Names and Addresses of Associated Companies to be involved in the Project and whether Parent / subsidiary/ others.
- g. If the company is subsidiary, what involvement, if any, will the Parent Company have in the Project?



6.10 Form: J BANK DETAILS FOR E-PAYMENT

Beneficiary name :

Beneficiary Address :

Line-1:	
Line-2:	
District/City:	State:
Pin Code:	Tele/Fax:
Mobile alert:	

Bank Details:

Bank Name:	
Branch Name and Address:	
Beneficiary A/C No.	Beneficiary A/C Type ( Saving/Current):
Beneficiary A/c Name:	
Nine - Digit branch MICR Code:	
IFSC Code of the branch:	

Stamp & Signature of Authorized Signatory





**6.11 Form: K GRIEVANCE REDRESSAL DURING PROCUREMENT PROCESS**

The designation and address of the First Appellate Authority is Dir (O&S), JAIPUR METRO RAIL CORPORATION, JAIPUR.

The designation and address of the Second Appellate Authority is MD, JAIPUR METRO RAIL CORPORATION, JAIPUR.

**(1) Filing an appeal**

If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

**(2)** The officer to whom an appeal is filed under Para (1) shall deal with the appeal as expeditiously as possible and shall endeavor to dispose it within thirty days from the date of the appeal.

**(3)** If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

**(4) Appeal not to be in certain cases**

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-

- (a) determination of need of procurement;
- (b) provisions limiting participation of Bidders in the Bid process;
- (c) the decision of whether or not to enter into negotiations;
- (d) cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality.

**(5) Form of Appeal**



- (a) An appeal under para (1) or (3) above shall be in the annexed Form along with as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
- (c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

**(6) Fee for filing appeal**

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

**(7) Procedure for disposal of appeal**

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
  - (i) Hear all the parties to appeal present before him; and
  - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal

**Memorandum of Appeal under the Rajasthan Transparency in Public Procurement Act, 2012**

Appeal No .....of .....

Before the ..... (First / Second Appellate Authority)

**1. Particulars of appellant:**

- (i) Name of the appellant:
- (ii) Official address, if any:
- (iii) Residential address:



**2. Name and address of the respondent(s):**

- (i)
- (ii)
- (iii)

3. Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:

4. If the Appellant proposes to be represented by a representative, the name and postal address of the representative:

5. Number of affidavits and documents enclosed with the appeal:

6. Grounds of appeal:

.....  
..... (Supported by an affidavit)

7. Prayer:

.....

Place .....

Date .....

Signature



**7 Financial Bid:**  
**BOQ (Bill Of Quantity):**

Tender Inviting Authority: EXECUTIVE DIRECTOR

Name of Work: Supply with Installation and commissioning of Damper Testing Machine

Contract No: JMRC/O&S/RS/2023-24/NIB/007

Name of the Bidder/ Bidding Firm/ Company:								
<p><b>PRICE SCHEDULE</b> (DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)</p> <p>1. This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only.</p> <p>2. The rates quoted above shall be inclusive of all taxes, Freight charges, transportation charges, packing charges etc; no other charges shall be paid by JMRC. GST will be paid at rate applicable at the time of billing.)</p>								
NUMBER :	TEXT :	NUMBER :	TEXT :	NUMBER :	NUMBER :	NUMBER :	NUMBER :	TEXT :
Sl. No.	Item Description	Quantity	Units	BASIC RATE in Figures To be entered by the Bidder in Rs. P	TOTAL GST Amount in INR Rs. P	TOTAL AMOUNT Without Taxes net (12) + (4) x (7) in Rs. P	TOTAL AMOUNT With Taxes net (14) + sum of net (12) & (13) in Rs. P	TOTAL AMOUNT in Words
1	2	4	5	7	9	12	14	15
1.21	Supply with Installation and commissioning of Damper Testing Machine. (Including Erection, Testing, Commissioning and Packing Charges)	1.00 Nos				0.00	0.00 INR Zero Only	
Total in Figures						0.00	0.00 INR Zero Only	
Quoted Rate in Words		INR Zero Only						

**Note:**

- 1) The rates quoted of items shall be FOR JMRC office, Mansarovar Metro Depot, Jaipur 302020, inclusive of all expenses i.e. all taxes (excluding GST) and transportation/freight charges, packing & forwarding charges, insurance and all other statutory duties etc; no other charges shall be paid by JMRC.
- 2) GST will be paid at rate applicable at the time of billing.

