



दक्षिण पूर्व मध्य रेलवे  
South East Central Railway

# ओपन टेंडर डाक्यूमेन्ट OPEN TENDER DOCUMENT

**Name of Work** – Works Contract of “Supply, Installation and Commissioning of Shot Peening Machine with building/Shed” through Open Tender .

***ISSUED BY:***

उप मुख्य यांत्रिक इंजीनियर,  
वैगन रिपेयर शॉप, रायपुर - 492008  
Dy. CHIEF MECHANICAL ENGINEER,  
WAGON REPAIR SHOP, RAIPUR - 492008

**SOUTH EAST CENTRAL RAIWAY****TENDER FORM****Annexure-I****Tender Notice No: WRSR-09-26-27-Peening-RT****Date: 17/06/2026****Name of Work** - Works Contract of "Supply, Installation and Commissioning of Shot Peening Machine with building/Shed" through Open Tender.

<b>Advertised Value of Tender:</b>	<b>Rs. 72,68,937.14 /-</b>
<b>Bid Security (EMD):</b>	<b>Rs 1,45,400/-</b>

The President of India  
Acting through the Dy. Chief Mechanical Engineer,  
South East Central Railway,  
Wagon Repair Shop, Raipur

I/We \_\_\_\_\_ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of \_\_\_\_\_ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for \_\_\_\_\_ Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within \_\_\_\_\_ months from the date of issue of letter of acceptance of the tender.

**1.** I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.

**2.** A Bid Security of ₹ \_\_\_\_\_ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:

- (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
- (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
- (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.

**3.** (a) I/We am/are a Startup firm registered by .....Department of Industrial Policy and Promotion (DIPP) and my registration number is .....valid upto..... (Copy enclosed) and hence exempted from submission of Bid Security.

**4.** We are a Labour Cooperative Society and our Registration No. is \_\_\_\_\_ with.....and hence required to deposit only 50% of Bid Security.

**5.** Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

**Signature & Seal of Tenderer(s)****Date** \_\_\_\_\_**Address of the Tenderer(s)** \_\_\_\_\_

**Tender Form (Second Sheet)**

1. Instructions to Tenderers and Conditions of Tender: The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet and Second Sheet
- (b) Special Conditions/Specifications (enclosed)
- (c) Bill(s) of quantities (enclosed)
- (d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of \_\_\_\_\_ or obtained from the office of the Chief Engineer, \_\_\_\_\_ Railway on payment of prescribed charges.
- (e) Standard Schedule of Rates (SSOR) as amended / corrected upto latest correction slips, copies of which can be seen in the office of \_\_\_\_\_ or obtained from the office of the Chief Engineer, \_\_\_\_\_ Railway on payment of prescribed charges.
- (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

2. Drawings for the Work: The Drawings for the work can be seen in the office of the \_\_\_\_\_ and / or Chief Engineer, \_\_\_\_\_ Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Standard Schedule of Rates (SSOR) of \_\_\_\_\_ Railway as applicable to \_\_\_\_\_ Division except where he/they are required to quote item rates and must tender for all the items shown in the Bill(s) of Quantities attached. The quantities shown in the attached Bill(s) of Quantities are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Bill(s) of Quantities. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.

5. The works are required to be completed within a period of \_\_\_\_\_ months from the date of issue of acceptance letter.

**6. Bid Security:**

(a) Subject to exemptions provided under para 5(1) (a) of Part-1 (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.

(b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to \_\_\_\_\_ Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.

(c) If his tender is accepted,

(i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;

(ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.

The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.

- (d) In case Contractor submits the Term Deposit Receipt/Bank Guarantee Bond towards either the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security so retained as per sub para(c) above, to the Contractor.

**Signature & Seal of Tenderer(s)**

**Date** \_\_\_\_\_

**Address of the Tenderer(s)** \_\_\_\_\_

## **INSTRUCTIONS TO TENDERER(S) FOR E-TENDER**

1	<b>Care to be taken in Submission of Tenders:</b>
1.1	The work shall be executed in accordance with Indian Railways standard General condition of contract, April-2022 and its revision and correction slips as applicable. However, few important clauses of IRS General condition of contract April-2022 are reproduced in this chapter for ready reference.
1.2	Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer. <b>Any clarification/information regarding scope of work may be obtained from SSE/contract Mobile no.- 9752440481 or 9752440443.</b>
1.3	Tenderers shall examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt. & as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
1.4	The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority.
1.5	In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/ SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority
1.6	When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
1.7	The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
1.8	The Tenderer(s) shall keep the offer open for a minimum period of <b>60 days</b> from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be <b>forfeited</b> to the Railway.
1.9	The tenderers shall submit a copy of certificate stating that all their statements/documents submitted alongwith bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as <b>Annexure-V</b> . <b>Non submission of above certificate by the bidder shall result in summarily rejection of his/their bid.</b> It shall be mandatorily incumbent upon the tenderer to identify state and submit the supporting documents duly self attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.
2	<b>Bid Security-</b> The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be 2% of the estimated cost of the work. Please refer para -5 of <b>Instructions to Tenderers, Part-I, of GCC-April-2022.</b>
2.1	E-Tender have been invited for and on behalf of the President of India of India through website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> for the work mentioned against the tender notice number available in the website. Tenderers are to bid online only in the above mentioned website. All the mandatory field marked with (*) have to be filled in by the tenderer. No manual offer is acceptable against this tender. No tender document in hard copy will be sold against this tender number. <b>Please read the Instructions to Tenderers for e-tendering, General Conditions of Contract, Special Condition of Contract before filling the e-tender online.</b>

2.2	E-Tender forms are Non-transferable and the same is to be submitted with digital signature by personnel already registered with the site.
2.3	The submitted e-tender forms will be considered as digitally signed by the tenderer as a confirmation that tenderer has read, agreed and accepted all the conditions and laid down documents referred in para-2 above as well as schedule of tender, General and Special Conditions.
2.4	The tender offer complete in all respect and with all document is to be submitted online by e- tendering process through the website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> before the closing time/date of this tender as mentioned in the NIT (Notice Inviting Tender). Tenderer can revise the bids any number of times till the closing time/date of the tender, No manual offers shall be accepted.
2.5	The Railway may, of its own or in response to any clarification requested/suggested by any person including that from the tenderer, may modify this tender document at its sole discretion 10 days before the due date of date of opening of the tender as corrigendum.
2.6	Corrigendum as required may be issued upto 10 days prior to the closing of the tender. These corrigenda of this tender, if any, as issued time to time will be available on website at least 10 days in advance of closing of tender. The tenderer are requested to check the website before submitting their offer whether any such corrigendum to the tender has been issued or not and revise the offer if required accordingly.
2.7	This document is the Standard Tender Document which consists of the Instruction to the Tenderers, NIT (Notice Inviting Tender), General Condition of the Tender, Scope of work & various Annexure etc. All the above mentioned documents taken together if not scored off, shall constitute the complete tender document herewith referred to as “tender Document” & have to be rear together & acted upon accordingly. No part of the tender document can be relied upon or acted upon in isolation. The Railway and the website will have no responsibility for incorrect evolution of cost and thereby incorrect cost of work and ranking of tenderers, if the schedule is not filled in correctly and unambiguously for each item. No. claim or clarification of a tenderer regarding applicability, inclusion or exclusion of any element of tax or duty or any other change in the offer subsequently (after opening of the tender) will be entertained. For this the tenderer are advised to read the Instructions, General Conditions, Special Conditions and other Instructions carefully before Submission of tender.
2.8	The Railway and the website will have no responsibility for incorrect evolution of cost and thereby incorrect cost of work and ranking of tenderers, if the schedule is not filled correctly and unambiguously for each item. No. claim or clarification of a tenderer regarding applicability, inclusion or exclusion of any element of tax or duty or any other change in the offer subsequently (after opening of the tender) will be entertained. For this the tenderer are advised to read the Instructions, General Conditions, Special Conditions and other Instructions carefully before submission of tender.
2.9	In case of any problem with the portal is faced while filling the e-tender, Tenderers are advised to contact with the Helpdesk of IREPS portal who will render all help and related with the website and portal except that related with the details of the tender. Railway will not take any responsibility for non-participation in the e-tender online for the reason related to the website and portal or server etc beyond the control of Railways.
3.0	Railway and IREPS website will not take responsibility for any payment made by the tenderer and debited from his/their accounts towards the tender cost or Earnest Money due to wrong or mis manipulation of the menus or any reasons related with the IT or found unsuitable for the tender etc. Railway and IREPS website will not entertain any claim in this regards or refund the paid amount.
3.1	The documents uploaded or information furnished in the website are digitally signed by the competent authority.
3.2	This Tender document includes many chapters/items/conditions/instructions for E-tendering, Special Conditions of Contract-General and list document to be uploaded and deposited, Notice Inviting Tender (NIT), Tender Form, Special Condition of Work are available in the IREPS portal and all the items including all other documents referred to herein, if not scored off, shall consist integral part of this tender document and shall be read and acted upon together. No part of this tender document shall be read, relief and/or acted upon in isolation.
4	INCONSISTENCY BETWEEN THE DOCUMENTS
	GCC April-2022 along with latest correction slip issued thereto from time to time and shall from integral part of this tender document. However, in case of any inconsistency and contradictions between the same and special conditions and specifications laid in various chapter of this tender document, the later shall prevail.
5	TENDERER’S POSTAL ADDRESS

	<p>Address of tenderer: - The address, email id and Mobile phones, other phone nos. and other details given in the portal while registering will be considered as official address and all Correspondence to the tenderer will be made in these registered modes.</p> <p>All communications sent in time to the tenders by post at the said address shall be deemed to have reached the tenderer duly and in time. Important documents shall be sent by registered post. However, an undertaking has to be given in the enclosed annexure by uploading a scanned copy of duly filled in form in the portal.</p>
6	THE SCHEDULE OF WORKS
	The Schedule of works is also available separately in the website online and Rates are to be quoted online and submitted online duly signed digitally.
7	OPENING OF TENDER
7.1	<p>Opening of e-tender online: The e-tender will be opened online using the IREPS portal.</p> <p>No representative is required to be present for opening of tender and taking notes of rates quoted and ranking as the complete details of rates etc of all the bidders. Bids/rates shall be available to the bidders in the website after the opening of the tender.</p>
7.2	In case the date of closing mentioned in the Notice Inviting Tender is declared holiday/ bandh/ strike on any account, the date of closing tender online will not be changed as the application in the website of IREPS does not permit submission of any offer after closing date and time of the tender. However, opening of tender online will be on any convenient day.
8.	<p>Signing of tender :</p> <p>(a) Any individual (s) signing the tender or other documents connected therewith shall specify whether he (they) is (are) signing:</p> <p>(i) as proprietor(s) of the concern or attorney or,</p> <p>(ii) as partner(s) of the firm or,</p> <p>(iii) as a Director, Manager or Secretary in case of Limited Company.</p> <p>(b) In case of a firm not registered under the Indian Partnership Act, all the partners or the Attorney duly authorized by all of them should sign the tender and all other connected documents. A copy of document empowering the individual(s) to sign shall also be furnished with the tender. In any case, the tenderer should disclose his constitution fully and copies of all necessary legal documents in support thereof, should be produced as and when called for</p>
9	INSPECTION OF DATA -- Drawings for the work can be seen in the office inviting this tender on any working day during working hours (If applicable to tender).
10	If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates /create circumstances for the acceptance of his / their tender, the Railway reserves the right to reject such tender at any stage
11	The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.
12	In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto five years.
13	<b>Employment/Partnership etc. of/from Retired Railway Employees- please refer to GCC-2022, Chapter –I, Introduction to Tenderers, para 16 shall be followed.</b>

**Part-I**

**PRECAUTIONS TO BE TAKEN FOR PREPARING LEGAL DOCUMENTS (For guidance to tenderer):**

**1. Non-Judicial Stamp paper:**

- (i) Should have been purchased in the name of the company/firm/executants.
- (ii) Should be purchased from the Place/State where the document is being executed.
- (iii) Values of non-judicial stamp paper (NJSP) should be as mentioned in Tender conditions, where value of NJSP is not mentioned in the tender conditions, value of NJSP should be as per the law of the state in which the document is being executed.
- (iv) Date of purchase of NJSP should be prior from the date of execution of document.

**2. Signature on the document**

- (i) The document should be signed on each page and also at the appropriate place meant for signature of executants/deponent.
- (ii) Signatory/executants should ensure that on the date of signing the document he/she has valid authority/ attorney in his/her favour for signing.
- (iii) In affidavit declaration clause as well as verification clause both should be signed by deponent/executants.
- (iv) Where the document requires witnessing, it should be duly signed by witness along with their names and addresses.
- (v) On power of Attorney, signatures of the Attorney holder should also be get done and attested by executants.

**3. Format of the document**

- (i) Where the format has been prescribed by the Railways, the document should be executed in that format.
- (ii) Date and place of execution should always be mentioned on the document.

**4. Notarization of document required as per GCC**

- (i) The document should be duly attested (signed & stamped) by notary on each page.
- (ii) The seal of the notary public should contain his name, area of practice and registration number.
- (iii) Notary's stamps of appropriate value should be affixed on the document.

**5. The Tenderer(s) shall quote his /her rates as a percentage above or below the Schedule of Rates of S.E.C.Railway as applicable to WRS/Raipur except where he/they are required to quote item rates and must tender for all the items shown in the Schedule and given as a guide and are approximately only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Schedule.**

The tenderer(s) shall quote rates/ rebates only at specified place in Tender Form supplied by Railway. Any revision of rates/rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

**6. Signing of Tender:** As defined in relevant clauses of GCC-2022 depending upon constitution of the firm.

**7. Eligibility Criteria:**

**7.1 Technical Eligibility Criteria**

- (a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- (i) **Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or**
- (ii) **Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or**
- (iii) **One similar work costing not less than the amount equal to 60% of advertised value of the tender.**

- (b) (1) In case of tenders for composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges – substructure, superstructure etc.), tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- (i) **Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or**
- (ii) **Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or**



**(iii) One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.**

Note for b (1): Separate completed works of minimum required values shall also be considered for fulfillment of technical eligibility criteria for different components.

(b)(2) In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity.

(b) (3) To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in clause 7 of the Standard General Conditions of Contractor through subcontractor fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief Engineer in writing.

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates. In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

### **7.2. Financial Eligibility Criteria:**

The tenderer must have minimum average annual contractual turnover of **V/N crores**;

where V= Advertised value of the tender in crores of Rupees N= Number of years prescribed for completion of work for which bids have been invited.

**The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.**

The tenderers shall submit requisite information as per Annexure-VIB, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

### **Explanation for Eligibility Criteria:**

1. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.

2. In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.

3. If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials.

4. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.

In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work.

**Note: Please go through the para-10 of GCC(Works-2022) for the eligibility criteria.**

## **8. Definition of Similar Nature of Work:**

**(1) Similar Nature of work for Mech Engg. Component:- Mechanical Engineering works involving Supply/Procurement, Installation& Commissioning of Mechanical Machineries and Plants.**

**(2) Similar Nature of Work for Civil Engg. Component:- Any Civil engineering work involving construction of buildings/Industrial sheds with Pre-Engineered(PEB Works)**

## **9. Tender Credentials:**

Documents testifying tenderer previous experience and financial status should be produced along with the tender. Tenderer(s) who is / are not borne on the approved list of the Contractors of \_\_\_\_\_ Railway shall submit along with his / their tender:

- (i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
- (ii) Audited Balance Sheet duly certified by the Chartered Accountant regarding contractual payments received in the past.
- (iii) (iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
- (iv) (iv) A copy of certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as Annexure-V.
- (v) Non submission of a copy of requisite certificates by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested / digitally signed by which they/he are/is qualifying the Qualifying Criteria mentioned in the Tender Document.
- (vi) The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.
- (vii) (a) In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto five years. (b) In case of any information submitted by tenderer is found to be false, forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of upto five years.

**10. Validity:** The tenderer shall keep offer in response to invitation of tender, valid for acceptance in part or in full or as modified on negotiations by the Railway for a period of 60 days from the date of opening of tender.

**11.** Documents submitted along with Tender:

**12.** (i) The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm/ Company/Joint (JV)/ Registered Society/ Registered trust/HUF etc. The Tenderer(s) shall enclose the attested copies of the constituting of their concern, and copy of PAN Card along with their tender. Tender documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company association, trust or society, as the case may be.

(iii) Following documents shall be submitted by the tenderer:.

(a) Sole proprietorship Firm :

(i) An undertaking that he is not blacklisted or debarred by Railways or any other ministry/ Department of Govt. of India from participation intender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which he was / is a partner/member. Concealment/ wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.

(b) HUF :

(i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

- (ii) An undertaking that the HUF is not blacklisted or debarred by Railways or any other Ministry/ department of Govt. of India from participation in tender on the date of opening of bids, wither in individual capacity or as a member of the partnership firm or JV in which HUF was/is a partner/member. Concealment/ wrong information in regard to above shall make the contract liable for determination under clause 62 of the GCC.
- (c) Partnership Firm:** The tenderer shall submit documents as mentioned in clause 18 of the Tender Form (Second Sheet) of GCC.
- (i) The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- (ii) The Partnership Firm should have been in existence or should have been formed prior to Submission of tender. Partnership Firm should have either been registered with the Registrar or the partnership deed should have been notarized as per the Indian Partnership Ac, prior to submission of tender.
- (iii) Separate identity/ name should be given to the partnership firm. The partnership firm should have PAN/TAN number in its own name and PAN/TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm be called partners.
- (d) Company registered under Companies Act 2013;**
- (i) The copies of MOA (Memorandum of Association)/AOA(Articles of Association) of the Company.
- (ii) A copy of Certificate of Incorporation
- (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.
- (iv) All other documents as per para 10 of tender form (Second Sheet) of GCC in this matter.
- (e) Joint Venture (JV):** The tenderer shall submit documents as mentioned in Clause 17 of the Tender Form (Second Sheet) of GCC.

**Participation of Joint Venture Firms:**

For participation of Joint Venture for this work, conditions related to guideline by Railway Board's letter no. 2002/CE-I/CT/37 dt. 02.09.2008 or any latest guidelines in this regard will be considered for eligibility.

**General Conditions of Contract, April-2022**

1.	The work shall be executed in accordance with Indian Railways standard General condition of contract, April 2022 and its revision and correction slips as applicable. However, few clauses of IRS General condition of contract, April 2022 are reproduced in this chapter for ready reference.
1.1	Order of Precedence of Documents:
	<p>In a tender/contract, in case of any difference, contradiction, discrepancy, with regard to conditions of tender/contract, specifications, drawings, bill of quantities etc., forming part of the tender/contract, the following shall be the order of precedence:</p> <p>i. Letter of Award</p> <p>ii. Schedule of Items, Rates &amp; Quantities</p> <p>iii. Special Conditions of Contract</p> <p>iv. Technical Specifications as given in tender documents</p> <p>v. Drawings(if applicable)</p> <p>vi. Indian Railways Standard General Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.</p> <p>vii. CPWD Specifications 2019 Vol I &amp; II updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.</p> <p>viii. Indian Railways Unified Standard Specification (IRUSS-2019) updated with correction slips issued up to</p>

date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.

ix. Indian Railways Unified Standard Specifications (Works and Material) 2010 updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.

x. IR Specifications/Guidelines updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.

xi. Relevant B.I.S. Codes updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.

2 Communications to be in Writing:

All notices, communications, reference and complaints made by the Railway or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or e-mail on registered e-mail IDs and no notice, communication, reference or complaint not in writing or through e-mail shall be recognized.

3. **Bid Security:**

Value of the Work	Bid Security
For all works	2% of the estimated cost of the work

- (1) (a) The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be as under:

Note:

- (i) The Bid Security shall be rounded off to the nearest ₹100. This Bid Security shall be applicable for all modes of tendering.
- (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as 'Startups' shall be exempted from payment of Bid Security detailed above.
- (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.

(b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway.

(c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

- (2) The Bid Security shall be deposited either in cash through e-payment gateway or submitted as

	<p>Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per <b>Annexure-VI A</b> and shall be valid for a period of 90days beyond the bid validity period.</p> <p>(3) In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:</p> <ol style="list-style-type: none"> <li>A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.</li> <li>The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document within 5 working days of deadline of submission of bids.</li> <li>Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.</li> <li>The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.</li> <li>The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected.</li> <li>The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification "Bid for the ***** Project" and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope.</li> <li>The envelope shall be addressed to the officer and address as mentioned in the tender document.</li> <li>If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.</li> </ol>
4.	<p><b>Validity:</b></p> <p>The Tenderer(s) shall keep the offer open for a minimum period of 60 days 90 days -in case of two packet system of tendering) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to _____ Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.</p>
5.	<p><b>Security Deposit:</b></p> <p>The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained /encashed by the Railways as part of security for the due and faithful fulfilment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security, to the Contractor.</p> <p>Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the Railway may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through Performance Guarantee) may not exceed 10% of the total value of the contract.</p> <p>The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.</p> <p>Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for</p>

	an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.
5.1	<p>(i) <b>Refund of Security Deposit:</b> Security Deposit mentioned in sub clause (5) above shall be returned to the Contractor along with or after, the following:</p> <p>(a) Final Payment of the Contract as per clause 51.(1) of General Obligation of GCC April 2022 <b>and</b></p> <p>(b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor <b>and</b></p> <p>(c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50.(1) of General Obligation of GCC April 2022, in case applicable.</p> <p>(ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of General Obligation of GCC April 2022, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of General Obligation of GCC April 2022, the Security Deposit shall not be forfeited.</p>
5.2	No interest shall be payable upon the Earnest Money and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16.(4)(b) of General Obligation of GCC April 2022 will be payable with interest accrued thereon.
6.	<p><b>Performance Guarantee:</b></p> <p>The procedure for obtaining Performance Guarantee is outlined below:</p> <p>(a) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twenty one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty one) days and up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21(Twenty one) days, i.e. from 22<sup>nd</sup> day after the date of issue of LOA. Further, if the 60<sup>th</sup> day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day.</p> <p>In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Bid Security and other dues payable to the contractor against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security on the strength of their registration as a Start-up recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect.</p> <p>The failed Contractor shall be debarred from participating in re-tender for that work.</p> <p>(b) The successful bidder shall submit the Performance Guarantee (PG) amounting to 5% of the original contract value and additional performance Guarantee as per clause 16(4)(h) in any of the following forms.</p> <ol style="list-style-type: none"> <li>A deposit of Cash;</li> <li>Irrevocable Bank Guarantee;</li> <li>Government Securities including State Loan Bonds at 5% below the market value;</li> <li>Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;</li> <li>Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;</li> <li>Deposit in the Post Office Saving Bank;</li> <li>Deposit in the National Savings Certificates;</li> <li>Twelve years National Defence Certificates;</li> <li>Ten years Defence Deposits;</li> <li>National Defence Bonds and</li> <li>Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&amp;CAO (free from any encumbrance) may be accepted.</li> </ol> <p>(c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance</p>

(LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.

(d) The value of PG to be submitted by the Contractor is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.

(e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.

(f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed.

(g) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

(i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.

(ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.

(iii) The Contract being determined or rescinded under clause 62 of General Obligation of GCC April 2022.

(h) If a tender is accepted on the quoted rates of bidder which is below the advertised tender value, an additional performance security shall be submitted by the bidder as below:

Bid quoted in % of advertised cost	Additional Performance Guarantee
Below 0-5% (inclusive)	Nil
Below 5%	5%

7. **Force Majeure Clause:** If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics/pandemics, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, provided further that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

7 A. **Extension of Time in Contracts:** Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the Contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

(i) **Extension due to Modification:** If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise.

(ii) **Extension for Delay not due to Railway or Contractor:** If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of Railway's employees or by other Contractor employed by the Railway under Sub-Clause (4) of Clause 20 of Obligation of GCC April 2022 or in executing the work not forming part of the contract but on which Contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the Contractor not having received in due time necessary instructions from the Railway for which he shall have specially applied in writing to the Engineer or his authorized representative then upon happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening, but shall nevertheless make constantly his best endeavors to bring down or make good the delay and shall do all that

	may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The Contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time.									
(iii)	<p><b>Extension for Delay due to Railways:</b> In the event of any failure or delay by the Railway to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the Railway due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the Contractor to damages or compensation therefore, but in any such case, the Railway may grant such extension or extensions of the completion date as may be considered reasonable.</p> <p>The Contractor shall indicate the period for which the work is likely to be delayed and shall seek extension of time as may be considered necessary under clause 7A (i) or/and 7A (ii) or/ and 7A (iii) above, as soon as the cause thereof shall arise and, in any case, not less than one month before the expiry of the date fixed for completion of the works. The Engineer shall consider the same and shall grant and communicate such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time; the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.</p> <p>The non-submission of request for extension or submission of request within less than one month before the expiry of the date fixed for completion of the works shall make him ineligible for extension under these sub clauses, subject to final decision of Engineer.</p>									
7 B.	<p><b>Extension of Time with Liquidated Damages (LD) for delay due to Contractor:</b> The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 7 and 7A, the Railway may, if satisfied that the works can be completed by the Contractor within reasonable short time thereafter, allow the Contractor for further extension of time (Proforma at Annexure-VII of GCC, April 2022) as the Engineer may decide. On such extension the Railway will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the following rates of the contract value of the works.</p> <p>For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition shall not exceed 5% of the contract value or of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract</p> <table><tr><th>S.No.</th><th>Duration of extension of time under Clause 17B</th><th>Rate of Liquidated Damages</th></tr><tr><td>(i)</td><td>Up to Twenty Five percent of original period of completion including period of extension of time granted under Section 17A(i)</td><td>As decided by Engineer, between 0.01% to 0.05% of contract value for each week or part of the week</td></tr><tr><td>(ii)</td><td>Above Twenty Five percent but up to Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)</td><td>0.10 % of contract value for each week or part of the week</td></tr></table>	S.No.	Duration of extension of time under Clause 17B	Rate of Liquidated Damages	(i)	Up to Twenty Five percent of original period of completion including period of extension of time granted under Section 17A(i)	As decided by Engineer, between 0.01% to 0.05% of contract value for each week or part of the week	(ii)	Above Twenty Five percent but up to Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)	0.10 % of contract value for each week or part of the week
S.No.	Duration of extension of time under Clause 17B	Rate of Liquidated Damages								
(i)	Up to Twenty Five percent of original period of completion including period of extension of time granted under Section 17A(i)	As decided by Engineer, between 0.01% to 0.05% of contract value for each week or part of the week								
(ii)	Above Twenty Five percent but up to Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)	0.10 % of contract value for each week or part of the week								



	(iii)	Above Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)	0.30 % of contract value for each week or part of the week
	<p>Provided further, that if the Railway is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the Railway shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's Security Deposit and rescind the contract under Clause 62 of these Conditions, whether or not actual damage is caused by such default.</p> <p>NOTE:</p> <p>In a Contract, where extension(s) of time have been allowed once under clause 17B, further request(s) for extension of time under clause 17A can also be considered under exceptional circumstances. Such extension(s) of time under clause 17A shall be without any Liquidated damages, but the Liquidated damages already recovered during extension(s) of time granted previously under clause 17B shall not be waived. However, Price variation during such extension(s) shall be dealt as applicable for extension(s) of time under clause 17B.</p>		
8.	<p><b>Conditions of Contract:</b></p> <p>If the tender submitted by tenderer is accepted and the contract awarded to the tenderer, the work coming within the purview of the contract shall be governed by the terms and conditions included in the tender papers as modified or amended by the letter of acceptance of tender and IR's GCC-2022 regulations and instructions for tenderers and standard form of contract (latest) as corrected up to date. Special attention is to be drawn to clause no 54 (Minimum Wages Act-1948), 55 (Payment of Wages Act-1936), 55A (Contract Labour (Regulation and Abolition Act 1970) and 57 (Workmen's Compensation Act-1923) of the GCC and Factory Act-1948 for strict compliance.</p>		
9.	<p><b>Agreement:</b></p> <p>The successful tenderer shall, within 60 days after having been called upon by notice to do so, be bound to execute an agreement based on accepted terms and conditions in such form as the railway may prescribe and lodge the same with the Railways, together with conditions of contract, specifications and schedules of prices referred to therein duly completed. The successful tenderer(s) will furnish 'Power of Attorney' duly authenticated by the Notary Public in favour of the person who will execute the agreement, other legal and financial documents.</p>		
10.	<p><b>Execution of Contract Documents:</b> - The successful tenderer(s) shall be required to execute an agreement with the president of India acting through the South East Central Railway for carrying out the work according to General Conditions of Contract. Special Conditions/Specifications annexed to the tender and specifications for work and materials as laid down in General Conditions of contract as amended/corrected up-to correction slip.</p>		
11.	<p><b>Variation Clause:</b></p>		
12	<p><b>Modification to Contract to be in Writing:</b> In the event of any of the provisions of the contract required to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the Railway and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the Railway unless and until the same is incorporated in a formal instrument and signed by the Railway and the Contractor, and till then the Railway shall have the right to repudiate such arrangements.</p>		
12.1	<p><b>Powers of Modification to Contract:</b> The Engineer on behalf of the Railway shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any</p>		

	alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.
12.2	Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be up to 25% of the quantity originally contracted, except in case of foundation work.
12.2(i)	The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever up to the limit of 25% variation in quantity of individual item of works.
12.2(ii)	In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
12.2(iii)	(a) Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
	(b) Quantities operated in excess of 140% but up to 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
	(c) Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
	(d) Variation to quantities of Minor Value Item:  The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value.  (i) Quantities operated up to and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;  (ii) Quantities operated in excess of 100% but up to 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;  (iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
12.2(iv)	Valuation of Variations: The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub-Clause (2) of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressly included and provided for in the Specifications and Drawings and the amounts to be paid therefore shall be calculated in accordance with the accepted Bill(s) of Quantities. Any extra item(s)/quantities of work falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates determined under Clause-39 of these Conditions.
13.	<b>Place of Work: The subject work shall be supplied, installed and commissioned in WRS/Raipur</b>
14.	Payment:
	While processing payment of any “On Account bill” or “Final Bill” or Performance Guarantee/ Security deposit’, contractor shall submit a certificate to the Engineer or Engineer representatives that “I have uploaded

	the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till.....Month,.....Year."
15.	<b>Clarification:</b>
(a)	Clarifications of any general or technical nature or on contractual matters required by tenderers(s) may be obtained from Dy. Chief Mechanical Engineer/Wagon Repair Shop/South East Central Railway/Raipur.
(b)	Tenderer may visit the work shop to get acquainted with the nature and scope of work before quoting in the tender.
16.	Deviation from tender papers:
	Deviations from the tender papers will not normally be agreed to. In case of any deviation quoted by the tenderer shall be indicated in the tender document in the desired annexure. The Railway, however, reserves the right to reject the tender, if any deviation is not acceptable to Railway and the tenderer is unwilling to move such deviations to a manner acceptable to the Railway
17.	Tenderer's address:
	Every tenderer shall state in his tender his complete postal address, phone, mobile, e-mail etc. clearly. Any communication sent to the tender(s) by post at this said address shall be deemed to have reached the tenderers in time notwithstanding a failure of communication to reach the tenderer at all or in time for whatever reason. Important documents will, however, be sent by registered post. Any change in address during the currency of contract shall be advised forthwith to Railways.
18.	Tenderer's credentials:
	Documents testifying tenderer previous experience and financial status should be produced alongwith the tender.  Tenderer(s) who is / are not borne on the approved list of the Contractors of South east Central Railway shall submit alongwith his / their tender:
(i)	Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
(ii)	Certificates which may be an attested Certificate from the client, Audited Balance Sheet duly certified by the Chartered Accountant etc regarding contractual payments received in the past.
(iii)	The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
(iv)	The tenderers shall submit a copy of certificate stating that all their statements/documents submitted alongwith bid are true and factual. Standard format of certificate to be submitted by the bidder . Non submission of above certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify state and submit the supporting documents duly self attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.
(v)	The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.

(vi) (a)	In case of any information submitted by tenderer is found to be false forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Earnest Money Deposit besides banning of business for a period of up to five years.
(vi)(b)	In case of any information submitted by tenderer is found to be false forged or incorrect after the award of contract, the contract shall be terminated. Earnest Money Deposit (EMD), Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of up to five years.
19.	<b>Acceptance of Tender:</b>
19.1	Railway reserves the right to divide the tender amongst more than one tenderer, if deemed necessary, and also to reject any or all tenders received without assigning any reason and is not bound to accept the lowest or any other tender.
19.2	Railway reserves the right to accept /reject any tender.
20.	<b>Determination of Contract:</b>
20.(1)	Right of Railway to Determine the Contract: The Railway shall be entitled to determine and terminate the contract at any time should, in the Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the Railway of such determination and the reasons therefore shall be conclusive evidence thereof.
20.(2)	Payment on Determination of Contract: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Railway's decision on the necessity and propriety of such expenditure shall be final and conclusive.
20.(3)	The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract..
21.0	Determination of Contract Owing To Default Of Contractor :
	Clause no.61 of Indian Railways Standard General Condition of Contract, April 2022 with latest correction slips shall be applicable for this tender.
22.0	Consignee:  The consignee will be Dy.CME/WRS/Raipur or his nominated official for works to be executed at Wagon Repair Shop Raipur, South East Central Railway, Raipur.
23.0	Damage To Railway Property Or Private Life And Property The Contractor shall be  responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway, although all reasonable and proper precautions may have been taken by the Contractor. In case the Railway shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway may incur in reference thereto, shall be charged to the Contractor. The Railway shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take

	such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.
24.	<b>Arbitration:</b> The clause no.63 and 64 of General Conditions of Contracts April 2022 (GCC) with correction slip (if any) shall be applicable.
25.	<b>Illegal Gratification:-</b>
25.1	Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner or agent or servant or anyone on his behalf, to any officer or employee of the Railway or to any person on his behalf in relation to obtaining or execution of this or any other contract with the Railway shall, in addition to any criminal liability which he may incur, subject Contractor to the rescission of the contract and all other contracts with the Railway and to the payment of any loss or damage resulting from such decision and the Railway shall be entitled to deduct the amounts so payable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
26.2	The Contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the Railway and if he shall do so, the Railway shall be entitled forthwith to rescind the contract and all other contracts with the Railway. Any question or dispute as to the commission of any such offence or compensation payable to the Railway under this Clause shall be settled by the General Manager of the Railway, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive. In the event of rescission of the contract under this Clause, the Contractor will not be paid any compensation whatsoever except payments for the work done up to the date of rescission.

### Scope and Terms & Conditions of Contract

The comprehensive work of supply, installation and commissioning of "Shot Peening Machine with building/Shed" has been splitted into three parts namely A, B and C.

Part-A	Supply, Installation, Commissioning & Proving Out of <b><u>Shot Peening Machine for Springs (Turnkey basis)</u></b>
Part-B	Construction of shed for shot peening machine
Part-C	Electrical fittings for shot peening machine and in constructed shed.

Departmental Rate			
Sr. No.	Description	Amount (in Rs.)	Remarks
1.	Supply, Installation, Commissioning & Proving Out of <b><u>Shot Peening Machine for Springs (Turnkey basis)</u></b>	34,33,800/-	Part-A
2.	Construction of shed for housing of shot peening machine	36,94,331.35/-	Part-B, shed formation as per figures and diagrams and materials/items used as per Annexure-I
3.	Electrical fittings for shot peening machine and in constructed shed.	1,40,805.79/-	Part-C, materials/items used as per Annexure-II
<b>Total Cost of Work</b>		<b>72,68,937.14/-</b>	

Manufacturing of Shot Peening Machine according to Railway's Requirement shall be initiated by the contractor as soon as the issue of LOA.

Also for housing of Shot Peening Machine in proposed location {as per drawing S.E.C.RLY./SK.No. WRS/R(CIVIL)-1429}, the construction of shed with proper electrical fittings and connections in whatever the suitable order shall commence within fifteen days of issue of LOA.

### Part-A

<b><u>Shot Peening Machine for Springs (Turnkey basis)</u></b>
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### **Supply, Installation, Commissioning & Proving Out of Shot Peening Machine for Springs (Turnkey basis)**

**Purpose:** The machine shall be designed for efficient cleaning of coil springs, cbc parts etc. The coil springs and cbc parts etc. should be cleaned of grease, oil & scales etc.

#### **DESCRIPTION:**

The offered machine is suitable for cleaning of coil springs, cbc components etc.

The machine consists of substantially built blast cabinet with table fitted on door with 1hp drive.

One nos. blast wheels station is mounted on the roof of work cabinet which fires abrasive on the components.

The turn table system is driven by gear motor outside the enclosures.

The spent abrasive from the blasting operation passes through the perforated floor plates and gravitate down the cabinet hopper into a screw conveyor. The abrasive is then transferred to the boot of the bucket elevator.

The bucket elevator carries the abrasive vertically and discharges the same into a rotary screen separator where dust and fine abrasives are air cleaned ensuring that only clean abrasive is collected in the storage hopper for re-circulation purpose.

The blast cabinet is efficiently exhausted to remove dust by a Fabric Bag dust collector unit.

Following are the major components supplied

- Blast Cabinet with door turn table.
- Cabinet liner
- Direct Blast Zone& Table:-10mmthick Mn liners (11-14%Mn)
- Rest cabinet:-10mm thick vulcanized rubber sheet.
- Door:-Rubber sheet 6mm thick vulcanized
- One15½"x 2½"blast wheel assembly.
- Automatic abrasive control dribble valve.
- Two door with Turn Table drive.
- Bucket Elevator and rotary screen separator systems.
- Cartridge Type Dust Collectors with Ducting, Wiring and control panel.
- Exhaust Fans.
- All necessary civil work for cabinet and dust collector.
- Abrasive Media S-280(0.5 Tons).

#### **Following are the major components arranged by Railway:**

1. A.C. Electrical Supply at 415V/3P/50Hz. Upto the Control Panel.
2. Dry & Oil free Compressed air supply for Abrasive Control Valv

COMPRESSED AIR REQ: - 7KG/CM2 AT 25CFM  
ELEC. SUPPLY - 415V/3P/50Hz AC



**Figure 1.0: Shot Peening Machine for Springs (Turnkey basis)**

### TECHNICAL SPECIFICATIONS:

S. No.	Description	Specifications
1.	No. of Blast Wheels	1
2.	Size of Blast Wheel	15½"x 2½"
3.	Flow Rate lbs/Wheel/min	330-360
4.	HP of Blast Wheel(Each)	15
5.	Shot Velocity	70-75Mtrs/sec

6.	Shot Consumption	0.5Kg/Wheel/Hour Approx
7.	Initial Charge of Shots	500Kgs.(Buyer's Scope)
8.	Swing table door	2 nos.
9.	Turn Table Drive HP	1
10.	Table Load Capacity	750Kg Each
11.	Bucket Elevator HP	1
12.	Type of Dust Collector	Cartridge bags
13.	Dust Collector Capacity	2000 CFM
14.	Number of Bags	4
15.	Filtration Area	36 Sq. Meter
16.	Dust Emission Level	LessThan80mg/ Ncub.meter
17.	Pit Depth Requirement	NIL
18.	Overall Dimensions	7500mm x 3500mm x 4500mm

#### Electrical Load Requirement

S.No.	Description	Horsepower	
1.	Blast Wheel 15½"x 2½"	15HP x1	15HP
2.	Bucket Elevator	1HP x 1	1HP
3.	Turn Table Drive	1HP x2	2HP
4.	Dust collector	5HP x 1	5HP
<b>Total Power</b>			<b>23HP</b>

#### Blast Cabinet:

Blast cabinets are manufactured from prime quality heavy duty steel plate of 6 mm and mounted on rigid structural steel frame work. The blast cabinet's internal surface is provided with 10mm thick liners in the Direct Blasting zone & the rest of the cabinet 10mm thick vulcanized rubber sheet. Both door is lined with 6mm thick Vulcanized rubber. The blast cabinets are provided with 6 mm thick heavy duty perforated floor for the transfer of shot to the hopper for recycling. The hopper is manufactured from heavy duty steel plate to mount the screw conveyor system.

Length	:	2300 mm
Width	:	1320 mm
Height	:	1890mm

#### Door with Swing Turn Table : 2 Nos.

The door with swing turn table is provided with machine for job loading and unloading. The door is lined with 6mm thick Rubber. The work table is drive by geared motor which was mounted outside the cabinet with door. The table is mounted on the boom of door with bearing housing.Housing is protected with Mn plates to secure life of bearings. Table is lined with 10mm thick Mn lining.

Interlocking is providing with door and cabinet to ensure door opening when blast wheel is in on condition.

Diameter of Table	1200 mm
Load Capacity of Table	750 Kg
Max" work clearance height	800 mm
Drive	1 HP Geared Motor
Quantity	2 Nos.
RPM of Table	6-8 rpm

#### Blast Wheel Assembly:

The blast wheel assembly is mounted on a MS thick plate. It consists of one number blast wheel of size 15½" x 2½". The wheel consists of fabricated steel casing, alloy steel liners, rotor, blades, control cage and feed spout. The rotor is made out of EN grade material duly hardened to the full depth.Blastwheeliscoupledthroughself-lubricatedandselfaligningpedestal bearings. The rotor is dynamically balanced and the drive shaft of the blast wheel is made out of EN grade material and duly precision grinded.



Size	15½"x 2½"
Quantity	1Nos.
Drive Motor	15 HP, 415V/3P/50Hz
Drive Transfer	Through Flat Belt
Flow Rate/wheel/hour	150kg/min
Flow Control	Through Dribble valve

**Screw Conveyor: 01 Nos.**

One no. screw conveyor is provided in the hopper of cabinet. Spent shots falls into the screw conveyor hopper, which runs lengthwise and convey media into the boot of bucket elevator. The screw conveyor shall be fabricated from 'C' class pipe with 6 mm thick flight. The bearing used shall be taper roller bearing (NTN/SKF/FAG/ZKL) to take maximum load and to provide smooth operation. Bearing shall be sealed against dust and lubricated for more life.

Drive for Screw Conveyor : Attached with Bucket Elevator Boot

**Bucket Elevator & Rotary Screen Separator: 01 Set**

The abrasive conveyed by the cross screw conveyor is elevated by the bucket elevator to the top where it enters the media separation unit. The media separation unit consist rotary screen which continuously segregate usable abrasive from blasted media and debris. The media separation unit is air wash type separation system receives media and dust after rotary screen separator.

The separation unit consists of baffles which generate a curtain of abrasive & dust and an air current is passing through the curtain which air washes the media thereby removing dust from the blasted media. Contaminants are removed by the separation unit for disposal by user [Buyer to arrange bin] and are discharged through chute.

Reusable abrasive falls into the storage hopper for re-circulation.

The abrasive from storage hopper are transferred into the blast wheels through feed funnel. The flow of shots to the blast wheel unit is regulated by the dribble valve which is actuated by pneumatic cylinder.

The bucket elevator is fabricated from 5 mm thick steel sheet at boot and top section and 3.15 mm thick steel sheet at trunk section.

Drive for B. Elevator & Rotary Screen : 1 HP, 415V/3P/50Hz.

**Cartridge BAG TYPE DUST COLLECTOR: 01Set**

The fine dust laden air sucked from the cabinet enters into the dust collector. It passes through filter bags where the dust particles deposit on the surface of bags and clean air discharges into the atmosphere.

The CT dust collector is constructed from 2 mm thick MS sheet and suitably reinforced for strength and rigidity. The fine dust is trapped on the surface of bags inside the dust collector. The cleaning of bags is done by pulsing system. The dust is dislodged in the hopper and from there it is transferred through the gravity operated flap valve to the dust bin (Bin to be arranged by Railway).

Filter Bag	Catridge Bag
No.of Bags	04
Filter Bag Area	36 sqmtr
No.of Shaking	2
Dust Emission level	Less than 80mg/NCubicMtr
Exhaust Fan Motor	5HP,415V/3P/50Hz
Exhaust Fan Capacity	2000Cfm

**Ducting:**

Suitable ducting from blast cabinet & separator to dust collector is provided. Water storage tank is also provided to keep atmosphere clean Ducting is constructed by 2.0 mm thick mild steel sheet.

**Electric Control Panel:**

The motor control panel shall be a centralized control panel housed with switchgear items. The motor control panel shall be mounted with 1 No. suitable rating Switch Fuse Unit for incoming supply. Individual MCB and thermal over load relay shall be mounted for motor below 12.5 HP.

**Colour / Painting:**

All steel surface will be grinded with disc grinder / sander & then will be painted with two coats of red oxide zinc chromate primer as per IS 2074. The final coat will be done with green enamel synthetic paint serial no 281 to IS5-1978.

**NOTE:** All above dimensions are approximate. The system's design may be changed without affecting its rated capacity.

**Technical Specification****1. Basic Design Features:****1.1 SAFETY FEATURES:**

Machine shall have safety features

**1.2 SPECIFIC CHARACTERISTIC:****1.2.1 General:**

The coil springs and other components shall be cleaned of oil, grease, scale etc. by degreasing agents and rinsing with hot water/steam and dried before shot blasting.

The design of the plant shall be of door mounted rotary table which swings out with it. The machine shall permit blasting of components in rotation with 1(one) mechanical turbine to be fixed at suitable angle for completion of shot blasting while the job shall be placed on the rotary table in a suitable position. Rotation of the table shall be in one direction & driving mechanism shall be located below table. While shot blasting is underway on the components placed on one of the rotary tables, the other table shall be available for loading/placing the components thereon, in parallel.

**1.2.2 Blast Cabinet:**

The blast cabinet shall be of sturdy fabricated construction with M.S. plates not less than 6 mm thick, suitably reinforced to combine strength and utility. The overall dimensions of the blast cabinet shall be such as to enhance shot blasting efficiency. Length, breadth and height of the cabinet shall be indicated in the offer.

The area of the cabinet directly exposed to the shot stream shall be lined with hardened long life liners of 11-14% austenitic manganese steel as per IS: 276 (2000) grade-3 of minimum 10 mm thickness. The liners shall be pre-hardened through work hardening process in order to avoid any warping during blasting operation. The thickness, material composition, life of liners in terms of machine hours of utilization and hardness of liners shall be indicated in the offer. The rest of the cabinet shall be lined with abrasion resistant vulcanized rubber sheets of 10mm thickness, having minimum shore hardness of 40-50, for protection from rebounding abrasive.

The cabinet floor shall be of minimum 6mm thick perforated M.S. plates. Arrangement should be made to protect unnecessary wear to the cabinet floor, hoppers and screw conveyors with a fabricated steel box assembly to hold scrap iron, provided beneath the blast wheel.

**1.2.3 Door:**

The cabinet doors shall be sealed against dust and abrasive leakage with rubber type seals. The doors shall be constructed of 6mm thick M.S. Plate lined with 6mm thick rubber or for protection from rebounding abrasive. The doors shall be supported from a sturdy spindle mounted in anti-friction bearings. A three point cam locking device actuated by the doors handle to ensure tight fitting and easy opening of the doors shall be provided. The arrangement should be clearly indicated in the offer with diagrams.

The doors shall carry one rotary table each attached to the cabinet. Each door shall be fitted with a safety device to ensure that the turbine does not work when the door is open. The number of doors shall be two.

#### **1.2.4 Table:**

The system shall include rotary tables having load capacity of 750kg minimum, suitable for loading of various components. The table shall be rotated from inside of the cabinet by electric motor with belt and reduction gearbox. The motor and reduction gear box shall be mounted out of blast zone. The diameter of the table, work loading height and its speed shall be as indicated in leading parameters.

The table shall be constructed with minimum of 16mm thick M.S. plate and 10mm thick 11-14% austenitic manganese steel as per IS: 276 (2000) grade-3 lining on top of that, duly work hardened prior to fitment. Both M.S. plate and rubber sheet shall be perforated with approx. 16mm diameter drain holes.

The table support arrangement shall be cantilevered beam type, fabricated with M.S. plates and shall be supported from door supporting shaft column. The beam shall not be supported from the door assembly. The construction of beam and material thickness used shall be indicated in the offer.

In the "door open" position, the table shall be free from its drive and shall be rotatable by hand for loading and unloading.

#### **1.2.5 Abrasive Recovery and Reclamation System:**

The spent abrasive shall be collected through perforations in the table into the hopper. The hopper shall be of fabricated construction suitably reinforced to combine strength and rigidity. The abrasive shall be transferred by screw conveyors to the bucket elevator, which shall discharge the shots to the abrasive separator where dust and fines shall be removed. The clean usable abrasive shall drop into a storage hopper after which the abrasive shall be fed to the turbine. The design of the system provided shall be clearly shown in detail through diagrams and schematic views.

#### **1.2.6 Abrasive Conveyor:**

This shall generally consist of two approx 09 inch helicoids screw conveyors. The screw conveyor shall discharge the charge to the boot section of the elevator driven through chain and sprocket transmission from the boot shaft of the abrasive elevator. The number of conveyors used in the system shall be indicated in the offer.

#### **1.2.7 Bucket Elevator:**

The bucket elevator shall be of fabricated construction with suitable access for maintenance located at convenient point. The bucket shall be of M.S. fabricated construction and attached to belt with spike bolts. The elevator shall have removable top cover for belt inspection or installation. The elevator bearings shall be lubricated and sealed for life. Make of bearings shall be only SKF/FAG/KOYO/NTN/TATA. The abrasive shall be centrifugally discharged from the head and spent discharge shall be taken to abrasive separator by a bucket elevator. The bucket elevator and belt shall be closed in the dust tight steel housing.

The elevator shafts in the head and boot shall be driven by electric motor with the provision of belt tensioning adjustment. The elevator drive unit shall be located at the top

#### **1.2.8 Abrasive Separator:**

The abrasive separator shall consist of wind sifting arrangement working on the principles of dynamic deflection of grains.

The bucket elevator shall discharge shots, dust and sand into the wind sifting arrangement through a screw conveyor which removes large size particles. The material shall be allowed to fall by gravity. The shots shall be arranged to fall in several cascades so as to increase the contact time through at least two baffles. The arrangement shall ensure a

full length even thickness curtain of abrasive presented to the air washing flow and even flow of air through the abrasive curtain. This shall be connected to the dust extraction system to ensure collection of thoroughly cleaned shots into storage hopper. The residual dust contents in the blasting abrasive after sifting must be indicated in the offer.

The arrangement shall be such that wear and tear on the separator is negligible. An abrasive trap shall be provided to prevent small abrasive from being carried into dust collector.

#### **1.2.9 Blasting Turbine Wheels:**

The plant shall be provided with one turbine wheel. The position shall be so arranged as to ensure coverage of entire area of table. The minimum abrasive flow rate shall be in the range of 150-170 kg/min. and velocity shall be in the range of 70-80 meter/second. However, the bidder should furnish H.P. RPM, shot throw speed and shot throw capacity per minute of turbine wheel with calculations etc. in the offer. The bidder shall also indicate the layout of blasting turbines in the blasting cabinet, through sketches.

All parts of the turbine wheels coming in to contact with grits/shots should conform to the following:

- i. Bare wheel- SAE8620 or its equivalent
- ii. Blade hardness-64-66HRC, as self locking type blade
- iii. Impellers/Accelerators-52-56HRC
- iv. Control cage-52-56HRC

Note: The bidder shall identify the material used for the above parts and their method of hardening.

The wheel shaft should run on dust proof sealed ball bearings of SKF/FAG/NTN Japan/KOYO/TATA. The turbine wheels should be dynamically balanced.

#### **1.2.10 Shot Controller:**

The flow of shots to the turbine unit shall be controlled by an air cylinder operating a shut off valve which operates through a solenoid valve and a selector switch located near the operator's control panel.

#### **1.2.11 Dust Collector:**

Dust collector and extraction unit of wear resistant design of suitable thickness of steel sheet and capacity, should be provided. The air exhaust into atmosphere must not contain dust more than 80 milligram/cubic metre of air.

The dust extraction unit shall be such, as to ensure that adequate fresh air circulation is maintained in the chamber for clear visibility and to prevent dust deposition on the blast cleaned surfaces.

Complete technical details, specifications and make of the equipments like fans, filters, duct etc., working parameters like exhaust air capacity, static pressure at fan inlet, operating pressures and power equipments, should be furnished in the offer.

The exhaust fans should be made of sturdy steel sheet construction of suitable thickness, not less than 3mm. It should have statically and dynamically balanced impeller. Its air volume capacity, RPM, pressure and HP requirement should be indicated in the offer.

Facility for automatic continuous cleaning of the filter bags shall be built-in. The system should be explained in the offering detail.

Ducting between dust collector and cabin should be of minimum 2.5mm thickness galvanized steel sheets. The ducting should also be provided from dust collector to fan and to chimney. Minimum length of ducting will be 10 mtrs. Bidder shall indicate the length of ducting and height of chimney and also the cost of additional ducting parameter length in their offer.

### **1.2.12 Shot:**

The steel shot shall conform to IS 4606/SAE-J-827 or its equivalent with hardness value ranging between 40 to 50 HRC. The bidder shall clearly indicate material composition of shots to be used, its density, hardness and size etc. in the bid.

### **1.2.13 Noise level:**

The noise level of the plant shall not exceed 85 dB (A) at 1m in any case during working of the machine. The system adapted for controlling the noise level shall be indicated in detail.

### **1.2.14 Maintainability:**

The design of the equipment in the entire system shall be such that any item requiring replacement during maintenance is quickly and easily replaced.

The plant should be provided with inspection platform with non skid floor plates, safety ladders and railings for elevator sand dust collectors.

## **2. GENERAL ELECTRIC SPECIFICATION:**

**2.1** The provision of this General Specification shall apply, wherever relevant

**2.2** All equipments and material shall comply with appropriate Indian Standards (latest), International Standards or National Standards of the country of origin provided the latter are equivalent to or better than the former. The tenderer shall indicate the Standards applicable. Wherever IS specification are different from this specification the provision made in this specification will prevail. The tenderer shall indicate the specifications to which the different equipments being supplied will conform, along with the offer. The following standards are applicable in particular. (Corresponding International Standards like ASA, NEMA, BSS, DIN etc. may also be quoted).

<b>Specification No.</b>	<b>Item Description</b>
IS:325-1979 (latest)	Three phase induction motors (corresponding to IEC pub-34-1) (Latest).
IS:1248 (Latest)	Direct acting indicating analogue electrical measuring instruments and their accessories (corresponding to IEC Pub-51) (Latest).
IS:1231-1974 (Latest)	Dimensions of three phase induction motors (corresponding to IEC Pub-72- 1) (Latest).
IS:1271-1985 (Latest)	Classification of insulation material for electrical machinery & apparatus in relation to their thermal stability in service (corresponding to IEC-Pub-85) (Latest).
IS:6875 (Latest)	Push Buttons and related control switches corresponding to IEC Pub/73) (Latest).
IS:375-1963 (Latest)	Marking and arrangement of switchgear, busbars, main connection & auxiliary wiring.
IS:996-1979 (Latest)	Single phase small AC and universal electrical motors.
IS:1356 (Latest)	Electrical equipment of machine tools.
IS:2516 (Latest)	Circuit breakers (corresponding to IEC Pub-56) (Latest)
IS:4691- 1985(Latest)	Rotating electrical machine part 5 degree of protection provided by enclosure for rotating electrical machinery.
IS:2223- 1983(Latest)	Dimensions of flange mounted AC induction motors
IS :10118- 1982(Latest)	Code of practice for selection installation and maintenance of switch gears & control gears.
IS:4889- 1968(Latest)	Method of determination of efficiency of 14 rotating electrical machine.

**2.3** Unless specified in the main specification, the AC motors and starters shall be of the following type. Tenderer is, however, free to give alternative proposal along with justification, if in his view alternative proposal is warranted by site conditions. Type of motor type of starter.

S.N.	Type of Motor	Type of Starter
2.3.1	Any type of AC motor starting current of which does not exceed 75 amps.	Direct online.
2.3.2	AC squirrel cage, induction motors, starting current of which is above 75 amps. if started direct on line	Star delta or Auto transformer type.
2.3.3	AC slip ring type motor	Resistance type air/fan Cooled
2.3.4	AC synchronous or synchronous induction motor.	Suitable makers standard.
2.3.5	DC motor	Resistance type/ Thyristor type.

**2.4** The control gear for AC/DC motors shall incorporate the following protection devices as concomitant accessories.

**No Voltage Protection** - No voltage protection shall be provided so that machine will not start up again by itself when, following an interruption the supply is restored.

**Short Circuit Protection** - To protect against short circuits due to insulation failure of faulty connections HRC fuses shall be provided for each motor. The rating of the fuse shall be such as to take care of the over current due to motor starting.

**Over Load Protection** - To prevent motors from overloading, overload protection shall be provided separately for each motor. Three phase motors shall be protected by overload tripping devices on each phase.

**Single Phasing Protection** - A separate current sensitive delayed action single phasing preventer shall be provided for each motor separately. Overload protection shall not be treated as single phasing preventer.

**2.5** Control equipments shall be mounted in separated drip proof enclosures. Control enclosures and compartments are to be so designed as to give adequate protection against ingress of dust, oil, coolant or chips. All control devices like contractors etc. shall be front mounted on a rigidly fabricated metal panel for ease of operation. All other electrics shall be installed that they are readily accessible when the doors and covers are opened. Hinged covers shall be interlocked with the machine tool control to prevent operation of the machine when cover is open.

**2.6** The motor shall be totally enclosed with or without fan cooled frame. Screen protected drip proof type motor may be provided if it is mounted inside protective enclosures.

**2.7** All electrical equipment shall comply with the latest Indian Electricity Rules Act and rules (latest) framed under the Act in respect of safety requirements and other essential provisions of the Act, applicable to installation and operation of the machine.

**2.8** All instruments shall be of the Industrial Grade "A" (IS-1248) switch board type the range of the instrument shall be such that the maximum load expected in the circuit shall produce a deflection of 60% to 80% of the full scale.

**2.9** The supplier shall furnish 3 sets of complete electrical and electronic wiring diagrams in full details to enable the maintenance staff to locate faults in the circuits, 3 sets of part 15 catalogues, maintenance manuals operating instructions with details of coils and windings, used in the equipment to facilitate repairs and maintenance should also be supplied.

**2.10** For main motor class minimum “B” Class insulation shall be provided. If any other class of insulation is proposed, detailed justification for providing different class of insulation shall be given.

**2.11** Motors shall be designed to withstand frequent starts, stops and reversals as demanded in the operation of the machine.

**2.12** Two earthing terminals shall be provided on all electric motors including the control gear.

**2.13 POWER SUPPLY:**

The machine shall be suitable for operation on 415 volts 3 phase 50 cycles AC 3 wire or 4 wire system with neutral solidly earthed. The supply voltage may vary up to +10% - 20%. The frequency may vary up to + 3%. However, full rated power of the motor shall be available at the lower voltage. Firm should confirm satisfactory performance of the machine at incoming power supply in the range 415V+10%-20% and 50HZ+3% frequency or should provide voltage stabilizer as specified below of required capacity.

The voltage stabilizer, if required, shall conform to:

Input Voltage-320 to 460volts 3-phase 4-wire supply.

Output Voltage-400-415 volts

Regulation - /+1% from No load to Full load.

Rate of correction- 20 volts per second per phase.

Wave form distortion-NIL

Efficiency- Not less than 97%.

Winding and class of insulation – Copper wire wound with “B ”class of insulation or better.

In case of machines equipped with NC, SS, CNC, Thyristor controlled devices and other sophisticated electronic gadgets including microprocessors etc. which are susceptible to power line spikes and surges, a suitable voltage stabilizer and ultra isolation transformer of adequate capacity to cover for the entire electrical load of the machine shall be offered as a concomitant accessory conforming to Specification for voltage stabilizer and isolation transformer to the parameters mentioned below.

Transformer ratio-1:1

Winding-Copper wire wound with “F” class insulation or better

Protection-To arrest spike and surges to the order of 3KV for 200-400micro seconds duration.

Common mode rejection -120dB

Isolation-Capacitance 005Pf: resistance greater than 1000Mega Ohms.

**2.14 ATMOSPHERIC CONDITIONS:**

The ambient temperature at the site at which the machine will be installed may vary from -4°C to +50°C over the year. The relative humidity may be as high as 98%. The atmosphere is expected to be dusty. The machines offered shall be suitably tropicalized to work under these atmospheric conditions without any adverse effect on their performance.

The temperature rise shall not reach such a value that there is a risk of injury to any insulating material or adjacent parts.

The drive shall be capable of operating at any one of the speed required independent of the load in accordance with the requirements of the machine.

### **3.0 GENERAL CHARACTERISTIC:**

#### **3.1 RIGIDITY AND STABILITY**

The machine shall be robust, rigid and of sturdy construction. It shall be designed to meet heavy duty demands of various operations on the machine under normal Workshop environment for such machines. It shall be free for vibrations even when working at full capacity.

All machine castings shall be made of close grained high grade cast iron like Mechanite or equivalent materials meeting IS-210 Standards to ensure durability and rigidity. The casting shall be thermal stress relieved to ensure stability and continued accuracy.

All machine fabrications of critical load bearing assemblies like beds, columns etc. shall be adequately strengthened and stress relieved.

Change in ambient temperature shall not affect the performance of the machine there shall be no change in the performance of the machine either on switching on the machine or after continuous running.

There shall be no resonant vibrations throughout the working range of the machine at all load levels

#### **3.2 SAFETY CONTROLS:**

The machine shall incorporate safety devices to provide protection to the operator and machine against all possible operational and machinery failures.

Suitable interlock shall be provided to prevent machine operations in the event of:

Faulty sequence of operation.

Fluctuation in supply voltage.

Resumption of power supply after power failure.

Non-positioning of safety guards.

Failure of hydraulic system(where applicable)

Failure of lubricating system (In case of automatic including drop in pressure lubrication)

A fault or damage in the control circuit or interruption re-establishment after an interruption of fluctuation in whatever manner in the power supply to the machinery must not lead to dangerous situations in particular.

The machinery must not start unexpectedly.

The machinery must not be prevented from stopping if command has already been given.

No moving part of the machinery or piece held by the machinery shall fall or be ejected.

The protection devices must remain effective.

The machine shall be fitted with an emergency stop device to enable actual or impending danger to be averted. This device must be:-

Conveniently located.

Clearly identifiable.

Stop the machine as quickly as possible without causing additional hazards.

The emergency stop must remain engaged. It should be possible to disengage it only by appropriate operation.

Disengaging the control must not restart the machinery but only permit restarting.

Safety features shall also include.

Safety device against over load for all mechanical and electric items to the extent possible.

Safety stops against over-running of slides.

Guard and protection devices shall protect exposed persons against risks related to moving transmission parts (such as pulleys, belts, gears, rack and pinion, shafts etc.) and moving parts directly involved in the process to the extent possible. This shall meet the following requirements:-

Be of robust construction;

Not give rise to any additional risk;

Not be easy to by-pass or render non-operational;

Be located at an adequate distance from danger zone;



Cause minimum obstruction to the view of the production process;  
Rigidly connected and not prone to rattling;  
Enable essential work to be carried out without the guard or protection device having to be dismantled.

A load meter shall be provided to indicate the load on the machine. The meter shall have a suitable mark to indicate the maximum load the machine can take. Full details of the above and other safety features indicating how each one functions must be explained in the offer.

Movement of main cylinder of jig & fixture only possible when robotic head is fully out.

Remote connectivity points should be provided on both sides on CNC spot welding machine.

PLC listing manual should be in the form of ladder or ST Ladder PLC is available in the machine.

Service accessories kits for trouble shooting to component level for different boards should be supplied

### **3.3 OPERATIONAL CONTROLS:**

The operation of the machine shall be by push buttons or levers. The basic rules for the direction of operation of controls and the corresponding direction of movements of the machine tools shall be as per IS: 2987-1985.

The control devices shall be-

Clearly visible and identifiable.

Ergonomically positioned for safe operation without hesitating or loss of time, and without ambiguity.

### **3.4 LIGHTING:**

Integral lighting suitable for the operations concerned where its lack is likely to cause a risk despite ambient lighting of normal intensity shall be provided.

The manufacturer must ensure that there is no area of shadow likely to cause nuisance, that there is no irritating dazzle and that there are no dangerous stroboscopic effects due to lighting provided by the manufacturer.

Integral parts requiring frequent inspection and adjustment and maintenance areas must be provided with appropriate lighting.

The machine lighting should be of low voltage so as to prevent any hazard to the operator.

### **3.5 MACHINE MAINTAINABILITY:**

The machine shall be so designed as to require minimum possible maintenance and to give trouble free service.

All assemblies/parts of the machine shall be easily accessible for maintenance.

The machine shall not require major dis-assembly for checking and replacement of a particular part, especially for parts requiring periodical checkup and replacement.

The manufacturer must provide means of access e.g. stairs, ladders, cat walks etc. to allow access safely to all areas used for production, adjustments and maintenance operations.

### **3.6 WEAR COMPENSATION ADJUSTMENT:**

The original built in accuracy of the machine shall be capable of being maintained conveniently and economically by suitable adjustments for taking up wear on slides, bearings and lead screws. The system of adjustments incorporated shall be explained in the offer.

### **3.7 COOLANT SYSTEM (WHERE APPLICABLE):**

Suitable coolant system with pump, motor, tank, filter etc. shall be provided. The coolant pump shall be as per IS:2161-1962. The filter shall be of reusable type and indigenously available. If reusable filter cannot be offered the filter cartridge shall be readily available in India. Source of supply shall be indicated. Adequate no. of filters for 2 years working on double shift basis shall be offered as spare. Details of the coolant system shall be indicated in the offer.

The supply of coolant shall be in ample volume. Provision to re-circulate the coolant shall be available. A chip and coolant tray shall be provided. The volume of coolant flow shall be indicated. It shall be adjustable.

An enclosure shall be provided to prevent the coolant from splashing outside the machining zone. Details of enclosure shall be provided. Specific requirements of coolant system for grinding machines etc. shall be clearly indicated.

### **3.8 LUBRICATION SYSTEM (WHERE APPLICABLE):**

The machine shall be provided with an automatic lubricating system for ensuring delivery of adequate quantity of lubricant to areas requiring continuous lubrication. Suitable arrangements must be provided for indication of failure of the lubricating system.

The system shall be provided with interlock to prevent machine operating/starting in the event of the failure lubrication system.

Reusable filters capable of filtering chips, dust particles etc. shall be provided. Indicators for showing clogged condition of filters shall be available. The filters shall be indigenously available. If reusable filter cannot be offered the filter cartridge shall be readily available in India. Source of supply shall be indicated. Adequate no. of filters for 2 years working on double shift basis shall be offered as spare.

Lubrication and filter cleaning chart shall be displayed on a metal plate at a conspicuous location on the machine indicating :-

Specific location of points on the machine to be oiled lubricated/greased.

Periodicity of lubrication of these points.

Filter to be cleaned.

Periodicity of cleaning filters.

Periodicity of replenishing lubricating oil for the centralized system.

Any other similar relevant information.

Points where manual lubrication is needed shall be separately indicated. Frequency of lubrication shall be also clearly mentioned.

Lubricating oils used in the machine shall be available in India. Successful tenderer will be required to indicate brand names of approved oils manufactured by various Indian Oil Companies.

First fill of lubricating oils used in the machine shall be provided with the machine. Details of lubricating system provided shall be indicated.

### **3.9 PNEUMATIC SYSTEM (WHERE APPLICABLE):**

The compressed air supply will be provided by the customer at the machine within pressure range of 4.5-7.5 kg/cm<sup>2</sup> and a moisture content or 1000 ppm. The pneumatic system of the machine should be designed accordingly. An alarm shall be provided for low air pressure.

Suitable filter/moisture trap shall be provided by the contractor in the system of pneumatic air intake. The filter shall be reusable type and indigenously available. If reusable filter cannot be offered, the filter cartridge shall be easily available in India. Source of supply shall be indicated. Adequate nos. of filters for 2 years working on double shift basis shall be offered as spare.

Air pressure regulator, if necessary, shall be provided by the tenderer.

The make of pneumatic control equipment shall be of reputed make. The makes shall be indicated.

### **3.10 HYDRAULIC SYSTEM (WHERE APPLICABLE):**

Hydraulic circuit must be equipped with the following safety and inspection equipment:

Pressure gauges at all place, where pressure has to be set up or inspected.

Safety valves for hydraulic circuit if relief valve does not fulfill this function.

Equipment for checking of temperature in the circuit or in the pump wherever necessary.

Arrangement to show if the filters (including those in the pump set) are choked and need cleaning. The filters shall be of reusable type and indigenously available. If reusable filter cannot be offered, the filter cartridge shall be readily available in India. Source of supply shall be indicated. Adequate no. of filters for 2 years working on double shift basis shall be offered as spare.

Alarm for low oil level.

The sump aggregate shall have the following:

Oil level sight gauges or any other equipment showing the minimum and maximum oil levels in sump.

A drain plug at the lowest portion of the tank.

It shall be possible to drain the oil from the tank without disconnecting any pipes or other fittings.

The temperature of oil in hydraulic circuits shall not exceed 60 degrees C in any case. Suitable arrangement shall be incorporated to ensure that the oil is not overheated under local weather conditions at continuous normal working of the machine.

Facilities for bleeding of air in case of air lock shall be provided.

The hydraulic reservoir, pump and allied equipment shall be suitably

The Hydraulic Reservoir, pump and allied equipment shall be suitably segregated from the machine in order to remove major source of heat.

First fill of hydraulic oils used on the machine shall be provided with the machine.

#### **4.0 COLOUR:**

The machine and its accessories shall be painted in Apple Green Colour No.281 to [IS: 5- 1978](#), (if any specific colour code standardized by BIS is available, the same be given). The machine can also be painted in equivalent RAL/DIN/other International Standards. If there is a standard color scheme of the manufacturer; the same can also be considered and may be specified.

#### **5.0 BOUGHT OUT ITEMS:**

The bidder shall furnish along with the offer a list of all critical items/ sub-assemblies which are bought out by the bidder and proposed to be used, along with the manufacturer's name, brand model etc. The successful bidder may be required to produce invoices to ensure genuineness of such products/ verification by the Inspecting agency.

The bidder should clearly indicate that in case of components/sub assemblies taken from reputed companies such as Vickers, Rexroth, RITTAL, THK, and Shenburger etc., the parent company has already entered into contract with their Indian units/affiliates for undertakings repairs/after sales service during warranty and post warranty.

S.N.	Sub-assembly	Make
1.	CNC & Drive Controller	SIEMENS/FANUC
2.	Hydraulic system	Rexroth/Vickers/Yuken/Atos/Parker
3.	Feedback devices	Heidenhain, Fagor, Siemens, Fanuc, Mitsubishi
4.	Balls crews	THK/INA/Tsubaki/Rexroth/Steinmeyerstar/ Gamfior / Schenburger/Shuton.
5.	Spindle Bearings	SKF/FAG/KOYO/NTN/TATA.
6.	Lubrication System	Cenlub/ Dropco/Vogel/Rexroth
7.	Electrical Control Cabinet	RITTAL/ Siemens or of other reputed make with IP55 Protection level

8.	Servo Controlled Voltage Stabilizer	Neel/Servomax/Neelkanth/Powerware/Delta
9.	Ultra Isolation Transformer	Neel/Servomax/Neelkanth/Powerware/Delta
10.	PLC	SIEMENS/FANUC/AllenBradley/Heidenhain/ Mitsubishi
11.	Contactors/ Relays/MCBS/Overload Relays/Isolation Switch	SIEMENS/Schenider/Moeller/ABB
12.	Proximities Switches/ Limit Switches/ Reed Switches/ Push Buttons	SIEMENS/Schenider/Balluff/Sick/Turck/ Allen Bradley

## 6.0 LEADING PARAMETERS:

### 6.1 MAJOR PARAMETERS:

Diameter of rotary table	:	1200mm (minimum)
Load capacity of table	:	750Kg(minimum)
No. of blast wheel	:	01No.

### 6.2 OTHER PARAMETERS:

Job height	:	800mm
Shot flow rate	:	150Kg/minute
<b>Motor Power:</b>		
Blast wheel	:	15 HP
Bucket Elevator	:	01 HP
Table (02Nos.)	:	01HPeach
Dust Collector	:	05 HP
Ventilation required	:	2000 cfm
Blasting intensity	:	As laid down in IS:9954-1981
Electricals	:	Suitable for operation on 415V+10%AC, 50Hz +3%, 3 phase

#### NOTE:

Machine has to be designed considering sufficient clearance above job height for proper shot blasting.

Above mentioned Motor Power is indicative and shows the values towards minimum side.

### 7.0 PERFORMANCE STANDARD:

The machine shall be capable of performing airless centrifugal shot blasting operation on the components like coil springs, block hangers, equalizing stays, anchor links etc. The machine shall be designed as per parameters given under Leading Parameters of this specification.

The plant shall be capable of cleaning the surface to a finish such that all visible rust, mill scale and foreign matter are removed to enable visual & magnaflux inspection. The blast pattern obtained shall be dense and uniform over the surface, and, surface finish shall conform to SA- 2.5 finish [as per IS: 9954-1981](#). The design of the plant should be such that it is capable of performing other operations like flow of shots, removal of dust etc.

The plant shall be capable of recycling and cleaning the used shots.

The machine shall be capable of operating under ambient conditions of 48 deg. C and 98% relative humidity.

### 8.0 PRODUCTIVITY:

Bidder shall indicate the total cycle time as well as break up in the following format:

- Loading time
- Blasting time

- Turning time
- 2<sup>nd</sup> blasting time (if required)
- Unloading time

Bidder shall furnish drawing/sketch to substantiate their productivity claims.

The timing should be maintainable for regular 08-hrs shift for single shift working, 6 days a week, with machine availability of 85%.

### **Scope of Supply and Other Important Conditions**

#### **Scope of Supply:**

The scope of supply shall include design, supply, and installation, testing, commissioning and proving-out of machine on turn-key basis. It includes all the concomitant accessories/equipments, which are essential to make the machine fully Operational, when installed and commissioned. It shall also include installation and commissioning of related equipments, training of personnel in operation and maintenance of machine and supply of technical documentation.

#### **CONCOMITANT ACCESSORIES:**

Abrasive Shots — 0.5 MT minimum (Bidders shall indicate price per tonne).

Electrical wiring from main to control and from control panel to machine — Approx. 20 meter.

Maintenance tools (List to be submitted by the bidders) — 01 set

Foundation and leveling bolts - 01set

#### **TECHNICAL LITERATURE:**

One copy of the printed illustrative catalogue showing features of the machine and its elements must be enclosed.

Two copies of Operational manual of the machine.

Three copies of Maintenance manual of the machine.

Electrical Wiring diagram, in which length of wires must be mentioned, hardcopies in A- 3 size as well as soft copy in PDF format.

Mechanical drawings (spindle assembly, table assembly, column assembly), hard copies in A-1 size as well as soft copy in PDF format.

Spare parts manual including parts list no., hard copies in A-4 size as well as in PDF format.

Drawings of tooling & fixtures hard copy in minimum A-2 size page as well as soft copy in PDF format.

Machine Software (if provided) and “password” to be handed over to consignee during commissioning.

User manual for Tool changer system (if provided).

Operational & Maintenance manual of the servo controlled voltage stabilizer.

Operational & Maintenance manual of the ultra isolation transformer.

Instruction & Maintenance manual for Hydraulic Oil Cooling Unit.

Technical & Maintenance manual for Hydraulic System.

Technical & Maintenance manual for Lubrication System.

Layout drawings in A-1 size (compulsory), which clearly shows the position of all type of electrical components in machine.

**Note : All manual and literature should be clearly legible and in English only.**

#### **OTHER CONDITIONS :**

#### **Training:**

Free training by the firms shall be imparted in operation, maintenance & AC Drives etc. This training shall be provided to 10 persons nominated by the consignee, for a period of two weeks, free of cost at the consignee’s shop floor premises.

Note: All trainings should be imparted in English/Hindi only.

**DELIVERY SCHEDULE CHART (Timeline):**

In the event of acceptance of the offer, the machine shall be supplied as per the following Milestone Chart:		
S.No.	Activity	Outer Limit of time Scheduled expected by Railway (within days)
01	Issue of LOA	Automatically through IREPS.
02	Visit of site by successful bidder and start of work	Within 30 days from issue of LOA
03	Submission of GA drawings and requisition for the trial component (s) (if applicable) to consignee by Successful Bidder/Supplier	LOA+50 days (20 days)
04	Approval of GA drawings by consignee or Railway Representative.	LOA+60 days (10 days)
05	Confirmation of availability of clear site by consignee	At the time of approval of GA drawings (Sr.04 completion day)
06	Completion of foundation	LOA+82 days(22 days)
07	Supply/Delivery of machine	LOA+182 days (100 days)
08	Availability of Power connection for the machine by the railway and other on site requirement to be provided by Contractor.	LOA+192days (10 days)
09	Railway give call to supplier for the commissioning of the machine	LOA+195 days (3 days)
10	Installation, commissioning and proving out of machine by supplier	LOA+210 days (15 days)
11	Issue of Performance/ Proving Test Certificate (PTC) by consignee	LOA+240 days (30 days)
12	Warranty by supplier	For 2 years after completion of Sr.11 activity

**Note: Supply, installation and commissioning of Shot Peening machine along with construction of shed for housing of machine equipped with electrical fittings and connection shall be within the above time schedule of 180 days from the issue of LOA.**

**Safety Measures:**

The Contractor should take all precautionary measures in order to ensure the protection of his own personnel moving about or working on the railway premises, and should conform to the rules and regulations of the Railway.

The Contractor should abide by all railway regulations in force from time to time and ensure that the same are followed by his representatives, agents or sub-contractor or workmen.

The Contractor should ensure that unauthorized, careless or inadvertent operation of installed equipment which may result in accident to staff and /or damage to equipment does not occur.

The Contractor should indemnify and keep the Purchaser indemnified and harmless against all actions, suits, claims, demands costs charges or expenses arising in connection with any accident, death or injury, sustained by any person or persons with in the railway premises and any loss or damage to railway property sustained due to the acts or omissions of the Contractor irrespective of whether such liability arises under the workman's compensation act or the fatal accidents act or any other statute in force from time to

**GENERAL ARRANGEMENT & RELATED DRAWINGS:**

Supplier must visit the site prior to drawing preparation. Supplier has to submit general arrangement and other related Drawing within allowed time. Consignee after receipt the drawing copy from the firm will be taken necessary action for approval of GA drawings. The Supplier should ensure that the drawings submitted to the consignee are complete in all respects as specified in Technical specification / Leading parameter. The GA drawings shall be approved by the consignee and given back to the Suppli

**INSTALLATION, COMMISSIONING AND PROVING TESTS: (ON TURN KEY BASIS)**

**Joint Check**—The contractor or his agent would be required to carry out a joint check at 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 receipt inspection be done immediately on receipt of the machine by consignee & bidder's representative to avoid commissioning delays due to shortages/ transit damages.

After receipt of the machine as above a Joint Receipt Inspection note (JRI) shall be prepared by the consignee and the firms representative indicating the tentative time schedule for various activities of installation and commissioning. For Indian manufacturers.

**Responsibilities Of Consignee and Bidder:**

The consignee shall be responsible for-

- I. Provision of a clear site for construction of foundation as per the schedule to ensure its readiness before arrival of machine at site.
- II. Electricity, water and compressed air for installation and commissioning of machine shall be provided free of cost within one week of arrival of machine at site.
- III. All piping for air and water upto equipment's inlet connection.
- IV. The consignee shall arrange the raw material for prove-out at their end within 3 days of the dry run of the machine (installation, power connection, auxiliary connection like air, water connection) failing which such components will be deemed to have been proved out. The components supplied by the consignee in time will be required to be proved out within specified times schedule thereafter.

The **bidder** shall be responsible for—

- I. Design of foundation as well as flooring of sufficient thickness, suiting local soil conditions at the site.
- II. Advise consignee in time regarding schedule for requirement of clear site for construction of foundation and other infrastructure, resources & facilities required.
- III. Consignee will provide the necessary supports/arrangements (crane, truck, lifter etc.) for shifting the received and inspected items from stores to site, But the actual handing of the items (i.e. loading and unloading) to be done by the bidder. Any damage during this shifting would be accounted to the bidder.

Consignee will provide AC supply. All types of cables, connections, circuit breakers etc. required for connecting power supply point to different parts of the machine/control cabinets, shall be the responsibility of the bidder. Requirement of grounding/earthing with required material shall also be incorporated by the bidder during construction of foundation.

Electrical work like laying of power/electrical cables & earthing wires from mains to machine control panel (upto 20 metres) as well as within the machine, with supply of all materials shall also be carried out by the supplier The supplier shall demonstrate machine performance and prove out the claimed capability for M&P shall be deemed to be "commissioned" at the consignee premises on the date when it is tested and meets with the specified capabilities/functions according to the technical specifications. In addition to above, in case of tooled-up M&P, the M&P shall be deemed to be "Commissioned" at consignee premises on the date when "prove out" components specified as per the relevant clause of technical specification have been successfully proved out meeting the productivity requirements of Technical specification. The consignee shall arrange the raw material for proveout at their end within 30 days of dry run of the machine (installation, power connection etc.) failing which such components will be deemed proved out. The components supplied by consignee in time will be required to be proved out within 30days thereafter. Any delay in providing the raw material or any other input for proving out shall not be logged on suppliers's account. A Joint Commissioning Note (JCN) to this effect shall be made.

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 BG of suitable amount. In case the entire machine has to be taken back, a Bank Guarantee for the cost of the machine would have to be submitted. The bank guarantee should be of adequate value so as to cover the cost of the assembly/sub-assembly/paid up cost of the machine.

**Prove Out at Consignee's Premises:**

The supplier shall demonstrate machine performance and prove out the claimed capability for successful commissioning at the consignee's works for a period of 08 hours shift. After such successful demonstration as therein before the consignee shall take over and watch the machine performance for a period of one month, before the final performance/ proving test certificate (PTC) is issued.

**WARRANTY OBLIGATION:** The following conditions regarding Maintenance and reliability shall also apply —

The machine shall be designed for a life of minimum 20 years with regular maintenance and all the structural members of the machine and the foundation shall be guaranteed for 20 years against cracks, breakages etc. during the course of normal operations.

This warranty shall be **for 2 years** from the date of **PTC** at ultimate destination.

The tenderer shall ensure that in case a failure is reported by consignee, qualified service Engineer shall visit the site within three days from the date of complaint or working days basis. The period of three days (excluding date of complaint) after the failure reported shall be treated as grace period, which will not count towards break downtime for up to one failure per month and a maximum of 3 failures per quarter. In case the number of failure exceeds one failure per month or three during any quarter of warranty, grace period of only 01day will be permissible for such additional failure. Complaints shall be lodged by consignee by fax, phone, e-mail or per bearer at address given by the tenderer.



Diagram of a covered shed with dimensions 12 x 10m. The shed is rectangular, with a length of 12m and a width of 10m. A door is located on the right side, with a width of 3m. The shed is labeled "Covered shed 12 x 10m".

**Covered shed**  
**12 x 10m**

Do

3

1. Provision of proper drain.
2. Eco friendly material to be used.
3. Proper illumination to be provided.
4. Transparent sheet to be provided.

NOTE:- 1. ALL DIMENSIONS ARE IN meter.  
2. NOT TO SCALE.

11.7.25

$$\frac{SSE(Drg)/WRS/R}{SSE(Drg)/WRS/R}$$

**REF:-AS PER VERBAL  
ORDER BY  
Dy.CME/WRS/R.**

मुख्य कर्मशाला प्रबंधक  
ड्राइंग अनुभाग, वैरि.शॉप,  
द.पू.मध्य रेल्वे/रायपुर

S.E.C.R.L.Y./SK.No.WRS/R (CIVIL)-1429A

शॉट पीनींग मशीन के लिए प्रस्तावित शेड  
Proposed Shed for Shot Peening M/C

8.5

7.0

फेंसिंग ऑफ लवर्स शेड

2 शेड ऑफ शेड

Elevation of Shed

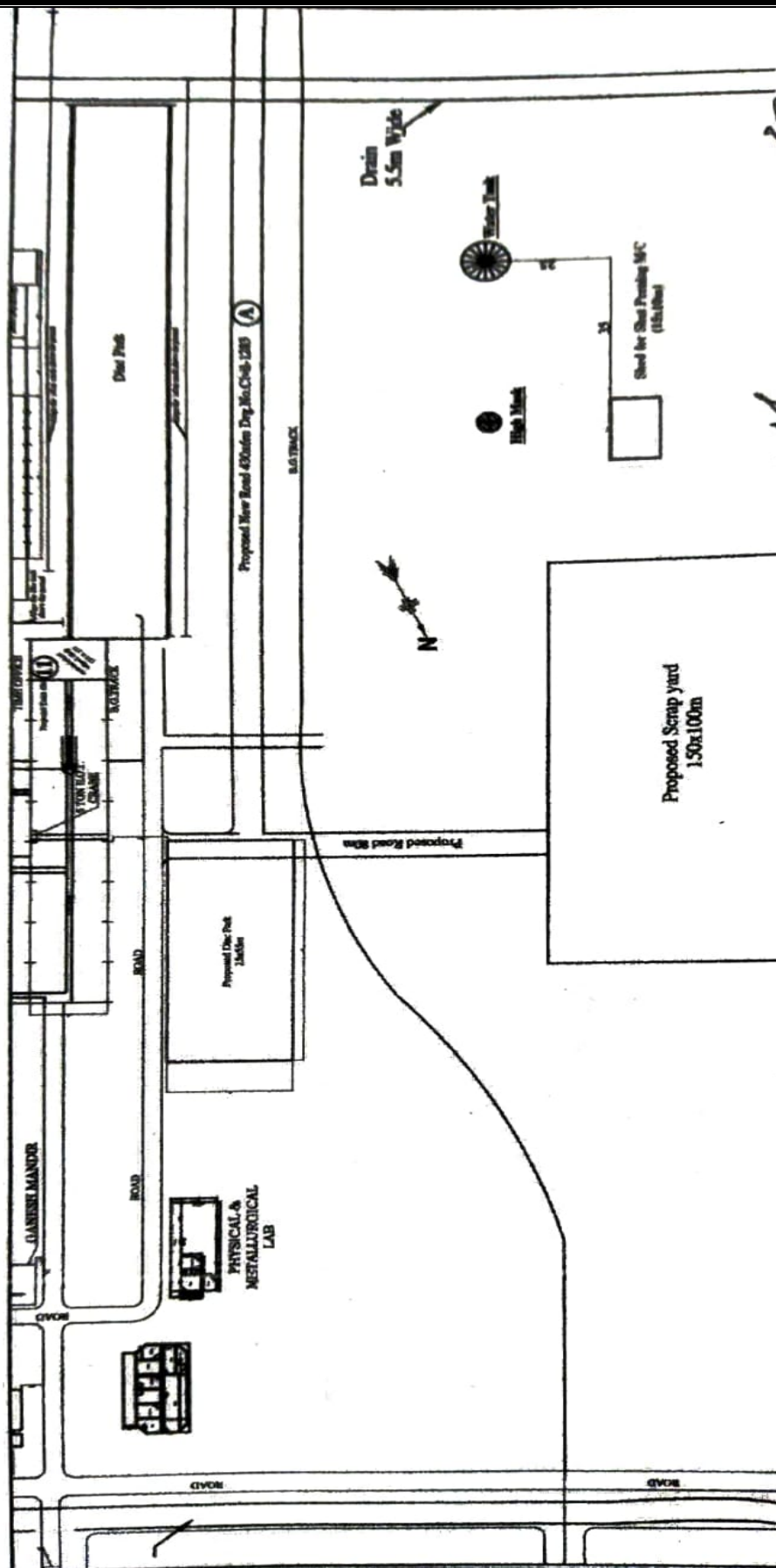
### Elevation of Shed

*[Signature]*  
DY. CME/WRS/R

$$\frac{DA}{CME/WRS/R}$$

**Figure 2.0:** Drawing of Shed for housing of Shot Peening Machine

2067656/2025/O/o CWM/WRS/R



NOTE:- 1. ALL DIMENSIONS ARE IN Meter.  
2. NOT TO SCALE.

SSE(Drg./WRS/RAIPUR

Dy.CME/WRS/RAIPUR

REF:-AS PER VERBAL  
ORDER BY  
Dy.CME/WRS/R.

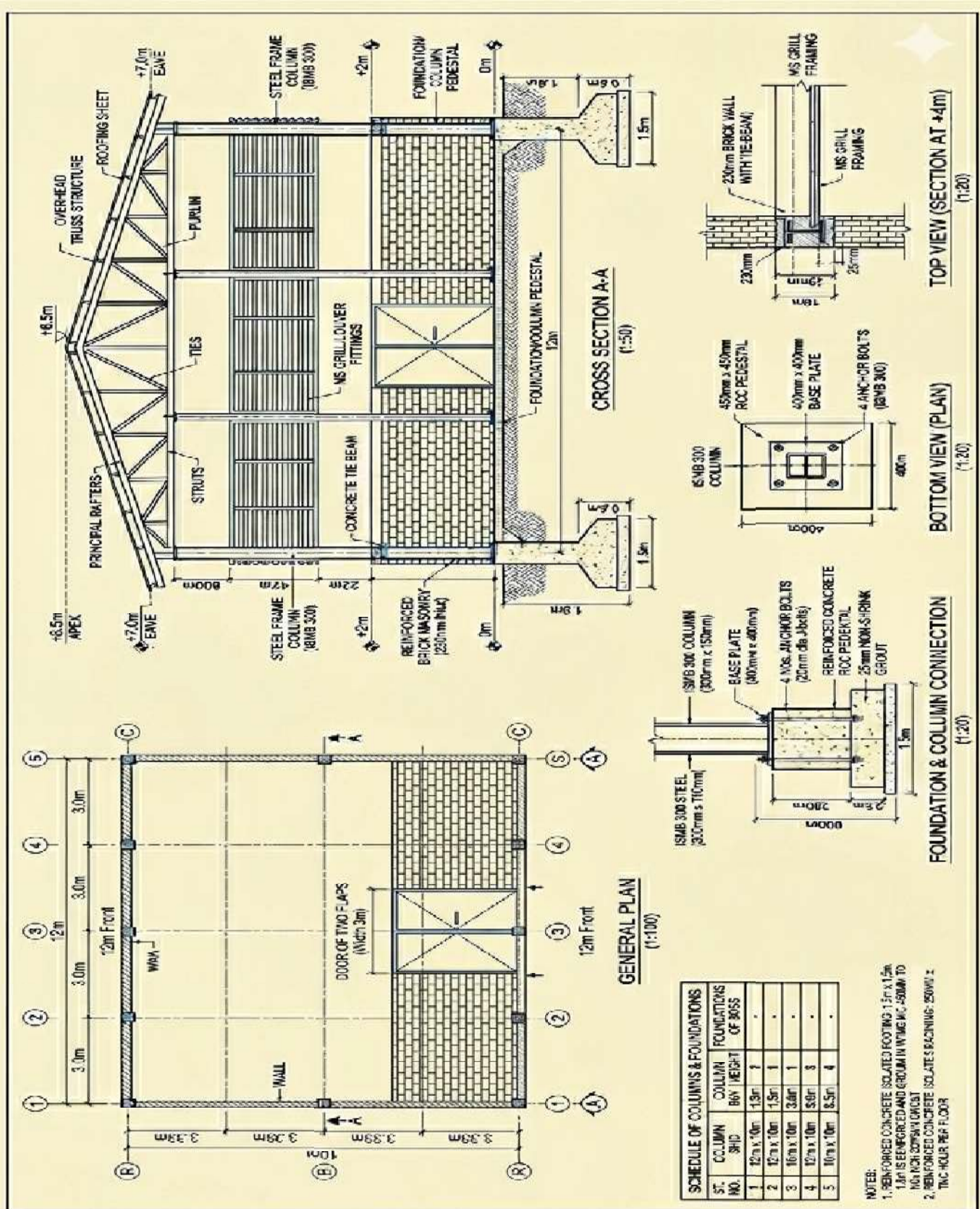
मुख्य अभियंता प्रबंध  
खनिज मंत्रालय, हरियाणा,  
राज्य सरकार/राजपुर

शॉट पीनिंग मशीन के लिए प्रस्तावित शेड का लोकेशन  
Location for Proposed Shed for Shot Peening M/C

S.E.C.R.L.Y./SK.No. WRS/R (CIVIL)-1429

Figure 3.0: Location of Shed for Shot Peening Machine inside Workshop WRS/R





Scope for Construction of IRS shed (12.00 m x 10.00 m) for shot peening machine at Workshop, Raipur:

1. Shed for Shot Peening machine shall be constructed as per the sanctioned drawing S.E.C.RLY./S.K.No.WRS/R(CIVIL)-1429A (note: columns and beams mentioned in the drawing are rough sketched, contractor shall construct the number of columns, dimensions and as per Indian standard used in civil works also with consultation of SSE/Planning & SSE/M&P WRS/Raipur). The Structural details for the shed shall be referred from the drawing mentioned in Figure 4.0.
2. The height of the shed shall be 7.00 m, Truss height 1.50 m with RCC hardenite flooring.
3. Approach Road of RCC 20.00m x 4.00 m.
4. Brick Work upto 2.00 m height, covering the shed with light grill above brick wall.
5. Provision of proper drain.
6. Eco friendly material as much as possible to be used.
7. Proper illumination **and solar illuminated tubular light** to be provided.
8. Transparent sheet to be provided.
9. Provision for Turbo Ventilator (04 nos.)

Technical Specifications for 24-inch Turbo Ventilator	
Feature	Specification Details
Throat Diameter	24 inches (610 mm)
Material of Vanes	Stainless Steel (SS 304/430) or High-grade Aluminum (0.5mm thickness)
Number of Vanes	Typically 36 to 42 vanes for high-volume airflow
Rotation Mechanism	Double Shielded/Sealed self-lubricating bearings (e.g., SKF or HCH
Base Plate	Polycarbonate (allows natural light) or FRP (Fiber Reinforced Plastic)
Weight	Approximately 5 kg to 8 kg per unit
Durability	Should withstand wind speeds up to 180 km/h

## 1. General Layout & Dimensions

- **Total Footprint:** 120 sq. meters (10m Width x 12m Length).
- **Column Spacing:**
  - **Width (Gable End):** 10m (Clear span or with a center column).
  - **Length (Side Wall):** 4 bays of 3m each or 3 bays of 4m each.
- **Vertical Profile:**
  - **0m to 2m:** Reinforced Brick Masonry.
  - **2m to 7m:** Steel I-Beams with MS Grill/Louvers for ventilation.
  - **7m to 8.5m:** Steel Truss (Apex height at 8.5m).

## 2. Foundation Details (Isolated Footing)

- Since the shed is 8.5m high, the wind uplift forces will be significant. The foundation must be deep enough to counter leverage.

Component	Specification
<b>Footing Type</b>	Isolated RC Footing (Trapezoidal or Rectangular)
<b>Size</b>	1.5m x 1.5m
<b>Depth</b>	1.8m to 2.0m below Ground Level (subject to soil strata)
<b>PCC Bed</b>	100mm thick (M10 grade)
<b>Reinforcement</b>	12mm TMT bars @ 150mm c/c (Both ways)
<b>Concrete Grade</b>	M25 (1:1:2 mix ratio)

### 3. Column Design & Drawings

The columns act as the primary support for both the 2m brick wall and the heavy truss system above.

#### RCC Pedestal (Up to Plinth Level)

- **Size:** 450mm x 450mm.
- **Reinforcement:** 6 bars of 16mm TMT with 8mm stirrups @ 150mm c/c.
- **Anchor Bolts:** 4 nos. J-type high-tensile bolts (20mm dia) embedded 600mm deep into the concrete to transition to the steel column.

#### Steel Column (Above Plinth)

- **Section:** ISMB 300 or 350 (I-Beam) depending on the wind load.
- **Base Plate:** 20mm thick MS plate welded to the I-beam.
- **Masonry Integration:** The 2m brick wall should be built between the I-beams, using "butterfly" ties or welded lugs to ensure the wall is laterally supported by the steel columns.

### 4. Superstructure Detail (2m to 8.5m)

#### Brickwork & Grill (2m to 7m)

- **Brick Wall:** 230mm thick wall up to 2m height. Provide a concrete "tie-beam" at the 2m level to cap the masonry.
- **Grill/Steel Beam:** Above 2m, install horizontal runners (Purlins/Girts) using ISA 65x65x6mm angles to fix the grill or louvers.

#### Truss System (7m to 8.5m)

- **Truss Type:** Fink or Pratt Truss with a 1.5m rise (Total height 7m + 1.5m = 8.5m).
- **Main Rafter/Tie Member:** ISA 75x75x6mm double angles.
- **Internal Web Members:** ISA 50x50x5mm angles.
- **Roofing:** 0.50mm thick Galvalume sheets with turbo ventilators.

### 5. Key Structural Notes

1. **Wind Bracing:** Since the location is windy, install **X-bracing** using 16mm MS rods on the side walls (between columns) and in the roof plane to prevent swaying.
2. **Anti-Corrosive Treatment:** All steel members must be cleaned and coated with one coat of red oxide primer and two coats of epoxy paint.
3. **Plinth Beam:** A 300mm x 300mm RCC plinth beam is mandatory to connect all footings and support the 2m brick wall.

**Annexure-I**

The following are the materials/work as per Indian railway standard be used for the completion of work:

S.no.	Description(As per DSR-2021)	Departmental Rate (in Rs.)
1	Earth Work in excavation(for all kinds of soil)	45,896.00/-
2	Surface Dressing	7,544.20/-
3	Filling available excavated earth	20,316.0/-
4	Providing and laying in position cement concrete 1:3:6	1,91,335.20/-
5	Providing and laying in position cement concrete 1:2:4 (above plinth)	18,750.40/-
6	Providing & laying in position ready mixed design mix CC for RCC work ..M-25 below plinth	5,18,580.40/-
7	Centering and shuttering..foundation	16,629.30/-
8	Centering and Shuttering..Column	40,212.50/-
9	Centering and Shuttering..Plinth Beam	18,250.50/-
10	Brick Work with clay Fly ash FPS..in 1:4 mortar	1,68,293.0/-
11	15mm cement plaster..1:4	61,146.0/-
12	Structural Steel work welded in built up section trusses & framed work.	9,54,933.50/-
13	Steel work welded in built up sections.. framed/bracket work	7,39,960.0/-
14	Providing & fixing MS round H.D.bolts.	13,629.0/-
15	Providing & fixing bolts nuts & washers complete.	4,204.50/-
16	52mm thick cement concrete flooring with concrete harder topping	1,43,791.20/-
17	Providing & fixing UV stabilized fiberglass reinforced plastic sheet roofing upto any pitch...2mm thick corrugated	28,302.0/-
18	Providing & fixing precoated galvanized iron profile sheets	80,586/-
19	Providing and fixing precoated galvanized steel sheet roofing accessories 0.50mm (+0.05%)..ridges plain(500-600mm)	5,857.80/-
20	Painting with Aluminium paint.. two or more coats on new work	19,432.0/-
21	Finishing walls with premium acrylic smooth exterior paint	29,223/-
22	Supplying & Stacking at site moorum	71,064/-
23	Steel reinforcement (TMT) for RCC work...Fe 500..below plinth	4,79,896.45/-
24	Hiring of JCB	16,498.40/-
Total (in Rs. )		<b>36,94,331.35/-</b>

Note: The materials/items used shall be of high quality, branded and well certified and shall be jointly checked by the firm as well as by the railway representative (Consignee) and may be mentioned in the M.B. by the consignee for better appraisal of bill payment.

The final aim of this work is construction of shed, anything left mentioned in the document for completion of work shall be understood by the contractor so as to execute the whole work of shed formation in good quality.

If needed, Hiring of any machineries ex: road mobile crane/hydra etc. shall be borne by Contractor. and the machinery hired may not hamper or disturb other tasks in workshop premises.

**PART-C****ELECTRICAL FITTINGS FOR SHOT PEENING MACHINE WITH SHED**

Scope for Electrical fittings, wiring and other necessary accessories for Shot peening machine with shed:

The rate mentioned below includes both supply, fitment and commissioning of electrical items in new, good and working condition.

Sr.No.	Description	Unit	Quantity	Departmental Rate (Rs.)
1.	Supply of metallic distribution board consisting of 02 nos.pole 4 pole 100A MCCB as incoming 3 Nos. 63A MCB, 3Nos.32A TPN MCB, 4nos.16A SP MCB as outgoing, with busbar, HRC backup fuse including locking arrangement	Nos.	1	4,6075.5/-
2.	Erection of metallic distribution board consisting of 02 nos. 4pole 100A, MCCB as incoming, 3Nos. 63A MCB, 3nos. 32A TPN MCB, 4 nos. 16A SP MCB as outgoing, with busbar, HRC backup fuse including locking arrangement.	Nos.	1	353.7/-
3.	Concealed wiring for AC point with 4 sqmm insulated copper conductor including supply of Rayroll socket with 30A SPMCB	Pt	2	1,817.1/-
4.	Concealed wiring for light fan & 6 Amps plug points with modular board, PVC pipe and PVC insulated copper conductor 2.5sqmm size with supply of all materials (per point)	Pt	35	36,046.85/-
5.	Concealed wiring for 6/16Amps plug points with modular board with PVC pipe and PVC insulated copper conductor 2.5 sqmm size with supply of all materials (per point)	Pt	8	8,508.24/-
6.	Concealed wiring for Sub-Service connection from main DB to Sub DB with 6 sqmm insulated copper conductor including with supply of all materials.	meter	20	2,376/-
7.	Supply of 62.5 mm dia and 3 mtrs long GI earth electrode with all accessories as per the IS specification complete with making of RCC earth pit and cover plates	Nos.	2	18,673.20/-
8.	Erection of 62.5 mm dia and 3 mtrs long GI Earth Electrode with all accessories as per the IS specification complete with making of RCC earth pit and cover plates	Nos.	2	3,053.7/-
9.	Supply of 4-way metallic sub distribution board with 01 no. 63 A TPNMCB, 3 nos 25A SPMCB & 3 nos. 16A SP MCB, busbar and neutral link arrangement etc.	Nos.	1	18,160/-
10.	Fixing 4-way metallic sub distribution board with 01 nos. 63A TPNMCB, 3 nos. 25A SPMCB & 3	Nos.	1	283.5/-

	nos. 16A SP MCB, busbar and neutral link arrangement etc.			
11.	Supply, installation & Commissioning of energy meter	Nos.	1	5,458.0/-
				<b>1,40,805.79</b>

Note: 1. The materials/items used shall be of high quality, branded and well certified and shall be jointly checked by the firm as well as by the railway representative (Consignee) and may be mentioned in the M.B. by the consignee for better appraisal of bill payment

2. The final aim of this work is electrical fittings and connection overall, anything left mentioned in the document for completion of work shall be understood by the contractor so as the working of machine inside shed day/night with proper necessary electrical connections and illumination.

3. If needed, Hiring of any machineries ex: road mobile crane/hydra etc. shall be borne by Contractor.

And the machinery hired may not hamper or disturb other tasks in workshop premises.

### **SPECIAL TERMS & CONDITIONS OF CONTRACT**

SI No	Description
1.	Before offering the rates in the tender, the tenderers are required to acquaint themselves to the nature of work involved and all possible difficulties likely to be encountered for executing the work. If the tenderers need to clarify the scope of work or terms and conditions they may clarify before submitting the bid. Railway will not entertain any clarification regarding scope of work or terms and conditions after opening of the bid
2	The Contrator will have to perform all the work of transportation of machineries/items to WRS/Raipur at his own cost. Hiring of any kind of transport vehicle for material handling like Hydra/Road Mobile Crane wherever required shall also be managed by the contractor at its own cost.
3	The work shall be done within the scope of the work & to the entire satisfaction of the representative of the CWM/WRS/Raipur nominated supervisor and officer of Wagon Repair Shop, Raipur.
4	Contractor should possess sufficient T & P / tools/ machineries for operation of the contract. A list of T & P available with the contractor shall be furnished before execution of the work
5	Notwithstanding anything contained in the other clauses of the agreement, in the event of unsatisfactory service or any failure/ breach or non-observation at any time by the contractor of the terms and provision of this agreement to the satisfaction of the administration in all respects (which shall be the sole judge and whose decision shall be final), it shall be lawful for the administration without prejudice to all or any other rights and remedies to make any other arrangements it may consider necessary and forthwith terminate this contract without any previous notice to the contractor and in case of such termination the security deposit shall be forfeited by the administration and contractors shall have no claim whatsoever against the administration in consequence of such termination of the contracts.
6	The contractor shall not sublet, assign or transfer this contract or any rights or benefits hereunder to any other person or persons, nor shall the contractor take any partners without the prior written consent of controller of the concerned department.
7	The contractor in addition to the indemnity provided by law shall indemnify the Railway administration against all liability whatsoever to pay compensation under Workmen Compensation Act 1923 as amended from time to time in respect of any accident/injury to any labour employed by him under this contract or compensation in respect of any claim arising out of or in the course of employment under this contract.



8	The contractor further agrees to keep the Railway administration indemnified against any and every other losses, damages by reason of the operation of this contract or by reason of any neglect default act or omissions on the part of the contractor or his workmen suffered by to any property of the Railway administration and or by or to any property of any other person lying or being on premises belonging to the Railway administration.
9	Railway will not provide facility for traveling, loading & boarding to the Contractor or its staff for conducting initial visit, pre-assessment audits, certification audit, periodical audits etc. Agency will bear all these charges throughout the contract period. Agency shall take this aspect while quoting their rates.
10	The documents and information etc. which the Agency would have come across in the normal course of the execution of this contract will not be divulged to any other party without the written consent from the railway.
11	In case, 'recoveries to be made' exceeds the security deposit, the contractor shall further make good the deficiency in cash within 5 days of the date of demand to this effect.
12	<p><b>Taxes and Duties:</b> Taxes will be deducted as declared/enforced by the State Government and Central Government time to time. Tenderer (s) is/are bound to comply the GST Acts and rule as applicable from time to time. TDS from on Account Bills will be made as per extent rules. Income Tax and other levies will be deducted at source as applicable.</p> <p>In case any new taxes or slabs in GST rates are notified after opening quotation, Railways shall reimburse the same on submission of proof of payment by contractor.</p> <p>As per clause no.171 of GST Act, it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. Also Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt. &amp; as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates. Reverse charge mechanism (RCM) by WRS/R shall not be entertained for this work</p>
13	Any claim, compensation arising out of any accident/injury to any person/party will be the liability of contractors and/or any litigation arising out of accident or due to the person employed by the contractor etc. shall be dealt by contractor himself at his own cost. Railway will not bear any liability on any account. It will be the sole responsibility of the Contractor for the personal safety of the worker employed by him during the course of the execution of the work within the premises of WRS/Raipur and abide by all the provisions of "Contract Labour (Regulation & Abolition) Act 1970 & 1971" and Factories Act 1948.
14	The Railway reserves the right to terminate the contract at any time without assigning any reason thereof by giving 15-days notice in advance. The contractor shall not be entitled for any compensation in case of such termination.
15	The contractor shall be liable to honour Central and State Govt. laws, statutory rules, regulations, notifications like legislation, local self- Govt./Municipal requirements etc. and shall be solely responsible for any breach thereof. Railway stands indemnified against any penalty/prosecutions consequent to the violations (deliberate or inadvertence) by the contractor or his employees, representatives etc. of such statutory provisions in force.
16	The quantities shown in the schedule are approximate and meant to give the tenderer/s an idea of the quantities of work involved. The Railway reserves the right to add/delete any item/s and to increase/decrease the quantities.
17	The Machineries and its parts supplied, installed & commissioned should be new, clean, certified and in good

	condition. The certification for the parts/ machineries equipped shall be submitted before producing the bills along with measurement book(M.B.) and it must be jointly verified by both consignee (or railway representative ) and the contractor.
18	Price variation clause: Price variation shall not be applicable to this contract. Bidder shall quote the rate by duly considering the rates of various entities for escalation (like fuel, driver's salary, consumables etc.).
19	Standard GCC (Works) – 2022 of Indian Railway along with latest up to date Correction slip will be applicable to settle any dispute.
20	Any query regarding :  1. Shot Peening machine shall be consulted by SSE/M&P, SSE/Millwright or SSE/Machine Shop  2. Shed shall be consulted by SSE/Project, SSE/M&P and SSE of concerned shop where machine is to be commissioned.  3. Drawing related to shed shall be consulted by SSE/Drawing.
21	<b>Safety Measures:</b>  It is the sole responsibility of the contractor for safety of his labour, tools and plants, materials while executing the work. The Contractor shall ensure that suitable personal safety equipments, such as- hand gloves, safety shoes, nose masks, helmets, etc. required for the work are provided to the workers employed by him in accordance with the provisions laid down in the Factories Act for the purpose of executing such jobs. All other facilities required for the execution of the job shall have to be arranged by the Contractor. It is the responsibility of the Contractor to comply all the safety provisions for the staff employed by him during the course of the execution of the work within the premises of WRS/Raipur and abide by all the provisions of the “Minimum Wages Act, 1948, Payment of Wages Act 1936, Contract Labour (Regulation & Abolition) Act 1970, Contract Labour (Regulation & Abolition) Central Rules 1971 & Workmen's Compensation Act 1923 and Factory Act, 1948”, as modified from time to time, as applicable, for the workers employed by them.
22	<b>INDEMNITY:</b>
(i)	The contractor shall at all times indemnify the railway administration against all claims which may arise due to accident or otherwise or due to the breach of the terms and conditions mentioned herein and owing to any sort of act of commissions on the part of the contract during the currency of this contract.
(ii)	That the contractor agrees to indemnify the railway administration against all claims for compensation by or on behalf of staff employed by him in connection with the present contract for any injury or death by an accident under the Workmen's Compensation Act VIII of 1923 and the Railway Administration will be entitled to deduct from any sum of money due or payable to the contractor the amount of compensation thus payable under the terms of section-12 of the said act together with all or any cost incurred by the railway administration in such connection and the, contractor further agrees that the decision of the Engineer-in-Charge with respect to the amount of such indemnity shall be accepted by him finally. It will be the sole responsibility of the Contractor for the personal safety of the worker employed by him during the course of the execution of the work within the premises of WRS/Raipur and abide by all the provisions of “Contract Labour (Regulation & Abolition) Act 1970 & 1971” and Factories Act 1948. It will be the entire duty/responsibility of the contractor only to enforce Regulations/compliance of all labour laws, hours of employment, Insurance and any other Act/provision etc. enforced from time to time.  The tenderer shall ensure full safety of their workman deputed for the work. Railway shall not be held responsible for any accident and no compensation shall be claimed either by tenderer or their workman. It will be the responsibility of contractor to deal and pay all claims and cost of treatments if any.

(iv)	In case any deputed staffs by contractor is serious/injured while on duty, contractor will be totally responsible to provide medical assistance to such employee immediately and if any staff will expire on duty, contractor has to bear all the liabilities in this regard. In all such cases suitable report to be given to Railway Authority by contractor immediately. Railway Authority will not be responsible in any case.
(v)	The successful tenderer shall be required to submit aadhar card/Vote ID/ Ration card. Copies of ID cards have to submit Railway authorities to all contract labour engaged.
23	All direct or indirect costs and obligations pertaining to employment of specialized manpower and equipment shall be borne by the contractor.
24	Penalties will be deducted from the running bills, if any. In case of no running bills, deduction shall be recovered from PG and/or SD/EMD.
25	Working Hours inside Workshop premises:  Work shop working Hrs from Monday to Saturday are:  7:00 Hrs to 12:00 hrs and 13:00 Hrs to 16:Hrs (Day shift)
25	<b><i>BILL PASSING AUTHORITY</i></b>  <b><i>Bill passing authority - Dy. CME/WRS/Raipur</i></b>  <b><i>Bill paying authority - Dy. FA &amp; CAO/WRS/Raipur (or) AFA/WRS/R</i></b>  The contractor shall maintain a register showing the person engaged for the advertised work and presented for inspection as and when required.  The contractor should have PAN, GST registration certificate.
26	<b>Inspecting Agency: The machine should have inspected through RITES / Third party Inspecting Agency at the time of supply at WRS/Raipur</b>

**Payment Terms:**

For Billing and payment,

On account payment shall be made for portion of work completed, measured and accepted. M.B. shall be the basis of payment.

Deduction shall be made against penalty provisions

The Measurement Book (MB) shall be filled-up by Railway Representative nominated by Railway administration of the workshop as per work register and executive officer shall do test check and the contractor shall submit his bill in triplicate based on the measurement done in MB book to Tender Cell.

Railway administration reserves the right to terminate the contract without any prior intimation, if any malpractice found and the action will be taken against the contractor as per the rules.

Income Tax and other levies will be deducted at source as applicable.

Contractor has to comply all labour rules.

**1. Payment for Shed construction :**

S.No.	Level of Construction	Payment (% of Total Accepted Amount for Shed Formation )
1.	Upto Plinth level	30% of the accepted rate
2.	Beyond plinth level Upto Starting of Truss work	50% of the accepted rate
3.	Full Complete Work (including electrical wiring, finishing works which includes coating, painting and all)	20% of the accepted rate

**2. Payment for Electrical Fittings:**

Note: Warranty shall be given for 2 years for the respective electrical items/fittings mentioned in Annexure-II

S.No.	Electrical Fittings supplied and installed	Payment (% of Total Accepted Amount for Electrical Supply and fittings)
1.	Payment for electrical items/fittings supplied and installed shall be made in the proportion as per the rate % above/below or at par rate quoted by the contractor w.r.t departmental rate.	90% of the accepted rate
2.	Bill shall be raised by the contractor after 6 months from the date of PTC.	Remaining 10% of the accepted rate

**3. Payment for Shot Peening Machine Supply, Installation and Commissioning:**

S.No.	Status of work	Payment (% of Total Accepted Amount for Machine supply, installation & commissioning )
1.	Supply, installation & commissioning of machine after the PTC issued by the Consignee	90% of the accepted rate
2.	Bill shall be raised by the contractor after 6 months from the date of PTC.	Remaining 10% of the accepted rate

**Penalties for irregularities:** No work, No payment shall be followed and accompanied by imposition of penalties.

Sl. No.	Description	Penalty amount in Rs.
1.	If the Contractor does not start the work of shed formation within Thirty (30) days after issue of LOA.	Rs. 1000/- per day.
2.	Non compliance/misconduct of any of the item mentioned in this contract / tender condition.	Rs. 500/- per occasion.
3.	Any nuisance created by the contractor staff/worker deputed by firm, Any incident of the drinking/supplying alcoholic liquor, illegal substance etc. has the direct or indirect involvement of contractor staff	Rs. 500/- (per occasion) Per person.
4.	If work is not completed in stipulated time, suitable LD as decided by Dy.CME/WRS/R shall be levied.	

**Penalty for Breakdown Maintenance :**

Penalty shall be levied on the tenderer for maintaining the machine, after discounting for grace period

Sl. No.	Description	Penalty amount in Rs.
1	Penalty for delay in attending the breakdown of machine. (The Contractor shall ensure that in case a failure is reported by consignee, qualified service Engineer shall visit the site within three days from the date of complaint or working days basis. The period of three days (excluding date of complaint) after the failure reported shall be treated as grace period, which will not count towards break downtime for up to one failure per month and a maximum of 3 failures per quarter. In case the number of failure exceeds one failure per month or three during any quarter of warranty, grace period of only 01day will be permissible for such additional failure. Complaints shall be lodged by consignee by fax, phone, e-mail or per bearer at address given by the tenderer)	Rs.1000/- per day per occasion

	2	1. If the plant/machine uptime is less than <b>85%</b> in a quarter. Plant uptime Calculation (monthly) = No. of hrs or days machine working/ Total no. of hrs or days No. of hrs or days machine working = Total no. of hrs or days - Downtime of machine. If the machine gets repaired within grace period at the time of breakdown then the downtime of machine will be zero.	Rs 3000/- imposed quarterly.
		2. Further non-compliance to terms & conditions of contract.	Rs.500/- per occasion
		3. Non-response by the contractor regarding maintenance of machine.	Rs.500/- per occasion/day
29	<b>Warranty: Contractor shall provide a comprehensive warranty of 2 years after issue of machine PTC (Proving Test Certificate) by consignee</b> <b>1. The Firm shall attend the machine within time period for breakdown maintenance and shall replace the same item/parts causing breakdown free of cost (including all costs of items/parts, labour, travel/transport cost etc.) in the warranty period. The part which is replaced shall be handed over to railway by the contractor.</b>		
30	<b>The cost incurred for the involvement of any type of earth moving and material moving, transport handling vehicle/machinery or any type of logistics tools/ machineries have to to be solely borne/bear by the contractor.</b>		
31	General Conditions of Contract April' 2022 of Indian Railway with correction slips up to date shall be applicable to this tender.		

Reference -Para 6.1 of ITT

**FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS**

I.....(Name and designation)\*\*appointed as the attorney/authorized signatory of the tenderer (including its constituents), M/s\_\_\_\_\_ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of \_\_\_\_\_ as per the tender No.\_\_\_\_\_ of \_\_\_\_\_(Railway)\*\*, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website [www.ireps.gov.in](http://www.ireps.gov.in) . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway 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 declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.**
7. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
8. I/we understand that if the contents of the certificate submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security besides banning of business for a period of upto five year. Further, I/we (insert name of the tenderer) \*\*\_\_\_\_\_ and all my/our constituents understand that my/our offer shall be summarily rejected.
9. I/we also understand that if the contents of the certificate submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination GCC April 2022 of the contract, along with forfeiture of Bid Security/Security Deposit and Performance guarantee besides any other action provided in the contract including banning of business for a period of upto five year.
10. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed)

SEAL AND SIGNATURE OF THE TENDERER

Place:

Dated:

**\*\*The contents in Italics are only for guidance purpose. Details as appropriate are to be filled in suitably by tenderer.**

**This affidavit is to be given by each member of JV.**

**New Annexure V(A), Part I of GCC shall be read as under**

**ANNEXURE V(A)**

**Reference -Para 6.1 of ITT**

**(This certificate is to be given by attorney/authorized signatory/each member of Partnership Firm/Joint venture (JV) / Hindu undivided Family HUF / Limited Liability Partnership (LLP) etc.)**

I/We..... (Name), attorney/authorized signatory of the (constituent firm/constituent partner) and member/partner of the .....(tendering firm) hereby solemnly affirm and state as under:

1. I/We certify that (constituent firm/ constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/we are not from such a country or, if from such a country, have been registered with the competent Authority. I/we hereby certify that I/we fulfill all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

**SEAL AND SIGNATURE**

**OF THE CONSTITUENT FIRM/CONSTITUENT PARTNER**

**Place:**

**Dated:**

**Annexure –VIA**

**(Para 5 of GCC-2022)**

**(Bid Security)**

Bank Guarantee Bond from any scheduled commercial bank of India



(On non-judicial stamp paper, which should be in the name of the Executing Bank).

Name of the Bank: -----

President of India,

Acting through ....., ..... Railway, Beneficiary: **FA&CAO/SECR/Bilaspur, payable at Raipur** Date:

Bank Guarantee Bond No.: -----

Date: -----

In consideration of the President of India acting through----- (Designation & address of Contract Signing Authority), .....Railway, ....., .... (herein after called "The Railway") having invited the bid for\_\_\_\_\_through Notice inviting tender (NIT) No.,\_\_\_\_\_, We have been informed that . . . . [Insert name of the Bidder]..... (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") .

WHEREAS, the Bidder is required to furnish Bid Security for the sum of [Insert required Value of Bid Security], in the form of Bank Guarantee, according to conditions of Bid.

AND

WHEREAS, .....[Insert Name of the Bank], with its Branch .....[Insert Address] having its Headquarters office at..... [Insert Address], hereinafter called the Bank, acting through .....[Insert Name and Designation of the authorised persons of the Bank], have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the Railway:

1. KNOW ALL MEN that by these present that I/We the undersigned [Insert name(s) of authorized representatives of the Bank], being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the Railway full amount in the sum of [Insert required Value of Bid Security] as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.
3. The Bank shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the Bidder and without the Railway being required to show grounds or give reasons for its demand of the amount so demanded.
4. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Bidder.
5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the Railway and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification made by Railway at any time.
6. This guarantee will remain valid and effective from.....[insert date of issue]till .....[insert date, which should be minimum 90 days beyond the expiry of validity of Bid]. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.
7. The Bank Guarantee is unconditional and irrevocable.
8. The expressions Bank and Railway herein before used shall include their respective successors and assigns.

9. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the Railway. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.

10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details –

IFSC CODE	SBIN00RAIL
IFSC TYPE	BRANCH
BANK NAME	STATE BANK OF INDIA
BRANCH NAME	RAIL
CITY NAME	NAVI MUMBAI
ADDRESS	SECTOR-11, CBD BELAPUR, NAVI MUMBAI
DISTRICT	NAVI MUMBAI
STATE	MAHARASHTRA
BG ENABLED	YES

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the Railway. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Railway.

Date .....

Place.....

Bank's Seal and authorized signature(s) [Name in Block letters] .....

[Designation with Code No.].....

[P/Attorney] No-

Witness:

1 Signature, Name & Address & Seal

2 Signature, Name& address & Seal

Bank's Seal

[P/Attorney]No.

**Annexure -VI**

**MANDATE FORM FOR EFT/NEFT**

1, PARTICULARS OF THE PARTY

NAME : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

iii) PHONE NO: \_\_\_\_\_ MOBILE \_\_\_\_\_ FAX NO \_\_\_\_\_

iv) INCOME TAX PAN NO. \_\_\_\_\_ EMAIL ID \_\_\_\_\_

1. PARTICULARS OF BANK ACCOUNT \_\_\_\_

i) CITY: \_\_\_\_\_

ii) BANK NAME: \_\_\_\_\_

i) BRANCH: \_\_\_\_\_

ii) BANK ADDRESS: \_\_\_\_\_

iii) BANK TEL NO. \_\_\_\_\_ FAX NO \_\_\_\_\_

iv) BANK MICR CODE (9 OIGIT): \_\_\_\_\_

v) BANK IFS code \_\_\_\_\_

vi) BANK ACCOUNT NO \_\_\_\_\_

\_\_\_\_\_(Please enclose a cancelled blank cheque)

vii) ACCOUNT TYPE: (SVUBGS/CURRENT/CASH CREDIT): \_\_\_\_\_

2. Certified that the particulars furnished with reference to Bank Account are correct and bank guarantees to honor all EFT/NEFT advices/reports as per RBI Regulations.

Bank's Seal      Signature of the authorized official of the ....

3. DECLARATION BY THE PARTY:

I hereby declare that the particulars given in this mandate form are correct and complete the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, the User institution i.e., FA & CAO / Sr. DFM- SEC Railway, Raipur not be held responsible.

Date \_\_\_\_\_

\_\_\_\_\_

Signature of the Party with Stamp

**Annexure-VIII**

**Details of Firm**

Sl No.	Description	Remarks
1	Constitution of the firm/ concern. (Tick as applicable)	Sole Prop./ Partnership Firm/ Company/ JV/Society/LLP
2	Full name of the Sole Prop./ Partnership Firm/ Company/ JV/Society/LLP	
3	Year of formation/ incorporation	
4	(a) PAN No.	
	(b) GST No	
5	Registered Office Address	
6	Address on which correspondence regarding this tender should be done	
7	E- mail id	
8	Names of the proprietor/ partners/ JV members etc	

Signature of the Tenderer/s

**DECLARATION/UNDERTAKING**

I/We \_\_\_\_\_ (name and Designation) on behalf of \_\_\_\_\_ (Name of the tendering firm) do hereby declare/undertake that I/We have not employed any retired Engineer or retired gazette officer, nor made any Partner/Director etc. in our firm who retires from Railway Service in last one year as on the date of opening of tender in terms of **Clause 17 Employment/Partnership etc. of Retired Railway Employees** as given in chapter -I. “*Instruction to Tenders and Conditions of Tendering*” of tender document.

(Authorized Signatory)

Name of the tendering firm

Place:-

Dated:

**CHECK LIST:**

Sl. no.	Document/ Detail	Required in the form	Attached	
			Yes	No
1.	Annexure – I	Declaration of tender form.		
2.	Annexure – V	Format for Certificate to be submitted/uploaded by tenderer		
3.	Annexure- V(A)	New annexure for format for certificate		
4.	Annexure – VIA	Bid security ,if submitted as Bank guarantee bond		
5.	Annexure – VII	Bank Detail/RTGS		
6.	Annexure – VIII	Details of firm.		
7.	Annexure – X	Undertaking Regarding Employment/Partnership of Retired Railway Employees.		

Note: Relevant Para of GCC-April-2022, with correction slips may be checked for submission of data in the above format.

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