

BEML LIMITED

Regional Office, PB No.05, Jingurdha Colliery, Singrauli, Dist. Singrauli- (MP) 486889 Phone: 07805-272668, Fax: 07805-272282, TIN:27390264883

Ref. BEML/MS-1/20CuMRS/100/6300033629 Date: 28.07.2020 To: Dear Sir, E-Tender through BEML SRM for repair / re-conditioning of 30 Sub : nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects. BEML Ltd., a Govt. of India Mini Ratna Public Sector Company under Ministry of Defence is planning to outsource the Job of repair / re-conditioning of 30 nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects of NCL. Firms may download the tender documents and submit the tenders online through BEML SRM System. Please go through the instruction and submit your bid in SRM System complete in all respects before 14.00 Hrs. on 25.08.2020. Thanking you, Yours faithfully, For BEML LIMITED **REGIONAL MANAGER** Encl: Tender Document – 14 pages.



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TENDER DOCUMENT

FOR

Repair / re-conditioning of 30 nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects of NCL.

CLOSING DATE & TIME

25.08.2020 at 14.00 Hrs.

This Tender Document contains 14 Pages



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Limited Tender Notice

Tenders in single bid system are invited from Firms who have previous experience in Repair of major assemblies or subassemblies of Rope Shovels / HEMM at project site/mine area.

Description of Work: Repair / re-conditioning of 30 nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects of NCL.

Scope of work:

a) For Lug Portion:

- (i) Clean the surface area intended for weld build up
- (ii) Ensure the area crack free by visual inspection
- (iii) Preheat the portion of surface before starting the weld build up to an temperature around 250°C
- (iv) Carry out welding using AWS E11018 electrode by SMAW process.
- (v) Weld toes should be smoothly ground
- (vi) The dimensions contour to be ensured as per the sketch indicating lug dimension at build up area. (Sketches will be provided for successful bidder)
- (vii) Conduct DPT test to ensure free from surface defects.

b) For Bore Portion:

- (i) Clean the surface area intended for weld build up.
- (ii) As per existing drawing the bore area is induction hardened.
- (iii)It is to be noted that enlarging the bore area which is high hardened and difficult in machining, hence it is to be softening before enlarging the bore for machining.
- (iv) Ensure the area crack free by visual inspection & conduct DPT test to ensure free from surface defects.
- (v) Preheat the portion of surface before starting the weld build up to an temperature around 250°C
- (vi) Carry out welding using AWS E11018 electrode by SMAW process.
- (vii) Weld toes should be smoothly ground.
- (viii) Carryout line boring as per sketch enclosed.
- (ix) Conduct DPT test to ensure free from surface defects.

It is to be noted that any weld repair of this material, standard indicates stress relieving. (Details attached at page no. 14)

Weld Precautions:

- 1. No undercut is permitted
- 2. When carrying out welding, keep the earthing connections as close as possible to the job being welded.

The following are recommended brands of welding electrode for E11018 specification:

S. No.	Brand name	Manufacturer name	Sizes (dia,mm)	Current range, A
1	Ultratensal- MH	D & H Secheron	3.2, 4.00	3.15mm (110-120A) 4.00mm (130-140A)
2	Tenalloy	Ador welding	3.2, 4.00	
3	Esab 118	Esab	3.2, 4.00	
4	Rasi E11018 M	Rasi electrodes	3.2, 4.00	

Notes:

- 1) You are requested to quote on per track pad basis.
- 2) You are requested to visit our 20 Cum RS. Erection for inspection of the worn out track pads for better understanding and assessment of the job to be carried out.
- 3) The worn out track pads will be handed over in batches of 10 nos. at a time. i.e. initially 10 nos. of worn out track pads will be given for repair/re-conditioning & the next batch of 10 nos. worn out track pads will be given after receipt of the 1st batch of repaired / reconditioned track pads.

 Contractor has to arrange for collection of the worn out track pads & supply of repaired / reconditioned track pads.
- 4) Required welding electrodes, gas, gouging electrodes, Line boring machine & other requisite consumables are to be arranged by the contractor.
- 5) Hand grinding machine, pencil grinding machine, grinding wheels, hydraulic jack, other necessary tools and tackles, safety appliances, etc., are to be arranged by the contractor.
- 6) Supervisors to carry out the job are to be arranged by the contractor.
- 7) i) Payment will be on pro-rata basis i.e. no of track pads given for repair & repair for which has been completed.90% of repair value of each track pad as per Purchase order will be made subject to acceptance certificate issued by Project-in-charge (BEML) for having completed the repair work. Specifying all details such as time period specs etc..,
 - ii) 10% payment after completion of guarantee period of 2500 working hrs (Machine progressive hrs) or 06 months from the date of receipt of repaired / reconditioned track whichever is earlier.
- 8) Once the price is fixed and the contractor is instructed to carry out the job, no further negotiations on the price/procedures/rules & regulations are permitted.

Last date & time for on line submission: 25.08.2020 at 14.00 HRS. for online submission of tender documents.

EMD:

Tenderers are required to submit an amount of Rs.1000/- towards Earnest Money Deposit in the form of Digital transfer in favour of BEML Limited and copy of the same along with Technical Bid.

BEML Bank Account details:

Account number: 10773219053

Branch: SBI MORWA IFSC Code: SBIN0003767 MICR Code: 486002516

As per guidelines of the Government Of India under MSME act, Micro & small enterprises registered under MSME scheme with less than rupees two crores turnover per annum are exempted from payment of EMD. TO AVAIL THIS FACILITY THE FIRM SHOULD FURNISH COPY OF CURRENT MSME CERTIFICATE. Without this certificate and not full filling the eligibility norms should deposit the EMD amount.

Eligibility:

The tenderers having previous experience in Repair of major assemblies in Rope Shovels/Heavy Earth Moving Machinery at project site/mine area only.

Submission of Bid

Please upload all the technical bid documents in the Notes & Attachments at main header in the system. Please ensure that no price details are mentioned in any of the documents uploaded as part of the Bid.

Following documents should be uploaded in Notes & Attachments at main header on SRM platform:

- a) Scanned copy of the entire tender document duly signed by the bidder. Any alteration, erasure or over-writing will render the tender invalid. Alteration neatly carried out and duly attested over with full signature of the bidder however is permitted.
- b) Copy of the EMD fee digital transfer transaction slip as indicated in the NIT is to be uploaded along with technical documents (or) current MSME certificate for availing exemption on EMD fee as per the guidelines of the Government Of India as mentioned above at EMD, page no.5.

- c) Copy of GST registration, PAN card and relevant work experience as per NIT.
- d) The bidders shall submit relevant records in proof of complying with qualification criterion conditions.
- 1. Please quote the price details in 'Price Conditions' in the system only against the respective items provided therein.
- 2. Bids of the bidders will be opened first on the opening Date/Time.
- **3.** The bidder shall accept all the terms and conditions of the tender.
- **4.** Before making the offer the bidders are advised to carefully go through the terms and conditions, which form part of the agreement. For any further details required, Tender issuing officer of BEML Ltd., may be contacted in person or through telephone nos. 07805-276668 / or email singrauli@rm.beml.co.in.
- 5. BEML reserves the right to assess the capacity and capability of the parties for prequalification. The company also reserves the right to accept or reject any or all the tenders or any part thereof at any stage of process without assigning any reason whatsoever. The company has no obligation to accept the lowest tender. Offer of the Bidder if prima-facie found not comparable with the quantum of work envisaged and the bid is an effort to be L-1, then the offer is liable to rejected. BEML Ltd decision in this regard shall be final and binding.
- **6.** The bidders are required to enter the price and taxes for all the items listed in the 'Price Conditions' in the SRM System. The price should be quoted for each item after careful study of the actual job requirement so that, in case the contract awarded, contractor should not express any difficulties in execution of the contract.
- 7. The GST shall be excluded from the rates, which will be paid extra at the applicable rate.
- **8.** In the event of furnishing false information / incomplete information, the offer(s) shall be rejected.
- **9.** BEML Ltd. Reserves the right to reject any bid, which is technically unacceptable and unworkable. Further BEML Ltd. Also reserves the right to reject any or all bids without assigning any reasons thereof.
- **10.** BEML Ltd shall not be responsible for any acts and omissions of the staff of bidders and liabilities arising out of the acts and omissions as such will be borne by the bidders.

All pages of Tender Document if any shall be signed by the tenderer with seal. The decision of Regional Manager, BEML Singrauli will be final and binding in finalizing the offer.

Other Information:

The intending Tenderers should note the following:

- a) Issue of Tender document to any Tenderer does not automatically qualify such Tenderer for opening of their Tender document.
- b) Submission of Tender document, after due date and time are liable for rejection.
- c) Postal transactions for issue of Tender documents or receipt of filled in Tender document shall not be entertained.
- **d)** Successful tenderers shall have registered with sales tax authorities of the state government.
- e) BEML LIMITED, Singrauli may refuse issue of Tender document to any applicant and is not bound to accept the lowest Tender offer and reserves the right to reject any or all Tenders, or to accept wholly or partially any of the Tenders without assigning any reason whatsoever.

Digitally Signed:

Regional Manager BEML LIMITED, Singrauli

Tender Document

(Techno-commercial – Response to be submitted)

1.0 Title of Work:

Repair / re-conditioning of 30 nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects of NCL.

1.1 CONTRACTOR

Shall mean the Firm/ Repairer whose offer has been accepted by BEML and the term includes the contractor's authorized representative, successors, heirs, assignee, executors and administrators, unless excluded by the contract.

1.2 SUB-CONTRACTOR

Means the person/firm named in the contract/ Work order for executing the work or any persons/firm to whom any part of the contract /work order has been given by the contractor, subject to the prior consent given by BEML in writing and the term includes the sub-contractors authorised representative, successors and assignees.

1.3 PROJECT - IN -CHARGE.

Means the person appointed for the duties set forth in the contract/ work order on its behalf and whose authority is notified, in writing to the contractor by BEML.

1.4 CONTRACT

Means written agreement between BEML AND CONTRACTOR/FIRM/REPAIRER made from time to time

1.5 REPAIR VALUE

Means the mutually agreed price between BEML and the Contractor for the repair work as per the Scope of work.

1.6 WORKMEN

Personnel engaged by contractor for execution of the Contract, to include Welders, Fitters. Supervisory & the administrative staff and / or any other person(s) deployed by that Contractor for execution of this contract.

1.7 GUARANTEE PERIOD

2500 working hrs (Machine progressive hours) or 06 months from the date of completion of job after the repair, whichever is earlier for each track pad.

1.8 PROJECT SITE

Means the place and land in Jayant & Dudhichua Projects of NCL Ltd where the shovels are placed.

1.9 EQUIPMENT

20cuM OR 295HD Rope Shovel

2.0 SCOPE OF WORK BY THE FIRM

- 2.1 Repair / re-conditioning of 30 nos. crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects of NCL.
- **2.2 MANPOWER**: Adequate skilled, semi skilled and unskilled man power to execute the project as per time schedule indicated in the contract which include supervisory, non-supervisory, Qualified Electrical staff, Qualified Fitters, Painter etc.

The contractor shall deploy the above manpower to carry out the complete work in one/two/three shifts as required. They shall not be under aged and shall meet the prevailing Labour Laws/Act/Regulations/PF rules.

2.3 SAFETY AND SAFETY EQUIPMENTS.

Knowledge of Safety rules and regulations and ensuring their implementations and the availability of Safety Equipments, like SAFETY GLOVES, SAFETY SHOES, SAFETY GOGGLES, SAFETY CAPS (HELMETS), FIRST AID BOXES AND TURNING & GRINDING EQUIPMENT.

The contractor shall adhere to various other Safety aspects as required.

2.4 INSURANCE

It shall be the Contractors responsibility to arrange for insurance cover for all the personnel engaged in repair job and related Equipments. The insurance should also cover third party liabilities.

3.0 SCHEDULE/ TIME PERIOD FOR REPAIR:

05 days for each track pad from the date of handing over.

4.0 SCOPE OF WORK BY BEML: Providing expert advice, template details for rebuilding of shoe lug & track pad eye details / pin for maintaining correct eye dia.

5.0 CRANAGE.

Firm has to arrange crane facility (either from NCL or their own) for loading & unloading of track pads.

6.0 TERMS AND CONDITIONS:

6.1 COMMERCIAL TERMS

6.1.1 PERFORMANCE GUARANTEE (GUARANTEE PERIOD)

Each track pad should be warranted for 2500 working hrs (Machine progressive hrs) or 06 months from the date of receipt of repaired / reconditioned track pads whichever is earlier for each track pad.

If the contractor / Firm fails to remedy the defects during the warranty period, BEML is entitled to remedy the defect/damage or order the rectification of remedies through third parties on contractors account at actual cost for such work. This shall, however not relieve contractor of his obligations regarding guarantee.

6.1.2 Delivery schedule and Penalty:

The job of repair / re-conditioning of each track pad should be completed within 05 days. For every week of delay, over and above the allowed as in above, a penalty of 0.5% of the order value for each track pad shall be levied, subject to a maximum of 5% of the work order value for each track pad.

6.1.3 PAYMENT TERMS AND CONDITION:

- i) Payment will be on pro-rata basis i.e. no of track pads given for repair & repair for which has been completed.90% of repair value of each track pad as per Purchase order will be made subject to acceptance certificate issued by Project-in-charge (BEML) for having completed the repair work. Specifying all details such as time period specs etc...
- ii) 10% payment after completion of guarantee period of 2500 working hrs (Machine progressive hrs) or 06 months from the date of receipt of repaired / reconditioned track whichever is earlier.

6.2 GENERAL TERMS

- **6.2.1** On receipt of the contract/work order, the contractor shall register as per WORKS CONTRACT ACT or any other prevailing rules in that state, with the concerned state government to comply with the labour laws and rules, mobilize required man power (Supervisory and Non Supervisory) and other infrastructure as required.
- **6.2.2** The contractor shall carry out repair job of the track pads strictly adhering to STANDARDS and also as per the advice from time to time by Project in-charge (BEML).

Return to BEML in safe condition, track pads, all documents like drawings, specifications and any unused old materials (if any) issued by BEML after the repair work/ contract period or as and when demanded.

6.2.3 CONFIDENTIAL CLAUSE.

The contractor shall use all technical information, drawings and other advices / information provided by BEML only for execution of this contract. The contractor shall not pass on any data, material or information or drawings to other agency or use for any other purpose.

6.2.4 WAGES FOR WORKMEN AND WORKMEN COMPENSATION

(a) WAGES FOR WORKMEN.

It will be the obligation of the contractor to pay reasonable wages to the workmen employed by them. However, such wages shall not be less than the wages payable under the Minimum Wages Act, 1948 or the wages notified by the respective State/central Governments who are the concerned authorities for notifying the minimum wages payable to the workmen possessing different skills and who are engaged in executing the contract. The contractor shall also be bound by the statutory provisions of the Contract Labour Regulation and Abolition Act, Apprentices Act, PSU Act, PF ACT etc., concerning the employment of the Labour by the contractor. All the obligations under the different Act provisions shall be that of the contractor and the contractor shall indemnify BEML against any or all claims in this regard. The contractor shall also furnish the documentary evidence regarding the wages paid, correctness of the wages paid, PF and ESI payment in respect of the labour engaged for the purpose of executing the contract.

These reports shall be submitted to the Project-in-Charge (BEML). It shall also be the responsibility of the contractor to obtain statutory approvals as may be required in this behalf and BEML will in no way responsible for this action and BEML will be discharged of and indemnified against all such responsibilities.

(b) WORKMEN COMPENSATION

It is also agreed that BEML shall not be liable for any compensation to be payable in respect of any workmen employed by the contractor and it shall be the sole responsibility of the contractor for payment of compensation if any, arising during the course of execution of the contract. For this purpose, the contractor shall indemnify BEML during the currency of the contract against all such claims made by any person(s) employed by the contractor in execution of the contract. BEML shall not be responsible for providing employment to contractor's labourers and or payment of any retrenchment benefits, and it shall be the duty and responsibility of the contractor to pay all terminal benefits at the time of completion of contract and shall produce satisfactory proof for having paid so, before the final bill is settled.

6.2.5 SUSPENSION OF WORK

The contractor shall on written order of the Project—in—charge (BEML), suspend the progress of the works or any part thereof for such time or times and in such manner as the Project—in—Charge (BEML) deems fit without assigning any reasons whatsoever. Pro rata settlement to the extent of no. of repaired / reconditioned track pads will be made to the contractor in this case.

6.2.6 DELAYS IN THE CONTRACTORS PERFORMANCE

The TIME SCHEDULE for Repair / re-conditioning of each crawler shoes / track pads of 20CuM Rope shovels under MARC at Jayant & Dudhichua Projects is 05 days for each track pad thereof shall be the ESSENCE OF THE CONTRACT.

Except as provided under force majeure clause a delay by the contactor in the performance of its delivery obligations shall render the contractor liable to the imposition of penalty as per the clause No 6.1.2.

6.2.7 ASSIGNMENT SUB-LETTING AND SUB-CONTRACTING

The contractor shall not assign the contact either wholly or part thereof or any benefit or interest therein or there under without the prior written approval of BEML.

The contractor shall not sublet the whole part of the contract. However, where otherwise provided in the contract/work order the contractor may sublet a part of the contract with prior approval of BEML. But such an approval if given shall not relieve the contractor of any of the liabilities and obligations under the contract and he shall be responsible for the acts defaults and neglects of the sub-contractor, his agents or workmen.

6.2.8 INDEMNITY

The contractor shall indemnify BEML at all times against all claims made by the contractors personnel and third parties in respect of any injuries accidents or any other claim in the form of compensation.

7.0 FORCE MAJEURE

The contractor shall not be responsible for any delay in execution of this contract if the delay is caused as a result of Force Majeure.

"Force Majeure" means an event beyond the control of the Contractor, such as Floods, wars or revolutions, epidemics, strikes (caused by other than contractors own employees/ workmen), terrorist attack etc.

7.1 ARBITRATION CLAUSE

If BEML and the contractor are not able to resolve any contract dispute amicably within a reasonable period of time, such disputes shall be referred to a sole Arbitrator to be appointed by BEML and the proceedings before the Arbitrator shall be governed by the provisions of Arbitrations and conciliation Act 1996, in which event the Arbitration proceedings shall be held at Bangalore and the Arbitrator shall be required to give a reasoned award. Courts in Bangalore alone shall have jurisdiction in the matter.

7.2 APPLICABLE LAW

The contract shall be interpreted in accordance with the laws prevailing in India.

7.3 JURISDICTION OF COURTS

The courts in Bangalore only will have jurisdiction.

REGIONAL MANAGER SINGRAULI STRESS RELIEVE (Heating to and holding long enough to reduce residual stresses at a suitable temperature below the austenitizing temperature and then furnace cool slowly enough to minimize the development of new residual stresses.)

The following parts shall receive stress relieve heat treatment as specified bereinafter:

- All heat treated parts receiving minor weld repairs upgrading.
- All parts and/or components specified by Manufacturing Engineering for machining stability purposes.
- All parts and/or components specified on the engineering drawings to reduce residual stresses.

When stress relieving operation is specified for part (s) previously tempered, it shall be performed at a temperature 50° less than the part's tempering temperature. If part has not been previously tempered, then 1,100°F. stress relieving temperature is recommended.

Perform stress relieve as follows:

- Load parts and/or components into a heat treat furnace with initial temperature of 200°F. maximum.
- Use a heating rate of 150°F./hour maximum to heat up the furnace to the desired stress relieve temperature.
- Calculate the holding time at temperature using one hour/inch of the thickest cross section or largest diameter of any part in the stress relieve load.
- 4) At the end of the holding period, lower the furnace temperature $150^{\circ}F$./hour maximum from the stress relieving temperature down to $400^{\circ}F$., then unload.