

## 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/100/6300037756

Date: 13.07.2022

To:

Dear Sir,

Sub: E-Tender through BEML SRM for repair of 02nos. 298HP 3 Phase AC Motors (Siemens make) of 20CuM Rope Shovel.

\*\*\*

BEML Ltd., a Govt. of India Mini Ratna Public Sector Company under the Ministry of Defence is planning for repair of 02nos. 298HP 3Phase AC Motors (Siemens make) of 20cuM Rope Shovel under MARC at Jayant & Dudhichua Projects, NCL. The firm may download the tender documents and submit the tenders online through BEML SRM System.

Please go through the instruction and submit your single bid in SRM System complete in all respects **before 14.00 Hrs. on 03.08.2022**

Thanking you,

Yours faithfully,

For BEML LIMITED

REGIONAL MANAGER

Encl: Tender Document – 13 pages.



**BEML LIMITED**

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

**TENDER DOCUMENT**

**FOR**

**REPAIR OF 02NOS. 298 HP 3PHASE  
AC MOTORS (Siemens make) OF 20 CUBIC MTR ROPE SHOVEL  
UNDER MARC AT JAYANT PROJECT, NCL.**

**CLOSING DATE & TIME**

**03.08.2020 at 14.00 Hrs.**

.

**This Tender Document contains 13 Pages**

## **BEML LIMITED**

**Regional Office, PB No. 5, Jingurdha Colliery, Singrauli, Dist. Singrauli- (MP) 486889**

### **Limited Tender Notice**

**Tender is in a single bid system**, is invited from Firms/Motor repairers who have previous experience in Repair of more than 50 HP Heavy-duty 3 phase, AC Motors.

#### **Description of Work:**

**Repair of 02 Nos. 298HP 3 Phase AC Motors (Siemens make) of 20cuM Rope Shovel.**

#### **Scope of Work No. 1 (Rotor Shaft Replacement):**

1. The defective motor is available for physical inspection for ascertaining the scope of work including parts and labour before submission of the quotation. The Firm has to depute its competent representative for technical evaluation and finalization of scope of work to our erection office before the preparation/submission of the quote.
2. Replacement of Rotor shaft - supplied by BEML, Both DE & NDE bearings along with seals and replacement of motor DE & NDE bearing sleeve insulation, etc. will be under firm's / vendor scope. Old/removed bearings to be handed over to BEML. (Bearing No. as per our manual is NU2222E, NU220 & 6220- The bearings are to be of SKF/FAG/TIMKEN make only)
3. The only supplied shaft from BEML is to be assembled on to the existing rotor along with all elements.
4. The lubrication line for the end bearings has to be checked and any rectification required is to be carried out. Pre-lubrication of motor bearings with Gadus S3 V220C2 grease of M/s Shell Company is in the firm's scope.
5. The speed sensor's/ tacho wheel and RTD's are to be checked. If the tacho/ Speed sensor wheel is found damaged, the same is to be informed immediately to BEML for the supply of the same from BEML end. Replacement of temperature sensors/RTD's will be under the firm's scope if found existing ones are not in working condition.
6. The Rotor and Stator have to be thoroughly inspected, cleaned and to be varnished for better insulation.

7. Application of thinner, varnish, tapes, glass sheet, etc., will be under the firm's scope.
8. Insulation required is class H.
9. Complete assembly of grounding brush and its holder to be checked and if needs to be replaced.
10. Fixing up of motor junction box(supply through BEML) with suitable neoprene to avoid water entry into the stator & rotor body of the motor.
11. Complete assembling & Testing of the motor (surge comparison for the inter-turn test, megger, resistance, etc.,) has to be carried out in the presence of BEML representatives.

**Scope of Work No. 2 (Overhauling):**

1. Both DE & NDE bearings along with seals and replacement of motor DE & NDE bearing sleeve insulation, etc. will be under firm's / vendor scope. Old/removed bearings to be handed over to BEML. (Bearing No. as per our manual is NU2222E, NU220 & 6220- The bearings are to be of SKF/FAG/TIMKEN make only)
2. The lubrication line for the end bearings has to be checked and any rectification required is to be carried out. Pre-lubrication of motor bearings with Gadus S3 V220C2 grease of M/s Shell Company is in the firm's scope.
3. The speed sensor's/ tacho wheel and RTD's are to be checked. If the tacho/ Speed sensor wheel is found damaged, the same is to be informed immediately to BEML for the supply of the same from BEML end. Replacement of temperature sensors/RTD's will be under the firm's scope if found existing ones are not in working condition.
4. The Rotor and Stator have to be thoroughly inspected, cleaned and to be varnished for better insulation.
5. Application of thinner, varnish, tapes, glass sheet, etc., will be under the firm's scope.
6. Insulation required is class H.
7. Complete assembly of grounding brush and its holder to be checked and if needs to be replaced.
8. Fixing up of motor junction box(supply through BEML) with suitable neoprene to avoid water entry into the stator & rotor body of the motor.
9. Complete assembling & Testing of the motor (surge comparison for the inter-turn test, megger, resistance, etc.,) has to be carried out in the presence of BEML representatives.

## **Genral Scope of work:**

1. Fitment of drive pinion and brake hub on the rotor shaft is in the firm's scope whereas pinion, brake hub, and respective keys shall be collected from BEML representatives.
2. Transportation of the repaired/failed motor is in the firm's scope.
3. The quotation should indicate the cost of the parts with detailed price breakup and labour cost per Motor.
4. Firm has to quote individual line items seperately.
5. Indicate applicable taxes and duties.
6. The Repaired motors will be under repair warranty in all respects for 06 months from the date of fitment on the shovel/equipment or 2500 working hours whichever is earlier for the firms scope of work only.
7. The collection and delivery of Motors is the responsibility of the firm.
8. Delivery: each motor is to be delivered within 3weeks from the date of collection of the motor from BEML end after receipt of the work order by the firm.
9. Payment: 90% payment within 21days from the date of delivery and acceptance of the repaired motor and balance 10% after the warranty period.
10. Motors will be handed over to successful bidder for repair job on staggered manner.

Last date & time for online submission: **03.08.2022 at 14.00 HRS for online submission of tender documents.**

## **Eligibility:**

The tenderer should have previous experience in Repair of Heavy-duty Motors of more than 50 HP, 3phase, AC Motors.

## **Submission of Bid**

Please upload all the technical bid documents in the Notes & Attachments at the 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 the 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) The bidders shall submit relevant records in proof of complying with eligibility criterion conditions.
- c) The firm has to enclose a copy of bank account details (canceled cheque), PAN card copy and GST registration.
- d) Copies of firms turnover certificates and ITR of preceding three years.

**General Terms & Conditions:**

1. Please quote the price details in 'Price Conditions' in the system only against the respective items provided therein.
2. L-1 will be decided for individual line item.
3. Technical Bids of the bidders will be opened first on the Technical Bid Opening Date/Time. Price Bids of the technically accepted bidders only will be opened subsequently on completion of the technical evaluation
4. The bidder shall accept all the terms and conditions of the tender.
5. 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, the Tender issuing officer of BEML Ltd. may be contacted in person or through telephone nos. 07805-276668 / or email [singrauli@rm.beml.co.in](mailto:singrauli@rm.beml.co.in).
6. BEML reserves the right to assess the capacity and capability of the parties for pre-qualification. The company also reserves the right to accept or reject any or all the tenders or any part thereof at any stage of the process without assigning any reason whatsoever. The company has no obligation to accept the lowest tender. The 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.
7. 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, the contractor should not express any difficulties in the execution of the contract.
8. The GST shall be excluded from the rates, which will be paid extra at the applicable rate.
9. In the event of furnishing false information / incomplete information, the offer(s) shall be rejected.
10. BEML Ltd. Reserves the right to reject any bid, which is technically unacceptable and

unworkable. Further BEML Ltd. It also reserves the right to reject any or all bids without assigning any reasons thereof.

11. 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 the 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 the sales tax authorities of the state government.
- e) BEML LIMITED, Singrauli may refuse the 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 of 02nos. 298HP 3 Phase AC Motors (Siemens make) of 20cuM Rope Shovel.

#### **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 authorized representative, successors and assignees.

#### **1.3 PROJECT – IN –CHARGE.**

This 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**

This means the written agreement between BEML AND CONTRACTOR/FIRM/REPAIRER made from time to time.

#### **1.5 REPAIR VALUE**

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

#### **1.6 WORKMEN**

Supervisory & the administrative staff and / or any other person(s) deployed by that Contractor for the execution of this contract.

#### **1.7 GUARANTEE PERIOD**

2500 hrs of operation on the Machine from the date of fitment after the repair or SIX MONTHS from the date of acceptance of repaired motors for workman ship and repair scope, whichever is earlier.

#### **1.8 PROJECT SITE**

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



## **1.9 EQUIPMENT**

**20Cu.M OR 295HD Rope Shovel**

## **2.0 SCOPE OF WORK BY THE FIRM**

**2.1** Repair of 02nos. **298HP 3 Phase AC Motors (Siemens make) of 20cuM Rope Shovel** as the detailed scope of work.

**2.2 MANPOWER:** Adequate skilled, semi-skilled and unskilled manpower to execute the project as per the time schedule indicated in the contract which includes supervisory, non-supervisory, Qualified Electrical staff, Qualified Fitters, helper, etc.

### **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) AND FIRST AID BOXES.

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

### **2.4 SECURITY**

It shall be the responsibility of the Contractor to safeguard, safe handling and safe protection of the Motor thus taken for repair from theft, damage, vandalism, etc., till they are repaired/inspected and handed over to BEML.

### **2.5 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 MOTORS REPAIR:**

Repaired motors (298HP) for each scope of work has to be delivered within 3 weeks from the date of receipt of the motor from BEML after releasing of the work order.

## **4.0 SCOPE OF WORK BY BEML: Supply of Rotor shaft, drive pinion, brake hub and respective keys**

### **5.0 Transportation.**

The contractor shall arrange his own arrangement for to and fro movement of the motor from BEML Jayant Erection office/Regional Office Stores to Contractors workshop and vice versa.

## **6.0 TERMS AND CONDITIONS:**

### **6.1 TECHNICAL TERMS**

#### **6.1 INSPECTION AND TESTS.**

(1) The inspection and Tests for acceptance of the repair work will be:

- a) Material conformance standards.
- b) Stator Insulation test using 1000V Meggar.
- c) Noise-free run test.
- d) Pinion and Brake Hub surface contact test on the rotor Shaft and fitment.

(2) Inspection Authority.

Project-in-Charge (BEML) of Shovel Maintenance, Singrauli is authorized to certify the repair Work carried out and all materials used and process adopted during Repair.

### **6.2 COMMERCIAL TERMS**

#### **6.2.1 PERFORMANCE GUARANTEE (GUARANTEE PERIOD)**

The repaired Motors shall give a service life of 2500 working hours on the Machine or six months after delivery whichever is earlier for repair scope of work. Any repair of the Motor for end bearings and motor assembly faults during the Guarantee period shall be carried out at free of cost.

#### **6.2.2 Delivery schedule and Penalty:**

Each repaired motor (298HP) has to be delivered within 3weeks from the date of receipt of motors from BEML after receipt of the work order by the firm.

For every week of delay, over and above the allowed as above, a penalty of 0.5% per week of the order value shall be levied, subject to a maximum of 5% of the value of the repair cost.

#### **6.2.3 PAYMENT TERMS AND CONDITION:**

Payment will be made on prorata basis (i.e. repaired motor will be paid)

- i) 90% of order value after adjusting the EMD amount, 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 hours or six months whichever is earlier.

### **6.3 GENERAL TERMS**

**6.3.1** 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 manpower (Supervisory and Non – Supervisory) and other infrastructure as required.

**6.3.2** The contractor shall carry out the repair job of the Motors strictly adhering to STANDARDS and also as per the advice from time to time by Project in-charge (BEML). Ensure full co-operation for the testing of Motors.

Return to BEML in a safe condition, the Motor, 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.

#### **6.3.3 CONFIDENTIAL CLAUSE.**

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

#### **6.3.4 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, the correctness of the wages paid, PF and ESI payment in respect of the labour engaged for 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 on 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 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 the execution of the contract.

BEML shall not be responsible for employing 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 the contract and shall produce a satisfactory proof for having paid so, before the final bill is settled.

#### **6.3.5 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) may consider necessary and shall during such suspension properly protect and secure the work, so far as is necessary in his opinion.

#### **6.3.6 DELAYS IN THE CONTRACTORS PERFORMANCE**

The TIME SCHEDULE for REPAIR of the Motor as stipulated in this contract Clause Number and amendment thereof shall be the ESSENCE OF THE CONTRACT.

Except as provided under force majeure clause a delay by the contractor in the performance of its delivery obligations shall render the contractor liable to the imposition of penalty as per the clause No 6.2.2.

#### **6.3.7 ASSIGNMENT SUB-LETTING AND SUB-CONTRACTING**

The contractor shall not assign the contract either wholly or part thereof or any benefit or interest therein or thereunder 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 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.

#### **6.3.8 INDEMNITY**

The contractor shall indemnify BEML at all times against all claims made by the contractor's 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 the 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**

**BEML LIMITED, SINGRAULI**