

EoI-Ref : CPC/VDC/M&C/CMSE

Date: 16<sup>th</sup> October 2020.

**Expression of Interest (EoI) for manufacturing and technology partnership from Leading Original Equipment Manufacturers for Continuous Miner & Supporting Equipment under “Make in India” policy.**

**Objective : “Make in India” and Self Reliability**

BEML is seeking manufacturing and technology partnerships with reputed OEMs looking to establish and/or expand their supply chains/manufacturing base in India for the manufacture of various goods and/or service business in the areas of Defence & Aerospace, Rail & Metro, Mining & Construction, Engines and aggregates with the overarching objective of “Make in India” and enhancing Self-Reliance in line with the vision of Honorable Prime Minister of India.

**1.0 Back ground**

BEML Ltd has three business verticals viz Defence & Aerospace, Rail & Metro and Mining & Construction with four manufacturing complexes located at Bengaluru, Kolar Gold Fields (KGF), Mysuru and Palakkad.

All the manufacturing divisions of BEML have been accredited with ISO 9001 – 2015 and ISO 14001 (HSC) certification. BEML has its own world-class composite R&D establishment for Design & Development of products.

The Company has a nationwide Marketing Network and an International Business Division for Exports activity.

Details of the BEML Ltd is available on [www.bemlindia.in](http://www.bemlindia.in)

**2.0 Overview of BEML Capabilities:**

BEML Limited, a Central Public Sector Enterprise coming under the Ministry of Defence was incorporated in 1964. Subsequently it became a listed company and is engaged in the design, development and manufacturing in the areas of Mining & Construction, Defence & Aerospace and Rail & Metro equipments.

**2.1 Mining & Construction**

BEML Ltd is engaged in the business of Hydraulic Excavators, Bulldozers, Wheel Loaders, Wheel Dozers, Dump Trucks, Motor Graders, Pipe Layers, Tyre Handlers,

Water Sprinklers and Backhoe Loaders to customers in the Mining and Construction segments.

BEML has also developed Mining Dump trucks of 150 Ton and 200 Ton class and Excavators of both Hydraulic and Electrical of 180 Ton capacity.

## **2.2 Defence & Aerospace**

BEML Ltd is engaged in the business of High Mobility vehicle for all terrain operations, Heavy Recovery Vehicle, Pontoon Mainstream Bridge Systems, Crash Fire Tenders, Mobile Mast Vehicle, Engineering Mine Ploughs, Tank Transportation Trailers, Weapon Loading equipment, Armoured Recovery Vehicle, Milrail Coaches and Wagons, ground support vehicles and other products to the Indian and other Armed Forces.

## **2.3 Rail & Metro**

BEML Ltd is engaged in the business of Integral Rail Coaches, Overhead Inspection Cars, AC/DC Electrical Multiple Units, Stainless steel EMUs, Utility vehicles, Track Laying Equipment, Broad-gauge Rail bus, Treasury Vans, Spoil disposal Units to the Indian and other Railways.

BEML Ltd has also successfully diversified into manufacturing state-of-the-art technology stainless steel Metro Cars for various urban Metro Corporations and enjoys a dominant market share in this segment

## **3.0 Research & Development:**

BEML Ltd has R&D establishment for Design & Development of high tech engineering products for its three verticals. It employs over 300 professionals with high experience and skills spanning a wide range of technology areas.

The R&D establishment has CAD Centre, Fluid-power, Powerline, Structural Engineering & Material Science laboratories and is continuously engaged in New Product Development and upgradation of existing products to meet customer requirements. More than 65% of Company's Sales Turnover is through in-house developed R&D products. The R&D expenditure is around 2 ~ 3% of its turnover.

## **4.0 International Business Division:**

BEML has a sizeable market share in export markets with exports to 68 countries across the globe. Over the years this division has exported over 1200 machines covering all the three verticals.

## **5.0 BEML Ltd seeks partnership with reputed OEMs for manufacturing & supply of Continuous Miner and its supporting equipment herein referred as Continuous Miner package**

With the increase in demand for power, Indian Coal Industry is facing challenge of increasing coal production to meet the demand. Towards meeting this goal, Indian Coal Industry is adopting Mass Production Technology in the U/G Mining area, by introducing Continuous Miner / Miner Bolter with the required supporting Equipment to achieve optimum level of production, productivity, extraction percentage and safety in U/G mines.

To cater to this requirement, BEML is actively seeking partnerships with globally reputed Original Equipment Manufacturers (OEMs) who are looking to establish or expand their market, sourcing/manufacturing footprint in India for continuous miner package **(range of 0.7 m cutting height to 5 m cutting height along with supporting equipment)**. The After-Sales-Service will be rendered by our nationwide service network with the support of our selected working partner.

Generally the equipment required in Indian Coal Mines using Continuous Miner Package is:

- 1) Continuous Miners / Miner Bolter of various models with different ranges from minimum cutting height of 0.7 m or above to maximum cutting height of 3.6 m to 5 m (Suitable to prevailing geo-mining condition)
- 2) Shuttle Car (Electrical or diesel) / Coal Hauler for transportation of coal from face to Gate belt matching with guaranteed production
- 3) Twin Boom Roof Bolter sufficient to match with the requirement of bolting and other related jobs during development, widening and depillaring in the designated area of work as per statute.
- 4) Load Centre (Set of electrical power distribution of equipment) for supply of power to working equipments of the package meeting all standards of Indian statute, lighting & face communication unit
- 5) Load Haul Dumper (Remote Controlled)
- 6) Feeder Breaker / a suitable crushing & sizing equipment,
- 7) Suitable environmental system (instruments) for measuring air velocity, temperature, and percentage of various gases at various locations in the ventilation circuit of the working panel.

- 8) Battery operated Multi Utility Vehicle for cleaning & sweeping of coal, transport of material & consumable goods and shifting of switchgear & transfer etc,
- 9) Battery operated Free Steered Vehicles (Personnel Carriers) having carrying capacity of minimum 12 persons each
- 10) Starta Control Equipment - Instruments such as auto warning system, tell tales, Rotary tell tale, dual height tell tales, strain gauge bolts, stress cells, load cells, convergence indicator etc needs to be installed for proper continuous monitoring and analysis of starta and pre alarming for of impending roof fall during caving operation.
- 11) Suitable arrangement for retrieving continuous miner & other face equipment trapped in the district during operation,
- 12) Face pumps with required cables, switch gears and pipes/flexible hoses for discharging into intermediate sump
- 13) Auxiliary fans for face ventilation along with accessories including electricals as may be required.
- 14) Communication equipment
- 15) Dust Suppression System for CM package

However, this may vary from mine to mine or package to package.

**The selected Partner shall :**

- a) Supply the main equipment / critical aggregates, Technical consultancy etc. as required
- b) Agree for manufacturing of mutually agreed Assemblies / components at the manufacturing facilities of BEML in India so that cost advantage can be leveraged. The selected partner should offer the required technical support by providing drawings, vendors for sourcing of critical components etc. as required.
- c) Shall obtain the required Government Approvals like Directorate General of Mines Safety (DGMS) etc. (details given below) with the support of BEML.
- d) Associate in assembly of equipment at BEML facilities and installation, commissioning and operation / supervision of operation cum maintenance at end customer site as required,

- e) Supply the spares & consumables necessary for operation of the equipment during its life time,
- f) Training of BEML engineers for installation, supervision & maintenance of the equipment to ensure that BEML and the selected Partner shall be jointly responsible for supply, installation and operation / supervision of operation cum maintenance and spares management of the necessary machinery and / or equipment required for implementation of Continuous Miner Technology following stipulated safety standards as per Indian Coal Mines Rules and Regulations and subsequently its adoption and absorption by customer.

### **Directorate General of Mines Safety (DGMS) Requirements:**

The most important requirement for deploying Continuous Miner Technology is obtaining the approval of DGMS, India, the regulating authority, who accords approval for deployment of equipment in Underground Mines. DGMS approval is also required for the Mining methodology to be adopted by the Coal Mines, which will be generally obtained by the customer (Mining Company) with support from the Equipment supplier. The DGMS Approval for the equipment has to be obtained by the original equipment manufacturer (OEM) (Selected Partner) and BEML with required assistance from the customer. After entering into Agreement / Understanding, BEML and selected partner will work towards obtaining DGMS approval for deploying the equipment in Underground Coal Mines in India.

### **Business Model :**

BEML intends to have a long term understanding with the prospective partner to enable BEML along with the selected partner to bid for, *design, manufacture, supply, test, commission and maintain the Continuous Miner package*. The demand for Continuous Miner packages in India for next 5 to 7 years is 15 to 20 Nos.

BEML proposes a business model where in BEML and the selected partner will jointly bid for the contracts. The payments received/amounts realised from the customers will be shared between BEML Limited and the selected Partner in proportion to the goods and services provided by each Partner as per mutual agreement.

BEML would be the lead Partner in all business transactions in India and all the quotes submitted for acquiring business in India. The selected partner shall not participate independently or in association with anybody else in any tenders in India for manufacture / supply of Continuous Miner Package, during the period of agreement.

Selected Partner should indicate willingness to supply equipment and provide technical consultancy as requested by BEML on mutually agreeable terms at competitive market prices during the period of Agreement.

BEML intends to progressively indigenise the Continuous Miner / Bolter Miner and supporting equipment. The indigenisation drive will be either through manufacturing the components in-house or procure them from qualified and reliable Indian vendors in a time bound manner so as to maintain a competitive edge in the Indian Market in coordination with selected partner. As such, the selected Partner should extend cooperation to BEML in developing these critical / agreed components in India by sharing the technical information with BEML in developing in-house capability / identification of suitable vendors so as to ensure economic procurement and competitiveness in the price of these components resulting in cost advantage in the manufacture of the Continuous Miner Package. The Partner has to entrust BEML Limited with the exclusive rights and responsibility of supplying all the spares parts to the end customer either by manufacturing in India or Sourcing from the selected partner as per the requirement.

### **Qualification criteria of EOI.**

1. The manufacturer should be in the business of the supply and installation of Continuous Miner Package for the last 20 calendar years. Document proof shall be submitted for the same.
2. The company should have the cumulative turnover of minimum 100 million US dollar for the past 10 years. Supporting document/self declaration to be submitted.
3. The company should have manufactured and supplied minimum 5 nos. of Continuous Miner in the past 15 years
4. Willingness to indigenise at least 50% of the value of equipment in India to meet "Make in India" criteria.
5. The company should be interested to associate with BEML in any of the following mode or co-operation
  - a. Joint Ventures
  - b. Joint manufacturing
  - c. Technology licensing
  - d. Contract manufacturing
  - e. Know-how transfer arrangement
6. Willingness to share with BEML any up-gradations / improvements made during the period under which the joint working arrangement is effective.
7. Willingness to train a strong core technology team of Engineers from BEML Limited.
8. Submission of Undertaking regarding that the company has not been debarred / blacklisted by Government of India / any State Government in India/Central or State Government undertaking.

9. Submission of undertaking regarding number of arbitration cases pending and details regarding the same.
10. Submission of Quality Certificates such as ISO 9001, ISO 14000 or any other relevant certificate

The bidder should furnish Information on qualification criteria as per the enclosed **Format A** and the information required for evaluation of responses as per **Format B** which are enclosed.

**Shortlisted bidder should consider following also while submitting the response**

1. Prospective partner may also be required to enter into a long-term Supply Agreement for equipment; spares etc. and meet the expected delivery requirements and other Terms & Conditions of RFP / Tender to be issued by BEML on cost basis.
2. Prospective partner would be required to support BEML during interactions with the various agencies in India for initial screening, participation in the customer RFP / Tender and subsequent qualification process by way of deputing their experts to India and providing the required information, qualification documents and clarifications as required/sought by customer.
3. Prospective Collaborator shall provide firm and irrevocable commitment to provide product support in terms of maintenance, materials and spares etc. for a minimum period of 15 years from the date of last supply to BEML.
4. Prospective partner is required to confirm that in case of getting shortlisted as a result of this EoI process, following support shall necessarily be provided to BEML in order to enable BEML to prepare and submit a competitive techno-commercial bid to customer as per the terms of the customer RFP / Tender (& other requirements as applicable) and also to successfully execute the contract in case of BEML emerging as L1 bidder:
  - a. To provide costing elements required for preparation of BEML offer against customer RFP.
  - b. To provide a price list with long term validity with Price Variation Clause for assemblies / subassemblies / components / spares / Manufacturer's Recommended List of Spares etc. for items to be sourced from prospective partner.
  - c. Any other requirement felt necessary as per customer.
  - d. Above mentioned requirements are only indicative in nature, however any other document/information/input required by BEML for cost estimation and for preparation & submission of techno-commercial bid to customer shall have to be provided by the prospective partner.

## 6.0 Benefits of partnering with BEML

BEML Ltd has an extensive Marketing network and service centers. BEML has a strong R&D in all business verticals which have developed high end Mining and Construction equipment such as 150 and 200 Ton Dumpers and 180 Ton Excavators etc. BEML have delivered more than 1600 Metro Cars and have a dominant market share in the Indian Market.

BEML is having extensive Land bank at Bangalore, Mysore, Kolar Gold Fields and Palakkad to partner for a Make in India Park for self-reliance through indigenization in line with "Make in India" vision of Honorable Prime Minister of India. The products manufactured through collaboration/partnership may also be exported to other countries.

With extensive manufacturing facilities spread across India, a highly skilled and experienced manpower, presence and reach through its wide network of offices and divisions in India and a successful model of collaborating with other reputed OEMs, BEML is ideally placed to be the partner of choice in India for cooperation.

## 7.0 Contact Person

Interested parties may forward their interest by providing the details of their organization with credentials and areas of interest by providing the time line to following address by post (super scribing EoI reference CPC/VDC/M&C/CMSE dated 16.10.2020) or email on or before **13-11-2020 , 2 PM** to **[continuousminer@beml.co.in](mailto:continuousminer@beml.co.in)**

Shri. SUNIL KHARAD  
General Manager , Corporate Materials  
BEML Ltd , BEML Soudha  
Room NO. 223  
No 23/1 , Sampangiram Nagar  
Bangalore – 560 027  
Karnataka State ,  
INDIA  
Phone : +91 80 22963 179

**[Email id : continuousminer@beml.co.in](mailto:continuousminer@beml.co.in)**



Detailed information sought for Qualification:

Sl. No.	Parameter	Unit	Details
1	Number of years of experience in design & development of Continuous Miners and supporting equipment	No.	_____ Years
2	Number of Continuous Miners manufactured and supplied during last fifteen (15) Financial years i.e.2005-06 to 2019-20.	No.	_____ Continuous Miners manufactured and supplied
3	Cumulative turnover of the company for past 10 years i.e. between 2010-11 to 2019-20	USD	-----Million USD
4	Number of Continuous Miners supplied to Indian customers along with details of project where they are working	No.	_____ Continuous Miners supplied to Indian customers
5	Acceptance to associate with BEML in any of the following mode or co-operation Joint Ventures Joint manufacturing Technology licensing Contract manufacturing Know-how transfer arrangement	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
6	Willingness to indigenise at least 50% of the value of equipment in India to meet "Make in India" criteria	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
7	Willingness to share with BEML any up-gradations / improvements made during the period under which the joint working arrangement is effective.	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
8	Willingness to train a strong core technology team of Engineers from BEML Limited.	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
9	Submission of Undertaking regarding that the company has not been debarred / blacklisted by Government of India / any State Government in India / Central or State Government undertaking upon .	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
10	Submission of undertaking regarding number of arbitration cases pending and details regarding the same.	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>
11	Submission of Quality Certificates such as ISO 9001, ISO 14000 or any other relevant certificate	Yes/No	Yes <input type="checkbox"/> No <input type="checkbox"/>  List of certificates: (i) (ii) (iii) (iv)

Note: Please tick the relevant boxes and provide the information.

**INFORMATION SOUGHT FOR EVALUATION OF RESPONSE SUBMITTED:**

Sl. No.	Parameter	Unit	Details
1	Number of years of experience in design & development of Continuous Miners and supporting equipment	No.	_____ Years
2	Number of Continuous Miners manufactured and supplied during last fifteen (15) Financial years i.e.2005-06 to 2019-20.	No.	_____ No.
3	Cumulative turnover of the company for past 10 years i.e. between 2010-11 to 2019-20	USD	_____ Million USD
4	Number of Continuous Miners supplied to Indian customers along with details of project where they are working	No.	_____ No.
5	Net worth of the Company for the last three (3) financial years ie. 2017-18, 2018-19 & 2019-20	USD	In USD Million 2017-18 : 2018-19 : 2019-20 :
6	Profit After Tax for the last three (3) financial years ie. 2017-18, 2018-19 & 2019-20	USD	In USD Million 2017-18 : 2018-19 : 2019-20 :
7	Willingness to indigenise the value of equipment in India to meet "Make in India" criteria	%	50% <input type="checkbox"/> 60% <input type="checkbox"/> 70% <input type="checkbox"/> 80% <input type="checkbox"/> 90% <input type="checkbox"/> 100% <input type="checkbox"/>

Note: Please tick the relevant boxes and provide the information. Documents required to authenticate the above information/details may be enclosed.