

'Expression of Interest' for Manufacturing of BEML Heavy Duty Truck (HDT) CABINS (Unfurnished)

1. Objective:

BEML Limited is a Defence PSU under the Ministry of Defence (MoD), Govt. of India.. BEML HDT vehicles are mainly used for General Service and special projects carrying super structures as per MOD requirement. As part of indigenous program, the development and production of military truck Cabins (unfurnished) is taken up. In this regard, BEML intends to identify reputed indigenous cabin manufacturers having in-house capability for Manufacture and supply of military truck cabins and associate in integration and testing.

Annual consumption of cabins is more than 200 numbers including scope available for exports.

2. Military Truck Cabin Brief (For information):

The standard Cabin configured to Right Hand Drive is a sleeper type cab - ready to fit on chassis (drop down). The cabin is hinged on the front of chassis and tilted from the rear assisted through a hand pump.

- Cabin Structure:

The structure is built out of rolled metallic sheets & tubular structure clad with metal panel. It is sleeper cab type - ready to fit on chassis (drop down). It has two doors on each side with sliding toughened glass windows, two fixed toughened glass windows on the side panels, Split front wind shields with laminated safety glass, Rear panel with fixed toughened glass, Top panel with metallic hatches and bottom metallic cladding profiled to engine envelope.

- Cabin Features:

The cabin comes with the following features

- Ergonomically designed cabin for fatigue free operation
- HVAC (Heating ventilation and Air conditioning).
- Air intake, mounted on rear panel of cabin.
- NBC system.
- Circular roof hatch located above engine tunnel.
- Air suspension bucket type seats with height and horizontal adjustment.
- ABS panels in cabin interiors.

- CTIS Control Unit on the dashboard for the inflation/deflation of tyres from the driver cabin.
 - Control Unit with knobs for the operation / engagement of Axle differential lock and Inter-axle Differential Lock on the dashboard.
 - Black Out system with controls for Night / Convoy movement.
 - Major Sub systems include Front cross members, Steering column assy., Steering under carriage linkages, Gear Shift Lever assy., Air Intake Manifold & Engine air duct, Cabin lifting pump, Hydraulic & Pneumatic (CTIS, Parking & Service brake) routings, Electricals routings & Alternator 120 A & Fuel level sensor.
- Cabin Dimensional Data:

1. Main dimensions and weight of Cabin:

- a. Length - 2100 mm
- b. Width - 2500 mm
- c. Height
 - i. Over cab structure - 1850 mm
 - ii. Over Hatches - 2500 mm
 - iii. Over Beacons - 3278 mm
- d. Weight of the cabin structure - 360 Kg \pm 3%
- e. Weight of fully furnished cabin - 770 Kg \pm 3%



3. Scope of work:

Based on the response from Interested Firms for this EOI, Separate RFQs will be floated to shortlist one capable firm for manufacturing Cabin Welded Structure.

NDA and MoU will be signed with the final firm evaluated in the RFQ. BEML will issue cabin manufacturing drawings. Dies and Punches will issued as Free Issue Material (FIM) against Bank Guarantees.

A. The cabin development and Production is planned in three phases

- 1) Development stage: 5 cabins to be developed within 3 months of contract.
- 2) Pilot Production stage: 10 cabins to be produced based on feedback of prototypes within 3 months from prototype clearance.
- 3) Bulk Production stage: More than 50 cabins in the first year after pilot batch clearance by BEML/MoD.

B. The brief scope of work is,

- a. Process planning, Design and Manufacture of Jigs & Fixtures based on the drawings issued by BEML.

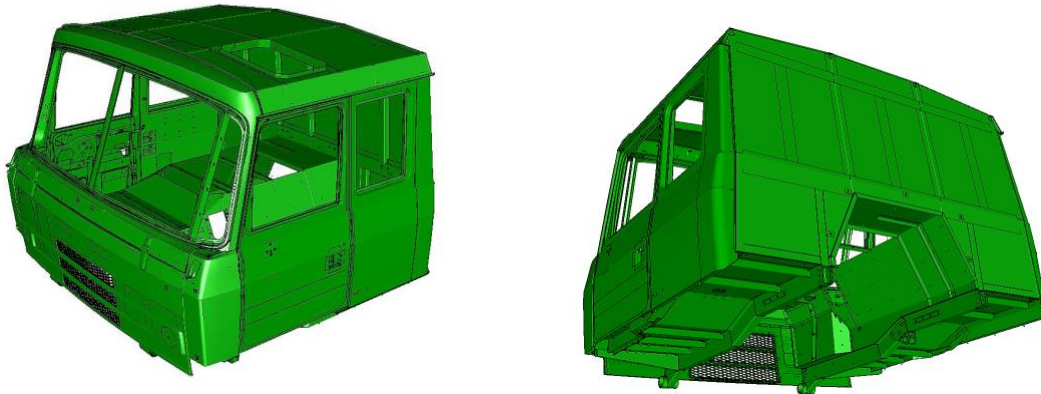
Note: Firm is free to prepare intermediary drawings and minor changes in the original drawings with approvals from BEML to match the manufacturing process. However all the drawings including the modified drawings will be the property of BEML.

- b. Sheet Metal work: Pressing and Blanking of 27 pressed components and 22 Laser cut components.
- c. Assembly, Set-up welding and full welding of around 11 sub assemblies.
- d. Cabin Integration: 5 Stage Modular Assembly with Robotic / Manual Welding
- e. Painting & Drying: Washing, Heating, Electrostatic Dip with Painting and Drying
- f. Development & Supply of fully welded and painted cabin structure assembly.
- g. The firm has to offer the finished welded cabin for inspection and clearance by BEML.
- h. Supply the cabin welded structure (Shell) to BEML along with quality records for having complied for materials, processes and dimensions.
- i. Associate with BEML during integration, furnishing, internal trials and MoD performance evaluation trials.

C. First three cabins will be subjected to endurance and destructive tests at the discretion of BEML. Proving all parameters will be the firm's responsibility. However complete cost of testing will be borne by BEML. The firm has to provide fresh cabins for testing in case of failures.

4. BEML will hold IP rights for all technologies developed for the indigenous cabin.

5. CAD Model and Pictures of Cabin for illustration purpose:



6. Pre-Qualification Criteria:

Interested firms shall fulfill the following criteria while submitting the EoI.

- i. Firm having more than 5 years of experience in design, development, manufacture of sheet metallic cabin for wheeled vehicles and having tested/undergone all terrain road worthiness will be preferred.
- ii. Firm with sound financial status – Consistently profit making for the past 3 years.
- iii. Firm should be certified for the latest Quality Management System.
- iv. EOI may be responded by individual firm or a consortium of firms represented by a lead member. In case of consortium, lead member shall respond to the EOI and will be responsible for the success of the program.
- v. The firm shall have the following basic and essential facilities to qualify to this EOI.
 - a) Latest CAD software & hardware for handling Design & Documentation
 - b) Range of Hydraulic Press Capacities from 315T to 1250T.

- c) CNC Laser cutting facilities.
- d) Capability to design and manufacture modular type hydraulic fixture.
- e) Adequate facilities for GMAW & Spot welding.
- f) Possess requisite Non Destructive Testing (NDT) facilities.
- g) 7 dip tank facilities for complete cleaning & phosphating the entire Cabin structure.
- h) Closed control painting and drying facilities.

7. Details of the firm to be provided with necessary supporting documents:

- i. Company Registration certificate indicating name of the firm, year of establishment, incorporation details, Members of the Board, URL of the firm's website.
- ii. Name of the contact person, address, Telephone, Fax & email
- iii. Number of years of experience in design and manufacturing of Cabins.
- iv. Brief on your cabins which are in-service commercial/military equipments.
- v. Detailed Technical Capabilities and manufacturing facilities of the firm for having designed and developed similar cabins for wheeled Vehicles.
- vi. Copy of the Supply Orders to brief the past and similar ongoing projects, if any.
- vii. Details of IT infrastructure and certificates of quality management system of the firm.
- viii. Financial performance documents (Audited Balance sheets and Profit & Loss statements etc.) with details of turnover for last three (3) years
- ix. Details of Contract(s) or order(s) terminated before completion, if any
- x. Details of any premature termination of job/supply order/contract for Min of Defence, India or any other Government / Quasi Government organization in India.
- xi. Value of largest two projects executed in last 5 years
- xii. Capability to furnish Bank guarantees.
- xiii. Details of important customers

Note: The responses from Firms/OEMs that are black listed/restricted by Government of India or its Agencies will not be considered.

8. Submission of EOI:

In this context, Eoi in sealed cover, Providing all details, documents and certificates shall be submitted by interested reputed firms, superscribing **“Expression of Interest’ for Manufacturing of BEML Heavy Duty Truck (HDT) CABINS (Unfurnished)”** on or before 14:00 hours of xx.xx.2019, to

**Deputy General Manager –Materials
BEML LIMITED,
KINFRA Park, Menon Park Road,
Kanjikode East,
Palakkad – 678 621
Kerala
India.**

**Tel (Off): 0491 2568178
Email: pm@beml.co.in**

The last date for receipt of EOI at the above address will be as per the information published and will be opened on the same date at 1515 hrs.

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