

DEMAND NOTIFICATION**INVITATION FOR EXPRESSION OF INTEREST FOR
DEVELOPMENT AND MANUFACTURE OF MAGAZINE TROLLEY**

BrahMos Aerospace, a joint venture between India's Defence Research and Development Organization (DRDO) and Russia's NPO Mashinostroyeniya, is a leading aerospace and defense corporation specializing in the design, development, and production of supersonic cruise missile systems.

BAPL invites Expressions of Interest (EOI) from prospective manufacturing industries for the procurement of Magazine Trolley.

Name of Equipment: MAGAZINE TROLLEY

Scope of work:

To Develop and Manufacture Magazine Trolley and qualify the same as per technical requirement which will be shared to shortlisted manufacturers.

Brief Description:**I. INTRODUCTION**

- (i) Magazine Trolley (MT) is intended for storage of cylinders in storage bin.
- (ii) This trolley, loaded with cylinders, is capable to move (manually as well as electrically) from rails of storage bin to the rails of traverse trolley for its loading / unloading in the storage shed.
- (iii) The trolley is capable of storing cylinders in different storage configurations.
- (iv) It should be feasible to safely load the cylinders on the trolley
- (v) Using magazine trolley, it should be feasible to safely load and move the cylinders in all configurations, as required by the user, while maintaining stability.

II. TECHNICAL SPECIFICATIONS / REQUIREMENTS AND SCOPE OF WORK

The Magazine Trolley is to be developed to meet the technical specifications given below.

| S. No. | Requirement | Specification |
|--------|--|--|
| 1. | Design | a) It should have sufficient stability under loaded condition. |
| 2. | Operating conditions and environmental & Hazard Protection | a) Operating Temperature Range: -20 °C to + 55°C. b) Storage Temperature Range: -40 °C to +55°C. c) Relative Humidity: 95 % RH. d) Altitude – up to 4000 MSL. e) Corrosion resistance for unpainted regions of trolley except for moving surface of trolley wheels. f) Environmental & Hazard protection for electrical components: <ul style="list-style-type: none"> i. Flame proof motor Protection. ii. Flame proof cables for connection wires on trolleys. iii. IP 54 – Dust and water proof protection class. iv. Over voltage / short circuit protection. |
| 3. | Wheels | a) To be selected for use on 105 lbs. (Indian Rail std.). b) Number of wheels 4 / 8 combination. |



| | | |
|-----|----------------------|---|
| 4. | Travel speed | a) Provision for a range of speed for operating trolley. b) Ability to select the speed of movement of trolley using a control panel. c) The control panel will be stationed on Traverse Trolley. |
| 5. | Mode of operation | a) The system must have provision for both Electric mode and manual mode of operation. i. Electric Mode: Through a control panel using push buttons and joysticks. ii. Manual Mode: Provision to operate trolley manually. |
| 6. | Latching and Locking | a) Latching / lifting points for loading and unloading the trolley on trailer and latching during transportation. b) Provision for arresting the lateral and longitudinal motion of cylinders using the available hard points / latching points. |
| 7. | Outrigger | a) Total 4 outriggers to be provided on suitable locations of MT for MT to rest on the outriggers while not in operation. |
| 8. | Power connection | a) Power will be derived from control panel mounted on traverse trolley by using a 4 Pin detachable power connector. b) Power Input: 415 V, 3 phase, 50 Hz. |
| 9. | Motor and Gearbox | a) Flame-Proof enclosure Class D or above. b) Gear box preferably low gear ratios for better torque output. c) Suitable for low temperature operations. |
| 10. | Brakes/ Stopper | a) The trolley shall have provision of brakes / stopper to arrest movement of trolley while loading / unloading operation. |
| 11. | Paint and plating | a) Paint: Trolleys to be painted with dove grey color with 2 coats of primer and 2 coats of paint. b) Unpainted regions to be ZN-Ni plated. |
| 12. | Testing / Inspection | a) Stage inspection b) Fitment tests c) Static and dynamic load tests d) Acceptance tests and Qualification tests |
| 13. | Deliverables | a) Magazine Trolley as per BOM. b) Grease gun – 1 no. c) Latching belts 3T capacity – 4 nos. d) Emergency rotating handle – 1 no. e) Tools and spares. f) Drawings, models and documents as per Para III. |

III. DRAWINGS / DOCUMENTS TO BE SUBMITTED

Following drawings, models and documents are to be generated by the supplier and shared with BAPL for review and approval.

| S. No. | Drawing / Document |
|--------|---|
| 1 | Manufacturing drawings (AutoCAD format) and Bill of Materials. |
| 2 | Detailed 3D model, Design report and FEA report. |
| 3 | User manual with Illustrated Spare Part List (ISPL). |
| 4 | Maintenance Manual |
| 5 | Manufacturer Recommended List of Spares (MRLS). |
| 6 | Components Catalogue for bought out items. |
| 7 | Draft Quality Assurance Plan (QAP) and Acceptance Test Plan (ATP) will be prepared and submitted by BAPL. Based on draft QAP and ATP, final QAP and |



| | |
|---|--|
| | ATP will be prepared by vendor. QAP to cover raw material checks, heat treatments checks, welding checks, surface treatment checks, painting checks, visual and dimensional checks, functionality checks, Load tests, Pre-delivery inspection. |
| 8 | Test reports as per QAP (Raw material test reports, WPS/WPQ/PQR, stage wise inspection reports, DP reports, certificates of conformance, dimensional inspection reports, Paint reports, Torque application report, Acceptance test / Qualification test report). |
| 9 | CoC and data sheet to be submitted against make and model for all electrical items. CoC of FLP panels and Motors to be submitted as part of documents. |

The eligibility criteria and instruction for submission of EOI are available at our website www.brahmos.com. Only eligible vendors meeting the requirements specified in EOI document "BAPL/EOI/TP-EQPT/01" shall only be applied.

Eligible manufacturing industries may furnish their Expression of Interest in the prescribed format (Annexure A of EOI document BAPL/EOI/TP-EQPT/01 in Sealed Envelope quoting our Reference No. BAPL/DN/UMT/001 with all essential information and supporting documents shall reach on or before **15/06/2025 [16:00 Hrs]** to the following address:

BrahMos Aerospace Private Limited
16, Cariappa Marg, Kirby Place
Delhi Cantt, New Delhi -110010
Tel: +91-11-42285101

Note: BAPL reserves the right to accept or reject any or all responses. Mere compliance to the EOI terms does not guarantee further consideration for qualification in the procurement process.

