

DEMAND NOTIFICATION**INVITATION FOR EXPRESSION OF INTEREST FOR
DEVELOPMENT AND MANUFACTURE OF CRANE**

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 Crane.

Name of Equipment: Crane

Scope of work: To develop and manufacture Crane alongwith its accessories and components required for fitment on vehicle and qualify the same as per technical requirement which will be shared to shortlisted manufacturers.

BRIEF DESCRIPTION:**I. INTRODUCTION**

- (i) Crane will be integrated/assembled over the chassis of 8X8 and 12X12 vehicles.
- (ii) Crane should carry load (16T approx.) in static and moving condition.
- (iii) Crane should have capability to swivel while carrying load.

II. TECHNICAL SPECIFICATIONS / REQUIREMENTS AND SCOPE OF WORK

The Crane is to be designed, developed and manufactured to meet the technical specifications given below.

<u>S. NO.</u>	<u>REQUIREMENT</u>	<u>SPECIFICATION</u>
CRANE REQUIREMENTS		
1.	Lifting Moment	580 KNm
2.	Reach max. Hydraulically	9.7 m
3.	Max Lifting Capacity	15500 Kg
4.	Lifting Capacity of Crane with winch, at rest	3600 Kg – 9.7 m 9200 Kg – 4.2 m
5.	Lifting height (above frame), hydraulically	8.3 m
6.	Crane Weight complete with rider seat and oil	4678 Kg
7.	Slew Range	Endless
8.	Drive: by hydraulic pump, driven through PTO of truck	
9.	Pump delivery	120 l/min
10.	Operating Pressure	280 bar
11.	Power Requirement	70kW approx.
12.	Winch Line Pull (1 Bm°), 1 st Layer, 5 th Layer	60.9 KN



		42.9 KN
13.	Rope diameter	16 mm
14.	Rope Length	90 m
15.	Hook Speed	5.5 m/min
16.	Design and Construction according to	EN 12999 Lifting Class H1 Stress Group B3
17.	Min Transition Height (above frame)	1335 mm (approx.)

Crane representation attached as Annexure 'A' (for reference Purpose Only)

GENERAL REQUIREMENTS FOR INTEGRATED SYSTEM

18.	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 Crane except for moving surface. f) Environmental & Hazard protection for electrical components (if any): i. Flame proof 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.
19.	Mounting	a) Should be compatible and suitable for 8X8 and 12X12 platforms (Chassis) b) Manufacturing of components for integration on vehicle c) Outriggers (Qty-04) for vehicle which assist at time of lifting loads
20.	Paint and plating	a) Paint: Crane to be painted with 2 coats of primer and 2 coats of paint. b) Unpainted regions to be ZN-Ni plated.
21.	Testing Inspection	a) Stage inspection b) Fitment tests c) Static and dynamic load tests d) EMI/EMC tests e) Random Vibrations f) High and Low Temp tests g) Altitude Test h) Tropical Exposure test i) Thermal Shock j) Bump test k) Load sustaining tests l) Static Tests of Crane m) Test Bench Qualification for Static testing of Crane n) Dynamic Testing of Crane after clearance of Static testing o) Acceptance tests and Qualification tests



22.	Deliverables	a) Crane as per BOM b) Tools and spares (List to be mutually finalized) c) Drawings, models and documents as per Para III.
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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	Quality Assurance Plan (QAP) and Acceptance Test Plan (ATP) will be prepared jointly with 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, JRI and Acceptance Tests
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 "BMR/WDC/EOI/MC/2225 Rev 0" shall only be applied.

Eligible manufacturing industries may furnish their Expression of Interest in the prescribed format (Annexure I of EOI document BMR/WDC/EOI/MC/2225 in Sealed Envelope with all essential information and supporting documents shall reach on or before **31/10/2025 [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.



Annexure – 'A'

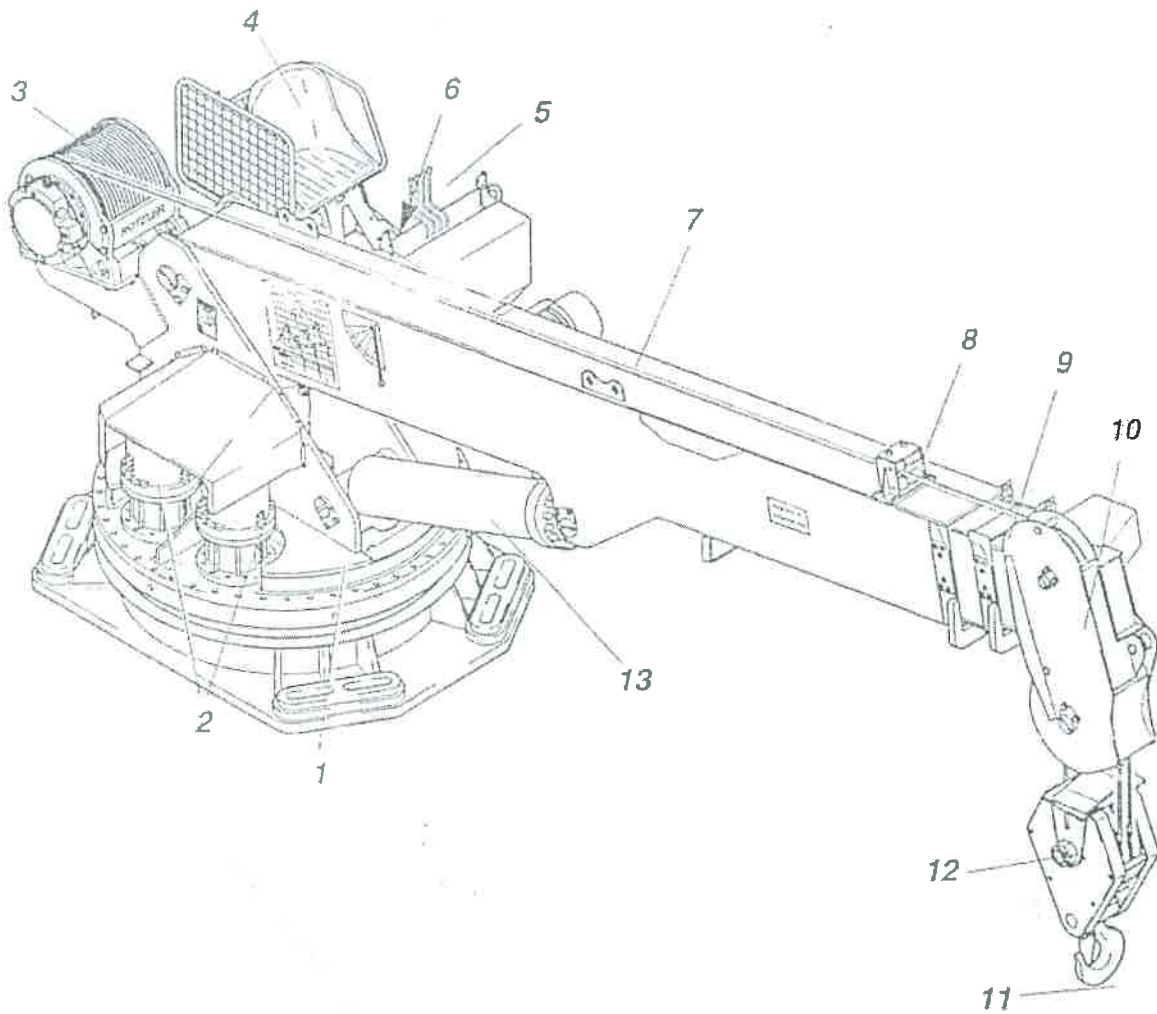


Image of Crane (for Reference Purpose Only)

