



**CENTRE OF PROPULSION TECHNOLOGY (CoPT)  
INDIAN INSTITUTE OF TECHNOLOGY MADRAS  
CHENNAI – 600036, INDIA**

Ref. No. COPT/ASE/1718/143/SRCH/016

Date: 16.07.2018

**Due date: 02.08.2018, 3.00pm**

**Item name: FABRICATION OF COVERED BODY FOR EXPLOSIVES TRANSPORTATION ON MAHINDRA  
PICKUP TRUCK BMT PLUS 1.2T PS BSIV- 1 No.**

1. Quotations are invited in a one **bid system** for the items shown overleaf (in Annexure I). The quotation should clearly give the commercial conditions and acceptance of the technical specifications. The quotation should also consist of detailed drawing of the Covered Body for Explosives Transportation conforming to our specifications. A bill of materials should also be provided. The Tender for supply of “Fabrication of Covered Body for Explosives Transportation on Mahindra BMT Plus 1.2T PS BS IV” should be written on the left side of the cover and sealed.
2. Quotes are invited only from vendors who possess valid licenses from PESO and any other required agency. Valid PESO license is mandatory.
3. Scope of Work: Fabrication of Covered Body for Explosives Transportation on a Mahindra BMT Plus 1.2 T PS BSIV pickup truck chassis. Please note that cargo body has been supplied by default in the pickup truck and hence a value of cargo body should be evaluated and shown deducted in the value of Fabrication of Covered Body for Explosives Transportation in the quotation on a buy back basis. Obtaining PESO approval for the fabricated explosive body will be the responsibility of the vendor.
4. The specifications for the Fabrication of Covered Body for Explosives Transportation has been detailed in the annexure 1.
5. The specifications of the Mahindra pickup truck as provided by the manufacturer has been given in Annexure 2.
6. Warranty of 2 years for the Fabrication of Covered Body for Explosives Transportation should be provided.
7. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
8. The total cost of the fabrication in terms of FOR @ Chennai should be clearly mentioned.
9. Terms of warranty and guarantee should be explicitly mentioned.
10. Delivery charges and any other tax or duty should be clearly stated.
11. Fabrication is not to be done without an official supply order.
12. Quotations should be for free delivery to this institute. If quotations are for ex-works, delivery charges should be indicated separately.



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13. A Pre-bid meeting will be conducted on 24.07.18 11.00am at the NCCRD Conference Room, NCCRD Building, Near Aerospace Engineering Building, IIT Madras, Chennai-600 036. Vendors who wish to participate in the limited tender are invited to attend the meeting.
14. The rate of Goods and Services Tax and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for sales / general taxes will be admitted at any stage and on any ground whatsoever. IIT Madras is eligible for concessional rate of GST of 5%. Necessary certificate will be issued on demand.
15. Payment :Payment is after delivery of goods. Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.
16. IIT Madras is eligible for concessional rate of customs duty. Necessary certificate will be issued on demand.
17. IIT Madras has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason.
18. The sealed quotation may be sent to

**The Purchase Manager,  
CoPT OFFICE, NCCRD Building  
Behind Aerospace Engineering Dept., IIT Madras,  
Chennai – 600036, Ph. (O) +91-44-22579863**



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**ANNEXURE 1**

**SPECIFICATIONS FOR FABRICATION OF COVERED BODY FOR EXPLOSIVES TRANSPORTATION ON  
MAHINDRA PICKUP TRUCK BMT PLUS 1.2T PS BSIV**

**CONSTRUCTIONAL DETAILS OF COVERED BODY FOR EXPLOSIVES  
TRANSPORTATION**

1. The dimension of the Covered Body for Explosives Transportation are as follows:
  - a. Length of the body : 2290mm
  - b. Width of the body : 1620mm
  - c. Height of the body : 1375mm
2. The vehicle will be of covered type.
3. The cab will be separated from the body of the vehicle by a fire-resisting screen carried down to within 30cm of the ground. A clear space of about 15cm should be provided between the screen and the body of the van. The fire-resisting screen shall consist of 18 gauge steel sheet lined on either side one ply asbestos sheets. The screen suitably supported in an angle iron frame of light construction will be fitted to the body of the vehicle. The height of the screen should be equal to the height of vehicle body. It should be painted in light yellow colour with a duly approved paint. A 100mm wide red band painted on either side and back with the word "Explosives" above the band should be displayed. The emblem of IIT should be painted below the red band on both sides and the back.
4. The whole unit of the Silencer and the exhaust pipe shall be positioned in front of the fire screen below the cabin. The exhaust pipe shall be fitted with an effective spark arrester.

**Construction:**

5. The body framing is to be constructed of good quality wood like teak or sesum thoroughly seasoned and free from all defects. All joints are to be morticed and tenoned or half checked,



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depending upon their position in the structure, and securely fixed with screws. The joints are to be coated with white lead before assembly. All parts of the framing which will be in contact with the outer metal paneling are also to be thoroughly coated with white lead before paneling is fixed thereto, Iron plates, Knees, etc. may be used for stiffening the framing where they are considered necessary but no such iron work must be exposed in the interior of The completed van body.

6. The roof sides, ends and doors of the van should be covered externally with 20 S.W.G. aluminium sheeting. The sheeting must have a smooth surface, free from distortion or any dents, and should be fitted to the framing in sections of convenient size. The roof is in four sections, and these turn down the sides and ends to a distance of 25mm, the end turnovers being relieved at Intervals of 150mm to allow the sheeting to lie flat on the framing. At all places where sheeting is fixed to the body framework, it has to be covered by a beading. The roof beading is of aluminium 19mm x 4mm whilst a wooden weather beading is round the sides and ends where the joint with the roof sheeting takes place. At other places, aluminium beading 10mmx 4mm has to be used, excepting only the bottom joint of the sides which is covered by a wooden rail 25mm wide x 38mm deep and the central cover joint of the doors, which is formed with a flat mild sheet strap 38mm wide. The interior of the van body has to be lined with 20 S.W.G. aluminium sheeting throughout, sides, roof and doors. The lining has to be fitted in as few sections as possible, and in all cases brass screws must be used for securing the same.

Flooring

7. This is to be constructed of good quality wood like teak or sesum boarding, tongued and grooved, 22mm thick and about 150mm or 175mm in width, it is so be recessed into the sole plate of the van body and below it is to be fixed a 20 S.W.G. aluminium sheet, The flooring Is to be supported, by bearers about 29mm thick by 50mm wide fitted between the sole plate and screwed on top of the cross-members of the chassis frame.
8. The sill of the doorway has to have a fall outwards of 6mm and it should be covered with a brass plate full width of the doorway 62mm wide inside, and having its outer edge turned downwards, and secured in position with brass screw.
9. Double doors, which will open outwards, shall be fitted at the rear end of the body. The doors will be hung on strong hinges, The door should fit closely and provided with locking arrangement. Slam lock and cross bar outside the doors shall be provided, to prevent rattling. The doors should open fully and rest on sides and the front curves of the interior of the body should be strengthened with MS section and teak wood pellets paneled by 10 gauge aluminium sheets.



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10. There shall be no opening in the body of the vehicle, except through the doors at the back. No holes shall be drilled in the chassis, unless allowed by the maker for the purpose of securing the van body.
11. Dimensions of cargo body. Cargo Body to be quoted under buy back offer in the Covered Body for Explosives Transportation quote.

Length: 2500mm

Width: 1620mm

Height: 468mm

Contact person for technical clarifications:

Dr.K.Jayaraman

E-mail address: [jayaraman78@gmail.com](mailto:jayaraman78@gmail.com)



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**ANNEXURE 2**

**MAHINDRA BMT PLUS 1.2T PS BSIV PICK UP TRUCK SPECIFICATIONS**

**BMT PS 1.2 BSIV (Mahindra & Mahindra) (BMT PS 1.2 BSIV)**

**Generic Parameters**

<b>Vehicle Engine Capacity (cc)</b>	2523
<b>Type of Fuel</b>	Diesel
<b>Vehicle Emission Complainece</b>	BS-IV
<b>Vehicle Colour type</b>	Both solid and metallic
<b>Colour of the vehicle</b>	WHITE
<b>Vehicle Mileage ( declared by OEM as certified by Test Agency under Rule</b>	17.7



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115of CMVR 1989) (in KM/Litre)	
Engine Gradeability (Degree)	10.3



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<b>Air Conditioning</b>	Without
<b>Engine BHP@rpm</b>	63bhp@3200rpm
<b>Engine Torque (Max.)@rpm (N-m@rpm)</b>	195 Nm @ 1400 - 2200 rpm
<b>Number of Cylinders in Engine</b>	4
<b>Type Of Vehicle Body</b>	Chassis Frame
<b>Seating Capacity</b>	2
<b>Fuel Tank Capacity (Ltrs)</b>	45 liter
<b>Ground Clearance (mm)</b>	170 millimeter
<b>Wheel Base</b>	3150 millimeter
<b>Boot Space (Ltrs)</b>	1855 liter
<b>Kerb Weight</b>	1470 kilogram
<b>Gross Vehicle Weight</b>	2620 kilogram





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<b>Type of Vehicle Tyre</b>	Tubeless
<b>Size Of Tyre</b>	195 / 80 R15 LT (195 R 15 LT)
<b>Vehicle Transmission System</b>	Manual
<b>No. of Speed/ Forward Gears</b>	5
<b>Type of Wheel drive</b>	Two Wheel Drive( Rear Wheel)
<b>Drive Axle</b>	Rear
<b>Type of Steering</b>	Power
<b>Turning Radius (mm)</b>	5500 millimeter
<b>Vehicle Brake ABS Fitted</b>	false
<b>Front Vehicle Brake</b>	Disc Brake
<b>Rear Vehicle Brake</b>	Drum Brake
<b>Vehicle Air Intake System</b>	TurboCharged



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<b>Driver Airbag</b>	No
<b>Battery Make</b>	Multiple OEMS
<b>Vehicle Gradeability (in Degrees)</b>	10.3

**Certification**

<b>Vehicle Certification ARAI/VRDE/ICAT Number</b>	AAIN 0007
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**Performance Parameters**

<b>Warranty Time</b>	12 month
<b>Battery Warranty</b>	12 month
<b>Warranty Distance (unlimited during warranty period)</b>	yes
<b>No of Free Services</b>	3



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**Constructional Parameters**

<b>No.of Doors (Nos.)</b>	2
<b>Length of Vehicle Body</b>	4855 millimeter
<b>Width of Vehicle Body</b>	1700 millimeter
<b>Height of Vehicle Body</b>	1825 millimeter
<b>Type of Wheel</b>	Simple
<b>Size of Wheel</b>	15 inch

