



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
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Ref: CIE/09-10/157/MUDX/RSIV

Date: 24.02.2014

Tender No.: CIE/LEVL/026/2013

N.E. Nagaraj
Special Officer (Project Purchase)
IC&SR, I.I.T. Madras

Due Date: 17.03.2014 3:30pm

Dear Sirs,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of various Scientific Instruments such as “**Vehicle Mounted with Knuckle Boom Crane having workman basket**” conforming to the specifications given in Annexure.

I) Instructions to the Bidder

- (i) **Preparation of Bids:-** The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- (ii) **Delivery of the tender:-** The tender shall be sent to the below-mentioned addresses either by post or by courier so as to reach our office before the due date and time specified in our Schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule. The tender box is kept in the office of the “Special Officer, Project Purchase” IC & SR Building 2nd floor, I.I.T. Madras, Chennai – 600 036.
- (iii) **Opening of the tender:-** The offer/Bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and it will be examined by a technical committee which will decide the suitability of the bid as per our specifications and requirements. The financial offer/bid will be opened only for the offer/bids which technically meet all our requirements as per the specification.
- (iv) **Prices:-** The price should be quoted in nett per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated.

The price should be quoted without custom duty and excise duty, since I.I.T. Madras is exempt from payment of excise duty, and the custom duty will be paid at concessional rate against duty exemption certificate.

In case of import supply, the price should be quoted on FOB and CIF basis indicating the mode of shipment.

- (v) **Agency Commission:-** Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The Foreign Principal should indicate about the percentage of payment and it should be included in the originally quoted basic price.
- (vi) **Terms of Delivery:-** The item should be supplied to our destination in case of local supply. In case of import supply, the item should be shipped only to Chennai Airport. The Installation/Commissioning should be completed as specified in our important conditions.
- (vii) IIT Madras reserves the full right to accept / reject without assigning any reason.

Yours faithfully,



N.E. Nagaraj
Special Officer (Project Purchase)
IC&SR, I.I.T. Madras.

SCHEDULE

II) Important Conditions of the tender

1. The due date for the submission of the tender is **17.03.2014, 3:30pm.**

2. The offers / bids should be submitted in two bids system (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and conditions including taxes, transportation, packing & forwarding, installation, guarantee, payment terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Limited Tender / Open Tender for supply of **“Vehicle Mounted with Knuckle Boom Crane having workman basket”** should be written on the left side of the Outer bigger cover.

3. (i) EMD should be at 2% (Two percent) of the tender value quoted by the company. The EMD should be included in the Financial bid which will not be opened for Technical evaluation. **Enclosing the EMD in the Technical bid will automatically disqualify the tenderer.** EMD should be in the form of DD in favour of “The Registrar, Indian Institute of Technology Madras” and payable at Chennai. The tender without EMD would be considered as UNRESPONSIVE and REJECTED. Photo/FAX copies of the Demand Draft/Banker’s pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the Successful bidder on receipt of Performance Security.

(ii) The Successful bidder should submit Performance Security of an amount of 5% of the value of the contract. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from commercial bank will be an acceptable.

(iii) The Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. If an Indian agent is involved, the following documents must be enclosed:
 - i) Foreign principal’s proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
 - ii) Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.

iii) The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.

5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.
6. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid.
7. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.
8. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
9. **Validity:** Validity of Quotation not less than 90 days.
10. **Delivery Schedule:-** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
11. **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase claus
12. **Payment:-** No Advance payment will be made for Indigenous purchase. However 90% Payment after Delivery and 10% after installation is agreed to wherever the installation is involved. In case of import supplies the payment will be made only through Letter of Credit and 90% payment will be released against shipping documents and 10% after installation wherever the installation is being done.
13. **On-site Installation:-** The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at Institution of IIT Madras.

14. **Warranty/Guarantee:-** The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately.
15. **Late offer:-** The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal or any other delay.
16. **Acceptance and Rejection:-** I.I.T. 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.
17. **Disputes and Jurisdiction:-** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.
18. **Acknowledgement:-** It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER
ALONG WITH SEAL OF THE
COMPANY WITH DATE.**

Vehicle mounted with knuckle boom crane having workman basket

Crane boom and man basket requirement:

1. Working height : 13 m
2. Outreach at 13 m height :5 m
3. Maximum height (completely retracted) : 4m from ground
4. 2 stabilizing legs on each side
5. Stabilizer spread of inner set : 3.5 m
6. Stabilizer spread of outer set (to be used only when needed) : 5 m
7. Slewing angle: 360 degrees
8. Maximum lifting capacity (at retracted stage): 3000 kg
9. Maximum lifting capacity at 13 m height and 5m outreach : 200 kg
10. Hydraulic pump: 25-35 l/mm
11. Operating pressure 320 bar
12. Hydraulic system maximum operating pressure: 500 bar
13. Man basket : platform size large enough to accommodate two people.
14. Workman basket load capacity : 200kg
15. Workman basket entrance width: 500 – 550 mm
16. Workman basket should have an automatic leveling system
17. Workman basket should have an integrated tool box
18. Safety belt for the people standing in the basket

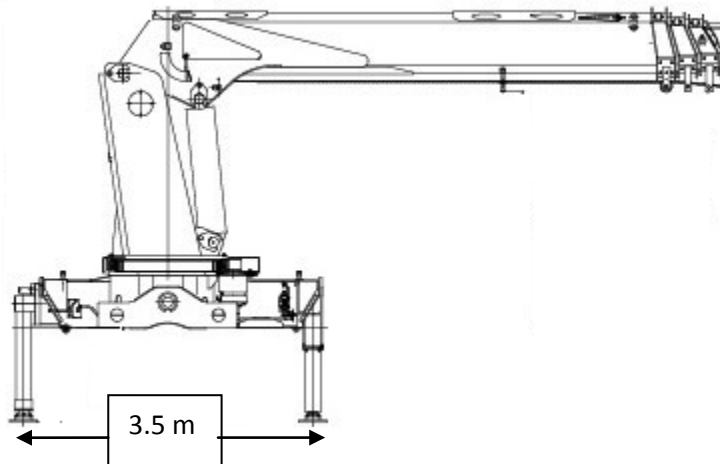


Figure 1. Schematic of the crane

Other features and accessories of crane:

- Should be high on strength and durability
- Should meet EN 12999 and 14502 standards
- Crane and workman basket designed in accordance with EN 280
- Crane should be provided to control from floor
- The workman basket should be able to completely control the operation of the crane at any time and should have priority over the control from floor
- Suitable capacity of hydraulic power pack
- Hose brake valve option to stop crane in case of failure in hose
- Load holding valves should be provided to prevent normal load lifting and lowering of crane due to internal leakage in the control valve and hydraulic system.
- Man basket should have railings high enough (minimum 3 ft) to ensure safety of the person standing in it.
- Hydraulic system should be able to draw power from engine and hydraulic power pack
- Automatic switch over to workman basket control during failures
- A hand pump ensuring the complete operation of equipment during the engine / pump failures
- Cabin should be spacious to accommodate traffic data collection equipments
- Continuous seat in the drivers cabin to keep the equipments

Details of Vehicle requirement:

- Truck Chasis GVW: minimum 7 T
- 4 Wheeler with a wheel base of 4m
- Diesel engine with a power rating of around 120-130 hp and a peak torque of around 400 Nm
- Maximum speed: Around 90- 100 kmph
- Power steering
- Air suspension
- Push type clutch with hydraulic actuation and clutch booster
- Dual air brake with spring actuated parking brake
- Battery: 12 V – 100 AH
- Radial Tires
- Should be compatible with the crane boom and vehicle and crane should be delivered as an integrated unit (Minimum vehicle frame thickness of 6mm)
- Overturning should not happen due to crane weight in its extended position
- Cabin should have air-conditioner and power socket
- Flexibility of modifying vehicle body to fit the traffic sensors
- Crane to be fixed between cabin and load body as shown in Figure below

Other dimensions (Approximate):

1. Wheel base: 4000 mm
2. Front over hang: maximum 1400 mm
3. Rear Over hang: maximum 1800 mm
4. Overall length: 7000 to 7500 mm
5. Overall width: 2200 to 2300 mm
6. Front track: 1900 – 2000 mm
7. Rear track: 1600 – 1700 mm
8. Turning diameter: 13000 mm
9. Minimum ground clearance: 200 – 250 mm

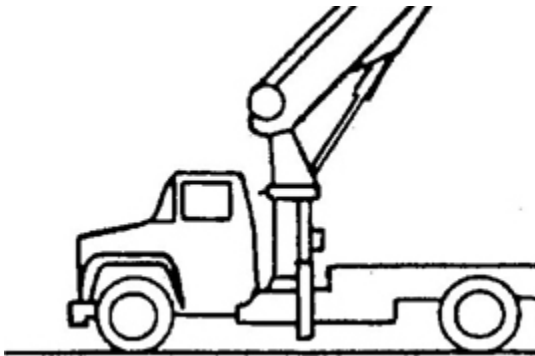


Figure 2. Expected layout of vehicle with crane

General Conditions

- Quote should be for on-road condition for the vehicle with crane, with necessary RTO registration and insurance for 1 year. IIT Madras will provide necessary documents for these.
- 2 years warranty should be provided and service should be provided within 24 hours of problem reporting. Four free services per year should be provided during the warranty period.
- AMC proposal for 2 years after the warranty period to be included in the quote as a separate optional item.
- Company should have service centers in all cities of Tamil Nadu and all major cities in South India.