

### भारतीय प्रौदयोगिकी संस्थान (भारतीय खनि विदयापीठ): धनबाद- ८२६००४

# Indian Institute of Technology (Indian School of Mines) Dhanbad – 826004, Jharkhand, India

No. Mech-500437-2016-17

Date: 31 January 2017

To M/s

Sir,

Indian Institute of Technology (Indian School of Mines), Dhanbad invites quotations for the following to be supplied and delivered in Mech Department.

S No	Full Description of items/ store	Qty	Rate	Amount
1	Supply & Installation of Single Cylinder Four Stroke Diesel (>4.5 kW) with self-start water cooled (Detailed Specification is given in Annexure – I)	01 No		
	Packing & Forwarding, if any			
		Freight Cha	rge, if any	
	Installation		tion, if any	
		CST/V	AT, if any	
		G	rand Total	<del>.</del>

### Tender Schedule

Particulars	Date & Time	
Last date for seeking clarification/s (if any)	16.02.2017 at 3:00 P.M.	
Date and time for submission of tenders	21.02.2017 at 3:00 P.M.	
Date and time of opening of tenders	21.02.2017 at 4.00 P.M.	

- 1. You are requested to quote your lowest rates for the supply of above items.
- 2. Clarification(s) sought after the prescribed date shall not be entertained.
- 3. You may send your representative in the office of the undersigned at the scheduled date and time of opening of tender.
- 4. Tender should be submitted in sealed cover only superscribed with Enquiry No. and due date at the following address only:

The Asst Registrar (P&S)
Indian Institute of Technology (Indian School of Mines),
Dhanbad – 826 004 Jharkhand
P: 0326-2235612
E: drps@ismdhanbad.ac.in

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- Engine & Dynamometer should be mounted on a stand with universal coupling. The height of the engine from the ground should be minimum 15 mm or the height should be sufficient to drain out the lube oil of the engine.
- Electrical Dynamometer capacity of minimum 4.5 KW for loading the Engine. Load bank comprises of load resistance of capacity 1.0 KW (2No), 0.5 KW (4 No), 0.250 KW (2 No) with Required Switches / Relay.
- Calorimeter (shell and tube with copper inner tube) with a flow-meter for water circulation.
- Water flow measurement device for the engine cooling.
- Outlet hot water from the engine and calorimeter must be cooled by closed loop of an external heat exchanger arrangement.
- Air box MS fabricated with flow measuring device, Fuel flow measuring unit and Fuel tank with capacity of minimum 5 litres.
- Speed indicator -Digital display with proximity sensor, Temperature sensors (at Cold water inlet to Water jacket, hot water out from engine water jacket, for external heat exchanger as per requirement, at both end of calorimeter for exhaust gas, hot water out from calorimeter with digital temperature indicator etc---) required for the measurement of the parameters given below.

The setup should be able to measure the following things:

- i) Brake Horse Power
- ii) Brake specific fuel consumption
- iii) Volumetric efficiency
- iv) Mechanical efficiency
- v) Thermal efficiency
- vi) Heat balance sheet
  - Instruction manual with calculation sheet and results.

Supply should be completed with all accessories required for installation and commissioning of the items at site



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# Indian Institute of Technology (Indian School of Mines) Dhanbad – 826004, Jharkhand, India

-:2:-

#### Terms & Conditions

- 1) Please submit authorized dealership certificate, if you are not a manufacturer.
- 2) Please mention Sales Tax, CST, VAT, TIN and PAN numbers and Bank Account Number and name of the bank/ branch in your offer.
- 3) Conditional offer will not be accepted.
- 4) Please indicate rate of taxes/ duties clearly. Rates quoted will be taken as inclusive of all taxes unless given separately.
- 5) The rates should be quoted for each item separately.
- 6) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of sales tax/VAT applicable should be quoted.
- 7) *Educational discount,* if any, should be clearly mentioned.
- 8) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 9) Your tender must be valid for minimum 90 days from the date of opening of tender.
- 10) Please mention warranty/guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **12 months**.
- 11) Each page in the bid document should be numbered properly.
- 12) The items/ materials shall be required to be delivered at Mech Department/ Section through Purchase & Store Section, IIT (ISM) Dhanbad at the risk and cost of the tenderer.
- 13) Unloading & installation shall be the complete responsibility of the supplier.
- 14) The stores are required to be delivered within 30 days. Late delivery may not be accepted.
- 15) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 16) Advance payment is not admissible. Payment shall normally be made within 3-4 weeks subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items.
- 17) In the event date on which the tender is opened for acceptance is declared to be a holiday, the tenders shall be deemed to remain open for acceptance till the next working day.
- 18) Please send your offer by Regd.Post/ Speed Post/ Courier along with Courier receipt. Tender/ quotation will be received during IIT (ISM) working hours only (i.e. Monday to Friday). Late or delayed tenders shall be summarily rejected.
- 19) Any other information that you may like to obtain, you are free to contact IIT (ISM) before submission of tender.

20) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.

Asst Registrar (P&S)

P: 0326-2235612 F: 0326-2296633

E: drps@ismdhanbad.ac.in