

No.: Mech-INS-195-18-19

Date: 13.08.2018

# **NOTICE INVITING TENDER**

### Subject: Supply and installation of Epicyclic Gear Train Apparatus With Data logging facility

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

S. No	Full Description of items/ store	Qty	Delivery
1	Supply & Installation of Epicyclic Gear Train Apparatus	1	At the Earliest
	With Data logging facility		
	(Detailed Specification is given in Annexure – I)		

#### Tender Schedule

Particulars	Date & Time	
Bid Security or Earnest money deposit	Rs. 6,000.00	
Last date and time for submission of tenders	05.09.2018 at 1:00 P.M.	
Date and time of opening of tenders	05.09.2018 at 3.00 P.M.	

- 1. You are requested to quote your lowest rates for the supply of above items in the attached format for Financial Bid (Annexure II)
- 2. You may send your representative in the office of the undersigned at the scheduled date and time of opening of tender.
- 3. Tender should be submitted in sealed cover only superscribed with Enquiry No. and due date at the following address only:

The Deputy Registrar (P&S) Indian Institute of Technology (Indian School of Mines), Dhanbad – 826 004 Jharkhand

GSTIN: 20AAAAI0686D1ZA



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

#### No.: Mech-INS-195-18-19

Date: 13.08.2018

#### Terms & Conditions

- 1) The rates should be quoted for each item separately.
- 2) Conditional offer will not be accepted.
- 3) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate.
- 4) Bid Security or Earnest money deposit (EMD): should be submitted in form of A/c payee demand draft drown in favor of Registrar, IIT (ISM) Dhanbad and payable at any other bank/branch located in Dhanbad.
- 5) Successful bidder has to submit performance bank guarantee @ 10% of total order value of the purchase order.
- 6) *Educational discount,* if any, should be clearly mentioned.
- 7) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 8) Your tender must be valid for **minimum 90 days** from the date of opening of tender.
- 9) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **12 months**.
- 10) *Each page in the bid document must be numbered properly* and duly signed & sealed by the bidder on every page of the bid.
- 11) The items/ materials shall be required to be delivered at Mech. Engg. Department/ Section through Purchase & Store Section, IIT (ISM) Dhanbad at the risk and cost of the tenderer.
- 12) Unloading and installation shall be the complete responsibility of the supplier.
- 13) IIT(ISM), Dhanbad is entitled for Excise Duty Exemption under Govt. of India notifications and is registered with DSIR, Govt. of India for this purpose. This may be taken into consideration while quoting minimum possible rate. Exemption Certificates can be issued in favour of manufacturers only, if it is mentioned in the bid. It will not be issued any Indian Agent/dealer or distributor at any circumstances. IIT(ISM) will provide only custom duty exemption certificate for availing concessional custom duty. IIT(ISM) will not pay any extra custom duty other than duty exemption certificate.
- 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 or part payment is not admissible*. Payment shall normally be made within 4-6 weeks subject to receipt and acceptance & installation of the ordered materials/items and submission of bills, PBG, followed by its verification etc. (as per Purchase Order Terms).
- 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) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.



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Annexure - I

## **Technical Specifications:**

Name of the Equipment: Epicyclic Gear Train apparatus with data logging facility

### **Technical description:**

Epicyclic gear train is a motorized unit consisting of a SUN gear mounted on input shaft. Planet gears meshes with the annular gear. These planet gears are mounted on a common arm to which output shaft is fitted. Loading arrangement is to be provided for loading the system and to measure the holding torque. The set-up must have a facility to interface the system with computer which enables to log the experimental data using computer. The educational software and data-logging package has to be provided with the unit. The software environment base is to be Labview of National Instruments, USA. This software should be compatible with the interfacing unit designed by the supplier. This software package should provide a comprehensive educational software environment within which the investigations can be performed. This software should be capable to tabulate the sample readings according to requirement of the experiment under study and results obtained can be compared. The real time data acquisition can be done by interfacing the set-up with computer using software. Software allows the user to have control on data logging, printing the stored data, preparing spread sheets in Excel, Origin, Matlab etc.

### **Experimentation:**

- To measure epicyclical gear ratio between input shaft and output shaft (actual and theoretical).
- To measure input torque, holding torque and output torque.

## Utilities to be provided by Dept. of Mech. Engg., IIT(ISM):

 $\hfill\square$  Electricity Supply: 220 V AC, Single Phase, 50 Hz, 5-15 amp combined socket with earth connection.

 $\Box$  Floor Area: 2.0 m x 1.0 m.

## **Technical detail:**

- □ Internal type epicyclical gear train
- $\Box$  Motor: variable speed motor, 1 hp.
- □ Load arrangement: by load cell.
- □ RPM measurement: digital RPM indicator with proximity switch.
- □ Speed control unit: variable speed drive for varying the speed of motor.
- Computer System: i-5 processor (HP) with DVD Drive, Windows 7, MS-Office pre-loaded with required drivers and software.
- □ Instruction manual: an English instruction manual to be provided along with the apparatus

### **Control panel:**

- □ Standard make on/off switch, Mains Indicator etc.
- Dever measurement: By Energy meter.

### Scope of delivery:

- □ One self-contained *Epicyclic Gear Train apparatus with data logging facility and Computer* System
- □ One instruction Manual consisting of experimental procedures, block diagram etc.

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**Format for Financial Bid** 

NIT No.: Mech-INS-195-18-19

Bidders Ref: No.

Date:

GSTIN No.:

### Subject: Supply & Installation of Epicyclic Gear Train Apparatus With Data logging facility

Sl. No.	Full Description of Items with (HSN Code/SAC Code)	Qty.	Rate	Amount
		Packing & Forwarding		
		(if any)		
		Total		
		GST		
		Freight (if any)		
		Installati	on (if any)	
Amount should be in figure as well as word		Gr	and Total	

Note:

1) All the details must be provided as per prescribed format only

2) Prices quoted by the bidders should include GST, HSN Code, SAC Code, duties, livies, transportation cost and insurance costs etc. if any

3) All the rates must be quoted in Indian Rupees.



Date: 13.08.2018 Annexure - II

GSTIN: 20AAAAI0686D1ZA

Date: