



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

No. CE-500469-2016-17

Date: 23 February 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 Civil Engg. Department.

S No	Full Description of items/ store	Qty	Rate	Amount
1	Supply & Installation of Fabrication of Model Tank with all Necessary Parts (Details specifications are given in Annexure-I. General requirements and qualification criteria given in Annexure-II)	01 No		
Packing & Forwarding, if any				
Freight Charge, if any				
Installation, if any				
CST/VAT, if any				
Grand Total				

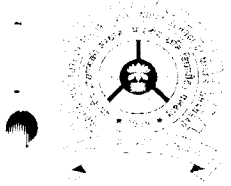
Tender Schedule

Particulars	Date & Time
Last date for seeking clarification/s (if any)	10/03/2017 at 3:00 P.M.
Date and time for submission of tenders	17/03/2017 at 3:00 P.M.
Date and time of opening of tenders	17/03/2017 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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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 CE 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 60 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

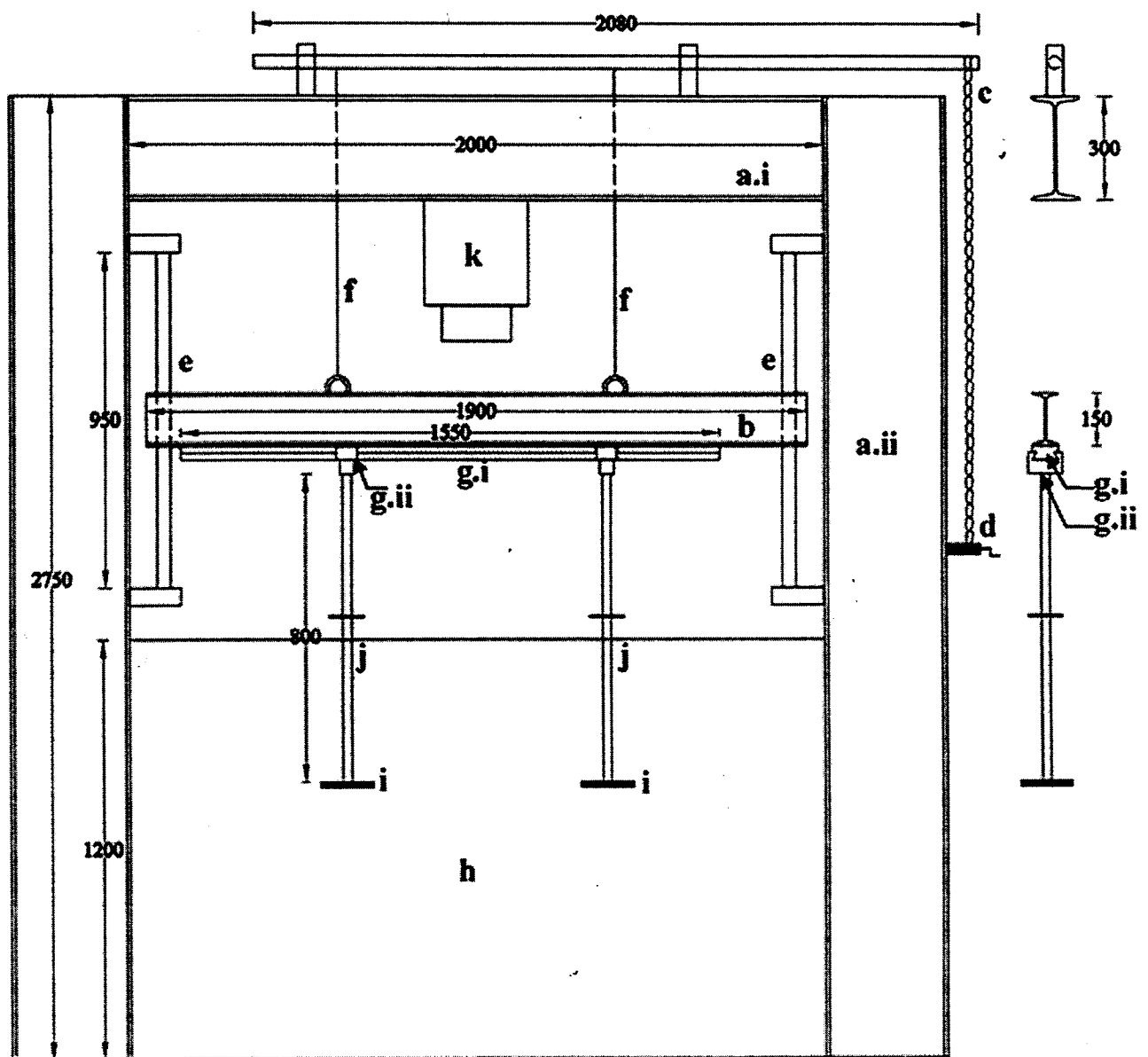
F: 0326-2296633

E: drps@ismdhanbad.ac.in

Technical Specifications

Fabrication of Model Tank with all Necessary Parts (Qty – 01)

- Fabrication should be carried out with precise dimensions and proper precautions.
- The whole setup should be fabricated in parts (Model tank, Reaction/Loading frame and Sliding beam).
- The fabrication of setup has to be made in such a way that, proper assembling and dismantling of parts (Model tank, Reaction/Loading frame and Sliding beam) should be possible.
- Schematic diagram of fabrication setup is shown in Figure 1 and description of particulars are tabulated in Table 1.
- The hydraulic jack supplied by IIT(ISM) Dhanbad need to be fixed to the beam of the reaction/loading frame.
- Material used for fabrication should be of good quality and the sections (I-sections) used should be as per Indian Standards.
- The fabricated setup has to be painted properly with two/three coats.



- | | |
|-----------------------------|-----------------------|
| a. Reaction frame | g. Dovetail Guide-way |
| i. Reaction Beam | i. Male Guide-way |
| ii. Reaction Column | ii. Female Guide-way |
| b. Sliding Beam | h. Model Tank |
| c. Chain pulley System | i. Model Footings |
| d. Manually operated wrench | j. Extension Rods |
| e. Guiding Rods | k. Hydraulic Jack |
| f. Suspension Cables | |

(All dimensions are in millimeter, mm)

Figure 1, Schematic diagram of fabrication setup.

Table 1, Descriptions of particulars.

Sl.No.	Name of particulars	Description	No. of particulars
1.	Model tank	Size: 2.0 m x 1.2 m x 1.2 m (length x width x depth) (thickness: 6 mm) Material: Manganese Steel To be fabricated with nut and bolt connections.	01
2.	Reaction/Loading frame	Beam: I-section of ISMB300 of length 2.0 m (width 140 mm and depth 300 mm)	01
		Column: I-section of ISWB350 of length 2.75 m (width 200 mm and depth 350 mm)	02
		Reaction/Loading frame to be fabricated with nut and bolt connections. Columns to be attached to model tank with nut and bolt connection. Steel plate supports to be given at base of reaction frame: for fixing to ground	
3.	Sliding beam	Beam: I-section of ISMB150 of length 1.9 m (width 80 mm and depth 150 mm)	01
4.	Model Footings	Square: 90 mm x 90 mm; 100 mm x 100 mm; 120 mm x 120 mm; and 150 mm x 150mm (Material: Steel; Thickness: 15 mm; With platform at center having inner threads to connect extension rod)	02 (each)
		Rectangular: 90 mm x 135 mm; 90 mm x 180 mm; 100 mm x 150 mm; 100 mm x 200 mm; 120 mm x 180 mm; 120 mm x 240 mm; 150 mm x 225 mm; 150 mm x 300 mm (Material: Steel; Thickness: 15 mm; With platform at center having inner threads to connect extension rod)	02 (each)
		Circular: 90 mm; 100 mm; 120 mm; and 150 mm diameter (Material: Steel; Thickness: 15 mm; With platform at center having inner threads to connect extension rod)	02 (each)
		Strip: 90 mm x 450 mm 100 mm x 500 mm; 120 mm x 600 mm (Material: Steel; Thickness: 15 mm; With platform at center having inner threads to connect extension rod)	02 (each)

5.	Guiding rods	Friction less solid stainless steel rod of 0.95 m length, 38.1 mm diameter. (to guide sliding beam) Attached to inner side of reaction/loading frame with proper supports.	02
6.	Dovetail Guide-way	To guide the footings (to slide extension rods attached to female guide-way). Male part: Length 1.55 m (depth 40 mm and width 80 mm) Material: Steel Attached at center to bottom of sliding beam. Female part: depth 40 mm and width 80 mm. Provision of threads to be given for connection to extension rods. Material: Steel	01
7.	Extension rods	Steel solid rods of 800 mm length, 38.1 mm diameter with threads at both ends. (for connection between Guide-way and Footings) Measurement plate (50 mm wide) welded at center along periphery of extension rod.	02
8.	Chain-pulley system	Chain pulley system with manual wrench: to lift the sliding beam manually. (supported with flexible cables and hooks, with steel solid rod of 2.08 m length, 25 mm diameter)	01
9.	Accessories	Sand pouring apparatus made of aluminum plate of 4 mm thick (Details as in Figure 3)	02
		Dynamic cone penetrometer made of mild steel. (Details as in Figure 3)	01
		Steel strips: 1.5 m length x 4 mm thick 2.2 m length x 4 mm thick	02 each

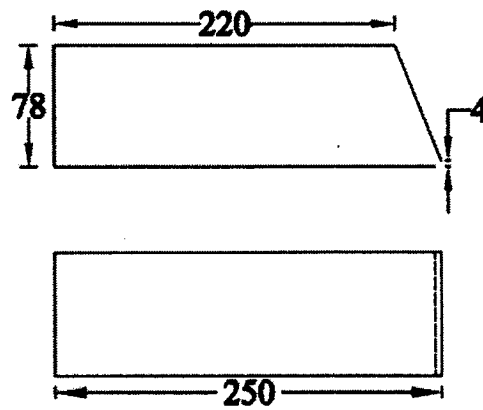


Figure 2, Sand pouring apparatus (dimensions in millimeter).

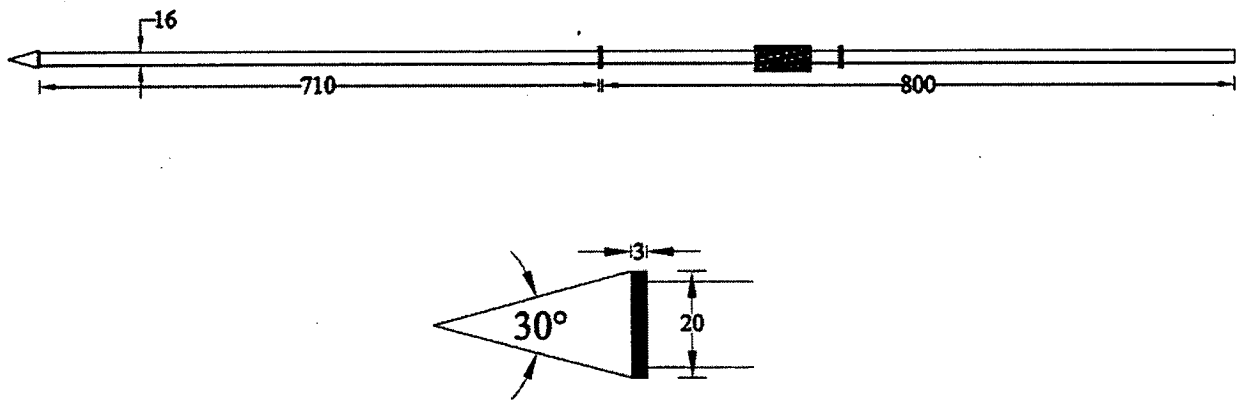


Figure 3, Dynamic cone penetrometer (dimensions in millimeter).

Note: IIT(ISM) Dhanbad shall not bear any kind of the transportation cost for fabrication of the setup and supply of the same (fabricated setup) to the institute.
The fabricated setup need to be properly painted.

Annexure II

General Requirements and Qualification Criteria

- IIT(ISM) Dhanbad shall not bear any kind of the transportation cost for fabrication of the setup and supply of the same (fabricated setup) to the institute.
- Manufacturer should have comprehensive production facilities, after sales service facility in Dhanbad (JH) and should provide the certificate of sales service having facility in Dhanbad (JH).
- Accredited Calibration and Quality control Test Laboratory. Manufacturing Capacity & capabilities of the supplier and workmanship of the instrument shall be assessed by concerned official before finalizing the order.
- Manufacturing of the machine should be as per required testing standards/Tender specification within the specified tolerance limits.
- Authority may visit bidder's workshop/Users place to evaluate the quality Control, after sales backup facility, expert availability etc.
- Supplier/manufacturer blacklisted by any Govt. Organization will not be considered. A declaration letter mentioning the same must be submitted.

Necessary Documents should be produced to support the above clauses.