



NATIONAL INSTITUTE OF TECHNOLOGY PATNA

(An Institute under Ministry of HRD, Govt. of India)

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Ref No: NITP/ 19-20/13

Date: 14/10/2019

Sub: Procurement of equipments for Geotechnical Lab. of Civil Engg. Dept., NIT Patna.

National Institute of Technology Patna, an Institute of National Importance, invites sealed tenders from reputed Original Equipment Manufacturers / Authorised Dealers / Bidders for quality procurement of equipments for Geotechnical Lab. of Civil Engg. Dept., NIT Patna.

All interested tenderers are requested to send their sealed quotation as per technical specifications in **Annexure – I (a) & (b)** and price bid as per **Annexure-III (a) or (b) (under two bid system)**. For general terms & conditions, instructions to bidders etc. please refer **Annexure-II**.

Tender will be accepted by **13/11/2019** upto **3:00 p.m.**

Detailed descriptions of the item and instructions for submitting your offer can be downloaded from our website www.nitp.ac.in. However, a cross Demand Draft of **₹ 25,000/- (Refundable)** towards **EMD** in favour of the **Registrar, NIT Patna** payable at Patna should be submitted in a separate sealed envelope along with your quotation.

The proposals must be sent in two separate sealed envelopes (Technical Bid and Price Bid) duly subscribed with Reference number and Tender Notice details as appended hereunder:-

TENDER FOR SUPPLY OF equipments for Geotechnical Lab. of Civil Engg. Dept., NIT Patna.

**TENDER REF NO: - NITP/19-20/13, DATED 14.10.2019
LAST DATE FOR SUBMISSION 13/11/2019 UPTO 3:00 PM.**

**To,
The Registrar
National Institute of Technology Patna
Bihar, INDIA**

From: M/s _____

Address: _____

Contact No.: _____

Email ID: _____

The price bid will be opened only of those firms, who will be found technically qualified after evaluation of their technical bids. **The technical bids will be opened on 13/11/2019 at 03:30 PM**, in the office/department at NIT Patna, in the presence of the Bidders/Vendors or their authorized representative who wish to be present.

Registrar

DETAILED SPECIFICATIONS**SPECIFICATIONS OF THE EQUIPMENT TO BE PURCHASED FROM INSTITUTE FUND
FOR GEOTECHNICAL ENGINEERING LABORATORY**

Sl. No.	Name of equipment / Description	Quantity
1	<p>Specific Gravity of Soils</p> <p>i) Pycnometer as per ISS capacity 1ltr (6 No.)</p> <p>ii) Density Bottle with capillary stopper glass cap.50ml (6 No.)</p>	
2	<p>Particle size distribution of soils :-</p> <p>I) Sieves set</p> <p>Test sieves In brass frame – 8" (200 mm) dia x 2" ht. As per IS : 460, w/o joint in frame, machine made of following . Sizes : 4.75 mm, 2.36 mm, 1.18 mm, 600 micron, 425 micron, 300 micron, 150 micron & 75 micron (01no. of each in set)</p> <p>Lid and Pan made of brass, for above</p> <p>II) Hydrometer</p> <p>a) Soil hydrometer as per IS : 2720 (Part-iv) IS : 3104. the scale range is 0.995 to 1.030</p> <p>Other Accessories (Required): Measuring cylinder 1000ml "Borosil" Electrical stirrer High Speed Porcelain bowl <u>Chemicals:</u></p> <p>a) Sodium Carbonate b) Sodium Hexametaphosphate</p>	
3	<p>Shrinkage limit apparatus set and Mercury Shrinkage Limit Apparatus IS : 2720 (P-VII) Set consists of one each :</p> <p>Porcelain evaporating Dish</p> <p>Shrinkage Dish glass Cup</p> <p>Perspex plate with three metal prongs Perspex plate, plain</p> <p>Flexible Spatula Cylinder 25 ml x 0.5ml</p> <p>Mercury 500g</p>	
4	<p>Proctor 's Compaction Test Proctor Mould & Hammer (Standard and Modified set)</p> <p>Offered:-</p> <p>i) Standard Proctor Compaction mould, 100mm dia x 127.3 mm high x 1000 c.c. volume with collar and base plate for Light compaction, made of Mild Steel. With Rammer 2.6 Kg. x 31 cm. controlled drop.</p> <p>Modified proctor Compaction Apparatus as per IS 2720(Part8) 1974 for Heavy Compaction -Modified Proctor compaction mould, 150mm dia x 127.3mm high x 2250 c.c. volume with collar and base plate, made of Mild Steel. With Rammer 4.89 Kg. x 45 cm. controlled drop.</p>	
5	<p>Direct Shear Test apparatus (Specs: Electrical cum hand operated Direct Shear Apparatus, 12 Speed, Motorised , As per IS:2720 (Part-XIII/Sec-1) with i) Proving</p>	

ring (universal)2kN - 1 No.
ii)Dial gauge - 2 No

Offered:-

DIRECT SHEAR APPARATUS, ELECTRICAL-CUM –HAND OPERATED, MOTORISED 12 SPEEDS. IS : 2720 (P-XIII).

having 12 constant rates of strain. 1.25,0.625,0.25,0.125,0.05, 0.025,0.01,0.005,0.002,0.001,0.0004 and 0.0002mm/minute . The apparatus is suitable for operation on 230 volts single phase A.C. supply. **with dial gauge and proving ring**

It is suitable for the specimen of size 60mm. x 60mm. x 25mm. and rate of strain is adjusted by the speed of movement .

SPECIFICATION

The equipment comprises the following :

Loading Unit : It consists of a load frame with V-strips on which shear box housing rests, load yoke with direct and lever system for applying normal load to capacity of 8kg/cm² , fixture for proving ring, bracket for holding consolidation dial gauge and motorized –cum-- manually operated lead screw for application of shear stress.

Shear box assembly for square specimen, size 60mm. X 60mm. X 25mm. complete with

- Two halves of shear box with an adaptor fixed to the U-bracket of upper half of the box.
- Plain gripper plates 2Nos.
- Perforated gripper plates 2Nos.
- Porous Stone 2Nos.
- Top loading Pad 1No.
- Base plate. 1No.

Shear box housing fitted with a U-bracket and an adaptor for connecting the lead screw complete with two ball roller strips.


Specimen cutter for cutting 60mm. X 60mm. X 25mm. specimens

One each of strain dial gauge and consolidation dial gauge of 0.01 X 25mm.

Set of weight to give a normal stress of 3 kg/cm.sq. through lever as follows :

To give	Qty. kg/cm.sq
0.05	4 Nos
0.1	1 No
0.2	1 No
0.5	3 Nos
1.0	1 No

Supplied complete as above with Proving Ring with our own calibration

	<p>certificate: Made of special alloy steel equipped with dial gauge least count 0.002mm with our own calibration certificate capacity 200 kgs.(2KN) .</p> 	
6	<p>Free swelling index :- Measuring Cylinders glass (5 no of 100 ml jar, 5 no of 250 ml jar and 5 no of 1000 ml jars) (total 15 nos.)</p>	
7	<p>CBR Tests : California bearing ratio equipment (Spec: Capacity 50kN 1) Proving ring 10kN -1 No. 2) Dial Gauge 0.01mm x 25mm travel. 3) Rammer 50mm internal dia Offered:- LABORATORY CBR APPARATUS: CALIFORNIA BEARING RATIO TEST APPARATUS, MOTORISED AS PER IS: 2720 (PART XVI)</p> <ul style="list-style-type: none"> • LOAD FRAME : Load Frame motorized capacity 50kN (5000kgf) having single rate of strain i.e 1.25 mm / minutes . It consists of a screw jack with a detachable handle. The lower platen moves up and down. The top bracket is adjustable for vertical clearance and has an adaptor for connecting standard Proving Rings. • A dial gauge mounting bracket is provided on one of the two pillars. Suitable for operation on 220 volts, 50Hz, Single phase A.C. supply. • C.B.R. Mould made of M.S., 150 mm I.D. X 175 mm. high with extension collar 150 mm I. D. X 50mm high. Perforated base plate for the above mentioned mould. • Penetration Piston having 50mm face dia • Adjustable bracket for Penetration Dial gauge. • Circular Metal Spacer Disc with detachable handle, 148mm . dia x 47.7 mm. high. • Annular Metal Weight , 2.5kg , 147 mm . dia. with 53 mm . dia. Central hole. • Slotted Metal Weight 2.5kg , 147mm. dia. with 53mm. dia. slot. • Perforated Plate 148mm. dia. With adjustable stem and lock nut. • Metal Tripod made of C.I for Dial Gauge. • Cutting Collar. • Proving Ring capacity 10kN, fitted with dial Gauge with our own calibration certificate. 	

	<ul style="list-style-type: none"> • Rammer 50mm face dia, 2.6kg • Rammer 50mm face dia 4.89kg • Dial Gauge 25mm. travel and 0.01mm. least count 	
8	<p>Sample Extruder :-Hydraulic Extruder (Hand operated) Specf: 1) Hydraulic extractor frame with a thrust of 600 mm and 9000 kgf. 2) Adopter plates for 38, 50, 75, 100 and 150 mm tubes</p> <p><u>Offered:-</u> <u>Hydraulic Extruder (Motorised)</u> This Hydraulic Extractor Frame is a motorised unit complete with, Hydraulic Jack with stroke of 600 mm and thrust force of 9000 kgf. It has a control valve for the control of direction of movement of the piston (Ram) and a relief valve to limit the load between 9000 kgf and 10000 kgf.</p> <p>i) Following adopter plates and adopters are supplied Adopter plates for 38, 50, 75, 100, 150 mm tubes. Adopter for 38, 50, 75, 100, 150 mm tubes.</p> <p>ii) Attachment for extraction of 3 samples of 38 mm (1.5 inches) from core cutter of 100 mm (4 inches) ii) Attachment for extraction of 7 samples of 38 mm (1.5 inches) dia from a mould of 150 mm (6 inch) dia</p>	
9	<p>Drying Oven: One Laboratory drying oven, thermostatically controlled, Range 50°C to 250°C+/-1° C with air circulating fan, S. S. inside size 600 x 900 x 600 mm³</p> <p>Offered:- DRYING OVEN : ELECTRIC : FITTED WITH MOTORIZED AIR CIRCULATION SYSTEM & INNER CHAMBER OF STAINLESS STEEL WITH DIGITAL CONTROLLER CUM INDICATOR.</p> <p>Mechanical convention type, Double walled, Inner made of Stainless steel, outer of M. S. nicely hammerton spray painted in between wall heavily insulated with thick layer of glass wool, with double walled insulated door, temperature controlled & Read by Digital Temperature Controller-cum-Indicator, temp. range 50°C to 250°C +1°C. (can be set at 100 to 110*c or as per your desire within temp. range of oven</p> <p>(Also fitted with 3 heat control switch for Low, Medium and High, Neon indication lamp for Main & Load. Air ventilator & Thermometer hole provided on top. Complete with plug & Cord & trays, operated on 230 V A. C. whole oven mounted on 4 nos. heavy type rubber buffer. Inner chamber size: 600mm x 600mm x900mm (24" X 24"X36")</p>	
10	<p>Point load index tester : Determination of Diametral Point Load Strength Index for rock</p> <p>Offerd: POINT LOAD INDEX MACHINE, HYDRAULIC</p> <p>A rock testing instrument for determining the Diametrical Point Load Strength Index of rock cores and Irregular Lumps which may be tested without any treatment. The Point Load Test is primarily as index Test for strength classified of rock materials. This instrument is mainly intended for field measurements on rocks specimen, but it can be used in the laboratory.</p> <p>The results of the test may also be used to predict the uniaxial compressive strength</p>	

of rock from correlations. The apparatus is light and portable and can be used in the laboratory as well as in the field.

Features:

- Equipment is light and portable
- Rock core specimens can be tested without any preparation
- The instrument can be used in the laboratory as well as at the drilling site
- The results of the test may also be used to predict the uniaxial compressive strength of rock.
- With this instrument, a wide range of core size can be tested
- The frame has adequate adjustments to align perfectly the loading axis passing through the centre of the bearing plates and loading platens at the position of the ram of the hydraulic jack.

The equipment comprised the followings:

Loading Frame, fitted with Hydraulic Jack, hand operated, capacity 100 KN (10,000 kgf)

Load Gauge, 25KN (2,500 kgf) to read up to 0.25KN (25kgf) Load Gauge, 100KN (10,000 kgf) to read up to 0.50KN (50kgf) Conical Loading Platens.

FORMAT OF COMPLIANCE STATEMENT

Para of Tender Enquiry Specification	Specification of Equipment Offered	Compliance to Tender specification whether yes or no (if yes indicate the page no and Put a Flag also highlight the matching specification)	In case of noncompliance deviation from Tender specification to be indicated in unambiguous term.
01	02	03	04

* The compliance certificate along with the page no indication (i.e. required spec and availability of the page in the entire tender documents by flagging or giving page no) must be submitted with the bid for evaluation. Firm not submitting the model/spec and their details availability in the bid documents by flagging/page no may not be considered for evaluation.

NOTE: *The bid documents are not transferable and the firm's seal and signature of the authorized official must appear on all papers and envelopes submitted.*

INSTRUCTION TO BIDDERS:

Two/Double Bids:-

- 01.** In case of two-bid system, tenders will have to be submitted in TWO PARTS i.e. (a) Technical Bid and (b) Price Bid, in two separate properly sealed covers indicating the type of Bid; and both these covers will have to be again put in to a single sealed cover. Also the address of the firm submitting the tender and the officer, to whom the tender is addressed, must appear distinctly on both the inner sealed covers, indicating also TECHNICAL BID / PRICE BID as may be applicable.

- 02. In the part relating to Technical Bid, the OEM/Vendor must provide the followings:-**
 - (a) Details of the technical features of the offered Equipment vis-à-vis specification as per Annexure – I;
 - (b) Standard Technical literature on each of the items offered; the article on offer should conform to standard quality, specification and test of manufacturer;
 - (c) Dealership certificate on the offered products from OEM in case of dealer/s;
 - (d) List of reputed organizations/Institutions, where similar orders have been executed (copies of the purchase/work order will have to be enclosed). The bidders / OEM should attach a self declaration stating that he is not banned / debarred from working with any Central Government / PSU / State Govt of India / Any other Govt. Agencies or any Institute of National / International importance.
 - (e) Up-to-date Sales Tax clearance certificate (*for vendors outside the State of Bihar*)/GST registration certificate indicating also the TIN number (*for vendors from within the State of Bihar*) of the FIRM will have to accompany the tender to be submitted;
 - (f) Copy of PAN of FIRM / Bidder must be submitted along with the Technical Bid;
 - (g) **Banker's details** of tendering FIRM / Bidder should be clearly mentioned;
 - (h) Details of nature and maximum period of **Warranty** offered by the OEM/Bidder;
 - (i) Amount of Earnest Money Deposited (**EMD**), in the form of Demand Draft/Banker's Cheque/PBG only, will have to be clearly stated and the same will have to be enclosed with **Technical Bid** only;
 - (j) A copy of the Price bid, ***WITHOUT MENTIONING THE PRICES***, will have to be provided as part of the Technical Bid document.

- 03. In the part relating to Price Bid, the OEM/Vendor must provide the following:-**
 - (a) Quantity, basic price (against item-wise details of specifications of each of the offered items);
 - (b) Prices of each of the optional accessories, as required by specifications and may be relevant for offered Equipment, will have to be specifically stated in the quotation;
 - (c) GST (as percentage of basic price + packing & forwarding charges if any)
 - (d) Installation & commissioning charge (including Service Tax), to be shown item-wise extra, if any.
 - (e) Freight & insurance charge, if any.

(g) Annual Maintenance contract (AMC) rate (after expiry of warranty period) is to be clearly indicated – preferably in both comprehensive and non-comprehensive terms, *failure to which the offer may not be considered even if it turns out at the lowest price.*

Terms & Conditions:-

01. **Rates:** Rates quoted should be on F.O.R., NIT Patna, on Door Delivery basis mentioning all taxes/break-up separately.
02. **Validity:** Quoted rates must valid for 180 days.
03. **Warranty/Guarantee:** The material must be quoted with a minimum comprehensive Warranty / Guarantee period of 36 months after the date of delivery and acceptance at final destination. After sales service and contact details of resource person for this should be mentioned.
04. **EMD:** Rs 25,000/-(refundable) in form of DD/PBG in favour of ‘**Registrar, NIT Patna**’ payable at ‘**Patna**’.
05. **Delivery:** Unless otherwise stated delivery of goods at NIT Patna, will have to be maximum within 30 days from the date of receipt of the Purchase Order. All aspects of safe delivery shall be the exclusive responsibility of the OEM / Bidder.
06. **Rate of AMC:** Annual Maintenance Contract charges (after expiry of warranty period) is to be clearly Indicated (for Equipment only) & applicable taxes. The selected supplier/s is to ensure regular availability of spares for at least five years.
07. **Printed conditions of supply of the firm, if any, will not be binding on us.**
08. **Late and delayed Tenders:** Late and delayed tender will not be considered. In case any unscheduled holiday occurs on prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.
09. **Ground for Rejection of Tender:** The tenders are liable to be rejected if the fore going conditions are not complied with. The tender should be complete in all respects and duly signed wherever required. Incomplete and unsigned offer will not be accepted.
10. **Payment Terms:-** 100% payment will be released after receiving of stores in good order and condition and successful installation and commissioning duly certified by the concern authority. Successful vendor should arrange to submit a **Performance Bank Guarantee or Demand Draft** to the tune of 10% amount of the total purchase value within 15 days from receipt of P.O. This Performance Bank guarantee should be issued from any Nationalized Bank and validity of the same will be till **warranty period +60 days** from the date of delivery / installation of the material. The payment will made by RTGS / FUND Transfer mode only. **Hence, following information must be clearly written in the Price Bid for RTGS / FUND TRANSFER:**
 - (a) Name of the Firm with complete postal address and phone details
 - (b) Name of the Bank with Branch where the Account exist

- (c) IFSC CODE
- (d) ACCOUNT No
- (e) PAN No
- (f) GST No (Required from the vendors belongs to BIHAR)

11. **Excise Duty:** The Institute is **exempted** from payment of Central Excise Duty vide GOI Notification No.10/97-Central Excise, dated 01.03.97 with Regn No. TU/V/RG-CDE(1211)/2015, dated 11.02.2015. . **Customs Duty:** The Institute is **exempted** from payment of Customs Duty vide GOI Notification No.51/96-Customs, dated 23.07.96, with Regn. No. TU/V/RG-CDE(1211)/2015, dated 11.02.2015.
12. **TDS** as applicable will be deducted from bill.
13. **Entry Tax:** Entry tax, if applicable will be borne by us as applicable on FOR NITP value. The vendor may arrange Road Permit on their own and get it reimbursed from the Institute on production of valid document. Road permit once issued will not change / altered in any circumstances. If any alteration is required due to fault from vendor/OEM side the same will be debited to supplier's A/c.
14. **Liquidated Damage:** If a firm accepts an order and fails to execute the order in full as per the terms and conditions stipulated therein, it will be open to this institute to recover liquidated damages from the firm at the rate of 1% per week of the order value subject to a maximum of 10% of the order value. It will also be open to this institute alternatively, to arrange procurement of the required stores from any other source at the risk and expense of the firm, which accepted the order but failed to execute the order according to stipulated agreed upon.
15. **Termination for default:** Default is said to have occurred:-
- (a) If the supplier fails to deliver any or all of the services within the time period(s) specified in the purchase order or any extension thereof granted by NIT Patna.
 - (b) If the supplier fails to perform any other obligation(s) under the contract
 - (c) If the vendor, in either of the above circumstances, does not take remedial steps within a period of 30 days after receipt of the default notice from NIT Patna (or takes longer period in spite of what NIT Patna may authorize in writing), NIT Patna may terminate the contract / purchase order in completely or in part and forfeit the EMD. In addition to above, NIT Patna may at its discretion also take the following actions: NIT Patna may procure, upon such terms and in such manner, as it deems appropriate, goods similar to the undelivered items/products and the defaulting supplier shall be liable to compensate NIT Patna for any extra expenditure involved towards goods and services to complete the scope of.
16. **Applicable Law:**
- (a) The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing.
 - (b) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Patna, India only.
 - (c) Any dispute arising out of this purchase shall be referred to the Registrar NIT Patna, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed

by the Director of the Institute. The decision of such Arbitrator shall be final and binding on both the parties.

17. The acceptance of the quotation will rest solely with the Registrar, NIT Patna, who in the interest of the Institute is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.
18. **Important:-** The Director may accept or reject any or all the bids in part or in full without assigning any reason and doesn't bind himself to accept the lower bid. The institute at its discretion may change the quantity / upgrade the criteria / drop any item or thereof at any time before placing the Purchase Order.

COMMERCIAL TERMS FOR TENDER

1. Manufacturer should have comprehensive production facility, after sales service facility & infrastructure, Accredited Calibration and Quality Control Test Laboratory. Manufacturing Capacity & capabilities of the supplier and workmanship of the instrument shall be accessed by concerned official before finalizing the order.
2. Manufacturer will ensure the traceability (source of calibration) of the calibration unit to NCCBM / NPL.
3. **BIDDERS HAVE TO QUOTE FOR ALL THE ITEMS AS PER BOQ OF THE TENDER DOCUMENT. INCOMPLETE QUOTATION SHALL BE REJECTED**
4. Manufacturer/OEM should impart necessary 3 days training to our personal for operation of the equipments supplied.
5. Preference will be given to ISO 9001-2008 Certified Company who can ensure the manufacturing of the machine as per required testing standard / tender specification within the specified tolerance limits.
6. Every machine should be highly qualitative and as per IS Standard/ I.S. marked / wherever required.
7. **Suppliers Turnover should not have less than Rs. -01 (one) crore per annum.**
8. Authority may visit bidders works/Users place to evaluate the manufacturing facility quality control, after sales backup facility, expert availability etc.
9. All India basis user Certificate from different Govt. Customer, Engineering Institute and PSU will be preferred.
10. Supplier should have capacity and experience of carrying out Annual Maintenance contract with the users of their M/C and Proof of such documentation will be preferred.
11. Indian Agent of OEM should have well backup facility.
12. Q.C Instruments must be from reputed manufacturer who does have above facilities.
13. The supplier must have the experience of supplying geotechnical equipments to reputed institutions in India e.g. IITs, NITs, central universities or CSIR laboratories.
14. The manufacturers must supply calibration certificates for all the equipments.

TENDER FORMAT FOR PRICE BID

Ref No: NITP/Proc/17-18/____

Date: _____

SI No.	Description of Item & Model	Quantity	Unit Price	Sales Tax	Total Price

Delivery Mode: F.O.R. Patna.

Total bid price should be inclusive of Sales Tax, F.O.R. NIT Patna for the above quoted items is Rs.....

Delivery Period:

Packaging & Freight etc. :

Validity Date: Minimum 180 days from the date of opening of tender.

Any other terms and conditions.

Place:

Date:

Signature:_____

Name:_____

Business Address:_____

Email_____

Contact No:_____

Affix Rubber Stamp

For Any Enquiry**Please Contact:**

The Registrar

NIT Patna

Email: registrar@nitp.ac.in