DOCUMENT

Open Competitive Bid (OCB)

For

Supply and Installation of Equipments to the Concrete Lab of Civil Engineering Department.

At the three campuses of Rajiv Gandhi University of Knowledge Technologies

Proprietary & Confidential



RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

Ground Floor, Vindhya C4 Building, IIIT-H Campus, Gachibowli HYDERABAD- 500 032

Phone: 040-23001830

Proprietary & Confidential

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Web document

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News paper advertisement

Short Tender Notice

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES



Ground Floor, Vindhya C4 Building, IIIT-H campus, Gachibowli, HYDERABAD- 500 032 Phone: 040-23001830

Ref: RGUKT/Proc/Civil3/CONC/T33/2013

Separate Sealed Tenders are hereby invited from reputed Manufacturers or Authorised dealers for supply and installation of equipments for the following labs of Civil Engineering Departments at the three campuses of RGUKT located at Basar (Adilabad District), Nuzvid(Krishna District and RK Valley (YSR Kadapa District) of Andhra Pradesh:

- i) Concrete Technology Laboratory
- ii) Environmental Laboratory
- iii) Fluid Mechanics Laboratory

Last date of submission of tender along with EMD as specified in the bid document is on 16.03.2013 before 04.00 pm.

Interested parties can collect the Tender document for each laboratory separately from the office of the RGUKT from 06.03.2013 to 15.03.2013 against payment of Rs. 1,000/towards the cost of Tender document fee (non-refundable) through D.D. drawn from any Nationalized Bank, in favour of "REGISTRAR, RGUKT" payable at Hyderabad. For further details, visit our website www.rgukt.in

Date: 06.03.2013 Sd/Registrar

<u>Time schedule of various Short tender related events</u>

Bid calling date	06.03.2013
Sale of document	From 06.03.2013 to 15.03.2013 up to
	04:00 P.M
Pre bid meeting	11.03.2013 at 04.00PM
Bid closing date/time	16.03.2013 at 04:00 P.M.
Technical Bid	16.03.2013 at 04:30 P.M.
Opening date/time	
Price Bid opening	18.03.2013 at 04:00 P.M.
date/time	
Bid Document fee	Rs.1,000/-
Contact person	Registrar, RGUKT
Reference No	RGUKT/Proc/Civil3/CONC/T33/2013

Note: Tender documents purchased bidders are only allowed to participate in Pre-Bid meeting.

Registrar, RGUKT

TENDER FORM

Not transferable

Reference. No. RGUKT/Proc/Civil3/CONC/T 33/2013 Dated 06.03.2013

Subject: Invitation of Tenders for Supply, installation and commissioning of Concrete Lab Equipments to the Civil Engineering Departments at three campuses of RGUKT located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and RK Valley (YSR Kadapa Dist) of Andhra Pradesh.

Last date and time for submission of the TENDER AT RGUKT, Vindhya-C4, IIIT Campus, Gachibowli, HYDERABAD is 16.03.2013 up to 4:00PM

Dear Sir/Madam,

- A. RGUKT invites sealed tenders comprising technical bid and price bid separately from reputed manufacturers (or) authorized dealers for its three campuses located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and R K Valley (Kadapa Dist) of Andhra Pradesh.
- B. The Tender form consists of 39 pages of which pages from 7 to 19 are instructions and page No.30 contains the format for financial bid. The duly completed Technical Bid together with a copy of the bid document (this tender) signed on all pages by the Bidders authorized signatory and the Price Bid should be kept in separate sealed covers. These sealed covers must be submitted in a sealed master Concelope super scribed "Tender for Supply, Installation & Commissioning of Concrete Lab Equipments to the Civil Engineering Departments at the three campuses of RGUKT. The last date for submission of bid is 16.03.2013 and closing time is 04:00 PM.
- C. The Sealed Tenders should be deposited in the Tender box kept in the office of Registrar, RGUKT, Hyderabad up to **04:00 P.M. on 16.03.2013**.

For any clarification and further details on the above tender please contact by Telephone No: 040-23001830 or Contact in Person during office hours.

Thanking you

Yours faithfully,

Registrar, RGUKT.

STATEMENT OF IMPORTANT LIMITS/VALUES RELATED TO BID

Item	Description
EMD	Rs. 1,00,000/- by way of Demand Draft from any Nationalised Bank or by way of irrevocable bank guarantee from any Nationalised Bank only. DD/BG from other than Nationalised Banks will not be accepted.
Bid Validity Period	90 days from the date of opening of Financial bid
EMD Validity Period	90 days from the date of opening of Financial bid
Warranty Period	3 years Comprehensive Warranty
Variation in quantities/number of residents	<u>+</u> 40 %
Period for furnishing performance Security Deposit	Within 10 days from date of receipt of award
Delivery Schedule	Bidder shall deliver the goods in one single lot within 30days from the date of award of the contract.
Performance security value	5% of contract value by way of irrevocable Bank Guarantee from any Nationalised Bank
Performance security validity period	38 months from award of contract (including 30 days of installation period)
Period for signing the order Acceptance	Within 7 days from date of receipt of notification of award

Payment terms	
On delivery at user site	Payment for goods and services shall be made in Indian rupees as follows. 1. 80% of payment will be paid after installation, commissioning 2. Balance 20% will be paid after 3 months after obtaining the satisfactory certificate from the Director, RGUKT IIITs.
Maximum Liquidated Damages for late deliveries	For delays:- If the supplier fails to deliver any (or) all of the goods or perform the services within the time period specified in the contract the purchaser shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages a sum equivalent to 0.25% of the contract value per day until actual delivery or performance up to a maximum deduction of 10% of the delayed goods or services contract price. Once the maximum deduction is reached, the purchaser may consider the termination of the contract duly forfeiting the performance security etc.,

ELIGIBILITY CRITERIA

- 5.1. This bid is open to all firms within India who are eligible to do business under relevant Indian laws as in force at the time of bidding, subject to meeting the pre-qualification criterion. They should provide list of customers of previous supply of similar/ same items to IITs, NIT's or Central Universities or any Academic Institute of National repute with contact details. Copies of orders received from the reputed firms on bidding firm need to be submitted.
- 5.2. The bidder should have servicing facility or work shop with in India so the provision of service is possible at a short notice and without incurrence of delay.

5.3.	The Bidding fir	m should have	e minimum 1	turnover as fo	llows:
0.0.	THE DIGGING III	iii biio aia iia v	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	carrio ver abro	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Bid Value offered against the tender call	Last financial year's business turnover
25 lakhs	50 lakhs
50 lakhs and above	1 crore

The bidder should have adequate experience in supply of such materials as required in the tender. Bidder should furnish proof of having supplied such materials as required in the tender in the previous financial year ending 31st March 2012 as mentioned above . A certificate indicating the Turn Over value details (in Rupees) of subject material, during the financial year 2011-12 (for the year ending 31.03.2012) from a Firm of Chartered Accountants must be enclosed (in original) as a proof for Turnover. The Turn Over of the subject Material must be separately indicated in the certificate.

- 5.4. The bidder should furnish satisfactory performance certificate from the parties concerned to whom bulk supplies were effected, in case such supplies were made. RGUKT may contact any such parties to elicit details.
- 5.5. Bidder should be registered under VAT Act/CST Act with the relevant State Sales Tax Authorities. He should furnish along with the bid document, the relevant VAT/CST Registration Document and PAN / TAN Card copies.
- 5.6. All bidders shall also include the following information and documents with their tenders (in the Technical bid cover)
 - 5.6.1. Copies of original documents defining the constitution or legal status, place of registration, and principal place of business of the bidding firm/entity; written power of attorney of the signatory of the Bid to commit the Bidder.

- 5.6.2. Machinery/equipment owned by the bidder and number of employees.
- 5.6.3. Latest Income Tax returns and **VAT/CST** Returns filed.
- 5.6.4. List of Present Clientele with contact addresses & telephone numbers.
- 5.7. All the certificates furnished along with technical bids should be attested by a Gazetted Officer, counter signed by bidder along with their seal.

The bidders must submit all relevant documentary evidence to support their claim for eligibility in placing bid. The tenders received without the above documents will be rejected.

Requirement of Concrete Lab equipments

Sl. No	Equipment	Required Qty for three Centers
1	Plastic Bucket Capacity of 16 ltrs	18
2	Scoop G.I.	42
3	Moulds	
	Cube Mould (70.6 mm) With I.S.I Mark IS: 10080-1982	135
	Cube Mould (150 mm) With I.S.I Mark, IS: 10086-1982	135
	Cylinder Mould (150mm x 300 mm) with ISI mark	135
	Beam mould (150mm x 150mm x 700 mm) with ISI mark	135
	Beam mould (100mm x 100mm x 500 mm) with ISI mark	135
4	Steel Trays Size 60cm x 60cm	24
5	Steel Pans Size 60cm dia	24
6	Vibrating Table as per IS: 2514-1963	6
7	Slump Test Apparatus as per IS: 7320-1974	15
8	Compaction Factor Apparatus as per IS: 5515-1983	6
9	Pan Balance: Capacity 5kg, single pan, clock type	15
10	Balance: Capacity 15kg, readability 1gm	15
11	Flow table (electrical Operated) as per IS: 5512-1983	6
12	Compression Testing Machine, Three Gauge	3
13	Variable Flow Type Air Permeability (Blaine Type) as per IS: 5516-1969.	9
14	Vicat Apparatus, With Dashpot as per IS: 5513-1976	21
15	Vee-Bee Consistometer as per IS: 10510-1983	9
16	Mortar Penetrometer as per IS: 8142-1976	15
17	Le Chatelier Mould as per IS: 5514-1969	15
18	Vibrating Machine as per IS: 10080-1982	6
19	Rebound Hammer test instrument with all the accessories which can perform the test as ASTM C805 – 85 or BS 1881: Part 202: 1986 (Digital)	6
20	Pulse velocity test instrument with all the accessories which can perform the test as per ASTM C598 -83 or BS 1881: Part 203 : 1986	6
21	Profometer or covesometer	6
22	Pan mixer	6
23	Core cutting machine	3
24	Grinding machine for concrete specimen	3
25	Wheel barrow/buggies	15
26	V Funnel test equipment	3

S No	Equipment with main Technical Testing Plastic Bucket Capacity of 16ltrs.	Required Qty for three centers
2	Scoop G.I.	42
3	Moulds	
	 Cube Mould (70.6 mm) With I.S.I Mark IS: 10080-1982 Cube Mould (150 mm) With I.S.I Mark, IS: 10086-1982 Cylinder Mould (150mm x 300 mm) with ISI mark Beam mould (150mm x 150mm x 700 mm) with ISI mark Beam mould (100mm x 100mm x 500 mm) with ISI mark 	135 135 135 135 135 135 135
4	Steel Trays Size 60cm x 60cm	24
5	Steel Pans Size 60cm dia	24
6	Vibrating Table as per IS: 2514-1963	6
	Specification: The Vibrating Table is used for compaction of cement concrete cubes and cylinders by vibration. The load carrying capacity of the table is about 150 kg. The table is supported on coiled springs and the housing of the eccentric is fitted below the table top.	
	The table is approx. 60 cm x 60 (100cm x 100cm) cm in size and has stops along all its sides to prevent the moulds from sliding away during vibrations. Table can accommodate four numbers of ISI mark 150 mm (6 to 8) cube moulds.	
	The frequency of vibration can be adjusted from a minimum of 2600 v.p.m. to a maximum of 3600 v.p.m. through a variable pitch pulley arrangement. A hand wheel is provided to effect this change in frequency. An operating switch is provided.	

	Suitable for operation on 440 v, 50 Hz, 3 phase supply.	
7	Slump Test Apparatus as per IS: 7320-1974	15
	Used for determination of slump of fresh concrete mix as a measure	ure
	of its consistency where the nominal size of aggregate does	not
	exceed 38 mm.	
	It comprises the following:-	
	i) A slump cone 100 mm dia at the top, 200 mm dia at	the
	bottom, and 300 mm high with two cleats and lift	ing
	handles. ii) A base plate with clamping arrangement for the slump co	one
	and a swivel handle which also serves as the datum	
	measuring the slump.	
	iii) A tamping rod 1.6 cm dia and 60 cm long with one e	end
	rounded and graduated from 0 to 15 cm in 0.5 cm spacing	g to
	measure the slump.	
8	Compaction Factor Apparatus as per IS: 5515-1983	6
	Used for determination of compaction factor of fresh concrete w	rith
	nominal maximum size of aggregate not exceeding 40 mm as	s a
	measure of its workability. It is particularly suitable for mix	of
	stiffer consistency.	
	It comprises the following:	
	i) Two conical hoppers with trap doors.	
	ii) One cylindrical receiver 0.005 cu m volume.	
	iii) A welded steel stand for mounting the hoppers and	the
	receiver co-axially at specified distances.	
	iv) Two trowels.	
	v) One hand scoop.	
	vi) One standard tamping rod 16 mm dia x 600 mm long.	

9	Pan Balance: Capacity 5kg, single pan, clock type	15	
10	Balance: Capacity 15kg, readability 1gm	15	
11	Flow table (electrical Operated) as per IS: 5512-1983	6	
	Used for making flow tests for consistency of mortars in tests of		
	hydraulic cements and pozzolanic materials. (For concrete as well)		
	It comprises the following:-		
	i) A machined table top 250 mm dia (Bigger dia. Is required) of Gun metal fitted with a vertical shaft. Total weight $4.00 \pm$		
	0.05 kg.ii) A cast iron frame with a machined base and a smooth		
	vertical hole at the top for the table shaft. It has a horizontal shaft carrying a cam at one end and a hand wheel		
	at the other. The cam allows 12 mm free drop of the table.		
	iii) A conical mould 100 mm inside dia at bottom, 70 mm inside		
	dia at top and 50 mm high.		
12	Compression Testing Machine, Three Gauge	3	
	Load Frame		
	Load frame is steel welded fabricated. It is designed to withstand a		
	few million times of full cycles of loading without any sign of		
	distortion or fatigue. These frames are light in weight. The base		
	carries a fine finished hydraulic ram and the lower platen. The top		
	plate has the spherical seating to take care of any irregularity of the		
	specimen surface or slight misplacement of the specimen from the		
	central position.		
	Pumping Unit		
	Pumping unit is attached on the right hand side of the loading unit. It is a multi-plunger pump submersed in the tank and is powered by		

1.5 kW electric motor. Power pack gives non-pulsating flow to the hydraulic ram. This ensures smooth loading of the specimen which can be seen by the movement of the load gauge/digital display. The flow of the oil can be precisely controlled by the strain control knob located at a convenient height. With the proper check on the oil, the life of the pumping unit and the hydraulic ram is almost as long as, life of machine. Capacity: 2000kN Max. Ram Travel: 50 mm Day light Clearance: 340 mm Horizontal Clearance: 300 mm Platen size: 256 mm

SALIENT FEATURES OF COMPRESSION TESTING MACHINE

- 1. LOADING UNIT a) The machine has welded frame which meets the international standard i.e. BS: 1881 for stability test.
- b) Spherical seating is provided on the top platen for self-alignment between the sample and platen so that even load is applied on the sample for better results
- c) The pressure Gauge fitted is imported (Not MASTA as claimed by other suppliers) NOT MASTA since it is locally fabricated, in India. The durability of pressure gauge with a tolerance of +/- 1-2%.
- d) The loading unit is fitted with safety guard in the front for protection of the operator.
- e) The pistons are hard chromed for better accuracy and long life of the machine.
- f) The lower platen and upper platen are hardened and grinded to 40 HRB for taking on the hardness on the metals of the concrete.
- g) A Special dust cover is provided there is no particles enter the ram pistons

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- 2. PUMPING UNIT a) Pumps are fitted with standard motor like GE, Crompton etc. and carrying the manufacturer warranty certificate.
- b) The Pump is fitted with addl. Pumping unit for rapid movement of the ram. Once the sample comes in contact with the sample the lower valves is to be operated. This helps the operator to test more sample in a day.
- c) The pump is fitted with multi plunger pump for smooth flow of oil which given in accurate results.
- d) An oil level indicator is provided to watch the oil level in the tank.

It has indication for load, peak load, and pace rate indicator. Pace rate is achieved manually by controlling the flow control knob and the system is released manually after the peak load is achieved.

Indication of load is on digital display system, which is directly indicated, in respective engineering unit. The electronic display unit is totally microprocessor based with a built in RS232 serial port.

Variable Flow Type Air Permeability (Blaine Type) as per IS: 5516-1969.

It is used for determination of fineness of cements, pozzolanas and other powdery materials in terms of specific surface, which is expressed as total surface area in square centimeters per gram of the material under test.

The apparatus comprises the following:-

 Standard permeability cell made of brass, 12.5 mm inside dia with one perforated metal disc and one plunger.

	ii) A U-Tube glass manometer with rubber coupling for	
	permeability cell, mounted on a wooden stand.	
	iii) Latex rubber tubing, 30 cm long.	
	iv) 10 filter paper discs, No. 40 whatman.	
	v) 250 ml Dibutylphthalate liquid.	
14	Vicat Apparatus, With Dashpot as per IS: 5513-1976	21
	For determination of consistency of standard cement paste and	
	initial and final setting times of cement.	
	The equipment comprises the following:-	
	i) A frame with a vertically movable rod having a cap at the	
	top.	
	ii) Vicat mould in the form of frustum of a cone with internal	
	diameter of 60 mm at the top, 70 mm at the bottom and a	
	height of 40 mm.	
	iii) Glass base plate for the mould.	
	iv) Initial Setting Time Needle.	
	v) Final Setting Time Needle.	
	vi) Consistency plunger.	
15	Vee-Bee Consistometer as per IS: 10510-1983	9
	Used for estimation of consistency of concrete mix by	
	determination of the time required for transforming sample of fresh	
	concrete in the form of a frustum of a cone into a cylinder by	
	standard vibration.	
	The apparatus consists of the following: -	
	i) A slump cone 100 mm inside dia at top, 200 mm inside dia	

	at base and 300 mm high.	
	ii) One container for the slump cone with two clamps and	
	lifting handles.	
	iii) A vibrating table mounted on rubber shock absorbers and	
	having a swivel arm attached on one side. The swivel arm	
	carries a funnel on one side and a graduated rod with a	
	perspex disc on the other side. The rod is graduated in	
	centimeters to measure the slump and volume in the cylinder	
	after vibration Suitable for operation on 440 V, 50 Hz, 3	
	phase supply.	
16	Mortar Penetrometer as per IS: 8142-1976	15
	It is used for determination of rate of hardening of mortar sieved	
	from concrete mixtures and estimation of the effects of such	
	variables like temperature, cement content, mix proportion and	
	admixtures etc on the setting time and hardening characteristics of	
	concrete.	
	concrete.	
	The equipment comprises the following:	
	i) A barrel enclosing a calibrated spring and a plunger with a	
	stem graduated from 0- 60 kgf in 1 kgf division. A handle is	
	fixed to the stem at the top.	
	ii) Two needle shanks marked at 1.25 cm intervals.	
	iii) Six needle points with cross sectional areas 645, 323, 161,	
	65, 32 and 16 sq.mm.	
17	Le Chatelier Mould as per IS: 5514-1969	15
	Used for determination of soundness of cement, and class-A and	
	class-B limes.	
	The apparatus consists of the following:-	
	i) One split cylinder 30 mm dia x 30 mm high made of spring	

brass with two indicator arms. ii) Two glass plates. iii) One lead weight approximately 100 g. iv) Le Chatelier Water Bath. It is a double walled water bath made from heavy gauge copper sheet for maintaining the temperature of water at 27 + 20 C. Glass wool insulation is provided between the walls. An immersion type heater, with thermostat and a Sunvic energy regulator are provided for controlling the temperature. A removable rack to hold twelve standard Le-Chatlier Moulds, is also supplied. Suitable for operation on 220/230 V, 50 Hz, single phase supply. Vibrating Machine as per IS: 10080-1982 6 18 The machine is used for compaction of 70.6 mm cube specimens of cement mortar under standard vibration required for determination of compressive strength of cement. The vibration machine consists of a frame mounted on four coiled springs to carry a cube mould and an eccentric revolving shaft mounted in ball and roller bearings. The machine is so balanced that the eccentric imparts simple harmonic motion to mould carrier and the mould. The frequency of vibration is 12000 ±400 per minute. The drive from the motor to the eccentric shaft is through an endless flat belt running on crowned pulleys. Suitable for operation on 220 V, 50 Hz, single phase supply. Supplied complete with a time switch, one 7.06 cm I.S.I. marked cube mould with hopper. Rebound Hammer test instrument with all the accessories 6 19 which can perform the test as ASTM C805 – 85 or BS 1881:

	Part 202 : 1986	
20	Pulse velocity test instrument with all the accessories which can perform the test as per ASTM C598 -83 or BS 1881: Part 203: 1986	6
21	Profometer or covesometer	6
22	Pan mixer	6
23	Core cutting machine	3
24	Grinding machine for concrete specimen	3
25	Wheel barrow/buggies	15
26	V Funnel test equipment	3

7. General Requirements & Qualification Criteria

- ❖ Bidding Firm offering the product should have ISO 9001 Accreditation certification.
- ❖ Bidding Firm, offering the product, should have supplied similar type of test systems for a several years to government establishments, defense organizations & National higher learning institutions like IITs, IISC etc., in India
- ❖ Bidding Firm offering the product should submit list of supplies made by it, during last two years with complete contact details of the end users such as phone number, fax number, e-mail ID etc. It should submit copies of order placed by such organizations and user certificates for goods of same/similar nature.
- ❖ Bidding Firm offering the Product should have a Local Service Support Facility, preferably in Hyderabad, and should submit address and contact details

Web document

- ❖ Bidding Firm should give an Undertaking that, un interrupted service support will be given for a minimum period of 10 years with unbroken availability of spares supply.
- ❖ Bidding Firm should give an undertaking that, the Software upgrades if any, during the warranty period of three year, should be supplied free of charge
- ❖ Bidding Firm should offer pre-dispatch inspection free of charge at their factory premises for 2 users for 3 days and post installation training at our three laboratories in different campuses to 2 users for 5 days.

NOTE

A complete set of bidding documents may be purchased by interested bidders from the RGUKT contact person upon payment of the bid document price which is non-refundable. Payment of bid document price should be by demand draft drawn from any Nationalized Bank only in favour of "Registrar, Rajiv Gandhi University of Knowledge Technologies" and payable at Hyderabad (India).

❖ Tender documents purchased bidders are only allowed to participate in Pre-Bid meeting.