## **NOTICE INVITING QUOTATION (NIQ)**

**Date:** Monday, 13<sup>th</sup> August, 2012

Sealed quotations on company letterhead are invited from reputed manufactures in India, abroad, or their authorized suppliers/ dealers and service agents in India for the supply of the equipment mentioned in this document of Notice Inviting Quotations (NIQ).

The quotation must provide detailed information of the configuration and specifications of the items as well as price (in Indian Rupees only) and terms and conditions of the payment. The quotation should mention individual unit cost of each of the components, also total cost of delivery, installation, and commissioning as well as full demonstration at IIT Delhi site. The cost should be CIF New Delhi (IIT Delhi). Comprehensive warranty of three years is required.

The quotation should be submitted on or before Monday, 3<sup>rd</sup> September, 2012 by 10:00 a.m. in the office of the **Head**, **Department of Civil Engineering**, **Room No. 221**, **Block No. IV**, **Indian Institute of Technology (IIT) Delhi, Hauz Khas, New Delhi - 110 016 (India**). The validity of the submitted quotation must extend up to at least four months from the date of submission.

Interested parties are required to submit their technical and financial bids in separately sealed envelopes and marked respectively as "Technical Bid" and "Financial Bid" on the outside. The two envelopes should be enclosed inside a single large envelope and marked, "ATTN: Dr. Vasant Matsagar, Sealed Quotation for *Fire Furnace and UTM* to be opened by Purchase Committee". Also, it is mandatory to provide a summary sheet clearly giving information if the specifications asked for are met in the offer.

The bidder is required to provide bid security through a Bank Guarantee or Demand Draft(DD)/Pay Order(PO) of Rs. 10,000/- valid until Monday, 31<sup>st</sup> December, 2012 in the Technical Bid. The bidder should provide necessary documentary evidence of(a) ISO 9001 and ISO 14000 certifications; (b) turnover of Rs. 10 Crore per year or more in any of the previous 3 years.

The institute reserves the right to accept/ reject any/ all the offers without assigning any reason whatsoever.

Sr. No.	Item Name and Specifications	Quantity
1.	Fire Furnace 1200°C and Allied Accessories	01
	<ul> <li>The Fire Furnace should be able to reach temperature of 1200°C (± 100°C) from the ambient temperature within a clear working space of 230 mm width × 230 mm height × 360 mm length and provided with two peep holes.</li> <li>The furnace could be split type and modular with easy fixing and detaching system. The attainment of temperature should be controllable with respect to time using suitable electronic controller.</li> <li>The attached control system and data acquisition system should be able to record the time (second) and temperature (°C) data.</li> <li>The material of the heating elements should be stable for continuous operation at 1200°C.</li> </ul>	Number

	• This Fire Furnace will be placed within the Universal Testing Machine (UTM). Hence,	
	appropriate arrangement should be made available to integrate the two units together.	
	However, the Fire Furnace should be detachable from the UTM.	
2.	Universal Testing Machine (UTM) of 100 Ton Capacity	01
	• The UTM should be compatible to the aforementioned Fire Furnace and have a capacity	Number
	of 100 Ton ( $\pm 1$ Ton) in compression and 50 Ton ( $\pm 1$ Ton) or higher in tension.	
	• The UTM should have possible stroke length of the plunger minimum of 250 mm.	
	• The straining speeds shall be regulated using multi-turn potentiometer.	
	• The attached data acquisition system should be able to record the load (Newton) and	
	displacement (mm) data and the rate of loading.	
	• The least count for load shall be 0.1 kN and for displacement it should be 0.1 mm.	
	• The machine shall be supplied with software for accurately recording load / displacement	
	/ time / temperature and plotting of load vs. displacement / load vs. time / load vs. temperature curves.	
	• Making necessary foundation arrangements for installation of the UTM at the Structures	
	Laboratory, IIT Delhi is the responsibility of the supplier.	
	• Ascertaining no leakage of hydraulic fluid from any of the component, accessories and fittings is the responsibility of the supplier.	
	• The arrangement should be able to transfer the load from the hydraulic actuator to the specimen placed inside the Fire Furnace with minimal (specified) heat-loss. All materials	
	to be used inside the Fire Furnace, e.g. the heads used for transfer of loads, etc. should be stable and non-combustible up to 1200°C and should display a stable thermal expansion	
	coefficient. The loading pads should contain one set for compression test diameter of 213	
	mm and one set for tension test for diameter 25 mm.	
	Documentation related to guarantee / warranty of sub-components from various manufacturers to be provided in the name of IIT Delhi.	

## NOTES:

- (1) All Documents and Manuals should be in English language.
- (2) Each of the essential specification needs to be responded either in range or any applicable answer. Bidder should also provide the timeframe of delivery. Failure to respond to any essential specification can lead to disqualification.
- (3) Technical Bid not accompanied by the Bank Guarantee/DD/PO will be disqualified.
- (4) Applicable taxes should be clearly specified.
- (5) Vendor should provide reference of supply of equipment earlier within India or outside of similar equipment. Any negative comments from any one referred would disqualify the bid. IIT Delhi reserves the right to interact/visit with the referred customer as per its convenience.
- (6) Installation, Commissioning and Terms of Conditions: The quoted cost should be in Indian Rupees including taxes and freight to IIT Delhi. The cost should include delivery, unloading at IIT Delhi site, installation, deputation of competent engineers for installation and systems required for smooth running of the equipment. Pre-installation requirements such as foundation to accommodate the UTM, electric fittings etc. should be mentioned along with their detailed technical specifications. Also, specify requirements of electric power etc. Interested bidders are welcome to see the space availability at the Structures Laboratory, IIT Delhi by taking prior appointment. All items mentioned in this NIQ should be provided within 3 weeks of Supply Order placement so that IIT Delhi can prepare the installation requirements within 60 days of the Supply Order.

The supplier should demonstrate the performance of the equipment to the specifications by conducting trial tests at the Structures Laboratory. Complete set of Manuals for operation, maintenance, and safety should be provided.

(7) Each of the essential specification needs to be responded either in range. <u>Failure to respond to</u> <u>any essential specification will lead to disqualification.</u>