



**INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR – 721 302**

Tender Notice No. 12/2011-12, dated 06.01.2012

Sealed bids are invited for the Procurement of **Laboratory model closed circuit 2” Hydrocyclone test Rig & Laboratory Model Froth Flotation Cell** for Department of Mining Engineering

Tender document and details be kindly seen and downloaded from the Institute website www.iitkgp.ac.in (link : tenders and quotations).

Last date for submission of sealed bids is February 08, 2012 by 2.30 p.m.

No. IIT/S&P/ENQ/NWP/MIN/2011-12
Date : 06.01.2012

Deputy Registrar (S&P)
for Director, IIT Kharagpur



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR – 721 302

No. IIT/S&P/ENQ/NWP/MIN/2011-12

Date : January 06, 2012

Sub : Procurement of Laboratory model closed circuit 2” Hydrocyclone test Rig & Laboratory Model Froth Flotation Cell

Tender Notice No. 12 / 2011-12, Dated 06.01.2012

Indian Institute of Technology Kharagpur, an Institute of National Importance, invites sealed bids from reputed manufacturers or their authorized Distributors / Dealers, for **Procurement of Laboratory model closed circuit 2” Hydrocyclone test Rig & Laboratory Model Froth Flotation Cell** for Department of Mining Engineering.

Interested parties may submit their sealed bids under Two-cover system as per **Technical Specifications** given at **Annexure I**, and **General Terms & Conditions** given at **Annexure II**. Bidders are required to submit their **Details** in the format given at **Annexure III** along with their technical bids. They are also required to submit a signed **Declaration** in the format given at **Annexure IV**. A **Checklist** and **Compliance statement** against each item of Annexure I & III thereon severally & individually shall also be submitted. Kindly refer to the Institute website www.iitkgp.ac.in [link: tenders & quotations] for complete tender details. Parties who are not enlisted with the Institute are also required to submit Form R1 along with the tender.

The tender be sent in a sealed packet, containing two separate sealed envelopes (one each for **Technical Bid and Price Bid**) along with prescribed tender fee and Earnest Money Deposit (EMD) duly superscripted with **Tender Notice No. 12 /2011-12 dated 06.01.2012**, to the **Office of the Deputy Registrar, (Stores & Purchase Section), Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721 302 on or before 08.02.2012 by 2.30 p.m.**

For any query pertaining to this bid document, communication be address to Head, Department of Mining Engineering, Indian Institute of Technology, Kharagpur-721302 [Ph.: 03222-282282, 283716]

The technical bid will be evaluated first and price bids will be opened only in respect of those OEM/Vendor, who are found technically qualified after evaluation of Technical bids.

The **Technical bids will be opened on 08.02.2012 at 3.30 p.m.** in the Office of Head, Department of Mining Engineering, Indian Institute of Technology Kharagpur.

Copy to :

1. Institute website
2. Notice Board

Deputy Registrar (S&P)
For Director, IIT Kharagpur

TECHNICAL SPECIFICATION

1. Laboratory model closed circuit 2" Hydrocyclone test Rig.

Specifications:

The unit /system should consist of the following:

a) Hydrocyclone:

One **1" Hydrocyclone** with

- i) Vortex finder body : minimum 3 no. in the range of 3mm to 7 mm
- ii) Spigots : size 2.2mm , 3.2 mm

One **2" hydrocyclones** should be supplied with different spigots and vortex finder attachments to obtain specific d_{50} cut points. The hydrocyclone can be operated within the pressure range of 5-50 p.s.i. d_{50} cut point: 5-10 microns.

- i) Vortex finder: minimum 3 no. in the range of 8.0 mm to 14 mm
- ii) Spigot: minimum 3 no. in the range of 3mm to 10 mm
- iii) one body extension extra to increase the capacity of the cyclone and reduce the cut point by 1 micron
- iv) 4 Nos of stub cones (90 degree angle)extra with opening 3 mm to 8 mm at bottom

b) Pump:

The hydrocyclone test rig contains a centrifugal slurry pump driven via 'v' belts by an electric motor with a flow rate of 3.5 - 4 m³/hr at a pressure of 40 -60 psi.

Drive motor & speed: - A suitable motor capable of running with 415V/50HZ /three phase, 1.5 kw and 1440 rpm. The motor is of reputed make such as GE/Kirloskar/Crompton Greaves/NGEF or Siemens.

- c) A sump is fitted from which slurry delivers to the hydrocyclone by pump. The sump should be made of stainless steel with Stainless steel piping for the entire rig. The sump capacity should be 40 liter (minimum).
- d) Valves: - Pinch type valves will be provided at the by pass and cyclone inlet.
- e) Diaphragm type pressure gauge to indicate the cyclone inlet pressure.
- f) Hydrocyclone should be made of Abrasion Resistant Polyurethane.
- g) The whole system should be mobile on wheel/castor for ease of operation.

- h) The system should be strong enough to withstand the vibration (provided with locking system/supporting system) during operation.
- i) Calibration certificate for pressure gauge is to be provided.
- j) 1 year warranty for the whole system.
- k) Optional Supplies:**
 - i) Auto sampler in both overflow and underflow.
 - ii) One body extension for 2" cyclone for achieving finer cut size and higher capacity.
 - iii) The party should supply an additional set of cyclone and vortex finder & spigot as spare.

2. Laboratory Model Froth Flotation Cell :

Specifications:

a) GENERAL :

The Laboratory Flotation cell shall consist of 3 nos of stainless steel container of 3 liter, 2 liter, 1 liter capacity (both U shaped & flat bottom). One main shaft called rotor with three types of impeller will be incorporated in a stand to flexible in middle portion of the stand. The rotor and impeller shall be attached with the V belt, pulley and variable speed motor as per requirement. One extra SS container for water storage shall be placed in the upper portion of the shaft. One air compressor unit shall be attached in the main shaft outer jacket for preparing bubbles in water container. The total system shall be incorporated in frame work of MS sheet with good finished paint. One control panel shall be attached with the system providing digital RPM counter with sensor, voltmeter, Ampere meter, 3 main load neon bulbs, variac for variable speed of motor, one blower attachment (air compressor unit) switch, air flow meter and other accessories for dosing of reagents (collector and frother).

b) MOTOR

- i) MAKE should be of GE/Kirloskar/Crompton Greaves/NGEF OR Siemens.
- ii) RPM (to be indicated)
- iii) Power (in hp) (to be indicated)
- iv) 1 No. Starter of reputed make should be provided along with supply. Make of Starter should be GEC/Siemens/L&T/Jyoti Electricals/Crompton Greaves.
- v) V' belt should be provided along with supply. Make should be Fenner.

c) ROTOR

The main rotor attached with a geared motor for up down lifting easily. The main rotor with impeller shall move in side the container in variable speed for recovering finer particles from fractional coal slurry with different dosing. The main rotor shall be separated by outer casing and main impeller. The SS container shall be used to carry the coal slurry for different quantity with a rotor shaft for collection of the froth. One other rotor shall also be attached for collection of froth automatically.

- d)** Instruction manual for operation & maintenance of the equipment shall be provided by the supplier.
- e)** Installation, commissioning and demonstration/performance testing of the equipment at the space indicated by IIT KHARAGPUR shall be the responsibility of the supplier.
- f)** Product Leaflet/Literature.

Optional:

- a)** pulp level controller

GENERAL TERMS AND CONDITIONS

- (1) **Last Date of Submission of Sealed Bids: 08.02.12 upto 2.30 p.m.**

The Technical bids will be opened on 08.02.12 upto 3.30 p.m. in the Office of the Head, Department of Mining Engineering, Indian Institute of Technology Kharagpur.

- (2) **Payment Terms:** 90% Payment shall be made after successful installation and commissioning duly certified by the concerned Head of the Department. Balance 10% may be released against submission of Performance Bank Guarantee to the tune of 10% of the total purchase order value. The Performance Bank guarantee should be issued by any Nationalized Bank and validity of the PBG will be 5 (five) years from the date of issue. No advance is payable against supply of stores.

No advance/mobilization support, is payable against supply of stores.

In the event of failure to deliver the stores beyond the specified date, liquidated damages @ 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.

- (3) **Warranty/Guarantee:** 03 (three) years from the date of receipt of materials.
- (4) **Delivery of Stores:** The store items be supplied within 30 days from the date of receipt of the Purchase Order.
- (5) **Tender Fee:** An amount of 2,000.00 (Rupees two thousand only) as tender fee (non refundable) is to be paid. The payment shall be made by Demand Draft from any Nationalized Bank and paid in favour of "Indian Institute of Technology Kharagpur", payable at Kharagpur. **Bids without Tender Fee will not be accepted. This should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing Tender fee.**
- (6) **Earnest Money Deposit (EMD):** An amount of **30,000.00** (Rupees Thirty thousand only) in the form of Demand Draft drawn in favour of "**Indian Institute of Technology Kharagpur**", payable at Kharagpur as **E.M.D. should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing EMD.** The validity of the EMD should be 6 (six) months from the date of issue. **Any bid without EMD will summarily rejected. No interest is payable on EMD.** EMD will be refunded to the unsuccessful bidder, finalization of the tender process. The EMD of vendor awarded with the contract to be treated as part of security deposit towards Performance Guarantee. No interest is payable on Security Deposit. Security Deposit shall be forfeited if the selected vendor after award of contract, fails to execute the same.
- (7) **Price:** The price shall be **quoted in Indian Rupees only**, on free delivery at site basis. This shall be inclusive of all taxes, and **summary cost** of total implementation be indicated.. Inter-state transit Way Bill (Form-50) will be issued only in favour of the bidder and address as mentioned in the Purchase Order.

- (8) **Bid:** Technical Bid and Price Bid should be submitted in two separate sealed envelope quoting reference number on the top of the envelope. Tender Fee and EMD should be enclosed with the Technical Bid documents, in separate sealed envelopes, stapled with the packet containing Technical Bid documents. The OEMs may either bid directly or authorize their Country/Regional/State Distributors /Dealers/Vendors, to quote with valid authorization certificate, capability to sale and service of the products.
- (9) **Acceptance of Tender:** The Authority of IIT Kharagpur does not bind itself to accept the lowest priced bid and reserves the right to reject any or the entire tender bids received without assigning any reason thereof. The authority may also decide to empanel more than one OEM or their certified authorized distributors/dealers and fix a price band for the product specifications offered by different companies/brands, compliant to minimum specifications asked in the tender.
- (10) **Extra Features:** If the bidder provides any other extra features which are not mentioned in the tender product specifications, then that shall be highlighted in clear terms, with documentary evidence/literature.
- (11) **Compliance List:** The proposal be properly indexed and a compliance list against the technical specifications should be provided.
- (12) **Conditional Offer** will not be accepted.
- (13) **Period of Validity:** Bids shall remain valid for acceptance for a period of 60 days from the date of opening of the price bid.
- (14) The benefit of any downward price revision (revision on account of budget/financial policy, tax revision, EPZ etc.) is to be given to IIT Kharagpur by the selected OEM/vendor.
- (15) **Past Performance of the Vendors will be judged at the time of Technical Evaluation.**
- (16) **The Institute does not bind** itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.
- (17) **Bidders should** enclose the following documents:
- (i) Certificate of Registration / Trade License
 - (ii) Enlistment form (R1), complete in all respect
 - (ii) Attested copy of PAN card, Service Tax, CST/VAT registration papers
 - (iii) Banker's Solvency Certificate.
 - (iv) Audited statement of accounts and IT returns for the last three years
 - (v) Authorized Distributors/Vendors must submit appropriate authorization certificate and letter from their OEMs, for participation in the said tender.
 - (vi) Name and address of past satisfactory supplies or minimum three clients to whom such items/stores have been supplied should be mentioned in the technical bid.
 - (vii) Copy of product literature, for which the prices have been quoted.
 - (viii) Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration.

- (18) **All tenders are to** be dropped in a sealed box in the office of the Deputy Registrar (Stores & Purchase), IIT Kharagpur. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future.
- (19) **The person/officer signing** the tender/bid documents should be delegated with an appropriate Power of Attorney (duly endorsed by a Notary Public) by the Chief Executive Office/Managing Director of the Company to sign such documents.
- (20) **Opening of Price Bids :** The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened and the same will be opened before the technically qualified vendor(s). **The date for opening of price bids will be notified separately.**
- (21) Tenderer or his/her authorized representative (with proper authorization letter for attending opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.
- (22) **IMPORTANT**
1. Director may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any time before placing the Purchase Order.
 2. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process.
 3. The OEMs/Vendors need to submit a certificate during opening of technical bids that they are not currently debarred or blacklisted in IIT Kharagpur for any supplies, products or services, or at present in any national organization or educational institute/university.
 4. In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.
 5. For any query pertaining to this bid document, correspondence be addressed to :
Head of the Department
Department of Mining Engineering
Indian Institute of Technology, Kharagpur-721 302
[Ph. : 03222-282282, 283716, Fax : 255303]
 6. In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.

Deputy Registrar (S&P)
for Director, IIT Kharagpur

TECHNICAL BID DOCUMENT

FORMAT TO BE FILLED BY THE MANUFACTURERS / INDIAN AGENTS (ON BEHALF OF THEIR FOREIGN PRINCIPLES) OR THEIR AUTHORIZED COUNTRY DISTRIBUTORS/ REPRESENTING DEALERS/ REGIONAL AGENCIES. SUBMITTING TENDER FOR SUPPLY OF LABORATORY MODEL CLOSED CIRCUIT 2” HYDROCYCLONE TEST RIG & LABORATORY MODEL FROTH FLOTATION CELL FOR IIT KHARAGPUR

1. Name of the Tenderer :
2. Status of the Tenderer :
(attach documents, if registered company/partnership/proprietyship)
3. Whether OEM/representing foreign principle :
(attach copy of certificate/authorization)
4. Details of key top official/authorized official :
(attach details)
5. Details of tie-ups for supply/services, if any :
(attach details, agreements, escalation matrix)
6. Income Tax and Service Tax returns of previous three assessment year (copy) :
7. Financial status of bidder and/or his associates including Annual Report & Balance Sheet/Statement of Account of past three years with Registration of Companies (ROC) receipts duly authenticated by Chartered Accountant :
8. Current list/address of clients where similar material has been supplied and successfully working :
9. Name of the vendor's three largest clients, to whom similar products and services were extended & amount of transaction/annual bills to such clients :
10. Name and address of Vendor's bankers and attach a Solvency Certificate from the Bank for a minimum amount of Rs. 20.00 Lakh. :
11. Income Tax Permanent A/c No. (attach copy) :
12. **Details of EMD/Bank Draft No., issuing branch and date :**

Certified that all above information are correct to the best of my/our information, knowledge and belief.

Dated signature & seal of the Authorized person of OEM/Vendor

NOTE : This is to be submitted in a separate sealed envelope super scribing “TECHNICAL BID”, Notice inviting Tender No. **12/2011-12** dated 06.01.2012 and name of the bidder. All technical documents like literature, catalogues etc., are to be put in the same envelope. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. **Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed.**

ANNEXURE - IV

DECLARATION

1. I, -----Son /Daughter of Shri -----
----- Proprietor/Partner/CEO/MD/Director/
Authorized Signatory of M/s. ----- am
competent to sign this declaration and execute this tender document.

2. I have carefully read and understood all the terms and conditions of the tender and
hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and
authentic to the best of my knowledge and belief.

4. I/ we/ am are well aware of the fact that furnishing of any false information/
fabricated document would lead to rejection of my tender at any stage besides
liabilities towards prosecution under appropriate law.

5. Each page of the tender document and papers submitted by my Company is
authenticated, sealed and signed, and I take full responsibility for the entire
documents submitted.

Signature of the Authorized Person

Date : -----

Full Name : -----

Place : -----

Company Seal : -----

To
The Deputy Registrar
Stores & Purchase Section
Indian Institute of
Technology **Kharagpur –**
721 302 (WB)

*Passport size
Photograph
of the Proprietor/
Partner/Authorised
signatory.*

**SUB : ENLISTMENT AS A VENDOR OF THE
INSTITUTE**

Sir,

Details of particulars, as per your format are given below for your consideration and necessary action for **enlistment** with your Institute, as approved vendor.

1. Name of the Firm :
2. Status of the firm & Date of establishment :
(Proprietorship/Partnership/Joint Stock Company/
Private Limited Company/Public Limited Company/
Sole Distributor/Stockist/Dealer/Agent/ Reg. Society or NGO)
3. Name of the Proprietor/ Managing Partner :
Authorised Signatory/Chief Executive
4. Present Address (Head Office/ Registered Office) :
Phone /Fax /E-mail/ website/ Mobile contact)
5. Permanent address of the firm :
6. Do you have an office in Kolkata :
(if yes, give address and contact details)
7. Nature of stores being dealt with :
(range of product or category or group of items
proposed to be enlisted - enclose item
catalogue)
8. Are you registered with DGS&D, NCCF, NSIC, :
Kendriya Bhandar or any Govt./State Agency
9. Are you already registered with IIT Kharagpur :
(if yes, give details, Sr. No./date/year etc.)
10. Name and address of Banker / CBS Account :
 - (a) Name of the Bank
 - (b) Name/address/code of the Branch
 - (c) Account Number
 - (d) IFSC Code
 - (e) Enclose solvency certificate from Bank
 - (f) Does your Bank stands guarantee to your business

11. (a) Financial Capability (in rupees) :
(b) Annual turn over (last three years)
(c) Audited balance sheet (last three years)
(d) IT returns filed (last three years)
(e) TIN / VAT / ST Reg. No's.
12. Registration/Trade License Number and date :
(attested copy to be enclosed)
13. Drug licence number (if you deal with medicine :
chemicals, alcohol, spirit, lab reagents etc.)
14. Experience, with credentials :
(documents if any, to be enclosed)
15. Whether it is a Production Unit :
(if yes, please specify location and area,
number of skilled, semi-skilled & unskilled
employees, number of qualified Engineer and
list of machinery and facilities available,
whether in EPZ, availing any tax benefit etc.)
16. Whether having a Permanent Account Number :
(if yes, mention the ward number, circle and
Commissioner of Income Tax under which you
are registered, enclose copy of PAN card)
17. Specimen Signature of the Proprietor/ :
Authorized Partner/Chief Executive/Signatory

DECLARATION

I do hereby declare that all particulars furnished by me are true and correct to the best of my information, knowledge and belief. I understand that IIT Kharagpur can adopt any pre-qualification to identify suitable vendor(s) for a particular quotation/tender invitation and items, and conduct visit to our premises for verification. Mere submission of this registration form doesn't entitle us for any enquiry or award of work and I promise to be in the lookout for details in your website [www.iitkgp.ernet.in (link : tenders and quotations)]. I also undertake to inform you at the earliest any change in details mentioned above.

Encl:
Rubber Seal :

Name and signature of the Vendor/
Proprietor/Authorized Partner/CEO