



सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
मैसूरु / MYSURU-570 020, भारत / INDIA

(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

सं. /No. CFTRI /74200/2020

दिनांक / Date: 02 November, 2020

NOTICE INVITING TENDER

क्रम सं. Sl. No.	निविदा संदर्भ Tender Reference	विवरण / Description
1	CFTRI/74200/2020	Pilot Scale Bioreactor– 1Set

1. Director, CSIR-CFTRI, Mysuru invites tenders for supply, installation & commissioning of Pilot Scale Bioreactor– 1Set
2. Last date for submission of Tender is 2.00 P.M. (IST) on 18th/November/ 2020 on line (CPPP) in etenders.gov.in
3. Technical Bid Opening on-line in etender portal at 2.30P.M(IST) on 19th/November/ 2020

हस्ता./Sd/-

अनुभाग अधिकारी (भंडार एवं क्रय)

Section Officer (Stores & Purchase)

Ph: +91- 821-2515440/2515447

E-mail: cosp@cftri.res.in, sosp@cftri.res.in

CRITICAL DATE SHEET

Tender Ref/No. CFTRI/74200/2020:

Sl.No.	Stages	Date & Time
1	Publish Date & Time	02/11/2020 @ 5.00p.m.
2	Document Download Start Date & Time	02/11/2020 @ 5.00p.m.
4	Bid submission Start Date & Time	06/11/2020 @ 05.30p.m.
5	Bid submission End Date & Time	18/11/2020 @ 2.00p.m.
6	Bid Opening Date & Time	19/11/2020 @ 2.30p.m.

Specification & Allied Technical Details

A3/74200/2020

Detailed specifications for 150 L pilot scale bioreactor

1. Fermentor, 150 litre total capacity

Total volume: 150 L
Working volume: 100 L
Vessel make: Contact parts SS 316L
H/D = 2.5/1
Designs: ASME certified
Working temperature: 15 - 140 °C
Standard Operating Pressure: 0-2.5 Kg/cm² (Saturated steam pressure)
Vessel thickness: 4 mm
Inner surface: 220 grit Finished and polished Ra < 0.8 micron
Head ports: 5 Nos (acid, base, inoculum, feed, antifoam)
Fixed Baffles: 4 Nos with diameter 10% of tank diameter (See picture below)
Impeller: D-6 (Rushton) (See picture below)
No. of impellers: 3

2. *In-situ* sterilizable jacketed

Jacked for in-situ sterilization: SS 304 with inlet and outlet ports with matt finish outer surface

3. Automatic sterilization system

Built-in electrically actuated advanced sterilization, with heater protection
Digital temperature profile controller with sensor
Range: 0 to 150° C
Timer: 0 to 90 min

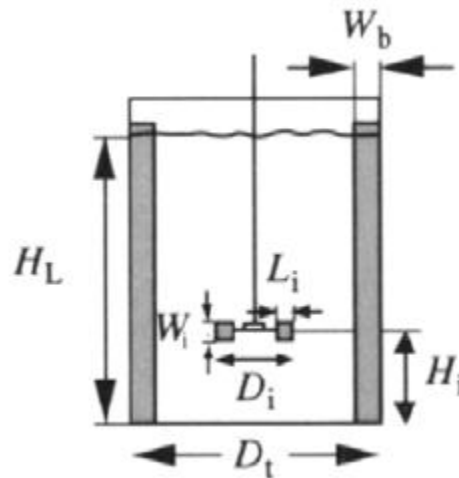
4. Aeration system

Ring type sparger
Inlet Filter: 0.2 Micron PTFE
Outlet Filter: 0.2 Micron PTFE
Filter Type: cartridge
Filter Housing: S.S 316
Type: In-situ Sterilizable

5. Agitation system with control

Type: Top/Bottom Driven
Motor: Variable speed
RPM: 50-500 RPM
Capacity: 1 HP
Sealing: Single Mechanical Seal
Other specifications of impeller diameter and distance from bottom of the

reactor (please see figure below)



Impeller	D_t / D_i	H_L / D_i	H_i / D_i	Baffles	
				W_b / D_t	Number
1. Rushton turbine $W_i / D_i = 0.2, L_i / D_i = 0.25$	3	3	1	0.1	4

6. Temperature control system

Temp system: Automatic temp & setriliation control

Temp sensor: pt 100

Temp Indicator: 0 to 150° C

Type: PID

Range: 0 to 150° C

Measurement precision: $\pm 0.1^\circ \text{C}$

Control precision: $\pm 0.2^\circ \text{C}$

7. Chiller water unit for circulation

Refrigerating type water chiller with recirculating pump

RTD Pt-100 temperature sensor

Digital temperature controller

8. pH control system

Steam sterilizable gel filled pH sensor with cable

Digital pH controller

Peristaltic pump for acid or alkali dosing

INSTRUCTIONS TO BIDDERS

1. The Instructions, Terms & Conditions, General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Annexures and Formats hosted in our website www.cftri.res.in [Path: Home page → Tenders → Standard Tender Document (Scrolling Text)] constitute as integral part of this tender.
2. Bidders should submit their financial bid in the format provided (Price Schedule Format/BOQ) and same has to be uploaded in the above etender.gov.in. It is mandatory for all the bidders to upload duly filled Price Schedule Format/BOQ towards submission of their Financial Bid. No changes or modification to the given format is acceptable. Bidders are required to go through the instructions carefully before filling the Price Schedule Format/BOQ.

Please note that CSIR-CFTRI, Mysore is registered with the Department of Scientific and Industrial Research (DSIR) for purpose of availing GST @5% concessional rate as per Central Tax(Rate)/Integrated Tax(Rate) in terms of Notification No. 45/2017-Central Tax (Rate)/No. 47/2017- Integrated (Rate) Dt. 14-11-2017. You are advised to quote accordingly.

3. Integrity Pact is not applicable for this tender.
4. **Warranty:** One year from the date of supply, installation & Commissioning, demonstration and acceptance by the Purchaser.
5. **Delivery Period:** Delivery should be effected within 4 weeks from the date of issue of Purchase Order.

6. **Terms of Payment:** The method and conditions of payment to be made to the supplier under this Contract shall be as follows:

Payment for Goods and Services supplied from India:

Payment for Goods and Services supplied from within India shall be made in Indian Rupees [INR] only as follows:

A. On Delivery, Installation & Commissioning, Demonstration and Acceptance:

- a) 90 % (Ninety Percent) of the Contract Price shall be paid on Delivery of the Goods, Installation & Commissioning, Demonstration and Satisfactory Acceptance of Items & upon submission of the documents specified in GCC/SCC and the acceptance certificate issued by the Purchaser.
- b) Balance 10% payment will be made to the supplier against submission of Performance Security i.e 10% of Contract value valid for warranty period + additional 2 months issued by Scheduled Commercial Bank.

7. **COVER DETAILS - DOCUMENTS TO BE UPLOADED:**

Cover – 1: PreQual/Technical (Techno-Commercial Details) for Procurement of Steam Boiler (Document Type .pdf)

- 1.(a) Catalogue / Brochure of the Model Quoted along with a detailed description of the essential technical and performance characteristics of the goods being offered, with an item by-item commentary on the indented technical specification and documentary evidence of conformity of the goods and services to the bidding documents demonstrating substantial responsiveness of the goods being offered.
- (b) Two (2) latest Purchase Order Copies with price of reputed Govt. Research Institutes/Organization for the supply & installation and satisfactory functioning of the similar/equivalent equipment to comply with minimum eligibility criteria.
- (c) User list for the quoted model along with contact Numbers and Email Id
- (d) Warranty offered and delivery schedule.
2. Bidder Information Form (Annexure – 1)
3. Manufacturer’s Authorization Form (Annexure – 2)
4. Bid Security Form (Annexure-3) / Bid Security Declaration Form (Annexure-4)
5. Performance Statement Form (Annexure – 5)
6. Deviation Statement Form (Annexure – 6)
7. Bidders must furnish a Compliance Statement of each and every required specification of our tender (Annexure-8)
8. Documents establishing goods eligibility and conformity to bidding document; indicating the Indian Customs Tariff Number (ICT & HSN No.)
9. Schedule of Requirements – (Refer Chapter 5 for Format)
10. Declaration abiding by the Code of Integrity and No Conflict of Interest for Public procurement (Annexure – 11)
11. Format for declaration by the Bidder on Non-applicability of Exclusion from Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 (on Letter Head of the bidder) (Annexure – 13)
12. Certification form for Local Content (Annexure – 14)

Cover – 2: Price Schedule Format/BOQ (Document Type .xl) BOQ uploaded in etenders.gov.in

8. **As per Govt. of India procurement policies,**
 - a. The purchaser intends to give purchase preference to local suppliers. There is a restriction on the eligibility of the foreign suppliers/their Indian agents for item with estimated value up to 200 Crores, as per instruction issued by the Govt. of India from time to time in this regard.
 - b. The procuring entity intends to give purchase preference to products/goods manufactured by micro, small & medium enterprises. “Local supplier” means a

supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed in DIPP Order No.P45021/2/2017-PP (BE-II) dated 28th May, 2018 or by the competent Ministries/Departments in pursuance of this order. As amended from time to time please also refer to Govt. of India (GOI) Ministry of Commerce & Industry, Department of Promotion of Industry & Internal Trade (DPIIT) Notification no. P45021/2/2017-PP (BE-II) dt. 04.06.2020 & other orders issued by the Govt. of India on "Make in India" from time to time for reference and further details.

"Local content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

"Class I-Local Supplier"- means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under the said GoI, DIIPT order dt. 04.06.2020 as amended from time to time.

"Class II-Local Supplier" means a supplier or service provided, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under the said GoI, DIIPT order dt. 04.06.2020, as amended from time to time.

"Non-Local Supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to 20% as defined under the said DIIPT order dt. 04.06.2020 as amended from time to time.

Verification of local content

- a. The "Class -I local supplier"/ "Class-II local supplier" at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification (as per format attached below) that the item offered meets the local content requirement for "Class-I local supplier" / "Class-II local Supplier", as the case may be. They shall also give details of the location(s) at which the local value addition is made.
- b. In case of procurement for a value in excess of Rs.10 crores, the "Class-I local suppliers" / "Class-II local suppliers" shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- c. Decision on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

Bidders in their own interest must refer to GOI, DIIPT order dt. 04.06.2020 & 16.09.2020, as amended from time to time & submit bid as extant Make in India. Submission of false or misleading declaration in this regard will make bidder concerned liable for punitive action, as per applicable policy and procedures.

9. Compliance of restrictions under Rule 144 (xi) of the GFR, 2017 related to restrictions on participation of Foreign Bidders and their Authorized Indian Agent/ Dealer

- a. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- b. "Bidder (including the terms "tenderer", consultant" or "service provider" in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated herein before, including any agency branch or office controlled by such person, participating in a procurement process.
- c. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -

- i. An entity incorporated, established or registered in such a country; or
- ii. A subsidiary of an entity incorporated, established or registered in such a country; or
- iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- iv. An entity whose beneficial owner is situated in such a country; or
- v. An Indian (or other) agent of such an entity; or
- vi. A natural person who is a citizen of such a country; or
- vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

d. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation----

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or

management rights or shareholders' agreements or voting agreements.

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Bidders are requested to submit the prescribed Certificate as per Annexure enclosed below with local details of local value addition.

10. **Purchase Preference to Micro and Small Enterprises (MSEs) and Purchase Preference linked with MAKE IN INDIA Order shall be applicable subject to full compliance of Technical Specification and other terms and conditions of the RFQ / NIT and Contract, as per Government of India procurement policies.**

The purchaser intends to give purchase preference to:

- Make in India (as per DPIIT Order no.P-45021/2/2017-PP (BE-II) dated 16th September 2020 of Ministry of Commerce and Industry, Government of India. The preference to Public Procurement (Preference to Make in India) Order 2012 shall be subject to meeting technical specifications and full compliance of other terms and conditions of the RFQ / NIT and Contract.
- Products / goods manufactured by micro and small enterprises as per MSE order 2012

and any amendments thereon. If the bidder wants to avail the Purchase preferences, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the preview of public procurement policy for micro and small enterprises. In respect of bid for services, the bidder must be the service provider of the offered service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. The aforesaid Policy is meant for procurement of only goods produced and Services rendered by MSEs and not for any trading activities by them. An MSE unit will not get any Purchase Preference over any other MSE Unit.

- In case a bidder is eligible to seek benefit under Purchase PP- MAKE IN INDIA policy as well as PPP for MSE 2012, then the bidder should categorically seek benefits against only one of the two policies i.e. either MAKE IN INDIA OR MSE policy in BID FORM. The option once exercised cannot be modified subsequently.

Please refer to our Standard Terms & Conditions uploaded in www.cftri.res.in under tender (Chapter-7) for above Format of Annexures. Any other supporting documents to avail preference/benefits as per Standard Tender Document must be uploaded with the technical bid for technical qualification.

Format for declaration by the Bidder on Non-applicability of Exclusion from Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 (on Letter Head of the bidder) (Ref: - Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject)

Ref. No: _____ Date _____

To,
The Director,
CSIR-CFTRI,
Cheluvamba Mansion
Opp. Railway Museum, KRS Road,
Mysuru 570020

Sir,
With reference to your Tender No. _____ dated _____ I/We hereby undertake that "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Thanking you,

Yours sincerely,

Signature (Name of the Authorized Signatory)

Company Seal

"[Where applicable, evidence of valid registration by the Competent Authority shall be attached]"

Annexure-14

Self-Certification Form for Minimum 50% or for Minimum 20% Local Content (on Letter Head)

1. Ref: DPIIT Order No.P-45021/2/2017-PP (BE-II) pref. to Make in India dt. 28th May, 2018 as amended vide OM dated 16th Sept 2020 or by the competent Ministries/Departments in pursuance of this order.
2. Ref: Rule 153 (iii) of General Financial Rule – GFR (GoI)

This is to certify that percentage of local content against CSIR-CFTRI tender no..... dt.....and our technical bid no..... dt.....isPercent(In Words.....) class/local supplier.

Local content value added- (PERCENTAGE)	
State:	
District:	
Place:	

Thanking you,

Yours sincerely,

Signature (Name of the Authorized Signatory)

Company Seal

PS: Please Note in case of imported items, Country of Origin and Bill of Entry along with the supply of Equipment is required.