



ENQUIRY LETTER

ENQ. NO.: HD/PUR/SP-42/TF/01/2020-21/||830

Date: 22.06.2020

Subject: Procurement of 'Tube Furnace' – Regarding

Due date/CLOSING for receipt of the quotations	13	07	2020	TIME BY:15.30 hours
DATE OF OPENING OF TECHNICAL BID	14	07	2020	TIME BY:12.00 hours

Sir,

Sealed quotations conforming to the specifications are invited for the following item(s). Quotation may please be submitted, keeping in view, the terms and conditions given below and overleaf, otherwise quotations will be rejected.

S. No.	Description of the item	Quantity	Specifications
01	Tube Furnace	1 No.	As per 'Annexure – I' enclosed

Terms & Conditions:

- C-MET is registered under Department of Scientific and Industrial Research (DSIR) and eligible for concessional GST rates @ 5% for Research Institutions as per Notification No. 45/2017- Central Tax (Rate) dated 14.11.2017 and Notification No. 10/2018-Integrated Tax (Rate) dated 25.01.2018. The requisite certificate for availing concessional GST Rate along with documents will be provided.
- PERFORMANCE SECURITY DEPOSIT:** Within 21 days of the receipt of notification of award of purchase order / contract from C-MET, the Bidder shall furnish a Performance Security Deposit equivalent to 10% of the contract value, if the order value is more than ₹5.00 lakhs.

Note:

- The envelope super-scribed with [a] Quotation No. [b] Due Date & [c] Description of the Item and be sent to the undersigned before the due date.
- The Technical & Financial bids should be in separate sealed covers. Combined quotations will be REJECTED.
- The quotation should be submitted in the enclosed format only.
- The Enquiry Letter No. & date should be clearly indicated in the quotation, otherwise quotation will be rejected.
- Firms or their authorized representatives are requested to attend the opening of **Combined/Technical bids on 14.07.2020 at 12:00 hours**. If there is any delay in opening of technical bids will be intimated to all bidders.
- These details are also available in our website: <http://www.cmet.gov.in> & CPPP Portal.

Thanking you,

Yours faithfully,

(G.K.VENKATESAN)

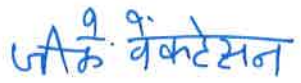
Administrative Officer

venkatesan@cmet.gov.in

Encl.: As above.

Specific terms and conditions to the tender:-

1. Please submit the Technical Details/Catalogue/Data Sheets.
2. The offer should be valid for a period of 90 days from the date of opening of Tender.
3. Please send the quotations ONLY in 'SEALED COVER' indicating our tender enquiry No. and due date by Hand/speed post/courier so as to reach us on or before the due date & time. C-MET will not be responsible for any postal delays.
4. **E-Mail/fax quotations 'WILL NOT BE ACCEPTED'.**
5. **All Tax invoices shall invariably bear your GST Registration No. (GSTIN) and the applicable GST rates. In the absence of which, the invoice(s) shall not be processed for payment.**
6. Our standard delivery term is FOR, C-MET. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.
7. **PAYMENT OF GST/IGST:** C-MET is registered under Department of Scientific and Industrial Research (DSIR) and eligible for concessional GST rates @ 5% for Research Institutions as per Notification No. 45/2017- Central Tax (Rate) AND 47/2017 - IT(Rate) both dated 14.11.2017. The requisite certificate for availing concessional IGST/GST Rate along with documents will be provided. **PAYMENT OF CUSTOM DUTY:** We are ELIGIBLE for concessional custom duty @ 5.15% as per DSIR issued certificate in terms of **Notification No. No. 51/96-Customs dated 23.07.1996** and necessary exemption certificate shall be issued upon request.
8. Our standard payment term is 100% within 30 days for indigenous orders and sight draft for foreign orders. Firm should provide Bank details for RTGS remittance.
9. **Liquidated Damages:** – The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire stores is supplied, installed and accepted.
10. **Security Deposit:-** The successful tenderer should submit Security Deposit@10% of the order value by way of Bank Guarantee /FC Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs. 200/- Non Judicial Stamp paper and should be valid beyond 2 months from the completion of all contractual obligations.
Note: Clause NO. 9 & 10 are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit.
11. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre/ Udyog Adhar / NSIC Registration Certification along with your offer.
12. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
13. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.
14. **Price Reasonability Certificate:** Prescribed form enclosed.
15. **Detailed information regarding previous supply of similar item:** Prescribed form enclosed
16. **Manufacturer's authorization letter:** A copy of **manufacturer's authorization letter** for participating in the bid should be attached.
NOTE: Bidder should sign on each of the page as read and accepted thereof with signature and official stamp of the firm.


Administrative Officer
C-MET, Hyderabad

CHECK LIST

Documents to be submitted along with the bids
(TECHNICAL BID)

S No	Description	Yes/No	Page No
1	Covering/introduction letter from the Firm referring to C-MET's tender enquiry No and date towards participation in the tender		
2	Acceptance of terms & conditions of tender enquiry		
3	Signed copy of tender enquiry		
4	Price Reasonability Certificate		
5	Bid form and Price schedule with commercial terms WITHOUT PRICE (BOQ)		
6	Manufacturer's Authorization letter		
7	Previous experience details alongwith documents like PO/WO etc. (not more than 3 years old)		
8	Undertaking and declaration		
9	Technical compliance statement with/without deviation		
10	Technical brochure of the Product offered or drawings		
11	GST Registration certificate or No		
12	Bank details for NEFT/RTGS		
13	Warranty		

**Documents to be submitted alongwith Commercial bids
(PRICE BID)
(Separate sealed cover)**

S No	Description	Page No
1	Bid form and Price schedule with commercial terms WITH PRICE for main system	



Annexure – I

Technical specifications of Tube Furnace

A horizontal tube furnace is required for the processing of carbides/oxides and chemical treatment with reactive gases. The system is to be designed and fabricated to take care of load, capacity and temperature uniformity as per detailed specifications

Detailed Technical specifications

1	Maximum temperature	:	1350°C
2	Continuous working temperature	:	1300°C
3	Power rating	:	~20kVA, (415V, 50Hz, 3Phase power supply)
4	Heating Elements	:	Silicon carbide heating elements arranged in three heating zones in such a way that there should not be any cold zones between the zones. Uniformity $\pm 5^{\circ}\text{C}$ within zones (Typically 18 Nos. of SiC heaters arranged six per zone)
5	Thermocouple	:	R type duplex thermocouple – 3 sets. (one each for zones). R-type thermocouple -1 No. (500mmlong) for measuring temperature inside the tube RTD- 3 Nos. to be supplied along with cables (total 10 m cables)
6	Temperature Controller	:	Three nos. of Eurotherm controllers (or equivalent make) with three thyristors one each for individual zones. Thyristor power control phase angle fired for each zones individually. Controller should have provision for programming at least eight segment pairs (ramp and dwell) It should correct for drift and gives high stability and rapid response to process changes Controller accuracy: $\pm 1^{\circ}\text{C}$
7	Over temperature Controller	:	3 Nos. of failsafe controllers should be provided for safety in the event of control failure or over heating.
8	Temperature indicators		1No. for R-type thermocouple 3 Nos. for RTDs
9	Insulation	:	High quality insulation to be provided and the skin temperature should not be more than ambient + 20°C at maximum working

			temperature. Inner most side should be lined with 3" Cumilag bricks backed with 2" ceramic board (1450°C) and ceramic board (1250°C).
10	Construction	:	<p>Tube furnace : Side loading Inner chamber 900mm X 200mm X200 mm. Total hot zone length- 800mm Ceramic tube – 1200mm length, (150mm each in the insulation area and 900mm in the heating area), 150mm outer dia capable of withstanding 1450°C on continuous operation under working load. Furnace should be robust, the system is supposed to take load of 10kg load on the ceramic tube while heating at maximum temperature. It should have the frame structure with steel, rust proof sheets and finished with epoxy powder coating.</p>
11	Control Box	:	Separate control box to be housed with necessary switches, current and voltage meters, indicating lamps, temperature controllers, temperature indicators etc.
12	Schematic Diagram	:	Party should provide a schematic diagram of the furnace describing arrangement of the heating elements, lining, chamber details etc.

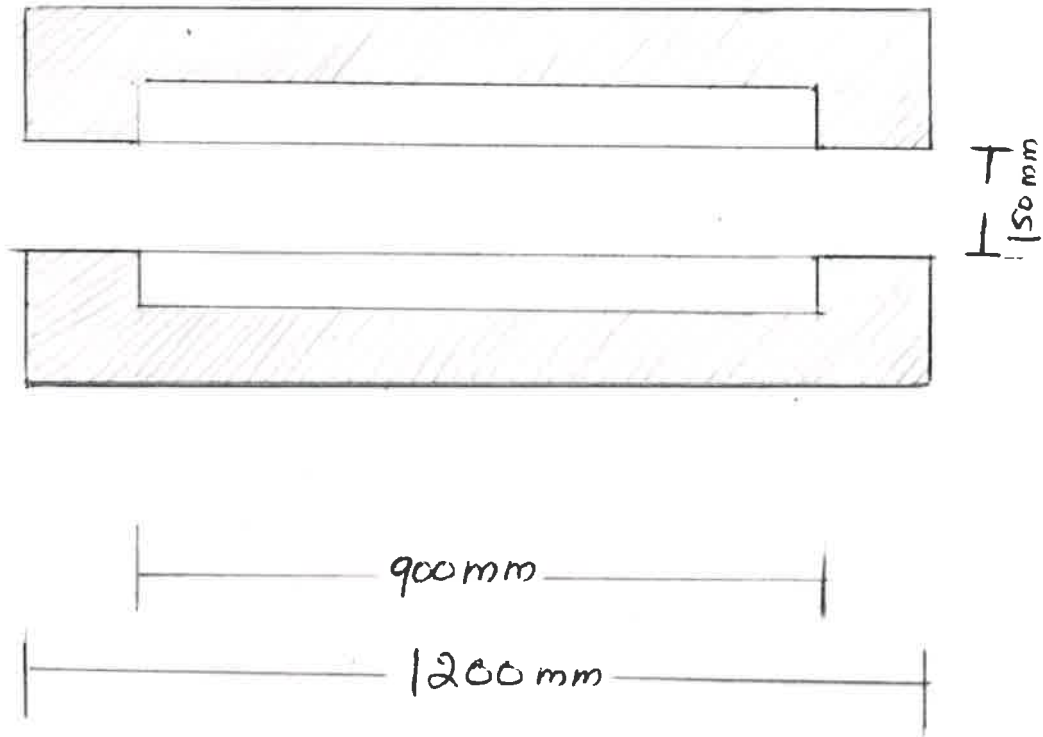
Optional items (to be quoted separately):

1. Heating elements: 1 set

General Requirements:

1. Details of installations: Party must have the prior experience of manufacturing & supply of similar type of furnaces. Give details of the number of installations in India, particularly in Hyderabad (mention the contact telephone numbers and addresses)
2. Warranty: 12 months onsite warranty from the date of installation and complete demonstration
3. Site and power requirements: Party should submit the prerequisites including site and power point requirements well in advance before supply of the system
4. Sets of all manuals: Operation, maintenance, drawings etc should be supplied along with instrument
5. Submission of Tenders: The interested parties should submit their quotations by answering point by point as per tender requirement, which will be convenient for making Technical Comparative Statement (T-CST)

Schematic diagram of tube furnace



Ceramic tube - 150mm OD, 1200 mm length

Two ceramic plugs to be provided to insert both ends.

(in the company letter head)

BID FORM AND PRICE SCHEDULE

Tender Reference No. : ENQ. NO.: HD/PUR/SP-42/TF/01/2020-21/ 11830
Date : 22.06.2020

Name of the Stores/ : Tube Furnace
Goods/Equipment :

Sl. No.	Description	Qty	HSN CODE	Unit Rate (₹)	Amount (₹)
1	Tube Furnace	1 No.			
	GST				
	Freight Charges				
	Packing & Forwarding				
	Transit Insurance				
	TOTAL				

1. Payment Terms:
2. Bid Validity:
3. Delivery Schedule:
4. Place of delivery: C-MET, Hyderabad
5. Warranty, if applicable:
6. GST Registration No.:
7. Any other relevant information:

Signature of Tenderer _____

Name _____

Seal of the tenderer _____

(in the company letter head)

BIDDER'S DETAILS

1	Name of the supplied/party/firm	
2	Name of the authorized representative	
3	Communication address	
4	Telephone Nos	
5	Mobile Nos	
6	Fax and e-mail address	
7	Web address	
8	Bank details for payment through NEFT/RTGS	
9	Name of Bank	
	Branch	
	Account No	
	IFSC No	
	MICR No	
	Cancelled cheque for verification of above details	

(Signature & seal of the bidder)

(in the company letter head)

PRICE REASONABILITY CERTIFICATE

It is certified that the rates quoted _____ are not more than as charged to other Govt. /PSU's for similar supplies made in recent past. Copies of the supply orders received from other Govt/PSU's are enclosed alongwith the technical bid.

Signature of Tenderer _____

Name _____

Business Address _____

Seal of the Tenderer _____

(TO BE SUBMITTED ALONG WITH TECHNICAL BID)

(in the company letter head)

To,

Date:

The Administrative Officer
C-MET, IDA Phase III
Cherlapally,
Hyderabad 500 051

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No. _____ dated _____

Name of the Tender/Work:

Sir/Madam,

I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' for the web site(s) namely:

as per your advertisement, given in the mentioned website(s)/enquiry letter.

2. I/we hereby certify that I/we have read the entire terms & conditions of the tender documents from Page No. _____ to _____ (including all documents like Annexure(s), schedules(s), etc.) which form part of the contract agreement and I/We shall abide hereby by the terms/conditions/clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/organization too have all been taken into consideration, while submitting this acceptance letter.

4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document (s)/Corrigendum(s) in its totally/entirely.

5. In case any provisos of this tender are found violated, then your Department/Organizations shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully,

Name & Signature of the Supplier/Contractor/
Authorized signatory with Official stamp/seal

(TO BE SUBMITTED ALONG WITH TECHNICAL BID)

(in the company letter head)

UNDERTAKING/ DECLARATION

I/We having our office at _____ declare that I/we have never been blacklisted by any State Government/Central Government or any State/Central PSU.

2. I/We, _____ hereby declare that the particulars furnished by me/us in this offer are true to the best of my/our knowledge and I/We understand and accept that, if at any stage the information furnished by me/us are found to be incorrect or false, I/We am/are liable for disqualification from this tender and also liable for any penal action that may arise due to the above, besides being black listed.

3. I/We _____ hereby accept to provide Warranty/Guarantee, additional Warranty, Comprehensive AMC

4. This is also certified that the rates quoted in the financial bid are not more than the rates charged from any other Institution/Department/ Organization in the last six months. No Other charges would be payable by the Institute.

5. I/We _____ have gone through the terms and conditions and will abide by them as laid down above. I hereby undertake that the information provided above and elsewhere in the tender is true and the tender is liable to rejection if the same is found to be false or the information is found to have been suppressed by me.

Name & Signature of the Supplier/Contractor/
Authorized signatory with Official stamp/seal



PERFORMANCE SECURITY DEPOSIT:

On acceptance of Tender, the Contractor shall, within 21 days of the receipt of notification of award of purchase order / contract from C-MET, the Bidder shall furnish a Performance Security Deposit equivalent to 10% of the contract value in anyone of the forms as given below:

- i. Call Deposit Receipt or Pay Order or Demand Draft duly endorsed in favour of 'C-MET'.
- ii. Bank Guarantee from a Nationalized/Scheduled Bank in favour of 'C-MET' irrevocable and operative for the entire period starting from acceptance of the contract ending 60 days after completion of the warranty period or 20 months, whichever is longer.
- iii. In case the vendor/supplier/contractor would like to submit security performance security Deposit by Bank guarantee (BG), then the original BG shall be routed through the banker to Purchaser directly by registered post with acknowledgement due. In case the BG is handed over to the vendor/supplier/contractor by the bank for any genuine reasons, the BG issuing branch shall immediately send an unstamped duplicate copy of the BG directly to Purchaser by registered post with acknowledgement due with the covering letter to verify the BG issued by us and confirm that it is in order. The vendor/supplier/contractor shall comply this provision meticulously.
- iv. Fixed Deposit Receipt issued by Nationalized/Scheduled banks endorsed in favour of 'C-MET Hyderabad'.
- v. The Performance Security Deposit is required towards fulfillment of the Purchase order / Contract obligations. This Security Deposit will be forfeited in case the successful Bidder fails to execute the Purchase order/ Contract.
- vi. Failure of the successful Bidder to comply with the requirement of the Sl.No. 28 can constitute sufficient grounds for the annulment of the award in which event C-MET may call for new bids.
- vii. If the Contractor is called upon by the Purchase to deposit "Security" and the Contractor fails to provide the Security within the period specified such failure shall constitute a breach of Contract and the Purchaser shall be entitled to make other arrangements for the re - purchase of the stores contracted for at the risk and expense of the Contractor in terms of Sl. No. 10(ii)(c) hereof and/or recover from the Contractor damages arising from such cancellation. No claim shall lie against the Purchaser either in respect of interest if any due on Security Deposit or depreciation in value.

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY DEPOSIT

To

The Administrative Officer
C-MET, IDA Phase-III
Cherlapally, HCL Post
Hyderabad – 500 051
Andhra Pradesh, India

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no _____ dated _____ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to 20 (twenty) months from the date of Notification of Award i.e up to ----- (indicate date)

.....
(Signature with date of the authorized officer of the Bank)

.....
Name and designation of the officer

.....
Seal, name & address of the Bank and address of the Branch

(TO BE SUBMITTED ALONG WITH TECHNICAL BID)

(in the company letter head)

Technical compliance statement in r/o TUBE FURNACE

Technical Requirement	Technical Specification	Specifications of quoted Model	Compliance whether "YES" OR "NO"	Deviation, if any, to be indicated in unambiguous terms	Remarks
GENERAL	A horizontal tube furnace is required for the processing of carbides/oxides and chemical treatment with reactive gases. The system is to be designed and fabricated to take care of load, capacity and temperature uniformity as per detailed specifications				
<u>DETAILED TECHNICAL SPECIFICATIONS:</u>					
Maximum temperature	1350°C				
Continuous working temperature	1300°C				
Power rating	~20kVA, (415V, 50Hz, 3Phase power supply)				
Heating Elements	Silicon carbide heating elements arranged in three heating zones in such a way that there should not be any cold zones between the zones. Uniformity $\pm 5^{\circ}\text{C}$ within zones (Typically 18 Nos. of SiC heaters arranged six per zone)				

Technical Requirement	Technical Specification	Specifications of quoted Model	Compliance whether "YES" OR "NO"	Deviation, if any, to be indicated in unambiguous terms	Remarks
Thermocouple	R type duplex thermocouple - 3 sets. (one each for zones). R-type thermocouple -1 No. (500mm long) for measuring temperature inside the tube RTD- 3 Nos. to be supplied along with cables (total 10 m cables)				
Temperature Controller	Three nos. of Eurotherm controllers (or equivalent make) with three thyristors one each for individual zones. Thyristor power control phase angle fired for each zones individually. Controller should have provision for programming at least eight segment pairs (ramp and dwell) It should correct for drift and gives high stability and rapid response to process changes Controller accuracy: $\pm 1^{\circ}\text{C}$				
Over temperature Controller	3 Nos. of failsafe controllers should be provided for safety in the event of control failure or over heating.				
Temperature indicators	1 No. for R-type thermocouple 3 Nos. for RTDs				
Insulation	High quality insulation to be provided and the skin temperature should not be more than ambient + 20°C at maximum working temperature. Inner most side should be lined with 3" Cumilag bricks backed with 2" ceramic board (1450°C) and ceramic board (1250°C).				

Technical Requirement	Technical Specification	Specifications of quoted Model	Compliance whether "YES" OR "NO"	Deviation, if any, to be indicated in unambiguous terms	Remarks
Construction	<p>Tube furnace : Side loading Inner chamber 900mm X 200mm X200 mm. Total hot zone length- 800mm Ceramic tube – 1200mm length, (150mm each in the insulation area and 900mm in the heating area), 150mm outer dia capable of withstanding 1450°C on continuous operation under working load. Furnace should be robust, the system is supposed to take load of 10kg load on the ceramic tube while heating at maximum temperature. It should have the frame structure with steel, rust proof sheets and finished with epoxy powder coating.</p>				
Control Box	<p>Separate control box to be housed with necessary switches, current and voltage meters, indicating lamps, temperature controllers, temperature indicators etc.</p>				
Schematic Diagram	<p>Party should provide a schematic diagram of the furnace describing arrangement of the heating elements, lining, chamber details etc.</p>				
OPTIONAL ITEM:					
Heating elements: 1 set					

Technical Requirement	Technical Specification	Specifications of quoted Model	Compliance whether "YES" OR "NO"	Deviation, if any, to be indicated in unambiguous terms	Remarks
GENERAL:					
	Details of installations: Party must have the prior experience of manufacturing & supply of similar type of furnaces. Give details of the number of installations in India, particularly in Hyderabad (mention the contact telephone numbers and addresses)				
	Warranty: 12 months onsite warranty from the date of installation and complete demonstration				
	Site and power requirements: Party should submit the prerequisites including site and power point requirements well in advance before supply of the system				
	Sets of all manuals: Operation, maintenance, drawings etc should be supplied along with instrument				

Signature of Tenderer _____

Name _____

Business Address _____

Seal of the tenderer _____

Place:

Date: