वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research

राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories



INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/MSD/010/21-Y

Dated: 13-Jul-2021

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation for procurement of the following item(s) for day to day research work.

SI.No.	Description of Items	Unit	Quantity
31.140.	High Temperature Controlled Atmosphere Furnace having Specifications;	Nos	01
	Working Temperature: 1800°C, Useful Hot Zone: 200mm X 200mm X200mm Furnace Atmosphere: High purity N2, Vacuum level = 10-1 mbar and Gas		
	purging facility. (Please refer annexure for detailed specification)	ė	

Single / Double Bid	Single	Tender Type	Limited	
	Bid Security Declaration should be enclosed with quotation	Bid submission end date	02-Aug-2021 10.00 Hrs	
Performance Security	Nil	Bid opening date	03-Aug-2021 11.00 Hrs	

- O1. Tender Documents may be downloaded from Central Public Procurement Portal https://www.etenders.gov.in. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website https://www.etenders.gov.in. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
- O2. Tenderers can access tender documents on the website (For searching in the NIC site https://www.etenders.gov.in, kindly go to Tender Search option, select tender type and select 'Council of Scientific and Industrial Research' in organization tab and select NAL-Bengaluru-CSIR in department type Thereafter, Click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://www/etenders.gov.in as per the schedule given in the next page.
- O3. Either the Indian Agent on behalf of the Foreign principal or the Foreign principal can bid directly in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.
- O4. Unsolicited / conditional / unsigned tenders (Quotations)/Quotations received after the due date and time shall be summarily rejected. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- O5. The Bidders proposing to supply finished products directly/indirectly from vendors of countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs.

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पी बी सं. 1779, एचएएल एयरपोर्ट रोड , कोडिहल्ली, बेंगलुरु - 560 017, भारत, P B No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA फोन / Phone : (का./ Off): +91 - 80 - 2508 6040 - 45, फैक्स / FAX: +91-80-2526 9611







CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA

06. If the Products supplied are not from vendors of countries sharing land border with India, the Bidders have to enclose a declaration to that effect.

The bids of those Bidders failing to comply with the above clauses will be summarily rejected.

- 07. Bidders are requested to refer to the instruction regarding Procurement Policies for Make in India issued by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 28-May-2018 and 4-Jun-2020 and guidelines as and when issued.
- O8. The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet (<u>www.nal.res.in</u>) under the icon Tender-Purchase before formulating and submitting their bids
- 09. The Director, CSIR- National Aerospace Laboratories, Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.
- 10. Participation in this tender is by invitation only and is limited to the selected bidders. Unsolicited offers are liable to be ignored. However, bidders who desire to participate in such tenders in future may bring it to the notice of Procuring Entity and apply for registration

Raman Kumar Stores & Purchase Officer High Temperature Controlled Atmosphere Furnace having Specifications; Working Temperature: 1800° C, Useful Hot Zone: 200mm X 200mm X 200mm Furnace Atmosphere: High Purity N_2 , Vacuum level = 10^{-1} mbar and Gas purging facility.

The detailed specification of High temperature controlled atmosphere furnace

Item	Description
Working Temperature	1800°C
Useful Hot Zone	200mm X 200mm X 200mm
Furnace Atmosphere	High Purity N ₂
Temperature controller	PID Controller – Eurotherm Make
Safety controller	Eurotherm Make
Power control	Through Thyrister power pack, Eurotherm make and Transformer of required rating
Control Panel	Separate self standing cabinet with safe electrical and electronics systems
Heating element	Molybdinum disiliside compatible with Nitrogen atmosphere
Temperature sensor	Thermocouple to measure up to 1800°C
Heating Rate	Rapid heating 1 to 20°C / Min
Accuracy	±1°C
Furnace Chamber / Casing and all other fitting	High quality SS
Insulation	Appropriate High temperature ceramic Insulation with stable fitting
Hot Zone area to load samples	200mm X 200mm X 200mm With sufficient distance from heating elements to avoid thermal shock
Vacuum Pump system	Rough vacuum level of 10 ⁻¹ mbar and appropriate measuring gauges
Gas purging/Circulation Facility	High purity gas to be purged and circulated/Flown into the Hot Zone/Chamber
Gas Inlet and Outlet into hot chamber	Appropriate connection in to the hot chamber to circulate Inert Gas
Ports in the furnace body	Required number of ports for gas circulation
Furnace Door / Loading	Front Opening / Front Loading
Skin temperature	Just above ambient
Warranty	1 year from the date of installation



BID-SECURING DECLARATION FORM

Date:
Bid No
To (insert complete name and address of the purchaser)
I/We. The undersigned, declare that:
I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.
I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We
(a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
(b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
(i) fail or refuse to execute the contract, if required, or
(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.
I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.
Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).
Name: (insert complete name of person signing he Bid Securing Declaration)
Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)
Dated on day of(insert date of signing)
Corporate Seal (where appropriate)

Note:

- 1. In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.
- 2. Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.