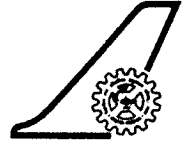


वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्  
Council of Scientific & Industrial Research  
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं  
National Aerospace Laboratories



CSIR - NAL Estd. 1959  
ISO 9001 : 2015  
Certified Organization

INVITATION FOR BIDS/NIT

Tender No: CCFP/PUR/2K20/45

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.

Sl.No.	Description of Items	Unit	Quantity
1	Compressed air unit as per attached specification	No	1

Bid Security (EMD) (in INR)	Bid Securing Declaration Form to be submitted.
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01.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'.

02.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.


03.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.

04.Unsolicited / conditional / unsigned tenders (Quotations) shall not be considered. Quotations received after the due date and time shall be summarily rejected.

05.The amount of the Performance Security shall be 10% of the contract value to be submitted within 21 days from the date of Purchase Order valid up to 60 days after the date of completion of performance obligations including warranty obligations.

06.The Bidder shall comply the terms and conditions of the tender, failing which; the offer shall be liable for rejection.

07.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.

  
Raman Kumar  
Section Officer (S&P)  
For & Behalf of CSIR-NAL

पी बी सं. 1779, एचएएल एयरपोर्ट रोड , बेंगलूर- 560 017, भारत.

P B No 1779, HAL Airport Road, Bengaluru - 560 017, INDIA

फोन / Phone : ( का./ Off ) : +91 - 80 - 2508 6097 / 6710, फैक्स / FAX : +91-80-2526 9611

<http://www.nal.res.in>

 [purchaseccadd@nal.res.in](mailto:purchaseccadd@nal.res.in)

**Technical specifications for compressed air plant**

1) Application

The new compressed air plant will be used to supply instrument air **on continuous duty**.

2) Plant capacity

100 Nm<sup>3</sup>/h @ 8 kg/cm<sup>2</sup>

Capacity control limits: 0 – 50% - 100%

3) Type of compressor

Reciprocating, non-lubricating

4) Compressor make

Chicago Pneumatic/ Ingersoll Rand

5) Compressor motor

4 Pole, Squirrel cage Electric Motor in TEFC enclosure and suitable for 440 V, 5%, 50 Hz, 3 phase electric supply, SF 1.2, with 40 °C ambient and 'F' class insulation.

6) Compressor cooling

Water cooling (open system with water circulation)

7) Components of the unit

- Air compressor
- After cooler
- Pressure switches, isolation valves and interconnection piping
- Safety valves
- Electrical control panel with starter
- Associated instrumentation, hoses, cable trays etc.,

8) Mounting

All the components shall be mounted on channel frames in a compact layout while also ensuring convenient access for operation

9) Air piping

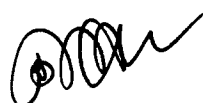
All interconnecting air-piping within battery limits including non-return valves & isolation valves are in the scope of supplier.

10) Safety interlocks

- Compressor loading and unloading
  - Compressor high temperature trip
- And other necessary interlocks

11) Electrical control panel requirements

- PLC based control for the compressor



- The panel shall have an independent MCCB (L&T/ Siemens make) of appropriate rating with shunt trip and shall have at least 50kA short handling capacity.
- Panel shall have ELR with CBCT etc.,
- Bus bars shall be of copper and with cooling fan etc.,
- The panel shall be fully enclosed to prevent ingress of atmospheric dust.
- Provision of proper cable entry and glanding arrangement for the incoming power cable with appropriate space for larger bending radius.
- Main MCCB shall have external rotary handle to operate.
- Double copper earthing shall be provided.
- Control/power cabling shall be connected using appropriate lugs for termination.

12) Address for supply & installation

Centre for Carbon fibers and Prepregs (CCFP),  
CSIR-National Aerospace Laboratories – Belur,  
NAL Wind Tunnel road, Bangalore – 560037.

13) Space available for installation

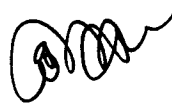
The plant will be located indoors on concrete floor space indicated below.  
3.2 m X 2.5 m x 8 m

14) Utilities available at NAL site

Cooling water @ 3 kg/cm<sup>2</sup>  
Electrical power 440V +/- 5%, 50 Hz

**Note to the Supplier**

- The scope is design, supply, unloading, erection, installation, commissioning and performance demonstration
- Desiccant dryer of capacity 100 NM<sup>3</sup>/h is available within 5 mtr of compressor mounting location at NAL site. The supplier has to connect the compressor output to this desiccant dryer unit.
- The supplier has to submit Single Line Drawings for NAL's concurrence.
- Warranty period shall be one year from the date of commissioning and acceptance.
- Instrument cable and power cable are to be laid in separate cable trays



## Terms & Conditions

Delivery Term	FOR- NAL
Delivery Schedule	Within 90 days from the date of PO
GST	Extra @ 5% against Concessional GST Exemption Certificate
Payment Term	NAL Term (Payment would be made within 30 days, only after receipt of material in good conditions, inspection and acceptance by end user).
Freight & Insurance(if any)	
Packing & Forwarding(if any)	
Warranty Certificate (if any)	
Any other Certificates (if any)	



CCFP/PUR/2K20/45

**SCHEDULE CUM CRITICAL DATE SHEET**

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	<b>CCFP/PUR/2K20/45</b>	
3	Tender Type (Open/Limited/EOI/Auction/Single)	<b>Open Tender</b>	
4	Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)	Supply	
5	No of Covers (One/Two/Three/Four)	One	
6	Tender Category (Services/Good/Works)	Good	
7	Allow Resubmission (Only in online mode within scheduled period)	Yes	
8	Allow Withdrawal (Only in online mode within scheduled period)	Yes	
9	Allow Offline Submission	No	
10	Work Item Title	<b>Compressed Air Unit</b>	
11	Work Description	<b>Compressed Air Unit as per attached specification</b>	
12	Delivery Schedule	90 days	
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment	
14	Is Multi Currency Allowed	No	
15	f) Tender Publishing Date -	09 Dec 2020	1800 Hrs
	g) Document download start Date:	09 Dec 2020	1800 Hrs
	h) Bid Submission Start Date	09 Dec 2020	1800 Hrs
	i) Bid Submission End Date-	31 Dec 2020	1000 Hrs
	j) Bid Opening Date-	01 Jan 2021	1100 Hrs
16	Bid Validity Days	90 days	
17	Address for communication	Stores and Purchase Officer CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017	
18	Inviting Officer	Director, CSIR-NAL	
19	Contact No	25086097, 25086710	
20	E-mail Address	purchaseccadd@nal.res.in/spo@nal.res.in	
21	Detailed specification of item	Invitation for bids / NIT	
22	Tender Terms & Conditions & Instruction for online bid submission	The prospective bidders are requested to refer to the Standard Tender Document available on NAL internet( <a href="http://www.nal.res.in">www.nal.res.in</a> ) under the icon Tender-Purchase before formulating and submitting their bids.	

**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
	Having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
b)	I.fail or reuse 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 the 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.

Tender No.:

**PERFORMANCE SECURITY FORM/STAND-BY LETTER OF CREDIT**

**MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY/ STAND-BY LETTER OF CREDIT**

To,  
.....

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 until the ..... day of ....., 20.....

(Signature of the authorized officer of the Bank)

.....  
Name and designation of the officer

.....  
Seal, Name & Address of the Issuing Branch of the Bank

Note:  
Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.