वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्

Council of Scientific & Industrial Research

राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories



Dated: 30-Jan-2021

INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/ACD/441/20-Y

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
1	Single Stage, Oil sealed, Air cooled Rotary vane vacuum pump on continues duty and accessories.	Nos	3
	Please refer Annexure for detailed specification.		

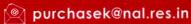
Single / Double Bid	Single	Tender Type	Open
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation	Bid submission end date	18-Feb-2021 10.00 Hrs
Performance Security	3% of the purchase order value	Bid opening date	19-Feb-2021 11.00 Hrs

- 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'.
- 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.
- 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 Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- 06. The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids
- 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 Stores & Purchase Officer

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





Ref: NAL/PUR/ACD/441/20-Y

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Annexure-1

Specification for the Single stage, Oil sealed, Air cooled, rotary vane vacuum pump on continues duty for the vacuum applications.

1.	Nominal pumping speed at sea level	180 to 200 m³ /hr	
2.	Ultimate partial pressure with standard gas ballast closed	≤ 0.1mbar	
3.	Ultimate partial pressure with standard gas ballast open	≤ 1.5mbar	
4	Water Vapor pumping capacity kg/hr	1.5 to 4	
5	Water Vapor tolerance	20 to 40 mbar	
6.	Motor power	3 phase, 415V+/-10%, 50Hz, Suitable for the pump	
7.	Inlet connection	KF 50 flange	
8.	Outlet connection	G 2"F	
9.	'O' rings and seal	Viton	
10.	Application area	Clean Room(new) - 02 Nos Layup Room in Autoclave Complex - 01No	
	No.of Pumps	03 Nos	

11. Pump with the following built- in attachments

- In-built pump isolation (Anti-suck back)
- Standard gas- ballast
- Screen filter at pump inlet and outlet

12. Other accessories

i.	500mm long SS bellow, 50mm bore welded with both side KF-50 flanges 03 nos.
ii.	KF-50 flange (to connect vacuum pump to the Reservoir pipe)03 no
iii.	Coupling clamp for KF-50 flange along with SS 'O' ring holder with Viton 'O' ring- 06 nos.
iv.	Vacuum oil-for the pump100 ltrs.
٧.	Repair kit containing a set of vane, Cartridge, 'o' rings, Gasket seal, oil filter, air filter,
	Float valve kit, Bearing and spider etc03sets
vi.	Electric starter with ISI mark suitable for the pump motor03 nos



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13. General Instructions:

- i. Give a separate quote for the other accessories i.e sl no:11 with item vise separate cost to enable us to select the required part at the time of placing purchase order.
- ii. Oil of 100 ltrs is to be supplied in small cans of each 20 ltrs.
- iii. Pumps have to be supplied with a charge of oil in a separate container.
- iv. The pump has to be guaranteed for the minimum period of 18 months from the date of supply or 12 months from the date of commissioning whichever is earlier.
- v. Comprehensive on site guarantee including parts and labour without any exception.
- vi. Free delivery to the NAL stores, commissioning has to be carried out at NAL site by the firm. NAL will provide required power and Electric cable.
- vii. Firm is responsible for the transit and handling damages.
- viii. Three sets of operation and maintenance manuals have to be supplied.
- ix. During the guarantee period if any problem arises for the Motor, it has to be replaced with new motor at free of cost.
- x. Quote with relevant catalogues.
- xi. The pumps should accompany with relevant test certificates.
- xii. Each pump has to be supplied with dummy caps 2 nos suitable for pump inlet and outlet connections.

14. ATP (Acceptance Test Plan)

The following tests are to be demonstrated at factory before delivery to NAL:

- i. Pump flow capacity, which can be tested by measuring the time taken to evacuate a known volume to the vacuum level of ≤1.5mbar when the gas ballast is open.
- The pump should be run with a full flow capacity for the minimum period of one hour. During this period the temperature of the pump body should not exceed 65 deg.C.
- iii. During running of the pump with full flow capacity there should not be any trace of oil coming from the exhaust pipe.

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	ion.
I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one grow the date of notification if I am /We are in a breach of any obligation under the bid conditions, becal/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	ing
(b) having been notified of the acceptance of our Bid by the purchaser during the period of bid valid	lity
(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 Bidders.	to
I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the success Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) the 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.