

INVITATION FOR BIDS/NIT

Tender No: APMF/PUR/2K19/166

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	Supply, installation & commissioning of Turret Ram Milling Machine as per Annexure - A	No.	1
Single / Double Bid		Single	
Bid Security (EMD) (in INR)		Bid Securing Declaration Form to be submitted	

1.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'.

2.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.

3.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.

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

5.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.

6. Bidder Eligibility Criteria

- (i) The bidder should have supplied at least two numbers of similar machines in the last three years. The bidder to provide list of installation in India along with the copies of Purchase Order, customer satisfactory report and year of supply.

P.T.O

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- (ii) The bidder should enclose the test charts for the machine supplied and also provide details of customers, contact persons and phone number.
- (iii) The bidder should have sales and service office in India and should be capable of attending and resolving technical issues within 48 hours of lodging the complaints. Bidder to provides details of sales and service office in India.
- (iv) **Not providing the above details could lead to disqualification of bid.**

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

8. 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

Supply, Installation & Commissioning of Turret Ram Milling Machine

Quantity-01 No.

Technical Specifications of Turret Ram Milling Machine

Note: Vendors should provide the compliance statement in tabular format only. Appropriate values shall be furnished wherever possible.

Sl.No.	Description	Specification	Bidders Compliance & Remarks
1.0	Table Details:		
1.1	Overall Size (length x Width)	1200 x 230 mm or better	
1.2	Working Range	1200 x 200 mm or better	
1.3	Number of T -Slots	3	
1.4	Width of T-Slots	Bidder to Specify	
1.5	Center Distance	Bidder to Specify	
2.0	Traverse Details:		
2.1	Longitudinal Manual	900 mm or more	
2.2	Longitudinal Traverse With Power feed	800 mm or more	
2.3	Cross Manual	290 mm or more	
2.4	Cross Traverse with power feed	220 mm or more	
2.5	Vertical	400 mm or more	
2.6	Ram travel	+/- 300 mm or more	
3.0	Spindle Details:		
3.1	Quill Travel	125 mm or more	
3.2	Spindle Taper	R8 / ISO 30	
3.3	R 8 /ISO 30 Collets	Required, Bidder to Specify	
3.4	Draw Bolts	Required, Bidder to specify	
3.5	AC Power Rating	3HP or better	
4.0	Speed Range		
4.1	Low	60-500 rpm	
4.2	High	500-4200 rpm	
5.0	Drilling Capacity:		
5.1	Power Quill Feed:	Required, Bidder to Specify	
5.2	Boring Range: Diameter up to 120 mm	Required, Bidder to Specify	
6.0	2- Axis (X,Y) Digital Read Out	Required	
7.0	Automated Lubrication System	Required	
8.0	Machine Lamp	Required	
9.0	Coolant System with Pumps	Required, Bidder to Specify	
10.0	Head Stock Inclined(+/- 45°)	Required, Bidder to Specify	
11.0	Mounting / Leveling Pad	Required	
12.0	Grouting Bolt	Required	
13.0	Coolant System	Required	
14.0	Power Feed	Required	
15.0	Accuracy required:		
15.1	Test Chart	Required, Bidder to provide test chart of similar class of machines.	

15.2	Flatness of Work table across and along	0.04/1000mm	
15.3	True running of the internal taper of main spindle.	0.01 mm	
15.4	Axial slip of main spindle.	0.01 mm	
15.5	Parallelism of the clamping surface of the work-table in the Longitudinal motion.	0.03 mm	
15.6	Squareness of the worktable surface to the main spindle.	0.02 mm	
15.7	Parallelism of the ram guide ways with the table transverse movement. Ram in any one position.	0.02/300 mm	
15.8	Parallelism of the worktable to the transverse movement.	0.02mm for complete width of table	
15.9	Parallelism of the centre T-slot with the longitudinal movement of the table.	0.03 mm / 1000mm length	
15.10	Squareness of the centre T-slot of worktable to the transverse movement.	0.02 mm over full width of table	
15.11	Squareness of the main spindle head to the worktable.	0.02 mm	
15.12	Squareness of the table surface with a) Column face, b)V-Guides of the column	a) 0.03 mm b) 0.03 mm	
16.0	Warranty	Required, On-site Comprehensive warranty for a period of 24 months from the date of acceptance of Machine	
17.0	Training	Required for a period of four working days at APMF, CSIR NAL, Belur Campus, Bangalore-560 037.	
18.0	Floor Space	Bidder to specify & provide machine layout drawing	
19.0	Essential Standard Accessories		
19.1	Self-Centering Vice, holding up to 50 mm	1 No.	
19.2	Self-Centering Vice, holding up to 75 mm	1 No.	
19.3	Circular Table (Diameter 200 mm)	1 No.	
19.4	Micro Boring with Set of Tools from 10-80 mm	1 set	
19.5	Semi Universal Dividing Head with Tail Stock.	1 Set	
19.6	Machine Vice with Swivel Base, Jaw Opening up to 50 mm	1 No.	
19.7	Machine Vice with Swivel Base, Jaw Opening up to 75 mm	1 No.	

19.8	Machine Vice with Swivel Base, Jaw Opening up to 100 mm	1 No.	
19.9	Clamping Kit	1 Set	
19.10	Centering Dial Indicator	1 No.	
19.11	R8 /ISO 30 Collet Sets(4,5,6,8,10,12,14,16,18,20 mm)	1 set	
19.12	R8 /ISO 30 Collet Arbor	1 No.	
19.13	R8 /ISO 30 Adopter for Keyless Drill Chuck from (3-6mm)	1 No.	
19.14	R8 / ISO 30 Adopter for Keyless Drill Chuck from (6-12mm)	1 No.	
19.15	R8 / ISO 30 Morse Taper-3 Adopter	1 No.	
19.20	Double End Spanner 17-19 mm	1 No.	

Other Terms & Conditions:

1. The Turret Ram Milling machine should be of proven design and of latest technology.
2. The machine shall be compact, rigid and equipped with accessories to machine all types of materials viz. Steels, 17-4 PH Stainless steels, MDN 250 etc. typically encountered in aerospace applications.
3. The bidder should have supplied at least two numbers of similar machines in the last three years. The bidder to provide list of installation in India along with copies of Purchase Order, customer satisfactory report and year of supply.
4. The machine quoted should be of standard type and technical broucher should accompany the quote.
5. The bidder should enclose the test charts for the machine supplied and also provide details of customers, contact persons and phone number.
6. Not providing the above details could lead to disqualification of bid.
7. The bidder should have sales and service office in India and should be capable of attending and resolving technical issues within 48 hours of lodging the complaints. Bidder to provide details of Sales and Service office in India.
8. Delivery schedule- 6 months from the date of issue of Purchase Order.
9. Installation & Commissioning: The scope of supply shall include installation and commissioning of machine at APMF, CSIR-NAL, Belur Campus, Bengaluru, 560037. The supplier shall arrange all necessary material handling equipment and man power for installation of machine as designated site at APMF, Belur, CSIR-NAL, Bangalore free of cost.
10. Bidder should come and inspect the place of installation and commissioning.



APMF/PUR/2K19/166

SCHEDULE CUM CRITICAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	APMF/PUR/2K19/166	
3	Tender Type (Open/Limited/EOI/Auction/Single)	Open Tender	
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	Supply, installation & commissioning of turret Ram Milling machine as per Annexure - A	
11	Work Description	Supply, installation & commissioning of turret Ram Milling machine as per Annexure - A	
12	Delivery Schedule	6 Months from the date of Purchase Order	
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment	
14	Is Multi Currency Allowed	Yes	
15	f) Tender Publishing Date -	10 Jan 2020	1800 Hrs
	g) Document download start Date:	10 Jan 2020	1800 Hrs
	h) Bid Submission Start Date	10 Jan 2020	1800 Hrs
	i) Bid Submission End Date-	03 Feb 2020	1000 Hrs
	j) Bid Opening Date-	04 Feb 2020	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	purchasecadd@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(www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids.	