

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. NAL/PUR/MSD/653/19-Y

Dated: 27-May-2020

28

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	Design, Fabrication, Supply and Commissioning of methyltrichlorosilane (MTS) transfer kit. (Refer the annexure for detailed specifications and drawing).	Nos	1
2.	Barrel (200 ltrs.) Tilter	Nos	1

Single / Double Bid	Single
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation
Performance Security	10% of the purchase order value

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

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

SCHEDULE CUM CRITICAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	NAL/PUR/MSD/653/19-Y dated: 28-May-2020	
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)	Goods	
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	Design, Fabrication, Supply and Commissioning of methyltrichlorosilane (MTS) transfer kit and Barrel (200 ltrs.) Tilter.	
11	Work Description	Design, Fabrication, Supply and Commissioning of methyltrichlorosilane (MTS) transfer kit and Barrel (200 ltrs.) Tilter.	
12	Delivery Schedule	60 days 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	a) Tender Publishing Date -	28-May-2020	1800 Hrs
	b) Document Download Start Date-	28-May-2020	1800 Hrs
	c) Bid Submission Start Date-	28-May-2020	1800Hrs
	d) Bid Submission End Date-	11-June-2020	1000 Hrs
	e) Bid Opening Date-	12-June-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	25086040, 25086041	
20	E-mail Address	purchasek@nal.res.in	
21	Detailed specification of item	Refer 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	

1. Design, Fabricate, Supply and Commissioning of Methyltrichlorosilane (MTS) chemical transfer kit as per the information (specification, drawings, etc.) supplied.**Technical specification**

Methyltrichlorosilane (MTS) is a corrosive liquid chemical (density= 1.27 g/cc and viscosity- 0.48 mPa s) needs to be transferred safely from the supplier's drum to the specially designed MTS storage tank. The transfer is by pumping through diaphragm pump (SS 316L, corrosive resistant) which is pneumatically operated. The transfer kit should be mounted on the trolley so that kit can be moved as required. The kit should have mini PLC and suitable HMI for the safe MTS transfer operation on auto/manual mode.

All the line/parts (liquid wetting) should be SS316L for better corrosion resistance. Tubing, valves and other fittings should be from swagelok

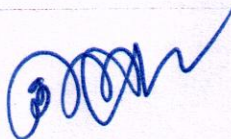
Major BOM (not exhaustive)

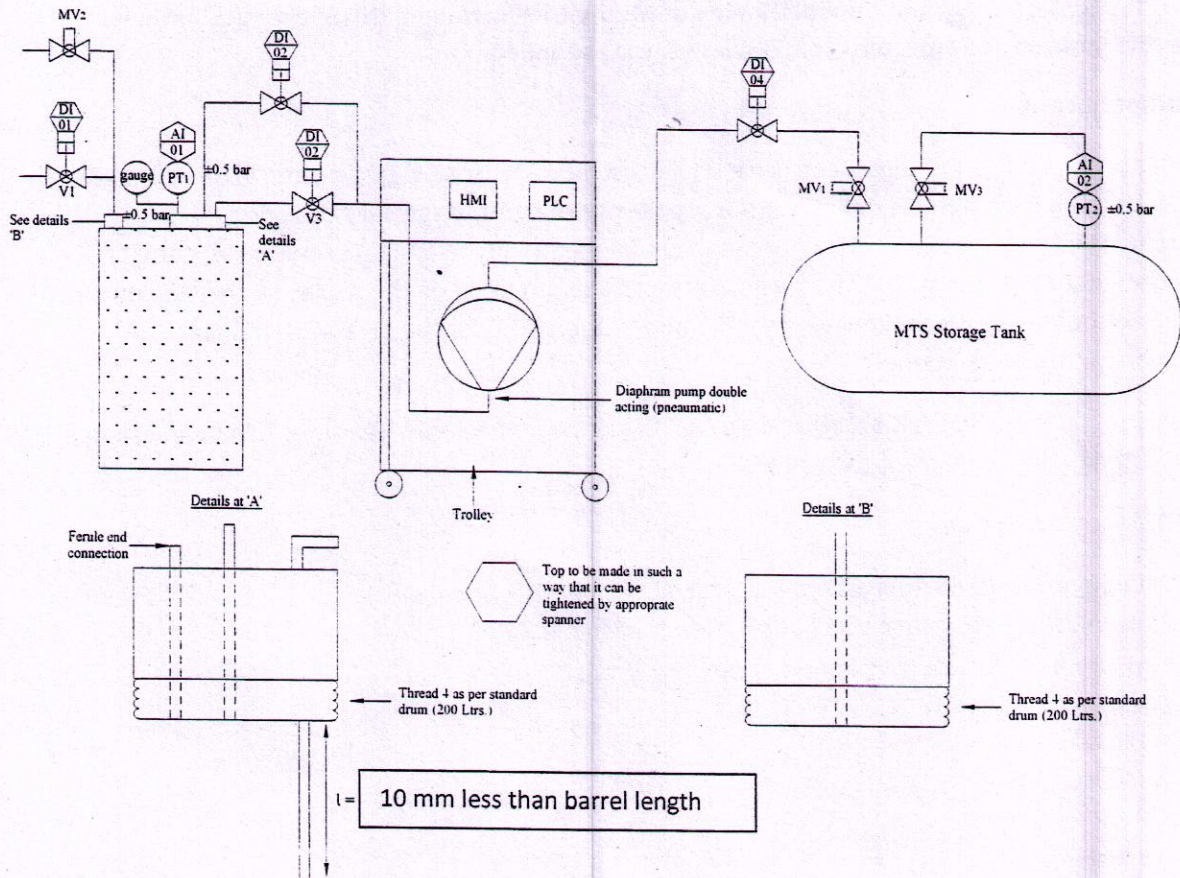
1. Diaphragm pump-SS (Blagdon or equivalent) 1 nos + 1 spare
(fluid inlet/outlet : ¼ inch BSP (F), air inlet: ¼ inch BSP (F))
2. Pressure transducer (± 0.5 bar / ± 1 bar) : 2 nos + 1 spare
3. Valves with actuator 4 nos
4. Manual valves
5. Mini PLC
6. HMI
7. Control Panel
8. Trolley
9. SS316L Tubing as required
10. Cable of sufficient length (10-15 mtrs)

NB: Please consider all the items required (fittings) while designing the kit.

Preliminary Design Review (PDR)

Once the design/drawings and PLC sequence are ready, documents can be submitted to CSIR-NAL for approval before procuring the items. Once the transfer kit is ready, a trial can be taken with 200 ltr drum with distilled water to check the smooth operation.

Drawing



PID of Transfer KIT

NB:

- Tubing/line diameter-10 mm and MTS storage tank is not in your scope
- PID is only indicative and vendor to consider additional items as required for the better safety

Acceptance Criteria

1. Items should be as per our specification
 2. Calibration/Inspection certificate to be provided
 3. Successful and safe transfer of MTS from the drum to storage tank at NAL
2. Barrel (200 ltr) Tilting facility : To tilt the drum (having left over MTS) for disposing the MTS safely.

[Handwritten signature]
28/5/2020

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.