



भारतीय मानक ब्यूरो  
BUREAU OF INDIA STANDARDS

उत्तरी क्षेत्रीय प्रयोगशाला : बी-69, फेस VII, इण्डस्ट्रीयल फोकल प्वाइंट,  
एस.एस. नगर, मोहाली 160051 (पंजाब)  
Northern Regional Laboratory : B-69, Phase VII, Industrial Focal Point  
S.A.S. Nagar, Mohali 160051 (Punjab)

दूरभाष	3246935 / 2236686	तार	: मानकसंस्था
Phones	2236218/2236722	Grams	: Manaksanstha
Fax	0172-2237212		

Our Ref: NROL(C)/2007/BNC02

Date: 08-03-2007

**Subject: SUPPLY OF LAMINAR AIR FLOW- VERTICAL**

Dear Sirs,

This is in continuation to our tender of even no dated 14.2.2007; we are pleased to inform you that the last date for submission of Technical & Commercial Bids has been extended as per the details given below:

- A. Tender documents will be accepted till 1700 h, on **21<sup>st</sup> March 2007**
- B. The technical Bids shall be opened in the Conference Hall, at the same address **at 1130 h on 22<sup>nd</sup> March 2007** and in the presence of such tenderers or their duly authorized representatives, who may like to attend.

The specification and terms & conditions can be downloaded from BIS Website – [www.bis.org.in](http://www.bis.org.in). Other terms and conditions remain the same.

Thanking you,

Yours faithfully,

**Scientist-F & Head  
(NROL)**



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Phones	2236218/2236722	Grams	: Manaksanstha
Fax	0172-2237212		

Our Ref: NROL(C)/2007/BNC02

Date: 14-02-2007

Subject: SUPPLY OF LAMINAR AIR FLOW- VERTICAL

Dear Sirs,

Technical & Commercial Bids are invited for the supply of **Laminar Air Flow- Vertical**, from the nationally reputed & bonafide manufacturers/authorized dealers in separate SEALED covers, which should reach the undersigned latest by 1700 h. on **8<sup>th</sup> March 2007**, at the following address:

BUREAU OF INDIAN STANDARDS  
Northern Regional Laboratory,  
Plot No. B-69, Phase-VII,  
Industrial Focal Point, Mohali,  
Punjab – 160 055.

- A. Instructions, Terms and conditions of supply, etc are given in **Annex-I & II**.
- B. The detailed Specification(s) of the above mentioned equipment(s)/item(s) are given in Annex-III.
- C. The technical Bids shall be opened in the Conference Hall, at the address mentioned above at 1130 h on 9th March 2007 and in the presence of such tenderers or their duly authorized representatives, who may like to attend.
- D. Please note that the envelopes containing Technical & Commercial Bids are sealed properly i.e. either wax sealed or with adhesive cello tape on both ends. **Unsigned Bids, Unsealed /stapled envelopes** and bids **without EMD** shall be summarily rejected. **No exemption** whatsoever for payment of EMD shall be accorded.
- E. This office reserves the right to reject any /all bids without assigning any reasons whatsoever. Late tender will not be accepted by any means & this office will in no way be responsible for any reasons of late submission of bids.
- F. The specification and terms & conditions can also be downloaded from BIS Website – [www.bis.org.in](http://www.bis.org.in)

Thanking you,

Yours faithfully,

  
Scientist-F & Head  
(NROL)

Encls: as above

**BUREAU OF INDIAN STANDARDS  
(NORTHERN REGIONAL LABORATORY)  
MOHALI 160055.**

Ref: NROL(C)/2007/BNC02

Dated 14<sup>th</sup> Feb 2007

**ANNEXURE-I**

**INSTRUCTIONS TO BIDDERS**

1. Sealed tenders are invited (under two bid system i.e. Technical Bid and Financial Bid, for details please see Annexure-II) separately from reputed manufacturers and their accredited/sole selling agents for the "Supply, Installation, Commissioning and Satisfactory Demonstration" of **Laminar Air Flow- Vertical** (For detailed specifications, please see Annexure-III).
2. **Security Bid (EMD)** – 3% of the Quoted Cost of the equipment may please be sent in the form of a Crossed/Account payee demand draft from a Nationalized Bank, payable at Chandigarh/Mohali in favour of "BUREAU OF INDIAN STANDARDS". The Demand Draft of the EMD be placed inside a separate sealed envelope clearly marked 'EMD' on the right hand side corner of the envelope and be stapled along with the sealed envelope containing the Financial Bid.
3. **TENDER DOCUMENT** : Bidders may also download the Tender Notice, specifications, terms & conditions.
4. Tenders not accompanied with '**EMD**' shall be summarily rejected.

Last date for receipt of Bids is: **08-03-2007 (1700 hrs)**

Date of opening of Technical Bids is: **09-03-2007(1130hrs)**

(N.B: In the event of any of above date(s) being declared a holiday, the last date of submission of completed bid(s) shall be on the next working day.)

5. The tenders should be addressed to:

**Head  
Northern Regional Laboratory (NROL),  
BUREAU OF INDIAN STANDARDS,  
Plot No. B-69, Phase-VII,  
Industrial Focal Point,  
Mohali 160055, Punjab.**

Phone No.0172-3246935, 2236722. FAX No.0172- 2237212, 2236722  
e.mail: [nrol@bis.org.in](mailto:nrol@bis.org.in)

**BUREAU OF INDIAN STANDARDS**  
**(NORTHERN REGIONAL LABORATORY)**

**ANNEXURE-II**

**DETAILS OF TERMS AND CONDITIONS OF CONTRACT**

Ref: NROL(C)/2007/BNC02

Dated 14<sup>th</sup> Feb 2007

**Instruction to bidders**

1. The BUREAU gives FIRST PREFERENCE in its purchase to goods bearing ISI CERTIFICATION MARK and second preference to those which conform to the relevant Specifications.
2. The Tenderers are requested to give detailed tender in their own forms in two bids i.e.

**Part - A: Technical Bid.** 3 copies

**Part - B: Financial Bid.** 3 copies

(1st copy – in original, 2nd and 3rd copy – Photostat Copy)

The Technical & Financial Bids should be sealed and sent separately in sealed envelopes and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed "**QUOTATIONS FOR SUPPLY OF LAMINAR AIR FLOW- VERTICAL**". The commercial Bid will be opened after technical evaluation of technical bid. The date of opening of commercial Bid will be informed to the bidders found suitable in technical evaluation. Such Bids shall remain valid for a period of 180 days from the date of opening.

3. The Date and Time of opening for Part B (Financial Bid) will be intimated only to prequalified and technically acceptable tenderers for the item at a later date.
4. Quotations/Bids, qualified by indefinite expressions as "Subject to immediate acceptance, Subject to prior sale", etc. and incomplete quotations are liable to be summarily rejected.
5. Each tender document shall be accompanied with EMD of 3% of cost of the equipment. The demand draft (from a Nationalized Bank) for the EMD amount shall be drawn in favour of BUREAU OF INDIAN STANDARDS payable at Chandigarh/Mohali. The sealed envelope containing EMD should be superscribed "**EMD**" and stapled separately with the envelope containing the commercial Bids. The Earnest Money of successful bidder will be returned only after installation, commissioning, satisfactory demonstration and acceptance of the equipment by the user Scientist/Head as per the terms of our purchase order. The Earnest Money of the unsuccessful bidder whose

technical bid has not been found suitable will be returned. Earnest money deposit shall be liable to be forfeited, if the successful tenderer withdraws the tender after opening.

6. (A) Tenders not accompanied with Demand Draft/Bank Guarantee towards "Earnest Money Deposit" will summarily be rejected.  
(B) Tenders, which are submitted without following the Two-Bid Offer System, will summarily be rejected.  
(C) Unsigned Tenders will also be rejected.
7. Conditional Offers will not be considered.
8. BIS shall pay 90% of the cost after satisfactory supply installation & commissioning and the Balance of 10% as contract performance security would be paid after expiry of warranty period. Supply means "Supply, Installation, Commissioning and satisfactory demonstration of the whole system and training".
9. BIS will not provide any accommodation/transportation for the Engineers/Representatives for attending Installation, Commissioning and Demonstration Work. It is the absolute responsibility of the Principal Supplier/Indian Agent to make their own arrangements.
10. **WARRANTY:** The equipment is to be guaranteed for trouble free performance for a **minimum period of two years** after installation. The warranty period of the equipments may be stated clearly in the Technical Bids. In case the same is not found stated, it will be presumed that warranty period as mentioned in their respective specifications of the tender document (if specified), is applicable. The warranty period of an item/equipment shall commence from the date of receipt of the item/equipment in good working condition and satisfactory installation / commissioning / demonstration at site. The warranty period and validity of contract performance security shall be extended for the period of delay in satisfactory installation.
11. The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary.
12. The supply of spare parts is to be guaranteed at least for a period of 10 years after the supply of the equipment.
13. Please mention clearly in the Technical Bids regarding address of arrangements for service/repair of the equipments available. Suppliers having such arrangements near Chandigarh/Mohali would be preferred.
14. Tenders complete in all respects for each item should be submitted separately for Technical as well as Financial bids as follows:
  - a. One sealed envelope superscribed "Technical Bid" will contain only the Technical Specifications of the indented equipment as per details in Annexure-III of this document.

- b. A Second sealed envelope superscribed "Financial Bid" will contain only the financial bid in which price (alongwith warranty) and 3 year comprehensive warranty charges, Annual Maintenance Contract Charges [AMC] etc. and any other information, which has financial implications, will only be given. The Demand Draft of the EMD be placed inside a separate sealed envelope clearly marked 'EMD' on the right hand side corner of the envelope and be stapled along with this sealed envelope containing the Financial Bid. However, the EMD of the successful Bidder may be adjusted against Performance Bank Guarantee.
- c. Both the above sealed envelopes are to be kept in a sealed envelope, superscribed as Tender No \_\_\_\_\_ for \_\_\_\_\_  
(Item/Name) due on \_\_\_\_\_ 2007 and duly sealed.

15. The **Technical Bid [Part A]** should accompany complete specification, Manufacturer's name, address and following details :

- a. Expected life span of equipment and accessories.
- b. List of infrastructural facilities and consumables to be arranged by the Bureau for commissioning of equipment,
- c. List of the Users in India with complete postal address to whom the similar equipment has been supplied,
- d. Near locations in India from where after sales services shall be provided along with the name of Servicing Agent,
- e. The optional and any other essential items/accessories required for the maintenance of the equipment for the next three years.
- f. Technical Literature of the equipment along with necessary photograph/drawings, if any
- g. Specification sheet duly filled in with all details.
- h. Special preferences/conditions, if any, is indicated in Specification sheet for the equipment.

16. Cost of the items should be mentioned clearly in the **Financial Bid [Part-B]**. The following details need to be included:

- a. Price break-up of main equipment and optional accessories (as per the specification) and consumables (for the accessories and consumables which are not part of the standard equipment) to be supplied by the party,
- b. The Comprehensive warranty and AMC charges for next three years after the expiry of warranty period must be indicated separately,
- c. The rates quoted shall be valid for a period of 180 days from the date of opening of the tender. However wherever applicable the current value of the foreign currency would be applied at the time of placing the order.
- d. Packing, Forwarding, Freight & Insurance and Commissioning Charges, if any extra, may be quoted separately in Financial Bid.
- e. In case your quote is F.O.R./F.O.B. basis, estimated insurance coverage charges may be indicated.
- f. CIF (Carriage Inward & Freight), at site value both by Airfreight and Ocean freight, where applicable.

- g. The Bids should clearly give break-up of cost of each equipment. The rates quoted should separately indicate Basic Cost, Excise Duty, Sales Tax, P&F charges, Freight, Insurance, VAT etc. Rates quoted should specifically state Sales Tax, Excise Duty or any other taxes/charges. In absence of any such stipulation, it will be presumed that the prices include all such charges and no claim for the same shall be entertained. Form C/D shall not be provided by BIS.
17. In case of foreign quote, the Principal supplier should clearly indicate the address of the Indian Agent and percentage (%) of Agency Commission payable if any, to be paid to the Indian Agent in Indian Currency.
18. Indicate the names and addresses of the Indian reputed Organizations where you have supplied the similar equipment and may attach the satisfactory performance report of the equipment from user Organization.
19. (A) If you have supplied identical or similar equipment to Govt Labs. /Institutes the details for such supplies (details of contact person, phone numbers, fax, e.mail i.d., etc) for the preceding three years should be given together with the prices eventually or finally paid.  
(B) Based on the above information BIS will have its option to obtain details of the equipment, their performance, after sales services etc. for evaluation of the tender, directly from the concerned Labs/Scientists etc.  
(C) Clause by clause compliance with the technical specification in this tender is required. Deviation from the specification, if any, and better alternative offer by the supplier and suitability to substitute the specified conditions must be clearly brought out with justification.  
(D) Technical specification shall be as per the requirements laid down. However, any deviations offered may be considered by the Technical Committee subject to suitability and the needs of the Organisation.  
(E) The specifications of equipments, have been specified at Annex-III. However, bidder(s) may be required to arrange practical demonstration of equipment/model(s) quoted by them before finalization of order.  
(F) The Bidder has to state in detail the Electrical Power/UPS requirements, floor space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system and to run the tests. i.e. pre-installation facilities required for installation may please be intimated in the technical bid.  
(G) Bidder shall be responsible for installation/demonstration wherever applicable and for after sales service during the warranty and thereafter.
20. Fax / E-mail / Telegraphic / Telex tenders shall not be considered.
21. All the Bank Charges inside and outside India, including opening of LC, communication, confirmation, amendments etc., will have to be borne by supplier only.

22. If applicable, with regards to terms of payment including period of warranty, we prefer to release the payment on BILL Basis (excluding Indian Agency Commission) after receipt of consignment in good condition and satisfactory installation, and commissioning thereof. Alternatively, depending upon the value and foreign exchange regulations the payment can also be considered through Sight Draft / Letter of Credit through the State Bank of India/Punjab National Bank for the order value excluding the Indian Agency Commission. However, the detailed payment for Sight Draft / Letter Credit is mentioned above in this tender terms and conditions.
23. Details of after-sales services offered by you are to be made clear in the tender. Indicate the name of firm, address, contact person, phone no. and fax no. etc of onsite warranty, agency that shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the technical bid. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
24. The delivery of the stores is required to be made within 30 days of receipt of order. If, it is not possible for you to affect delivery within the period, you are required to specify the date by which you can guarantee delivery of the stores. Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the tenderer will forfeit EMD, after maximum 10 days of the last date of delivery.
25. The equipment should be installed/commissioned and demonstrated by the supplier at site immediately, but in any case within one month after receipt of the item in the lab, and the same will be put under operation to the satisfaction of BIS technical personnel who will test the performance of the equipment. No separate charges for installation, etc. will be paid to the party beyond the quoted prices. Successful tenderer shall be required to provide training to BIS personnel at site in the use of the equipment at the supplier's cost.
26. All goods received would be subjected to inspection, by BIS before or after receipt or commissioning (as applicable) and the decision of BIS shall be binding. Rejected items/goods/stores shall be removed by the supplier at his own cost and risk, within 30 days of receipt of notice for the removal of such goods, and no liability, whatsoever, on the Bureau shall be attached for the rejected/disapproved goods/items/stores.
27. The Bureau takes no responsibility for delay, loss or non-receipt of tenders after dispatch.
28. In case of non compliance with the Terms & Conditions of the contract, the Bureau reserves its right to:
- a. Cancel/rescind/revoke the order if supply is not made in time and is not conforming to the required specification.



- b. Impose Penalty up to 1% of the total value of the order for a delay of every seven days after the schedule date subject to the ceiling of a maximum of 10% of the total value of the order.
- 29. Goods should not be dispatched until the Vendor receives a firm order.
- 30. Firms which have already supplied similar equipment to BIS shall indicate details of installation/commissioning.
- 31. **Printed conditions of the quotation will not be binding on BIS.**
- 32. BIS will not be responsible:
  - a. For delayed / late quotations submitted / sent by Post / Courier etc.
  - b. For submission / delivery of quotations at wrong places other than this office.
- 33. The Bureau reserves the right to accept any tender in full or in part or to reject the lowest or any or all tenders without assigning any reason.
- 34. All question, disputes or differences arising under, out of or in connection with this Bid document shall be subject to the exclusive jurisdiction of Chandigarh /Mohali Court

-sd-

**Scientist-F &Head**  
Northern Regional Laboratory  
Bureau of Indian Standards.

**ANNEXURE-III**  
**(SPECIFICATION SHEET)**

Procurement of equipment for NROL, Chemical section under Modernization Plan.			
Code Number: BNC 02			
Equipment Name: : Laminar Air Flow- Vertical			
Quantity: 1			
Sl. No.	NROL SPECIFICATION		BIDDER'S RESPONSE  (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. In case of "Non Complied", detail shall be mentioned)
1.0	INSTRUMENT COMPOSITION  Laminar Air Flow - Vertical                      One unit		
2.0	TECHNICAL SPECIFICATION		
2.1	Model Type	6' x 2' x 2'	
2.2	External Dimension L x W x H (mm)	1950 (L) x 762 (W) x 600 (H), Overall Height ~ 7.5 Ft	
2.3	Internal Dimension L x W x H (mm)	1830 (L) x 762 (W) x 560 (H).	
2.4	Main body	Stainless Steel 304, 18 Gauge	
2.5	Table Top & working Zone	Heavy Gauge Stainless Steel, with Two Parts: <b>Front Perforated portion and None perforated working zone.</b> Provided with Stainless Steel trough below working table.	
2.6	Front Door	Toughened Glass (6 mm). Vertical sliding (one piece with counter) Provides with alarm if door opened bey ond set height.	
2.7	Side Walls	Heavy duty Stainless Steel of 18 Gauge (Minimum)	
2.8	Main Hepa Filter	99.99 % efficiency for particles ~ <b>0.3 µm</b> with integral metal	

Procurement of equipment for NROL, Chemical section under Modernization Plan.			
Code Number: BNC 02			
Equipment Name: : Laminar Air Flow- Vertical			
Quantity: 1			
Sl. No.	NROL SPECIFICATION		BIDDER'S RESPONSE (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. In case of "Non Complied", detail shall be mentioned)
		guards & filter frame gaskets, D.O.P. port to provide class 100 air quality super clean working environment.	
2.9	Pre-Filter	Washable type pleated with 90 % efficiency for particles > 0.5 µm	
3.0	Exhaust Hepa Filter	Aluminum framed HEPA Filter with minimum efficiency of 99.99 % at 0.3 µm	
3.1	Fluorescent Light	2 x 40 watts, Placed outside working zone to avoid turbulence ,	
3.2	UV Light	36 watts. In working zone. Safely interlock with open front windows. Elegantly fixed to avoid direct visibility.	
3.3	Motor- Blower Assembly	Direct Drive, Statically & Dynamically balanced , fitted special Vibrator reducing pads to suit low noise and vibrations. High efficient centrifugal type with lifetime lubricated bearings.	
3.4	Air Flow (Ventilation)	Vertical down flow (Air recirculation 70 %, Exhaust Air 30 %)	
3.5	Average Air Flow	90 FPM ± 20.	
3.6	Noise Level	≤ 65 DB	
3.7	Vibration Level	< 2.5 um	

Procurement of equipment for NROL, Chemical section under Modernization Plan.			
Code Number: BNC 02			
Equipment Name: : Laminar Air Flow- Vertical			
Quantity: 1			
Sl. No.	NROL SPECIFICATION		BIDDER'S RESPONSE (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. In case of "Non Complied", detail shall be mentioned)
3.8	Display Panel	Reveal the state of open front window, Exhaust air flow , UV light indicator. Fluorescent light indicator. Cabinet temperature.	
3.9	Support Stand	With leveling feet adjustable . Wheeled base for easy transportation of unit	
4.0	Pressure Monitors	Magnetic Gauge/ Inclined tube Manometer to indicate Positive pressure across HEPA filter and Negative pressure in Exhaust zone, range 0-25 mm.	
4.1	Power Supply	220-230 Volts, at 50 Hz., electric load	
4.2	Power Consumption	440 watts	
4.3	Standard Accessories	Gas, Air & Vacuum inlet nozzle, Electrical Switches & Sockets of 15/5 amp. in working area. Spirit level. List of standard additional accessories, if any being supplied with the unit to be indicated	
4.4	Net weight	300 kg (Approx.)	
5.0	ADDITIONAL ITEMS		
	Manual	Operation and maintenance manual for each unit.	
	Service manual	Service manual with set of required tools for each system/unit.	
	Spare catalogue parts	One set	
	Trouble shooting charts	Trouble shooting charts of all sub units	
9.0	GENERAL	1. The instrument and all its sub units should operate on 230 V 10	

Procurement of equipment for NROL, Chemical section under Modernization Plan.			
Code Number: BNC 02			
Equipment Name: : Laminar Air Flow- Vertical			
Quantity: 1			
Sl. No.	NROL SPECIFICATION		BIDDER'S RESPONSE (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. In case of "Non Complied", detail shall be mentioned)
	CONDITIONS OF SUPPLY	2. volts 50 Hz power supply. All the operation and maintenance manuals, circuit diagrams, application notes and application software to be supplied should be in English language. 3. Equipment should be supplied with 2 years warranty.	