

TENDER DOCUMENT

Last Date for submission of the Bids: 24th October, 2025 upto 12.00 pm

Sealed Bids are invited for purchase of “Limiting Oxygen Index (LOI) Tester ”

Chairman Purchase Committee-NITRA invites sealed bids for purchase of “Limiting Oxygen Index(LOI) Tester” under NTTM sponsored project “Development of Flame Retardant Nylon 66 Yarn/Fibre Indigenously”

Details are as follows:

1.

Applicable Standards

The instrument shall comply with the following standards:

- 1.1 IS 13501
- 1.2 ASTM D2863
- 1.3 NES 714
- 1.4 ISO 4589-2

2. Features

- 2.1 Digital display of **Nitrogen flow, total O₂+N₂ flow**, with presettable test oxygen concentration.
- 2.2 Digital display of **oxygen percentage in test atmosphere** (no manual calculation required).
- 2.3 Paramagnetic oxygen sensor with **high precision and stability**.
- 2.4 Mini-adjustable valves for Oxygen and Nitrogen, with **high-precision flow meters**.
- 2.5 Gas ignition device with **adjustable flame length**.
- 2.6 **High-temperature resistant quartz glass chimney**, capable of withstanding higher test temperatures.
- 2.7 Multiple **sample holders** suitable for both rigid and flexible specimens.
- 2.8 Compact and lightweight **Limiting Oxygen Index Tester** design.

3. Technical Specifications

- 3.1 Oxygen concentration measurement range: **0–100%**.
- 3.2 Oxygen concentration resolution: **±0.1%**.
- 3.3 Working pressure: **0.05 – 0.3 MPa**.
- 3.4 Chimney material: **Heat-resistant quartz glass**.
- 3.5 Chimney dimension: **Φ76 mm × 500 mm (ID × Height)**.
- 3.6 Gas velocity in chimney: **(40 ± 2) mm/s**.
- 3.7 Instrument response time: **<200 ms**.
- 3.8 Stabilization time: **<5 s**.
- 3.9 Power supply: **AC 220 V, 50 Hz**.
- 3.10 Equipment dimensions: **420 mm (W) × 350 mm (D) × 560 mm (H)**.
- 3.11 Net weight: **9 kg**.

4. Configuration

- 4.1 Complete **Limiting Oxygen Index Tester unit** with all standard accessories.
- 4.2 Quartz glass chimney (1 no.) + 1 no. Spare.
- 4.3 Sample holders for rigid and flexible materials.
- 4.4 Gas ignition device with adjustable flame length.
- 4.5 User manual, calibration instructions, reference material oxygen index value to check performance of complete equipment as per annexure A of ISO 4589-2, and maintenance guide.

5. Warranty & Support

- 5.1 Minimum warranty: **1 year** from installation date.
- 5.2 **Lifetime technical support** shall be provided by the manufacturer/supplier (remote or onsite as required).
- 5.3 Bidder shall provide **installation & training at user site**.

Packing and Submission of the bid/bids

- A. The tender shall be submitted on or before 24-10-2025 (up to 12.00 PM) and at the address given in appendix-TF. Any tender received after this date and time shall not be accepted. Tenders shall be packed, marked sealed and submitted in original with the documents listed below.

Tenders shall be submitted in two separate sealed covers e.g. “Technical Bid” & “Financial Bid” for each instrument separately.

- B. Sealed cover “**Financial Bid**” shall contain financial Specification.

- i. Bill of Quantities duly completed with price.
- ii. Covering letter in duplicate bringing out the tenderer’s reservations, if any, regarding compliance with the tender document and his own specific assumption, if any.
- iii. Bills/Schedule of Quantities duly completed with price which will be inclusive of all taxes (GST, Excise Duty, Customs Duty etc.) any other Govt. levies & all other charges (packing, forwarding, loading-unloading, erection and commissioning, insurance and any other incidental charges by whatever name called). Break-up of the taxes/levies/all other charges will also be mentioned.
- iv. It is necessary to fill the Tender Value precisely. In case, all individual items are not quoted, it will be deemed that the Tender Value is inclusive of quotes of all the individual items as per the tender document.

C. Sealed cover “Technical Bid” shall contain

- i. SSI Certificate if the Manufacturer/supplier, is registered as small industries with the Government.
- ii. Profile of the Bidder’s Organization.
- iii. Copy of the PAN Card of the Organization.
- iv. Copy of the Registration Certificate of the organization.
- v. If the bidder does not manufacture the equipment, authorization of the manufacturer to the bidder for marketing and servicing the equipment in India should be closed along with the tender. In the absence of such authorization, the tender will not be considered.
- vi. Technical Specifications in detail of item for which bid has been submitted.
- vii. List of items with quantities for which the financial bid has been submitted.
- viii. The item for which the bid has been submitted should contain the list of clients to whom the respective equipment with same specifications has been supplied.
- ix. Tender documents, which shall be signed by the authorized person(s) and seal affixed.

D. The sealed envelope containing the covers ‘Technical Bid’ & ‘Financial Bid’ as above shall be marked in the name of the Chairman Purchase Committee, NITRA, Ghaziabad indicating the name of the item for which the bid is submitted.

Terms & Conditions:

1. Modifications if any of the tender documents will be made by addenda/corrigenda. One copy shall be signed, sealed and submitted packed along with the tender documents.
2. No Bids/Quotations shall be entertained, if it is not sealed properly, or sent through e-mail, fax, telex or telegraphic mode.
3. The quoted price should be written both in words and in figures. In case of conflict between the figures and words in the rates, the latter shall prevail.
4. The suppliers of the item should provide both theoretical and practical training after commissioning at an appropriate stage.

Terms of Payment:

1. The terms of payment in case of indigenous equipment/ machinery & accessories shall be as under :
 - a) 20% of the machinery cost ex-factory will be paid as advance against confirmation of orders.
 - b) 70% payment will be made against successful installation, commissioning and demonstration of satisfactory performance of the machinery / equipments at site.
 - c) Balance 10% payment will be made within one month from the date of installation & submission of Performance Guarantee for 12 months. If performance guarantee is not being submitted, then remaining payment will be released after 12 months from the date of installation. Format of Bank Guarantee will be provided in due course.

TENDER OPENING DATE & TIME: 24-10-2025, 03.00 pm at NITRA Ghaziabad

Email:mail@nitratextile.org(for any query/clarification)

PhoneNos.:0120-2807390/91/92/93/94/95

TENDER FORM

To,
The
ChairmanPurchase
CommitteeNITRA
Sector-23, Raj Nagar
Ghaziabad-201002(U.P.).

Sub:**Purchase of “Limiting Oxygen Index (LOI) Tester” to NITRA, Ghaziabad as per the specifications and Quantities mentioned in the tender.**

DearSir,

- a. Having examined the conditions of Tenders/ Specifications of the equipment,we,the undersigned, offer to supply equipment as per specifications given in the tender.
- b. We agree to abide by this tender for the period given in Appendix TF from the opening date fixed for receiving the same and it shall remain binding upon us for a mutually extended periodagreedin writing by us.
- c. If our tender is accepted, we undertake to supply the Equipment and install the same in Nitra,Ghaziabad mentioned in the tender within the specified periods in Appendix-TF on receipt of written order from the Purchase Committee, NITRA.
- d. If our tender is accepted we will obtain and arrange:
 1. Transit insurances
 2. Any other statutory obligation, if any, prior of commencement of supply of equipment.
- e. We agree to your right to cancel the order or stop payment with out prejudice to any other right or remedy for the following failures on our part.
 1. Changes to tender are made within Validity Period as specified in Appendix-TF.
 2. Supply and installation of equipment is not commenced within specified period as given in Appendix-TF.
 3. Obligations under(e) above are not fulfilled.
- f. Unless and until a formal agreement/purchase order is prepared and executed ,this tender together with your written acceptance there of, shall constitute a binding contract between us.
- g. We understand that you are not bound to accept the lowest or any tender you may receive.
- h. We agree to make a presentation of the products to be supplied by us, before the Purchase Sub-Committee on the date specified by it.
- i. Fluctuation in foreign exchange rates in respect of the imported equipment shall be borne by the equipment suppliers / authorized Agents.
- j. We hereby declare that the rates quoted by us are the lowest rates.

Authorized Signatory

to tenderer

Signature dated

Designation / Capacity

Name

Address

WITNESS 1

Signature

Name

DATE

ADDRESS

WITNESS 2

Signature

Name

DATE

ADDRESS

APPENDIX - TF

Sr. No.	Particulars	Remarks
1	Validity of Tender	180 days
2	Address, date and time of submission of the Tender Documents.	The Chairman, Purchase Committee, NITRA, Sector-23, Raj Nagar, Ghaziabad, U.P.- 201002, India. (24-10-2025 up to 12.00 PM)
3	Supply, Installation & Demonstration of Instrument/ Machine	Within 5-7 Weeks from the date of placement of order , failing which order may be cancelled.
4	Period of Warranty/ Performance guarantee of Instrument/ Machine.	One years with Life time technical support
5	Submission of the Programme for delivery.	Within 21 days from the date of the acceptance of the order placed.

SEAL AND SIGNATURE OF TENDERER

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