## LIMITED TENDER

## For purchase of Testing Instrument Under the "Textile Testing Laboratory"



Tender Number	WRA/TENDER/Tex Lab-01/2024-2025
<b>Total Nos. of Testing Instrument</b>	03
Last date of submission of Limited Tender	15.01.2025 (5.00 p.m.)
Tender Opening at WRA	16.01.2025 (11.00 a.m.)

WOOL RESEARCH ASSOCIATION (WRA)

P.O. Sandoz Baug Kolshet Road, Thane - 400 607, Maharashtra. Phone: (022) 25314294

E-mail: wra@wraindia.com.
Website: www.wraindia.com

## **APPENDIX - TF**

Sr.	Particulars	Remarks
No.		
1	Validity of Tenders	• 180 days from the date of opening of tender.
2	Address, date and time of	<ul> <li>Wool Research Association Kolshet Road, P.O. Sandoz Baug, Thane (W) - 400607</li> </ul>
	Submission of the tender documents.	<ul> <li>Last date of submission of tender at WRA: 15.01.2025 (5.00 p.m.)</li> </ul>
3	Supply of the Testing instrument etc	• Within 3 months from the date of placement of order or advance paid, failing which order may be cancelled, unless the period is extended by WRA, in writing, in exceptional circumstances.
4	Installation and commissioning of the Testing instrument	• Within 2 weeks after the delivery of the ordered item at WRA, installation and commissioning should be carried satisfactorily by the supplier. In case, installation/commissioning is delayed by the supplier, 2% per day of the cost of Testing instrument will be charged unless relaxation in this regard accorded by WRA, in writing, in exceptional circumstances.
5	Period of warranty of Testing instrument	• 3 Years warranty (Companies standard warranty plus additional two years) from the date of commissioning of the Testing instrument
6	Performance guarantee of Testing instrument	• 3 Years performance guarantee from the date of commissioning of the Testing instrument (as per Annexure II)
7	Submission of the details schedule for delivery	• Within 21 days from the date of the acceptance of the order placed

## SEAL AND SIGNATURE OF TENDERER

#### **TERMS AND CONDITIONS**

### 1. Training at site

**Training at site:** Hands on training at the time of installation and commissioning of testing instrument inside the WRA, Thane premises.

#### 2. Payment

- A. The price quoted should be exclusive of duty, ST, installation etc., which should be shown separately in the quote, if applicable. Freight and Insurance charges are to be indicated separately the same will, be paid at actual against supporting documents produced. Packing, forwarding and other charges as applicable are to be indicated separately.
- B. In case of Imported Items, 100% Payment shall be made through irrevocable Letter of Credit. LC money will be released by our bank only after inspection and successful installation and commissioning of testing instrument at consignee's address, within a period of 2 weeks after delivery of the Testing instrument. The firm on whom order will be placed or his local supplier/agent will be responsible for installation, commissioning, demonstration of satisfactory performance of the Testing instrument and imparting training to the technical personnel of WRA. However, involvement of the respective principals will be preferable. An undertaking to this effect along with the bank guarantee form will be required from the supplier/agent to WRA.

## 3. Earnest Money Deposit

Tender must be accompanied by Earnest Money Deposit (EMD) as indicated in **Annexure-I** for item being supplied in the form of Demand Draft or Banker's cheque in favour of "Wool Research Association" Payable at Thane, EMD shall be paid in Indian currency only. In case or receipt of EMD in Indian currency from abroad, same shall be refunded in Indian currency only.

WRA will not be responsible for refunding the EMD in foreign currency. The EMD by the successful bidders shall be held back towards the security deposit and will be refunded after successful installation, trial and training. EMD should remain valid for a period of forty-five days beyond the quotation validity period. The EMD of the unsuccessful bidder will be returned at the earliest of the final bid after expiry of final bid validity, latest on or before the 30<sup>th</sup> day after the award of the contract.

### 4. Delivery

Delivery of the Testing instrument should be as per the commitment from the date of receipt of initial payment against acceptance of order in case of indigenous Testing instrument and should not be extended.

### 5. The Pre-installation

Requirements including space, nature of civil work, power point, power Requirement etc. are to be mentioned clearly in the tender document.

1. Bid for the testing instrument should be submitted in an envelope super scribed with the name of the item at the top, NAME, ADDRESS OF THE BIDDER AND DATE OF SUBMISSION.

The sealed envelopes shall be marked in the name of "Director, Wool Research Association Thane -400607.

- 2. The list of organizations (with full addresses, telephone / fax no., e-mail addresses etc.) in India and abroad to which the testing instrument were supplied is to be provided in the bid for our reference. Preference will be given if the supplies are made to internationally reputed test house both in India and other countries particularly for the bided equipment (evidence of such supplies to reputed test houses may be enclosed.)
- **3.** Validity of the tender should be 180 days from the date of opening of tender. The tender may be rejected if the validity is not given accordingly.
- **4.** The supplier should take responsibility for delivering, installing and commissioning of the Testing instrument inside the premises of WRA, Thane at designated site.
- **5.** Annual Servicing / Maintenance charges for the next two years after the expiry of warranty period should be indicated separately in the tender.
- **6.** Late / delayed tender offers will not be considered at all.
- 7. Any non-fulfilment of the stipulation given above will make the bid invalid.
- **8.** If the tenders received are not sealed properly, they will not be considered at all.
- **9.** Wool Research Association (WRA), Thane reserves the right to accept or reject any or all the bids without assigning any reason thereof.
- 10. The local supplier shall be entirely responsible for all taxes, duties, and license fees etc., incurred until delivery of the contracted goods (to the purchaser) up to place of delivery.
- 11. The Delivery, installation & commissioning period of the testing instrument as agreed should not be extended under normal conditions. Suitable penalty for non-execution of the order may be enforced refer Appendix -TF.
- 12. The testing instrument & accessories should be delivered, installed and commissioned at the address specified in the order. Service / operation /instruction/ calibration manuals (in English) tool kit and gauges must also be supplied along with the Instruments and accessories.
- 13. During the guarantee /warrantee period, servicing /maintenance should be undertaken regularly subsequently Servicing/maintenance should be undertaken by the manufacturer or authorized agency of the manufacturer.

- 14. Warranty and performance guarantee as described in the Specification/ Appendix TF should be given in respect of instruments and accessories supplied. Terms for service contract after the expiry of said warranty period are to be quoted separately.
- **15.** The manufacturer /supplier may indicate the Status of the Manufactured Product /or of the performed services as regards to ISO quality system.
- **16.** List of servicing centres in India has to be indicated with detailed address, telephone no. /fax no. / e-mail address etc.
- 17. All pre-installation requisites such as Cables, plugs etc. should be provided by the supplier along with the testing instrument. WRA, Thane concerned will provide adequate space, electricity & water, as the case may be, for the successful installation and commissioning of the testing instrument.
- **18.** The Capacity statement of equipment, plant and past performance details should be provided.
- 19. In case of Imported Items, please quote Free On-Board value (at nearest foreign Airport / Sea port) & also CIF Value at Sahara International Airport, Mumbai or JNPT Nava Seva Seaport, MUMBAI (whatever applicable). Please specify the freight charges & Insurance Charges separately. Also specify the packing dimension, Nos. of Box/Cartoon & gross weight of each Box/Cartoon. Please specify the name of the port & country, from where the goods will be dispatched.

NOTE: The bidder has to specifically state that the clauses one to all as above have been read and understood and agree to comply all the above-mentioned clauses individual

## Annexure I

## **Technical Specifications of the Testing Instruments**

# (Including EMD)

Sr.	Instruments	EMD to be paid	Page Nos
No.		(Rs.)	
1	Heat Flow Meter Instrument (HFM)	1,00,000.00	7-9
2	Cut Resistance tester (Coupe)	25,000.00	10
3	TDM Cut Resistance Tester	30,000.00	11

# 1. Heat Flow Meter Instrument

Analytical Balance 5 Digits with following specifications:

Sr. No.	Requirement	Specification		
	Features			
1	Temperature Range :	• - 20°C and 90°C at a constant chiller setpoint of 20°C		
2	Specimen size	<ul> <li>The specimen size should be Min 300 mm x 300 mm with Minimum thickness of 100 mm and metering area of transducers 102 mm x 102 mm</li> <li>The specimen size should be Min 300 mm x 300 mm with Minimum thickness of 100 mm and metering area of transducers 102 mm x 102 mm</li> </ul>		
3	Measurements Range	<ul> <li>The system must allow measurements on samples with thermalconductivities (Lambda) between 0.002 W/(m.K) and 2.0 W/(m.K)*</li> <li>The system must allow measurements on samples with thermalconductivities (Lambda) between 0.002 W/(m.K) and 2.0 W/(m.K)*</li> </ul>		
4	Method to be Complied	<ul> <li>The system should be based on ASTM C518, ISO 8301, DIN EN 12664 and DIN EN 12667</li> <li>The system should be based on ASTM C518, ISO 8301, DIN EN 12664 and DIN EN 12667</li> <li>The system should be based on ASTM C518, ISO 8301, DIN EN 12664 and DIN EN 12667</li> </ul>		
5	Computer System Requirement	<ul> <li>The Instrument should have a built-in computer that allows printing of test results and motorized furnace door and plate movement with temperature measurement done at three locations on each plate</li> <li>The Instrument should have a built-in computer that allows printing of test results and motorized furnace door and plate movement with temperature measurement done at three locations on each plate</li> <li>The Instrument should have a built-in computer that allows printing of test results and motorized furnace door and plate movement with temperature measurement done at three locations on each plate</li> </ul>		

Technical Specification		
6	Sample load and Thickness Resolution	• The Instrument should optionally allow the operator to select the load on the sample (variable contact force). The contact pressure shall be up to 1930 N (21 kPa on 305 x 305 mm²) and also equipped with a four-corner thickness determination to measure the specimen's actual thickness within a few seconds. Thickness determination should be done with a µm-resolution transducer with a resolution of 0.001 mm and an accuracy of +/- 0.1 mm.
7	Option Kit	<ul> <li>For the instrument, an optional kit of thermocouples and rubber sheets should be available which could be inserted on the specimen's surfaces. This should increase the temperature accuracy especially for applications where enhanced temperature sensing is required.</li> </ul>
8	Programmable test temperatures	• For Lambda and cp determination, up to 99 setpoints should be possible
9	Accuracy	• The accuracy of cp should be between 5 and 10% for most insulating materials (depending on the sample properties).
10	Calibration	<ul> <li>The system should be shipped with a certified calibration standard.</li> <li>The instrument should be delivered calibrated accurately regarding position and stiffness, temperature, and force. It is possible to recalibrate these properties (User: position and stiffness and instrumentation kit thermocouple temperatures. Customer service: all properties).</li> </ul>

• Technical Specification		
11 Software:	In addition to the PC-based software, the HFM should have a built-in printer, which produces a summary report with a concise table of test results and a notice that measurements were made in accordance with international standards for heat flow meter testing. It should be possible to print out the test results such as mean temperature, thermal conductivity, thermal resistance, temperature gradient and test time.  The software should be able to generate reports according ASTM C518 and in addition customized templates. A software-controlled load option should allow for applying a selectable load on rigid or compressible samples.  The software should allow for applying a selectable plate distance during so-called empty stack measurements (correction for Cp).	

# 2. Coupe Cut Tester

## TECHNICAL SPECIFICATIONS FOR COUPE CUT TESTER

Coupe Cut Tester with following specifications:

Sr. No	Requirement	Specification
1	General Specification	CE Marking
2	Applicable Testing Standard	EN 388:2016
3	Sample Holder	It should be designed such a way mounting of sample should be easy
4	Test Requirement	Equipment should stop immediately as soon as rotary blade cut test specimen
5	Start Button Requirement	Counter should reset to Zero on pressing of Start Button
6	Consumable Kit	Equipment shall be supplied with consumable items for first 100 samples analysis
7	Calibration	Equipment shall be supplied with ISO 17025: 2017 Certified Calibration Certificate.

# 3. TDM Cut Tester

## TECHNICAL SPECIFICATIONS FOR TDM CUT TESTER

TDM Cut Tester with following specifications:

Sr. No	Requirement	Specification	
1	General Specification	CE Marking	
2	Applicable Testing Standard	EN 388, ISO 13997, ASTM F1790, ASTM F2992, ANSI/ISEA 105	
3	Loading force	Up to 100N	
4	Blade max movement	200mm	
5	Cut speed	Up to 150mm/min	
6	System Requirement	Touch screen control and setting panel	
7	Motor Detail	High Efficient and Low Noise	
8	Bearing Detail	Low Friction	
9	Consumable Kit	Equipment shall be supplied with consumable items for first 100 samples analysis	
10	Weigh Kit	High quality certified	
11	Calibration	Equipment shall be supplied with ISO 17025: 2017 Certified Calibration Certificate.	

## Annexure II

### FORMAT OF BANK GUARANTEE OF 10% OF CONTRACT VALUE

### (ON NON JUDCIAL STAMP PAPER OF RS.100/-)

Bank guarantee No Date: Date:
This deed of guarantee made this day of 2024 (Two
Thousand Twenty four only) (Name and address of the bank) herein after referred to as (The
bank) which expression shall where successors and assignees of the Bank and the Wool
Research Association (WRA) , Thane which expression shall unless repugnant to the context
of the meaning thereof include it's legal representatives, successors and assignees.
WHERAS the Wool Research Association (WRA), has placed its Purchase Order bearing Nodated
In consideration of the Wool Research Association (WRA), Thane having agreed to pay to the supplier Rs
The Doub shell met be dischaused or released from this grounded by one among consent between

The Bank shall, not be discharged or released from this guarantee by any arrangement between the supplier and the **Wool Research Association (WRA)**, Thane with or without the consent of the Bank or any alterations in the obligation of the parties or by any indulgence, forbearance shown by the **Wool Research Association (WRA)**, **Thane** to the supplier and the same shall not prejudice or restrict remedies against the Bank nor shall the same in any event be a ground of defence by the Bank against the **Wool Research Association (WRA)**, **Thane**.

We (name of the Bank) do hereby undertake to pay an amount equal to 10% of the order value being the amount due and payable under this guarantee without any demur, merely on demand from the Wool Research Association (WRA) stating that the amount claimed is due to the Wool Research Association (WRA). In case the Wool Research Association (WRA) puts forth a demand in writing on the Bank for the payment of the amount in full or in part against this Bank guarantee, the Bank shall considered that such demand by itself a conclusive evidence and proof that the supplier has failed in complying with the terms and conditions

stipulated by the **Wool Research Association (WRA)** in the purchase order and payment shall be made to the **Wool Research Association (WRA)** without raising any dispute regarding the reasons for any such lapse/failure on the part of the supplier.

This guarantee shall be in addition to and without prejudice to any other securities or remedies which the **Wool Research Association (WRA)** may have to hereinafter possess against the supplier and the **Wool Research Association (WRA)** shall be under no obligation to marshal in favour of the Bank any such securities or fund or assets that the **Director, WRA** may be entitled to receiving or have a claim upon and the **Wool Research Association (WRA)** at its obsolute discretion may vary, exchange renew, modify or refuse to complete or enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the **Wool Research Association (WRA)** on the Director, WRA serving with a notice requiring the payment of the amount and such notice shall be deemed to have been served on the bank either by actual delivery thereof to the Bank or by dispatch thereof to the Bank by Registered Post shall be deemed to have been duly served on the Bank notwithstanding that the notice may not in fact have been delivered to the Bank.

In order to give full effect to the provisions of this guarantee, the Bank hereby waives all inconsistent with the above provisions and which the Bank might otherwise as guarantor be entitled to claim and enforce.

NOTWITHSTANDING at	nything contained herein before, the	madinity under this guarantee is
restricted to Rs	(Rupeesonly).	The guarantee shall remain in
force till the	(Rupees only)	. and unless the guarantee is
renewed or a claim is pre	eferred against the Bank within thre	e months from the said date all
rights of the Wool Resea	rch Association (WRA) under the	guarantee shall cease and Bank
shall be released and disch	arged from all liability hereunder.	
		(SIGNATURE)
D		
PLACE:		
D + TF	GT. LY	
DATE:	SEAL	

NOTE: SUPPLIERS SHOULD ENSURE THAT SEAL OF THE SIGNATORY IS PUT BY BANKER, BEFORE SUBMISSION OF THE BANK GUARANTEES.