

TENDER DOCUMENT

For purchase of Machines and Testing Equipment & Accessories for PLSCs

Total No. of Equipment : 10

Tender No. NITRA/PUR/PT- 5/2017-18 Ref No. : 3307

Sale of Tender Document	(from www.nitratextile.org & http://tenders.gov.in)
Last date & time for submission of tenders	23-08-2017 (02.00 pm)
Date & time of opening of Technical bids	23-08-2017 (03.00 pm)
Date & time of opening of Financial Bids	Will be intimated later to eligible bidders
Place of submission of bids & opening of technical bids	Northern India Textile Research Association Sector-23, Raj Nagar, Ghaziabad

NORTHERN INDIA TEXTILE RESEARCH ASSOCIATION
(Linked to Ministry of Textiles, Govt. of India)
SECTOR-23, RAJ NAGAR, GHAZIABAD-201 002 (U.P.), INDIA
Phone No: 0120-2786434/451, 2783334/586/592/638
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Website : www.nitratextile.org

TENDER FORM

To
The Chairman
Purchase Committee
NITRA
Sector-23, Raj Nagar
Ghaziabad – 201 002 (U.P.).

Sub : For purchase of Machines and Testing Equipment & Accessories for PLSCs

Dear Sir,

If tender is awarded to us, we agree to abide the following:

- Having examined the terms & conditions of Tenders / Specifications of the machinery / equipments, we, the undersigned, offer to supply equipment/machines as mentioned in the Tender document as per the quantity and specifications given in the tender.
- To supply, install and commissioning of the equipment/ machine at the places specified within stipulated period as mentioned in contract/ purchase order and it shall remain binding upon us.
- Arrange for the transit insurance and fulfill any other statutory obligation, if any, prior to commencement of supply of machinery.
- NITRA's right to cancel the order or stop payment without prejudice to any other right or remedy.
- In case of Imported Items, we quote CIF value up to IGI Airport, New Delhi or ICD Patparganj / Tughlakabad, Delhi (whatever applicable) We also specify the packing dimension, Nos. of Box / Cartoon & gross weight of each Box/Cartoon (Packing list) and also specify the name of the port &Country, from where the goods will be dispatched.

Authorized Signatory
Name & Designation
Date:

WITNESS 1
Name & Signature

WITNESS 2
Name & Signature

INSTRUCTIONS TO TENDERER

1.0 GENERAL

- 1.1. Modifications, if any, in the tender documents will be made by addenda / corrigenda through a notification on websites. One copy of addenda/corrigenda shall be signed, sealed and to be submitted along with the tender documents.
- 1.2 E-mail, Fax, Telex or Telegraphic tenders shall not be entertained.
- 1.3 Bidders are required to submit Earnest Money Deposit (EMD) not less than 2% of tender value (quoted) from any Scheduled Bank through Demand Draft, favoring 'Northern India Textile Research Association' payable at Ghaziabad. Disqualified bidder/bidders will get back their EMD within 30 days from the date of opening of financial bid(s). Demand Draft submitted towards EMD shall be returned within one month from the award of the contract to the successful bidder.
- 1.4 NITRA's purchase committee reserves its right to accept or reject any or all the bids either in full or part, alter, change, cancel partially or fully, rescind or modify the terms and conditions of tender without assigning any reason thereof.
- 1.5 Each and every paper of tender documents shall be signed by the authorized person(s) with seal affixed. If necessary, authorization letter is to be enclosed.
- 1.6 The rates shall be written both in figures and in words. The tenderer shall also show the amount for each item, the total of each section and the grand total of the whole tender. In case of conflict between the figures and words in the rates, the latter shall prevail.

2.0 Packing and Submission of tender

- 2.1 The tender shall be submitted on & before the scheduled date and time at the address given in Tender Form. Any tender received after this date and time shall not be accepted. Tenders shall be packed, marked and sealed and submitted in original with documents as listed in points 2.2 & 2.3 below. **Tender shall be submitted in two separate sealed cover e.g. "Technical Bid" & "Financial Bid". These two sealed covers should be further sealed in one cover/envelope, which shall be marked in the name of the Chairman Purchase Committee, NITRA, Ghaziabad.**
- 2.2 Sealed cover "**Technical Bid**" shall contain
 - a) Tender Document- Technical Specifications in details.
 - b) List of items including spare parts with quantities.
 - c) List of clients including government institutions to whom the respective equipment with same specification has been supplied.
 - d) Pre-installation requirements
 - e) Detailed catalogue for each machine/equipment.
 - f) Details about bidder's organization:
 1. Profile of the bidders organization
 2. Copy of PAN card
 3. Copy of GST registration or any other suitable document.
 4. Turnover in India for last three financial years
 5. Period of existence of manufacturer or its authorized representative in India.
 - g) An authorization letter from principal/manufacturer, if the bidder is not a manufacturer.
 - h) EMD – Demand Draft of not less than 2% of tender value (quoted) to be submitted from any Scheduled Bank. The applicant without EMD will be out rightly disqualified. EMD is exempted for the bidders who are registered as Micro and Small Enterprises with the government. A self attested copy of the certificate is to be enclosed.

(Signature of the bidder)

- 2.3 Sealed cover “**Financial Bid**” shall contain financial details:
- a) Separate price for each of the items should be submitted in an envelope super scribed **with the name of the item at the top**, which will be inclusive of all applicable taxes, duties or any other Govt. levies & all other charges by whatever name called including freight, insurance and installation charges. In case of imported items, CIF value up to Delhi should be mentioned along with installation, commissioning and training at the places specified by NITRA.
 - b) Warranty /performance guarantee period – 3 year from date of commissioning.

3.0 Tender opening & evaluation:

- 3.1 The tender shall be opened on the specified date and time. In the event of any change in the date and time of tender opening, the same would be informed / notified to the tenderer through public notice / individual correspondence / through NITRA’s websites.
- 3.2 Technical bids will be evaluated on the basis of the technical capabilities for executing the order.
- 3.3 Financial bids will be opened only for technically qualified bidders. Award of contract will be made to the L1 bidder.

TERMS AND CONDITIONS

1. **All bids should be for new (first hand) machines only.**
2. Validity of bid/bids (technical & financial) should be 180 days from the date of submission.
3. The successful bidder may require to sign a contract/agreement for execution of the order. Acceptance of purchase orders shall also be required.
4. Bidders/suppliers shall provide both theoretical and practical training after commissioning the machinery or at an appropriate stage.
5. The supplier should take the responsibility for delivering, installing and commissioning of the machinery at the places specified by NITRA.
6. The terms of payment in case of indigenous equipment/ machinery & accessories shall be as under :
 - a) 20% of the order value will be paid as advance against confirmation of orders.
 - b) 70% payment will be made against successful installation, commissioning, training and demonstration of satisfactory performance of the machinery / equipments at site.
 - c) Balance 10% payment will be made after one year from the date of commissioning.
7. **In case of Imported Items, 100% Payment will be made through Irrevocable Letter of Credit.**
8. If the tenders received are not sealed properly, they will not be considered at all.
9. The delivery installation & commissioning period as agreed will not be extended under normal conditions. Suitable penalty for delay in executing the order may be enforced. In case of the delay due to some unforeseen reason, written permission is required from the Chairman, Purchase Committee, NITRA to avoid penalty.
10. Disputes, if any are subject to Ghaziabad (India) jurisdiction only.

(Signature of the bidder)

TECHNICAL SPECIFICATIONS

List of Equipment and Machinery

Sr. No.	Description	Quantity (Nos.)	Location
1	Automatic Hard Card Punching Machine	1	Varanasi
2	Automatic Pirn Winding Machine	1	Varanasi
3	Mechanical Jacquard (400 Hooks)	1	Varanasi
4	Yarn Appearance Board Winder	1	Varanasi
5	Perspiration Tester	1	Varanasi
6	Wrinkle Recovery Tester	1	Varanasi
7	Crease Recovery Tester	1	Varanasi
8	Martandale Abraison cum Pilling Tester	1	Varanasi
9	Yarn Faults Classification System	1	Varanasi
10	Scott Type- Crease flex Tester	1	Varanasi

(1) Automatic Hard Card Punching Machine: for Varanasi

- Suitable for punching standard hard cards upto 400 hooks
- Auto / manual card feeding
 - Variable pitch
- USB 2.0 port
- Designing system on / off machine
- Ready to run
- 1 set of all electronic cards and cables with sockets (if any)
- 5 years spare parts

(2) Automatic Pirn Winding Machine : for Varanasi

- with bunch motion
- number of spindles – 04
- auto pirn trolley with magazine
- auto thread stop motion
- suitable for spun & filament yarn winding
- suitable to accommodate pirns from 180 mm to 220 mm

(3) Mechanical Jacquard 400 hooks : for Varanasi

- number of hooks – 400 with chain / lever drive from loom shaft
- double lift double cylinder type – suitable for fine to medium variety fabrics
- with all required accessories for ready to run condition

(Signature of the bidder)

(4) Yarn Appearance Board Winder: for Varanasi

Instrument Details:

Instrument consists of a yarn wrap board. The board is rotated automatically to wrap yarn over it. The yarn is guided on to the board through a yarn guide, which moves parallel to the pivoting axis of the board giving uniformly spaced wraps. The guide is positively linked to the rotation of the board with the help of a chain and sprocket drive. A set of change gears gives six different spacing to the yarn for wrapping yarn of different counts. A spring loaded adjustable tensioning arrangement provides the desired tension to the yarn. A specially designed bobbin holder provides holding of yarn bobbin to check. Testing is carried out as per ASTM D 2255

Specification:

Instrument should be built on rigid heavy base with standard finish. Instrument and its all components should be corrosion resistant.

Traverse speed option for yarn wrapped @ 20,22,26,32,38,& 48 ends per inch

Size of Acrylic tapered Board : 28.5 cm x 18 cm, taper angle 2 Degree

28.5 cm x 16 cm

Size Acrylic rectangular Board : 28.5 cm x 18 cm

Standard yarn spacing : 20,22,26,32,38, and 48 wraps per inch

Accessories Required

Pointing needle

04 sets of tapered and rectangular boards each (Both white and Black Boards are required).

One complete set of photographic standards for yarn grading in compliance with ASTM D 2255 (Range –Ne 1-12, Ne 12-24, Ne 24-36, Ne 36-50, Ne 50-75, Ne 75-135 in std size 25 x15 inch

Other Requirement : Calibration certificate

(5) Perspiration Tester: For Varanasi

Following are the minimum requirement for perspiration tester:

1. This instrument is used to determine the colour fastness of dyed/printed material due to the effect of perspiration
2. It should fulfill the requirement of IS 971 (latest version).
3. The device should be made of stainless steel frame along with sufficient number of acrylic plates should be provided as required in the test method.
4. At least 10 meters Multifiber test fabric should be provided.
5. Grey scales (Change in colour and Staining) ISO 105 A02 and A03 should be provided
6. All the required material for running instrument as per IS 971 should be provided.

(Signature of the bidder)

(6) Wrinkle recovery tester (AATCC Method): for Varanasi

Following are the minimum requirement for wrinkle recovery tester:

1. This instrument is used to determine wrinkle property of fabric
2. It should fulfill the requirement of AATCC 128 (Latest version)
3. Three Dimensional (3D) Wrinkle Recovery Replicas should be provided along with instrument
4. Sample template as per the sample size mentioned in AATCC 128 and cutter may also be provided
5. Cloth hanging clips at least 20 should also be provided.
6. All the required material for running instrument as per AATCC 128 should be provided

(7) Crease recovery Tester: for Varanasi

Instrument Details :

The specimen is first creased under specified load for fixed time and is then transferred to measurement device, where one end of the specimen is held in a spring loaded clamp and other is allowed to fall free under its own weight. Now , angle of deflection of the clamped specimen from horizontal is read from the scale fixed to the clamp . This angle gives the measure of Crease Recovery Angle. Testing is carried out as per AAATCC 66,IS : 4681, ISO :2313 testing standard

Specification :

Heavy base with all parts of stainless steel

Rotating dial to be on Good Quality Acrylic Sheet .

Dial movement should be smooth preferably it should be housed in a Brass bush.

Angle Measurement: On an Engraved Circular Scale graduated in 1 deg.

Scale Measurement: 0-180 Degrees

Loading device (500 g , 1020.4 gm or 10 N)

Specimen Tweezers (High quality metal)

Specimen Template (40 x 15 mm and 50 x 25 mm)

Other Requirements : Calibration certificate

(8) Martindale Abrasion cum Pilling Tester : for Varanasi

Instrument Details :

Instrument consists of four testing plates on which the abrading fabrics is attached, these four testing table are mounted on the base plate of the instrument. There is revolving plate, which revolves with the help of three cranks, pegs & motor. There are four sleeves attached on the revolving plate. Testing is carried out as per :IS 12673 , ASTM D:4966 ,ASTM D:4970 ,BS 5690

(Signature of the bidder)

Specification :

No. Of specimens = 4

Exposed area of test specimen=6.45 cm²

Working pressure on test specimen = 3 kPa , 9 kPa,,12 kPa weights

Rotational speed of outer pegs =47±2.5 rev /min

Drive (speed) ratio of Outer pegs: inner pegs =32:30

Total Stoke of outer & inner pegs =60.5±0.5 mm

Circumferential parallelism of sample holder to abrading tables=±0.05 mm

Other Requirements:

Templates for cutting the specimen

Standard abrading fabric (worsted) : 2 meter

Backing Foam as per standard : 1 meter

Calibration Certificate

(9) Yarn Faults Classification system: for Varanasi

⇒ The instrument is required for classification (length / dia) & counting of the seldom occurring yarn faults and foreign matter (contamination) by sensing the running yarn.

Instrument should possess following features and specifications :

- ⇒ Offline Classification system should have features like determining yarn profile and automatic clearing curve including classification of foreign fibre and PP faults for white PP contamination
- ⇒ Capable for testing of all types of cleared and un-cleared Spun yarn (natural, synthetic and blends) based on measuring principle for mass- capacitance , for hairiness-Optical ,for foreign matter-Visible light and White PP based on InfraRed , Count Range -3^s to 200^s
- ⇒ Electronic Measuring device – capacitance and optical units with guide alignment of the yarn in a straight path through the measuring zone.
- ⇒ Control Unit – that supplies the signal to operate the measuring device and , also in return, receives the registration signal from the measuring device , stores the information received , responds to this information according to a predetermined setup , and outputs computed data at the end of the test.
- ⇒ Winder – A power driven take up device equipped with a winding drum (06 Nos.) of uniform diameter and capable of operating at constant take-up speed (300 to 1200 m / min)
- ⇒ Yarn Tensioning Device – A unit for the control of the yarn in the measuring zone so that the yarn travels in a straight path , free from knicks , without stretching the yarn.
- ⇒ Operating Mode : Cut and classification mode
- ⇒ Faults Classess : Mass -45 (STK -16 , Extended STK -3 , LTK -3 ,Extended LTK-4,STN-6, Extended STN-1 ,LTN-4 ,Extended LTN -4) Foreign Fibre -34 , PP -12

(Signature of the bidder)

- ⇒ Measuring Heads :06 ;
- ⇒ Auto air blow system
- ⇒ Scatter plot of yarn faults in yarn faults matrix and Scatter plot of foreign matrix
- ⇒ Determination of optimum clearing curve , based on scatter plot
- ⇒ On line visualization of yarn faults
- ⇒ On line simulation of defects in fabric or garment
- ⇒ Cut prognosis indicating the number of cuts with particular setting
- ⇒ Monitoring of yarn count
- ⇒ Detection of incorrect material
- ⇒ Information on length / weight of wound yarn

Other requirements : All accessories as required (Provide list of the accessories with Technical Bid)

(10) Scott Type- Crease flex Tester : for Varanasi

Scott Type- Crease Flex Tester is used to determine the crease-flex abrasion resistance of leather, rubber cloth etc.

It should be as per SES N 3298

It should have following details

- Specimen size : 30x120mm
- Clamp interval : 30 mm
- Load : 9.8 N
- Stroke : 50 mm
- Speed : 120mm/min
- Metallurgy: Stainless steel

Note : It should be complete in all respect

All accessories should be provided along with the instrument

(Signature of the bidder)