



TEXAS TECH UNIVERSITY

Fiber & Biopolymer Research Institute™

Testing and Services

Effective September 2019 – August 2020

Mailing Address:

Box 45019
Lubbock, Texas 79409-5019

Shipping Address:

1001 East Loop 289
Lubbock, Texas 79403-6518

Telephone: 806-742-5333

Fax: 806-742-5343

Email: fbri@ttu.edu

Web: <http://www.depts.ttu.edu/pss/FBRI.php>

Managing Director: Nouredine Abidi, Ph.D.

Telephone: 806-834-1221

Email: nouredine.abidi@ttu.edu

PROCEDURAL REQUIREMENTS

We do not accept items shipped “collect.”

For return shipments, specify shipping preference and account number to bill for cost. Otherwise return shipment is sent collect.

If a purchase order (PO) is required, submit with documents authorizing tests.

Payment may be made by credit card. (MasterCard, Visa, American Express and Discover accepted.)

Unless an exemption has been approved, international orders require prepayment.

All sample residues and excess raw materials become the property of the FBRI unless a specific request is made for return.

To ensure faster fiber preparation and testing, please follow these guidelines:

Sample Preparation: Do not use staples or plastic sacks. If sacks need to be closed by folding over; do not use rubber bands.

Sample Identification: Limit identification codes to ten digits and use numerals only (no letters, symbols, dots or dashes). If possible, use bar codes.

DATA DELIVERY: Email copies of test data

FIBER, YARN, & FABRIC TESTING

Contact: Khawar Arain

806-834-7567

Khawar.Arain@ttu.edu

FIXED-PRICE TESTS

Price

HIGH VOLUME INSTRUMENT (HVI) TESTING

HVI testing using Uster Technologies 1000 systems, providing the average of micronaire, length, uniformity, strength, elongation, color and trash.

USDA test, per sample

\$2.80

Replications include 2 for color, 1 for micronaire, 2 for length and 2 for strength.

Higher accuracy test, per sample

\$3.50

Replications include 2 for color, 2 for micronaire, 4 for length and 4 for strength.

Breeders' test, per sample

\$7.50

Replications include 4 for color, 4 for micronaire, 10 for length and 10 for strength.

AFIS (ADVANCED FIBER INFORMATION SYSTEM) TESTING

Provides length, maturity ratio, fineness, neps, and trash.

3 replications (20 grams of lint required)

\$15.00

5 replications (30 grams of lint required)

\$20.00

OTHER TESTS (Call for quote)

FOREIGN MATTER CONTENT OF COTTON – ASTM D 2812

Provides non-lint content based on MTM separation of lint and foreign matter.

ROVING AND YARN TESTING

CV% and Imperfections (Uster 5 Evenness Tester)

Single-Strand Yarn Strength (Textechno Statimat DS Tester) – ASTM D 2256-a

Provides tenacity, tenacity CV%, elongation, and yarn size.

100 breaks (*5,000 yards required*)

200 breaks (*8,000 yards required*)

- Yarn Strength by Skein Method – ASTM D 1578
Provides break factor and yarn number on ten 120-yard skeins.
(*5,000 yards required*)
- Yarn Number
Based on average of 10 skeins.
(*5,000 yards required*)

FABRIC TESTING

NOTE: Extraordinary preparation time may be charged

- Abrasion (Martindale) – ASTM D 4966
(*1 yard of fabric required*)
- Colorfastness (Atlas, accelerated) – AATCC 61
- Durable Press Rating – AATCC 124
(*1 yard of fabric required*)
- Fabric Strength Tests (*1 yard of fabric required*)
 - Grab Strength – ASTM D 5034
 - Strip Strength – ASTM D 5035
 - Ball Burst Strength – ASTM D 3787

- Fabric Count (*1 yard of fabric required*)
Ends & Picks or Courses & Wales – ASTM D 3775
- Pilling
Tumble Method – ASTM D 3512 (*1/2 yard of fabric required*)
Martindale – ASTM D 4970 (*1/2 yard of fabric required*)
- Shrinkage
Home Laundering – AATCC 135 (*2 yards of fabric required.*)
Quickwash – AATCC 187 (*1 yard of fabric required.*)
- Weight per square yard – ASTM D 3776 (*1 yard of fabric required*)
- Yarn Number from Fabric – ASTM D 1059 (*1 yard of fabric required*)

Spinning Process – Ring or Rotor Identification

OTHER FIBER ANALYSIS
Contact: Nouredine Abidi, Ph.D.
806-834-1221
nouredine.abidi@ttu.edu

Call for quote

High Performance Liquid Chromatography

X-Rays diffraction

Fourier Transform Infrared Microspectroscopy

Thermogravimetric analysis

Contact angle measurements

Ultraviolet-Visible Spectrophotometry

Fiber cross-section and image analysis for maturity ratio determination

Color measurement of textile

Microscopic visualization:

Scanning electron microscopy

Polarizing light microscopy

Fluorescent light microscopy

YARN SPINNING
Contact: Khawar Arain
806-834-7567
Khawar.Arain@ttu.edu

SHORT STAPLE SYSTEMS

Ring Spinning – Carded Yarns
(Minimum of 30 pounds of fiber)

Ring Spinning – Combed Yarn
(Minimum of 40 pounds of fiber)

Ring Spinning – Carded & Combed Yarn
(Minimum of 50 pounds of fiber)

Rotor Spinning
(Minimum of 30 pounds of fiber)

GINNING
Contact: Nouredine Abidi, Ph.D.
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	<u>PRICE</u>
<u>GINNING</u>	
<u>Micro Gin, 24-Saw</u> <i>(Minimum 8lbs)</i>	\$25.00
<u>Tabletop 10-Saw Gin</u> <i>(Minimum 50g)</i>	\$15.00
<u>Tabletop Roller Gin</u> <i>(For small samples - 10g or less)</i>	\$15.00
<u>Compass</u> <i>(Minimum 500g)</i>	\$15.00