



TEXAS TECH UNIVERSITY

Fiber & Biopolymer Research Institute™

# Testing and Services

**Effective September 2021 – August 2022**

**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](mailto: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](mailto: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**

### **Contacts:**

Noureddine Abidi, 806-834-1221, [noureddine.abidi@ttu.edu](mailto:noureddine.abidi@ttu.edu)

Khawar Arain, 806-834-7567, [Khawar.Arain@ttu.edu](mailto:Khawar.Arain@ttu.edu)

## GINNING

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|  | <u>PRICE</u>   |
|--|----------------|
| ▪ <b>Micro Gin, 24-Saw</b><br><i>(Minimum 8lbs)</i>                      | <b>\$25.00</b> |
| ▪ <b>Tabletop 10-Saw Gin</b><br><i>(Minimum 50g)</i>                     | <b>\$25.00</b> |
| ▪ <b>Tabletop Roller Gin</b><br><i>(For small samples - 10g or less)</i> | <b>\$25.00</b> |
| ▪ <b>Compass</b><br><i>(Minimum 500g)</i>                                | <b>\$25.00</b> |

## HIGH VOLUME INSTRUMENT (HVI) TESTING

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

|   | <u>Price</u>  |
|---|---------------|
| ▪ <b>USDA test, per sample</b><br>Replications include: 1 for micronaire 2 for color, 2 for length and 2 for strength.            | <b>\$2.95</b> |
| ▪ <b>Higher accuracy test, per sample</b><br>Replications include: 2 for micronaire, 2 for color, 4 for length and 4 for strength | <b>\$3.70</b> |
| ▪ <b>Breeders' test, per sample</b><br>Replications include: 4 for micronaire, 4 for color, 10 for length and 10 for strength.    | <b>\$8.00</b> |

## AFIS (ADVANCED FIBER INFORMATION SYSTEM) TESTING

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

|   |                |
|---|----------------|
| ▪ <b>3 replications (20 grams of lint required)</b> | <b>\$16.00</b> |
| ▪ <b>5 replications (30 grams of lint required)</b> | <b>\$20.00</b> |

## OTHER TESTS

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### 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*)

## YARN SPINNING

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### Call for quote

#### **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*)

## **OTHER FIBER ANALYSIS**

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### **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