Wisconsin Institute for Sustainable Technology

LABORATORY SERVICES

Price List

Effective January 2025

715-346-2111
wist@uwsp.edu
www.uwsp.edu/wist

Wisconsin Institute for Sustainable Technology
College of Natural Resources
University of Wisconsin-Stevens Point

WIST

Wisconsin Institute for Sustainable Technology

We'll help you find the answers you need.

The Wisconsin Institute for Sustainable Technology (WIST) offers innovative practices based on tried-and-true principles. Working toward sustainable solutions benefits all of us, but getting started or knowing where to turn can be challenging. We're here to help with that.

WIST's experienced staff brings new ideas and research opportunities from the university to the boardroom, shop floor, and, ultimately, the consumer. Our entrepreneurial approach to sustainability and best practices allows you to incorporate innovative methods that meet your organization's goals.

Our services include paper testing, papermaking, pulping, pilot coating and laminating, repulpability and recyclability testing, and compostability testing. Testing is performed according to TAPPI, ASTM, and ISO standard methods.

Table of Contents

The Wisconsin Institute for Sustainable Technology is part of the College of Natural Resources on the UW-Stevens Point campus.

Compostability Testing

Compostable packaging and materials get noticed in the marketplace, and organizations who embrace packaging sustainability set themselves apart. WIST can help you elevate your approval ratings while improving your environmental impact through compostability testing.

Our BPI-approved Compostability Testing Laboratory carries out the necessary tests to determine whether your materials are compostable under industrial composting conditions. We test to ASTM D6400, D6868, and D8410 standard specifications.

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17025
TESTING LABORATORY

Compostability Testing Price List

Analysis	Method	Price	Notes
Ash Content of Test Item		$140	
Biobased Carbon Content of Test Item		$750	
Compostability Suite *Includes Ultimate Biodegradability, Quantitative Disintegration, and Ecotoxicity*	ASTM D6400, ASTM D6868, and ASTM 8410 standards	$15,000	20% discount applies to second and subsequent samples submitted at the same time
Ecotoxicity	OECD 208	$3,000	
FT-IR Spectrum of Test Item		$200	
Grammage of Test Item		$100	
Quantitative Disintegration	ISO 20200	$4,500	84-day trial
Quantitative Disintegration and Ecotoxicity	ISO 20200, OECD 208	$7,500	140-day trial
Regulated Metals' Content of Test Item		$350	
Thickness of Test Item		$100	
Total Fluorine Content of Test Item		$250	
Ultimate Biodegradability	ASTM D5338	$7,500	45-day trial

Effective January 1, 2025

Repulpability and Recyclability Testing

The Wisconsin Institute for Sustainable Technology understands that sustainable packaging is essential to help minimize environmental impact and meet consumer expectations. WIST provides testing services to evaluate the recyclability of paper-based packaging that helps support on-pack labeling claims, build consumer trust, and differentiate your brand in the marketplace.

WIST's testing protocols and reports are accepted by the How2Recycle program. Our protocols make the technical determination of repulpability and recyclability of corrugated and other unbleached paper- and fiber-based packaging materials.

The protocols comprise two parts – Part I, Repulpability; and Part II, Recyclability.

Part I sets out specific methods to determine whether a corrugated box or similar packaging can be broken down into pulp—“repulpable"—which is a critical step in the recycling process. It also determines that a minimum threshold of fiber recovery is met.

Part II then checks whether the material can move through typical recycling systems without causing problems, such as contamination or processing issues, and finally be used in the manufacture of new recycled-content packages without negatively impacting the performance of that new package.

Price List

Analysis	Price
Part I	$750
Part II	$7,500

Effective January 1, 2025

Paper Testing Services

WIST provides a full line of paper testing services to support your technical and quality goals. We understand the importance of fast and accurate results, and all samples and test data are strictly confidential.

Our testing facilities consist of a wet laboratory and a 1,150-square-foot conditioned lab. Testing is performed according to TAPPI, ASTM, and ISO standard methods.

Pulping

The staff at WIST understands how pulp preparation and testing can improve an existing source of pulp or pave the way for new fiber sources. Our experience with a wide variety of biomass, including novel materials, will elevate your product and business opportunities. Count on WIST for all of your needs in laboratory scale pulping. We will work with you to develop the right trial for your project.

- Trials for wood and nonwood biomass including food processing by-products and agricultural residual materials
- Benchtop equipment sized 50-360 grams dry product weight

Full price list available on page 8.

Fourdrinier Pilot Paper Machine

Building new formulations in papermaking is crucial for profitability and quality output, but testing them on your own equipment creates downtime and significant cost obligations. UW-Stevens Point's Fourdrinier Pilot Paper Machine offers the full-scale opportunity for trials in a 20-inch web. Stock prep, fiber blending and refining, and customizable options allow you to run smaller batches, keeping your machines free to maintain profits, minimize risk, and run a wide range of grades and grammages.

Specifications:
- 20-inch web
- Speeds up to 200 fpm
- Sheets in basis weight from 40 to 350 gsm

Chemicals:
- Metered in at seven locations in the approach-flow system
- Pre-fan pump port is a co-mix port that can meter in two chemicals

The wet end:
- Dandy roll
- Single felted, two-nip press
- Smoothing press

The dry end:
- Two independent dryer sections
- Horizontal, flooded-nip size press

The stock preparation area:
- Hydropulper
- Two-stage cleaner system
- Slotted pressure screen
- Temperature control

Full price list available on page 8.

Raw Material and Chemical Additive Studies • Equipment Evaluation • Grade Development • Production Runs

Paper Testing Services Price List

Test	Method	Price/sample	Notes
ABC Pulping Liquor Test		$245	Three replicates
Absorption TIme, Water Drop	T432	$90	Test time, five-minute maximum
Ash Testing (525° C)	T211	$140	
Ash Testing (900° C)	T413	$175	
Basis Weight (Paper and Paperboard)	T410	$65	
Brightness	T525, T571	$65	
Britt Jar, Fines (pulp)	T261	$280	Requires consistency
Bulk/Density	T220	$60	Included with basis weight and caliper
Burst	T220	$85	10 on each side
Caliper	T411	$60	
Charge Analysis	Mutek	$370	Samples must be shipped overnight delivery
Cobb Size Test	T441	$140	Replicates depend on type of size used
Color L, a, b		$75	
Consistency	T240	$110	
Digester - Pulping Studies		$115/ hour	Request quote based on specific conditions
Disk Refiner		$350/condition	
Fiber Length Distribution - Morfi		$140	
Fiber Length Distribution - Morfi w/ shives or coarseness		$160	
Folding / Endurance	T511	$160	10 in MD and 10 in CD
Formation Analysis	Optest Micro-Scanner	$100	
Freeness	T227	$95	
Gloss	T480	$110	
Gurley Porosity	T460	$95	5 on felt and 5 on wire, reported as one
Handsheet Preparation and Physical Testing Package	T220	$530	Includes basis weight, burst, caliper, density, tear, tensile
Handsheet Preparation Only	T205	$180	

Test	Method	Price/sample	Notes
HST	T530	$130	
Kappa Number	T236	$245	
Klason Lignin	TAPPI 60(10): 143(1977)	$280	Detection limit of 2%
Moisture Analysis - Halogen Balance		$90	
Opacity	T519	$100	
Paper Making		$7,000 to $9,000 for an eight-hour day	The rate varies since trial plans are unique and differences affect the pricing. Shipping, materials, and other supplies and services charged in addition. Stock preparation, start-up and shut-down time is included in the eight-hour period. Contact us for a detailed price quote.
Parker Print Surf	T555	$95	
PFI Mill	T248	$2,500	Includes 5-point CSF (0, 3,000, 5,000, 10,000, 15,000 revs), handsheet preparation and testing. Require 210 g o.d. fiber
Pulmac Master Screen Shive Analysis	T274	$185	
Repulpability - Modified UWSP Version	UM 213 + Formation	$280	Repulpability of tapes
Repulpability - TAPPI UM Method Only	UM 213	$185	Repulpability of tapes
Ring Crush	T818	$130	
Roughness (Sheffield Method)	T538	$85	
Sommerville Flat Screen	T278	$185	Per sample; sample weight is 20 g
Stiffness, Taber	T566	$130	5 in MD and 5 in CD
Tear	T414	$100	10 in MD and 10 in CD
Tensile (stretch, TEA, modulus)	T494	$160	10 in MD and 10 in CD
Viscosity	T230	$315	
Viscosity (Brookfield)		$280	
Water Retention Value	UM256	$140	
Wax Pick Test	T459	$160	5 on each side
Zero-span Tensile	T231	$165	Representative samples from each direction

Pilot Coating and Laminating

Innovative approaches should support your bottom line, yet if you plan to test formulations in-house, you could be sacrificing valuable run times. With our Faustel Pilot Coating and Laminating machine, you can keep your own equipment running for your clients while we run your routine standard tests and test new formulations in our lab.

Our Faustel Pilot Coating and Laminating line handles paper, film, and foil on roll sizes up to 300 mm wide and at speeds up to 30 m/min. We can perform gravure roll and slot die coating, water-based or solvent-less formulations, and dry bond lamination. Small scale production runs, product development runs and tests with various substrates and coating materials are all within machine capability. Contact us to discuss your project and product development needs.

Pilot Coating and Laminating Price List

Equipment	Price	Notes
Coating and Laminating Trial	$4,000	Included labor and machine only; start-up and shutdown time is included in the eight-hour period; raw materials and other supplies and services charged in addition. Contact us for a detailed price quote.

Inquiries and Further Information

For papermaking, pulp, or coating and laminating services, contact:

Mark Shawbitz
Papermaking and Laboratory Specialist
715-346-2703
mshawbit@uwsp.edu

For compostability testing services contact:

Krystina Gehrke
CTL Research Specialist
715-346-2136
kgehrke@uwsp.edu

For all other inquiries contact:

Paul Fowler
Executive Director
715-346-3767
pfowler@uwsp.edu

WISCONSIN
OFFICE OF RURAL PROSPERITY

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E·D·A
U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

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