

WIST: Your trusted source for specialty paper services



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

**WIST: Your partner in paper research,
development and contract services,
providing:**

- Grade development
- Papermaking additive studies
- Equipment evaluation
- Small production runs
- Projects tailored to your specific requirements
- Contact us for pricing for your project



Pilot Paper Machine Specifications

- Fourdrinier machine
- Up to 200 fpm
- 20-inch sheet
- Basis weights from 15 to 400 gsm
- Stock preparation area features a hydropulper, two-stage cleaner system, slotted pressure screen and automated temperature control
- Chemical metering at several locations in the stock preparation area
- Wet end includes a dandy roll, single-felted two-nip wet press and a smoothing press
- Dry end features two independent dryer sections, horizontal size press and calender stack



WIST: your partner in compostability testing of coated paper and biodegradable plastic products

- Third-party compostability testing helps ensure compliance with FTC Green Guides for making environmental marketing claims
- Test methods carried out in accordance with standard specifications for compostability in industrial or municipal systems
- ASTM D6868 for paper end items incorporating plastic or polymer coatings
- ASTM D6400 for plastic end items
- Biodegradation, disintegration and ecotoxicity trials undertaken separately or as complete standard specification package
- Heavy metal evaluation



- Dedicated compostability testing laboratory and staff
- Service built on expertise in composting, biodegradation and data analysis
- Contact us for pricing your specific project: discounts for more than one sample evaluation



WIST: Your partner in routine testing and analysis, operating dedicated laboratories

- Full line of paper testing services
- Testing performed according to TAPPI, ASTM and ISO standard methods
- Chemical analysis
- Evaluation of pulp and paper mill waste streams for value-added products and reduced waste disposal costs
- Experienced laboratory and technical staff
- Contact us for pricing your specific testing needs



Paper Tests

- Basis Weight
- Brightness
- Bulk/Density
- Burst
- Caliper
- Cobb Size
- Dirt Count
- Formation
- Gloss
- Gurley Porosity
- Handsheet Studies
- Hercules Size
- Internal Bond
- Opacity
- Parker Print Surf
- Ring Crush
- Sheffield Smoothness
- Stiffness: Gurley
- Stiffness: Taber
- Tear
- Tensile: stretch, TEA, modulus
- TSO
- Wax Pick
- Zero-Span Tensile

Analytical Chemistry

- Sugar analysis
- Acid and enzyme hydrolysis
- Fermentation inhibitors
- Lignin utilization studies
- Brookfield Viscosity
- Fatty Acid Analysis
- Odor Analysis



WIST: Your partner in pilot scale pulping and bleaching

- Pulping and bleaching trials for wood and non-wood biomass, including food-processing by-products and agricultural residual materials
- Benchtop equipment sized 50-360 grams dry product
- Larger volume pulping and bleaching at 5-liter, 10-liter and 100-liter scale
- Contact us for pricing your specific project



Pulp Testing Services

- Bleaching Studies: Chlorine Dioxide, Hypochlorite, Hydrogen Peroxide, Oxygen, Ozone
- Britt Jar
- CED Viscosity
- Consistency
- Fiber Length Distribution:
- MorFi Fiber Length Analysis
- Freeness: Canadian Standard
- Handsheet Preparation
- Kappa Number
- Laboratory Refining – 12” twin disc refiner, chips and fiber
- PFI Mill: 5 pt. curve including freeness, handsheets and standard testing
- Pulmac Masterscreen
- Pulping Studies: Kraft, Sulfite, Organo-solv, RMP, CRMP
- Pulp Viscosity
- Sommerville Flat Screen
- Valley Beater



WIST: Your partner in coating and laminating

- Faustel LabMaster™ Coating Line with two unwinds, roll coater, dryer, laminator with chill rolls and rewind with integrated drives and controls
- Unit can handle paper, film, foil and nonwovens on roll sizes up to 300mm wide and at speeds of up to 30m/min
- Gravure roll and slot die coating
- Water-based or solvent-less formulations
- Dry bond laminating



- 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 needs and how our pilot line can assist in research, development and small-scale production runs



**For further information contact:
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