# Nature of Monadnock Paper Mills

### SUSTAINABLE MANUFACTURING BY DESIGN

### **ABOUT MPM**

Monadnock Paper Mills, Inc. is a family-owned and -operated business with 200 years of experience in papermaking. To put that into perspective, our doors opened shortly after the War of 1812, under the presidency of James Monroe and during the reign of King George III. Today, Monadnock is a strong company and is dedicated to corporate social responsibility. Each employee understands our mutual commitment to work as a community, and we remain nimble, focused and progressive.

We believe that socially and environmentally responsible investments in people, technology, processes and products will deliver value to our customers and our community. Across all levels of the organization, we believe there's a lot to be said for doing the right thing – simply because it's the right thing to do.

While papermaking is consolidating worldwide, Monadnock is experiencing growth in new markets and surpassing most of our environmental impact reduction goals. We reduce impacts by working smarter, finding new efficiencies in old processes, encouraging innovation across our organization and collaborating with our supply chain partners. We will continue to challenge ourselves to reduce our environmental impacts, substitute materials, reduce demand on natural resources and reuse whatever we can, while providing a safe and healthy place to live and work — not only for this generation but for future generations. This is how we define sustainability.

### MANUFACTURING CAPABILITIES

Monadnock provides and custom engineers a diverse range of fiber-based products, including premium printing, packaging and technical/specialty papers for leading brands worldwide.

Working as a true partner with its customers, Monadnock's technical expertise and agility result in products that lead the market in innovation and quality. With a passion for the environment and ingenuity, Monadnock turns ideas into reality.

### **COLLABORATION**

Monadnock employs a dynamic collaborative process in product development. We get all the right people in the room to help solve your most challenging problems. Sales, marketing and technical representatives, in close cooperation with you and your team, will work to define the full scope of your project. From this process evolves product, partnership and a concern for long-term mutual interests.

Monadnock is committed to innovation, long-term product development and refining products to meet increasingly demanding requirements. This commitment is based on the realization that much of the company's future success depends on commercializing products now in development. We are scaled to help you develop fiber-based solutions.

### **CERTIFICATIONS & PARTNERSHIPS**





## FOREST STEWARDSHIP COUNCIL® (FSC)

All Monadnock printing and packaging papers are FSC\* certified (FSC co18866 www.fsc.org). The FSC label on Monadnock products ensures responsible use of forest resources. Technical products may be certified upon request.





### 100% RENEWABLE ELECTRICITY

Made with Green-e® certified wind power (RECs).



### CARBON NEUTRAL

All papers are manufactured carbon neutral with verified emission reductions (VERs).



### ELEMENTAL CHLORINE FREE

The fiber in Monadnock virgin papers is elemental chlorine free.



### PROCESSED CHLORINE FREE

The fiber in Monadnock recycled papers is processed chlorine free.





### ISO 14001:2015 & ISO 9001:2015

All papers are manufactured under the strict requirements of a third-party certified ISO 14001:2015 Environmental Management System.

All papers are manufactured under the strict requirements of a third-party certified ISO 9001:2015 Quality Management System.



### AMERICAN MADE

All Monadnock papers are manufactured in the United States of America.

### MAKING THE GRADES

### **PAPERMAKING**

Monadnock manufactures over 200 distinct grades of papers for a broad variety of markets.

The Mill operates two Fourdrinier paper machines:

One: Trim 90-102" (229-259 cm) Two: Trim 80-88" (203-223 cm)

Converting: Roll Processing and Sheeting.

For higher-caliper or special composite requirements, Monadnock can provide laminated products up to 8 plies.

The calender stacks impart the desired surface smoothness. Finishes range from vellum to smooth to silk at 50 Sheffield smoothness.

Surface sizing, coatings and saturants may be added at the size press to increase the strength of the paper as well as optimize printability.

Monadnock has the capability to impart pigmentor dye-based colors in the paper as well as applying surface colors on the coater.

### COATING CAPABILITIES

Coater Trim 62" (157 cm)

Rod Coating, Two Coating Station

Coat Weight range 0.25-30 lb./ream/side (0.325-66 gsm)

### **CUSTOM FIBER FURNISHES**

Hardwood Cotton
Softwood Eucalyptus
PCW Recycled Hemp
Synthetic Kona

### **ADDITIVES & COATINGS**

Adhesive Anti-Curl Anti-Slip Barrier

Tie Print Receptive
Color Saturation Lattices

**Tactility** 

# PHYSICAL & PERFORMANCE CHARACTERISTICS

Basis Weight Tear Strength
Caliper Tensile Strength
Elongation Porosity Control

Finish Security
Flame Retardance Stiffness
Foldability Stripability
Opacity Wet Strength

### **CUSTOMIZATION**

Monadnock's team of scientists understands how to blend fiber and chemistry to achieve optimal performance characteristics. We dial in specific properties, such as strength and durability, porosity, flame resistance, brightness, moisture, caliper and absorbency. Physical and aesthetic characteristics, such as color, print receptivity, adhesive, surface barrier, anti-curl and anti-slip, can be applied at Monadnock's rod coater.

The hallmark of Monadnock's products is consistency. Manufacturing expertise and in-line process control ensure consistent product quality from run to run.

### **TOLL COATING**

Contact us for information on our toll manufacturing and coating programs.

### PRODUCT OVERVIEW

Monadnock manufactures a diverse range of paper products, including premium printing, packaging and technical/specialty papers for leading brands worldwide. Our papers are made with the environment in mind – many of our printing and packaging products contain up to 100% post-consumer waste (PCW) recycled fiber.

**ENVI PORTFOLIO**<sup>®</sup> – a comprehensive suite of high-performance, environmentally preferable, fiber-based options for retail, packaging and signage applications.

#### • Gift/Loyalty/Membership Cards

**Envi Card** – renewable and PCW recycled fiber alternatives to PVC and PLA materials used in gift, loyalty, promotional and membership cards. Available in several calipers. Durable, lay-flat, offset printable and recyclable.

**Envi Loyalty Card** – an environmentally preferable replacement for plastics and PVC materials often used in membership, merchandise return, loyalty and coupon cards. Durable, lay-flat, offset printable and recyclable.

### · Tag & Ticket

Envi Tag & Tickets – up to 100% PCW recycled fiber designed to effectively meet the marketplace need for environmentally friendly tags, tickets and on-garment identification.

**Envi Durable Tag** – renewable and PCW recycled fiber suited for applications that require additional strength and resistance to the elements.

### Folding Box Board & Durable Cover

**Envi Performance Board** – 15 pt. to 24 pt. – beautiful, high caliper, luxury retail packaging box board manufactured from renewable PCW recycled fiber and alternative fiber, such as Kona fiber – reclaimed jute fiber from coffee bean bags, hemp and cotton. In uncoated and coated finishes.

**Duraprint Durable Cover** – durable yet pliable paper that prints beautifully and holds up to the rigors of demanding folding applications. Perfect for book covers, CD/DVD cases, setup boxes and other projects where crack-free repetitive folding is a requirement

### • Performance Label & Printable Blotter

Envi Wet-Strength Labels – Virgin and 100% PCW recycled fiber options engineered for strength and durability.

**Envi Printable Blotter** – engineered for printability and absorbency.

### • Environmental Graphics & Signage / Wide Format

**Envi Wallgraphics** – made with PCW recycled fiber and engineered to replace vinyl graphics for walls and other rigid surfaces in commercial and residential spaces. Available pre-pasted and unpasted.

**Envi Ultraform® Backlit Poster** – durable, weather-resistant, renewable, recyclable, UV-stable poster papers for outdoor and indoor applications. The backlit product is c2s print ready, optimized for offset and screen printing.

Envi Ultrahide® Blockout Poster – engineered for indoor signage. The substrate is renewable and recyclable and 100% opaque, blocking any light and artwork from showing through from behind.

**Envi Flame-Resistant Poster Paper** – engineered for point-of-purchase signage in public/retail spaces where regulations call for flame-resistant materials.

**ENVisual® Board** – renewable and recyclable rigid board options including .010, .015, .020, .030 and .040" to replace to PVC and stryene.

### FINE PRINTING PAPERS – solutions for printing – writing, text and cover papers.

### Virgin Fiber

- Astrolite®— a premium, brilliant white paper of unmatched fiber formation, high opacity and dimensional stability.
- Caress® smooth and creamy, with a uniformly level surface and an elegant, mellow white shade.
- Dulcet® a perfectly balanced, neutral white shade with a velvety smooth finish.

### 100% PCW Recycled Fiber

- Astrolite PC 100<sup>®</sup> Velvet c2s a bright white, coated text and cover. HP Indigo certified.
- Astrolite PC 100 Smooth the brightest, cleanest 100% PCW recycled fiber paper available.
- Astrolite PC 100 Digital+ a high-performance, bright white uncoated paper with superior formation. HP Indigo certified.

**TECHNICAL**/**SPECIALTY PAPERS** – customized solutions to meet individualized client specifications. In addition to custom-furnish solutions, ranging from wood pulp to cotton to synthetics, many technical grades are treated with special additives, including a wide variety of polymers used for saturating and coating.

- Archival Papers & Boards cotton, high-alpha cellulose, wood fiber papers for archival facing, corrugating, backing paper, archival mat, and mounting board and barrier papers.
- Abrasive Backing Papers A through E weight abrasive backing papers for the production of wet and dry flexible coated abrasives. These papers are polymer-reinforced to enhance drape and "hand" as well as increase durability, tear resistance, holdout and grit adhesion.
- Ceiling Tile Backing Paper backing papers for ceiling tiles. These papers are engineered for strength, structural support and compatibility with OEM tile production processes and equipment.
- Chart Paper for recording charts. These papers are engineered for superior ink holdout and printability in a broad spectrum of environments and are compatible with chart recording instruments manufactured worldwide.
- Drywall Bead/Trim Papers corner bead and trim papers for drywall applications. These papers are engineered for strength to reinforce drywall edges and seams and are compatible with wet plaster/joint compound.
- Giclee/Digital Art Reproduction wood pulp or up to 100% cotton fiber, these printing papers are designed for the digital reproduction of fine art prints and photographs. These papers may be inkjet-receptive coated one or two sides for optimum inkjet printability.

- Medical Diagnostic Papers wood and cotton fiber paper substrates for medical diagnostic applications. These indicator papers are appropriate for testing the presence/absence of chemical agents and can withstand sterilization processes, such as ethylene oxide (ETO), steam autoclave and radiation, without degradation or loss of integrity.
- Medical Packaging Paper sterilizable medical packaging papers for a wide variety of flexible packaging and testing applications in the healthcare market. These kraft and polymer-reinforced papers are designed to withstand rigorous processing requirements of packaging converters, as well as sterilization processes, without degradation or loss of package integrity.
- Premask/Application Tape polymer-reinforced flatback base stocks for pressure-sensitive adhesive tapes and labels.
   These bases range from 3 mil, to 15 mils in thickness and are used as carrier and protective sheets for vinyl sign making as well as protective masking for wood, glass and metal surfaces during shipping, handling and final installation.
- Wallcovering polymer-reinforced wallpapers and nonwoven wallcovering backings suitable for gravure, offset, screen and digital printing. Full range of unpasted and pre-pasted grounds specifically designed for the residential and commercial wallcovering markets.



### **GREEN POWER PARTNER**

Monadnock is an EPA 100% Green Power Leader. Green Power Leadership Awards serve to recognize the leading actions of organizations, programs, suppliers and individuals that significantly advance the development of green power sources.



### **SMARTWAY TRANSPORT PARTNER**

Monadnock is an EPA SmartWay Transport Partner. We choose transport partners that are committed to emission reductions when moving our product to our customers. We also provide educational materials to drivers and discourage idling at our facilities.



### **WASTEWISE PARTNER**

WasteWise is a voluntary program set up to help businesses, government agencies and nonprofit organizations save money by reducing their garbage. Organizations join the program for a three-year period and set goals in three areas: waste prevention, recyclables collection, and the purchase or manufacture of recycled products. WasteWise provides members access to online electronic reporting and valuable technical assistance. The program provides a framework for categorizing and quantifying solid waste and requires the establishment of waste reduction goals.



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⊕ Please keep, share or recycle.

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Printed on Monadnock Astrolite PC 100<sup>®</sup> Velvet, 120 lb. Cover.