

DELIVERING A COMPETITIVE ADVANTAGE.



3M Products & Green Rubber Company Capabilities FOR YOUR MANUFACTURING NEEDS



THE POWER OF PARTNERSHIP

There's no question that today's manufacturing marketplace is extremely demanding. You've got to produce the highest quality product at the lowest price and deliver it yesterday. No matter what industry you're in—electronics, automotive, appliances, or specialty manufacturing—margins are getting thinner, and competition is fierce.

But there is help out there.

Working ogether with 3M, Greene Rubber Company can offer you a complete solution for your unique application challenges. By combining the best adhesives and materials the industry has to offer with a wealth of process and converting expertise, these innovative service providers can help you reduce costs, improve your productivity, and increase revenues.

It's a powerful competitive advantage you can use to lock in your current customers and secure new business.



DEVELOPING SOLUTIONS.

No matter what you need to attach, protect, support, or identify, your Greene Rubber Company has the 3M products to match the application and the right equipment to convert those products into solutions. Development of these solutions generally follows a consistent sequence.

- Identify the Challenge: The first step is to determine what the solution needs to do. Where will it be used? For how long? Under what conditions? What are your tolerance requirements? How much or how many do you need?
- Consult with Your Converter:
 Together with Greene Rubber
 Company from 3M, your
 converter will help you determine
 what materials have the
 performance properties that
 meet your specific application
 requirements.

Once the material has been selected, the design and production resources are identified. Engineering specifications are reviewed, and the converting technology is selected based on quantity, tolerances, and material

properties.

Develop the Solution: Prototypes are produced and tested, and any necessary alterations are identified. Cutting dies are created, if necessary, for high-volume flatbed, clamshell, or rotary applications.



Produce and Implement Solution:
Your custom-converted component is manufactured and put to use, improving your product quality and streamlining your production process.



A variety of converting technologies are employed in transforming your solution from stock materials into a finished piece. Let's take a look at the equipment, adhesives, and techniques used by Greene Rubber Company.

GETTING YOUR MATERIALS IN SHAPE.

LAMINATING: Laminating involves taking two or more materials, for instance, an adhesive and a substrate,

and combining them. Once the materials are laminated together, they can be cut or shaped to size and used in production. Greene Rubber uses both cold and hot lamination for ultimate bonding.





3M Products:

Laminating Adhesives

Extreme temperatures, challenging surfaces, humidity, solvents, or abrasion, 3M has the adhesive expertise to deliver a solution that sticks.

Double-Coated Laminating Adhesives

Engineered with adhesive on both sides of a carrier material, these adhesives can be laminated to foam gasketing material to create dimensionally table die-cut parts that are ready for application.

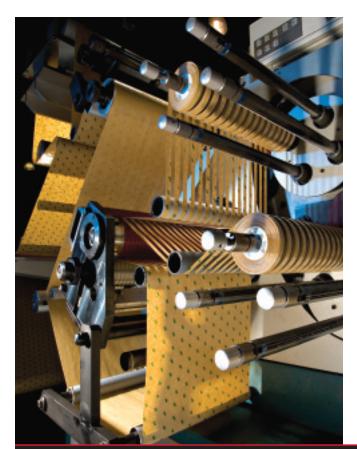
$3M^{\scriptscriptstyle\mathsf{TM}}\ VHB^{\scriptscriptstyle\mathsf{TM}}$ and Foam Tapes

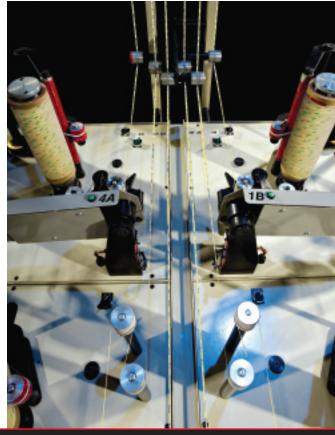
Available with a range of foam carriers and adhesives, these tapes can fill gaps, distribute stress, seal, cushion, dampen, and even replace mechanical fasteners for permanent assembly in many applications.

GETTING YOUR MATERIALS IN SHAPE.

SLITTING/SPOOLING: When materials arrive from 3M, they come on large rolls called "masters". Green Rubber Company offers a variety of slitting

and spooling services to take these large rolls of material and convert them into more readily usable sizes. In some cases, this is a first step in producing finished converted parts. Other times, the end product is the material itself, simply in a different configuration.





INDUSTRY APPLICATIONS

Masking • Conducting • Bonding • Protecting • Attaching • Cushioning



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3M™ VHB™ and Foam Tapes

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Masking and Specialty Single-Coated Tapes

Best-in-class holding power, sharp lines, temperature resistance, and clean removal— these innovative tapes are uniquely suited for a variety of industrial applications such as sealing, holding, reinforcing, masking, or protecting.

MAKING AN IMPRESSION.

FLATBED CONVERTING: Allows for thicker materials to be used. In addition, flatbed presses can accommodate rolled materials and be automated to include

multiple processes in a single pass. This allows for greater efficiency and a lower cost per part. The finished rolls can then be run on your automatic application

equipment. Tooling costs for clamshell and flatbed die cutting are generally lower than rotary applications, making these techniques ideal for mid-sized runs.



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Reclosable Fasteners

Hidden strength for multiple openings and closings. Eliminate the installation

work of screws, bolts, and metal closures while keeping surfaces smooth with 3M[™] Scotchmate[™] and 3M[™] Dual Lock[™] Reclosable Fasteners.

Resilient Rollstock

and colors.

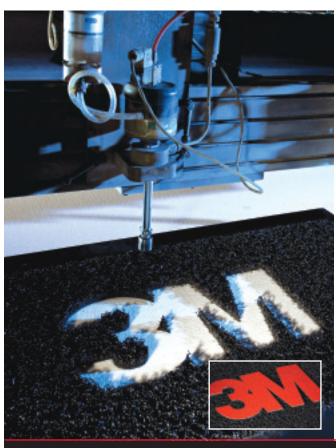
3M[™] Bumpon[™] Resilient Rollstock allows you to customize non-skid feet, spacers, or cushions that help protect products from skidding, vibration, marring, staining, or abrasion.

3M™ Safety-Walk™ Traction Systems Provides traction control in the factory environment or on durable equipment. Available in a wide array of grades

PRECISION UNDER PRESSURE.

WATERJET: For converting difficult or large components, waterjet cutting offers amazing repeatability with almost any material imaginable. A computer

numerically controlled (CNC) jet of highpressure water cuts materials up to 9" thick with laser-like precision to within .005". And, as with laser cutting, there are no dies required, so the setup costs are generally limited to processing your CAD files. Greene Rubber Company has one large and one small waterjet machine.





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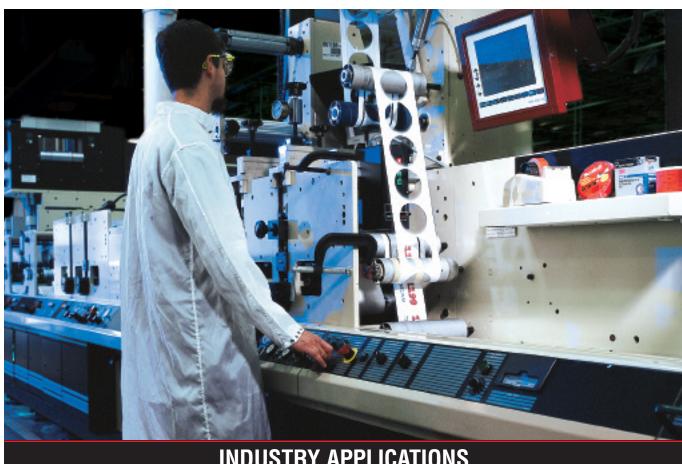
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ROLLING OUT HIGH VOLUME.

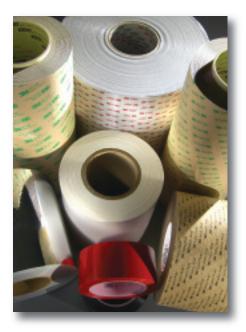
ROTARY: Rotary die cutting utilizes an engraved steel cylinder to cut shapes from roll materials up to .125" thick. The speed of these presses—up to 500 feet per minute with some materialsmakes rotary cutting the ideal choice for high-volume runs. Precision and repeatability are excellent, however,

the size of the finished piece is limited to the physical dimensions of the die. Automated optical scanners can provide 100% parts inspection.



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Performance Label Materials

With more than 150,000 combinations of liners, adhesives, facestocks, and topcoats, 3M has the solution for your label applications ready for converting.



Visit www.3M.com/converter or call us at 1.800.223.7427

Product Use: All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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20 Cross Street Woburn, MA 01801 Tel: 781 937 9909 Fax: 781 9379739 www.greenerubber.com

