

3 Ways Industries Are Using Paper Lamination

Manufacturers have been using the process of lamination globally for over a century. One of the earliest variations of this process comes from the French chemist Edouard Benedictus.

In 1903, Benedictus accidentally coated a glass flask with a plastic compound; when the flask fell to the ground, the chemist was shocked to see the glass merely shatter and not break.

This concept behind laminated glass paved the way for several innovations from industrial manufacturers—including those in the paper industry. The modern applications for paper lamination are very distinctive.

- Enhanced product protection.

Laminations are ideal for creating a protective layer against substances such as water, oil, or grease; and is a common requirement in food and beverage packaging.

To ensure products remain sterile until they are ready for use, a vapor barrier—a thin, impermeable coating—can be used in conjunction with

various laminates to keep moisture and oxygen out of the packaging.

• ***Security from counterfeiting.***

Paper manufacturers often use specially colored laminating adhesives as a security measure against counterfeit ticketing. When a laminate-treated ticket is torn, the unique color is clearly visible, signifying the ticket's authenticity. These specialized tickets are resilient enough to withstand contact with water and mild bending.

This practice is used with many types of tickets, such as those for sporting events, musical performances, and even public transportation.

• ***Light “Block Out” Barriers.***

Some laminations are used to create an inside adhesive layer able to block the transmission of light. This “block out” coating is popular for many products that need to keep light from showing through the other side.

These products include advertisements (aisle signs or those found in store windows), trading and playing cards, photographic light boxes, and many others.

<https://www.sierracoating.com/blog/2014/> > Page: 3



Learn About Our Paper Lamination Services

At Sierra Coating, we have over 20 years of experience providing customers with consistent, high-quality laminated paper products. In addition to being ISO, FDA, and NSF compliant, our products and services are versatile enough to meet the requirements of any application.

For more information on the extensive lamination services we offered, please contact Sierra Coating today

Rising Trends in the Blister Packaging Industry

The U.S. packaging market has seen its share of difficulties in recent years—including high raw material costs and negative environmental impact—but trends on the horizon predict a brighter future for manufacturers, vendors, and consumers alike.

The market is evolving rapidly, largely due to the increased usage of blister packaging throughout the country. Blister packs are highly versatile products that offer several advantages to various consumer goods. The efficiency and

<https://www.sierracoating.com/blog/2014/> > Page: 5

popularity of blister packaging has sparked several notable



- *Enhanced protective features.* To provide added protection for consumer goods, vendors are utilizing higher-quality plastics and raw materials when producing blister packs. With the use of plastics, blister packs can safeguard any products from possible contamination—particularly in regards to medicine and medical devices. Thermoform plastics can instill blister packs with chemical and wear resistances as well as increased durability.
- *Product and technological innovations.* Manufacturers are constantly on the lookout for high performing solutions with low production costs—blister packaging offers both. Blister packs can be manufactured

<https://www.sierracoating.com/blog/2014/> > Page: 6

to provide products with longer shelf lives thanks to their anti-microbial qualities. Nanotechnology is also playing a larger role in blister packaging. The use of nanotechnology affords blister packs enhanced barrier protection and reduced weight of the package. This technology is in high demand by pharmaceutical companies requiring improved protection against moisture, oxygen, and other gases for their products; demand for nanotechnology-based packaging is expected to increase by 15% compound annual growth rate during the forecast period.

- *Demand for child safety.* There is a growing demand for blister packs that are safer for children, such as child-resistant and tamper evident products. Child-resistant products are a direct result of numerous poison-related injuries befalling children; non-secure packaging can lead to accidental ingestion of medicines. Tamper evident products also have a positive effect on the packaging market, since they can an early warning sign for avoiding questionable products.
- *Sustainability.* Certain packaging materials can adversely affect the environment. To combat this issue, packaging and manufacturing companies have been encouraged to develop more sustainable products and solutions. Current environmental regulations are forcing vendors to cultivate blister packs that are more eco-friendly; vendors are designing bio-degradable blister packs, which will be expensive to produce and will necessitate increased research to offset added costs.

These rising trends are expected to continue driving growth within the U.S.

market, as manufacturers, vendors, and consumers strive for reliable packaging solutions.

Blister Packs: A Great Choice for Packaging

As important as products can be to consumers and manufactures, sometimes the packaging can be just as vital. Without proper and secure packaging, products can be stolen, tampered with or contaminated before they get into the hands of consumers.

No matter what side of the market you're on, producer or purchaser, damaged products equate to bad business. So many costs are already involved in the production and distribution of products, and consumers expect to receive functional products—why should both parties end up spending more in the long run?

There are numerous options for packaging, but blister packs many times are a superior choice for your products.

What are Blister Packs?

You might not be familiar with the name, but you've surely seen blister packs on store shelves. Blister packs are a type of plastic packaging commonly used for different consumer and pharmaceutical goods; a "blister" is a plastic shell that was thermoformed or plastic molded, then it is adhered to a paperboard or foil—blisters can also be bonded alone, which are called clamshell enclosures.

Blister packs protect products against varying environmental changes and shipping damage—while providing aesthetic value. Blister packs are often paired with custom designs to entice passersby.

Advantages of Blister Packs

Using blister packs offers several benefits to manufacturers and consumers, which include:

- *Product protection.* As mentioned, blister packs act as a barrier between your product and outside elements. The weather isn't the only thing capable of damaging your product; before getting into the hands of consumers, products can experience all kinds of impact or possible contamination. If you're buying medicine, be aware that the slightest impurity can make you seriously ill—blister packs can help keep you healthy.

<https://www.sierracoating.com/blog/2014/> > Page: 9



- *Evidence of tampering.* Products are individually sealed in blister packs, and the packs are designed to be torn in order to reach the product inside. Some blister packaging uses tamper-proof mechanisms and due to this, blister packs can quickly and easily inform consumers if their product has been mishandled or previously opened. Thanks to blister packs, consumers know when to stay away from potentially unsafe products.
- *Versatility of Use.* Blister packs can also be child resistant—these packs use a paper or film layer with a peelable adhesive that must be removed before reaching a product. Some blister packs, such as those made with 15-mil polyvinyl chloride, provide another layer of protection to products; blister packs made of harder substances with bitter-tasting coatings help deter children from chewing on them.

Blister packs are designed for high-speed production and high versatility. Blister packs are useful in various applications, and are often the most cost-effective, aesthetically pleasing, and safest option to package different products.



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<https://www.sierracoating.com/blog/2014/> > Page: 10

Thinking blister pack packaging might be the appropriate solution for your product? Sierra Coating Technologies can help. We have years of experience formulating and applying heat seal and heat activated adhesive coatings, many used in the blister pack process. Learn more about our adhesive coating services on our made to order page, and please feel free to contact us anytime.