HOW TO

Be GREEN Save GREEN

WITH STRETCH FILM





TECHNOLOGY Science Boldeas Visionary problem solving

These are the driving force behind making industrial operations more sustainable and economical for everyone



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STRETCH FILM is on track to forever change the packaging industry.

Here's why...

The Earth is a planet of finite resources—it's a reality that is already dramatically changing the consumer trend toward sustainable buying decisions. As a result, an increasing number of companies are taking the call-toaction to meet the needs of consumers by incorporating sustainable business practices.

However, there is a common belief that sustainable, "eco-friendly" products are either more expensive or lack in performance or quality. Nowhere is this more of a misconception than in the stretch film industry. Not only is stretch film an ecofriendly alternative to traditional packaging materials (cardboard, strapping, insulation), it also saves significant time and money through *increased* performance characteristics.

Technology, science, bold ideas, and visionary problem solving are the driving force behind making industrial operations more sustainable and economical for everyone from the manufacturer to the product end user. It's a formula that results in products and innovations that come to define an industry stretch film is one such product.

Stretch film is an innovative product that provides incomparable performance, costsavings, and sustainability in a combination never before experienced in the packaging industry. The success of stretch film is largely due to its ability to meet load-holding force with less packaging material. The thin gauge of stretch film results in time and money savings by reducing the volume of film needed to securely package a load. This economic benefit also serves as a sustainability benefit by providing a packaging solution that reduces waste, is recyclable, and reduces the carbon footprint of both manufacturers and end users.

Stretch film saves significant time and money through *increased* performance characteristics

The following eBook delves further into stretch film characteristics by outlining the unmatched benefits of stretch film in the areas of performance, economics, and sustainability. After reading this eBook, you will have a better understanding of how innovative, technology-driven stretch film products can forever change the way you approach packaging.



Load-Holding Force

When it comes to assessing the performance characteristics of stretch film, it's essential to start with a conversation about one of the most important factors: PROTECTION. This is an area where an understanding of load-holding force is key.

In the packaging industry, holding force is what determines the amount of packaging required to ensure proper load containment. Specifically, holding force quantifies the amount of force the packaging applies to the load and vice versa. Stretch film provides a load-holding force far superior to that of other packaging materials (i.e., cardboard, strapping, tape) due to the fact that it covers and fits the form of the load completely. This helps to ensure that unstable loads with varying components can be packaged securely without being compressed or deformed by straps or twine at multiple points.

Traditional packaging materials



Stretch film packaging solution



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Optics

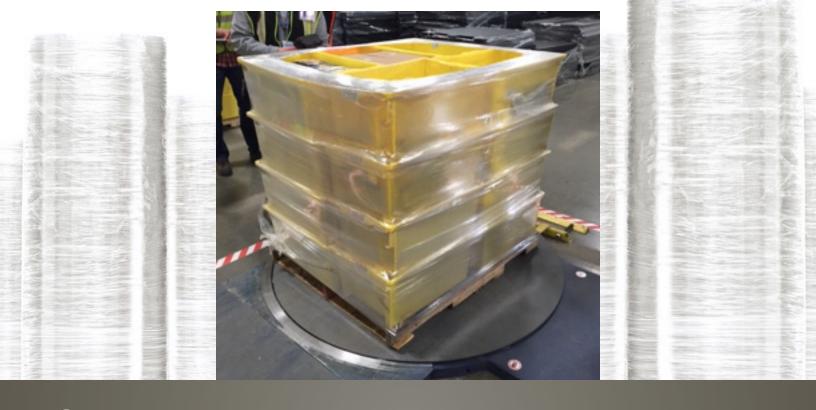
Whether you're a packaging veteran or new to the industry, one of the challenges you have likely encountered involves packaging a load so that its contents are identifiable, yet fully secure. Stretch film provides an effective solution due to the fact that it is transparent and

therefore enables load contents to be visible. This is absolutely critical for shipping companies, distributors, and wholesalers, all of which rely on the ability to efficiently scan, document, load, and unload packaged goods according to tight deadlines.

However, picture a scenario where a load has been wrapped so many times with so much stretch film that the contents inside are a Stretch film provides an effective solution due to the fact that it is transparent and therefore enables load contents to be visible

cloudy, unidentifiable mass. This can result in either improper inventory documentation or require receiving personnel to hack through layers of film in search of a barcode, thus significantly decreasing the integrity of the load while costing valuable time and effort.

The solution? Select a stretch film specifically designed to meet the unique challenges of any packaging application.







Gauge & Weight

In the world of stretch film, the load-holding force of this unique packaging material warrants the important mantra: LESS IS MORE There are two words that can instantly cause skepticism and anxiety among those who are looking to choose a new stretch film: *thinner* gauge. When considering the most effective way to securely package the valuable products that represent both you and your company, the instinctive reaction is that more packaging equals more security. However, as a result, this also means more packaging materials, more money, more time, and more environmental waste.

In the world of stretch film, the load-holding force of this unique packaging material warrants the important mantra: less is more. This is where down gauging comes into play. **Down gauging** occurs when a stretch film with a thinner gauge is determined to match or

exceed the same load-holding force as a film with a thicker gauge. Down gauging results in more efficient packaging methods and lower resource expenditure—both of which help to save time, money, and the environment.







Resistance, Robustness, Versatility

In a perfect world, every load would be uniform in shape, the size of the load and the pallet would always match perfectly, and there would only be four corners to contend with as puncture points. In the real world of packaging, however, this ideal situation is not always attainable.

Depending on the load you are packaging, the contents can have dramatically different shapes and sizes with multiple sharp puncture points—

one of the biggest challenges for stretch film. This presents a scenario where contents could break through the stretch film, resulting in a decrease in load integrity, as well as potential damage to surrounding loads. This is why it is critical to correctly determine load size and select a stretch film that will supply the needed performance characteristics in order to prevent punctures and tears.

In addition to puncture and tear resistance, it is important that the stretch film you use features a high level of robustness and versatility. The more robust the film, the more consistently it will perform in even the toughest applications without failure. The more versatile the film, the greater the number of applications (and variety of conditions) the film will work in.



The more robust the film,

the more consistently it will







Speed & Efficiency= COST SAVINGS

Time is money—it's an age-old adage that is the driving force behind the efforts of every industry, particularly the packaging industry. When other people, businesses, and industries depend upon your ability to package goods to ensure the timeliest delivery with the lowest transport damage, minutes can mean the difference between success and failure.

This is why an economical approach to packaging is essential. Packaging materials can have a dramatic effect on cost (and time) savings, which is why it's important to choose the best, most economical materials for the job. If you're already using stretch film, congratulations—you have taken the most important step toward a more economical approach to packaging!

Stretch film holds distinct economic advantages over other types of packaging by eliminating excess materials and timeconsuming packaging practices. In addition, within the realm of stretch film, the technological advancements in down gauging have enabled even greater results in efficiency and cost savings. Packaging materials can have a dramatic effect on cost and time savings, which is why it's important to choose the best, most economical materials for the job.



Conscious Design

In regards to sustainability and environmental impact, no other packaging material comes close to stretch film "Industrial" and "sustainable" are not words that typically share the same connotation. The common belief is that it is difficult, if not altogether impossible, for industrial operations to be ecofriendly. However, packaging is an industry where the implementation of sustainable practices is not only possible—it's happening right now...and stretch film is leading the movement.

In regards to sustainability and environmental impact, no other packaging material comes

close to stretch film. When stretch film is used in packaging applications, its stretch properties ensure maximum, form-fitting coverage with less material—and it is often the only packaging material required to get the job done. Compare this to the number of cardboard containers, volume of insulation materials (Styrofoam packing peanuts, Kraft paper), and amount of additional securement items (tape, strapping, etc.) that would be required to achieve the same coverage. It quickly becomes clear that stretch film not only provides a distinct *performance* advantage, it provides a distinct *sustainability* advantage as well.

To learn more about how sustainability is driving business practices within the stretch film industry, click "Learn More."









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