



EQUIPMENT: AUTOMATION

# STRETCH WRAP AUTOMATION

JUSTIFYING THE DECISION TO AUTOMATE THE STRETCH  
WRAPPING PROCESS AT YOUR FACILITY.



800-277-7007 | [ipack.com](http://ipack.com)

# Introduction: The choice to automate

Lean methodology. Cost savings initiatives. Elimination of waste. Problem solving and key performance indicators. All of these terms are used on a daily basis in manufacturing facilities throughout the world.



With costs and competition increasing daily, how can you stay competitive? You need to increase your throughput while reducing costs. It seems counterintuitive trying to do more with less resources, but that is the direction of American manufacturing. With imports arriving daily produced for much less, American companies are turning to new and innovative ways to make sure that they are competitive in the constantly evolving world economy.

Most manufacturing facilities have found ways to automate many aspects of the production cycle. Lean manufacturing focuses on the elimination of waste in waiting, inventory, defect production, over production, and unnecessary motion.

On the floor you understand the need to create a process flow and eliminate downtime. You've automated your lines and your products are flowing. Maybe there is even a machine at the end of the line packaging your product and sealing the box. Then it's placed on a pallet and a worker grabs a roll of stretch film and wraps the pallet for shipment.

**Wait.**

*Have you stopped to think that there may be other ways to help automate and reduce waste?*

***Just think about it.***

You have a worker hand wrapping pallets? Or maybe because you're moving so quickly you have a worker hand wrapping at the end of each line, meaning you have a team of people who are hand wrapping your loads.

But you have noticed a bit of a bottleneck as each one rounds the pallet multiple times, securing the load for placement on the truck. You also know that by the end of the shift pallets are wrapped more hurriedly you have had increasing reports of damages in transit because of shifting pallet loads and uneven securement force.

**Have you considered that maybe it's time to automate the stretch wrapping process, as well?**

# 1: Top 5 questions to ask when considering stretch wrap automation

Choosing the right stretch wrap machine should be a careful consideration for any business. There are several factors to consider when making your choice.



## What to consider

**Consider the following when you start the process of determining if stretch wrap automation is right for your facility:**

1. How many loads are you currently wrapping and how many loads do you foresee wrapping?
2. How are you currently wrapping and how many people does it take?
3. What types of loads will you wrap? Will the loads all be boxes, irregular shapes, fragile, etc.? Are the loads heavy, light, stable, unstable, etc.?
4. Are you experiencing shipping damages? If so, do you know what is causing the damage?
5. Are you operating multiple shifts?

***Choosing the right stretch wrap equipment should be a careful consideration for any business.***

Remember, there are two ways to apply stretch wrap, by hand and by machine. Hand wrapping is labor intensive and slow. Manual effort cannot effectively stretch the film. This has negative consequences on holding strength and unit stabilization. To increase stabilization, personnel often overwrap the pallet, using more material than necessary. Workers are prone to injuries from trips, falls, and repetitive motion.

Stretch wrap machines allow for obtaining the highest performance from the material, while eliminating the negatives of hand wrapping. The more the material is stretched, the lower the usage and the greater the savings. Other advantages include lower labor costs, greater load stabilization, and less damage to pallet loads during transportation. Material and labor savings, alone, can justify the initial cost of a machine in about a year.

Choosing the right stretch wrap machine should be a careful consideration for any business. There are several factors to consider when making your choice.

## Considerations & Advantages

If you are wrapping 15 or more loads per day, it's more cost-effective to use a machine than to wrap by hand. At that level, machines justify their costs by reducing manual labor expense and the possibility of injuries, sometimes many times in less than one year.

### Is automation right for your facility? *(Fig. 1-1)*

Consideration	Reality	Solution
Existence of Central Packaging Area	Yes	Could use wrapping machine
	No	Hand-Applied Wrap
Production Volume	Low (less than 30 pallets in 6 hours)	Hand-Applied Wrap
	Medium (30 to 100 pallets in 8 hours)	Semi-Automatic Machine Wrap
	High (more than 100 pallets in 8 hours)	Automatic Machine Wrap

### Considering the benefits *(Fig. 1-2)*

Waste	Hand Wrapping	Machine Wrapping
Defects	Hand wrapping produces inconsistent results and a load with weak points that can lead to in-transit damage.	A machine can wrap with more consistency from top to bottom and from the first load to the last.
Non-Utilized Talent	Why waste human capital on rote work?	Automating routine tasks will allow you to have employees do other jobs that require critical thinking.
Extra Processing	When hand wrapping, you may be applying more film than necessary to hold your loads together which could be increasing material costs.	A machine can apply film with more tension, making it possible for you to use less film to hold loads together more strongly.



# The benefits of machine wrapping

## When stretch wrap is applied by machine:

- Production rates increase and labor costs decrease
- Injuries decrease
- Wrapping is consistent and optimized
- Quality is increased
- Less material is consumed

In addition to increased productivity and decreased liability, most machines pull the stretch wrap at least 200% before applying it to the load. This results, not only in optimizing its load force capabilities, but also in legitimate savings of up to 50% of material costs.

**200% STRETCH PULL**

before applying the film to the load



For example, a company that historically uses a full pallet of hand film each month might reduce their usage to 6 pallets per year. The savings on material alone will provide significant return on investment very quickly.

Now that you understand that automating your wrapping will improve your overall processes, it's time to determine how exactly to do it. So, where do you even start?



**IN MATERIAL  
COSTS SAVINGS**

## 2: Important things to keep in mind

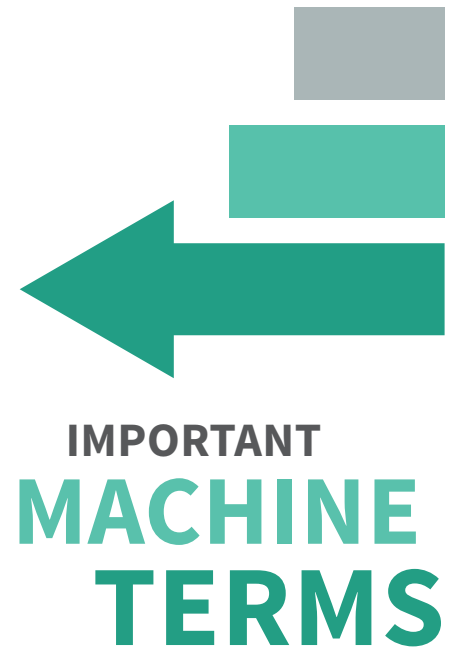
No matter what the purchase nor who your partner may be, it's critical to gain an understanding of the product and the process.

**Knowing the keywords to listen for or how to rate machines to meet your specific needs will make the search much easier. And having a partner in the process who can walk you through, answering any questions you may have, will make it a much more positive experience.**



There are three main types of stretch machines available:

- **Turntable Stretch Wrap Machine:** one of the most common forms of stretch wrap machines. Depending on which type chosen, they can meet the needs for the majority of applications. There are a large variety of turntable machines to choose from.
  - **Semi-automatic machines** are good for less than 30 loads and hour. Semi-automatics are designed for use with a forklift or a pallet jack.
  - **Fully automatic machines** are used in conjunction with conveyor belts and are used for high capacity output.
- **Rotary Stretch Wrap Machine:** feature a rotating arm to move around the load. These machines are commonly used for light, fragile, unstable, and loads too heavy for turntable machines.
- **Horizontal Stretch Wrap Machine:** these machines use a rotating film carriage that moves around a load as it passes through a horizontal ring. Horizontal machines are typically used for fully automatic operations.



### 3: The 8 key things to remember when picking your machine

Congratulations! You've decided it's time to automate, so now you need to decide what kind of machine is right for you and your facility.



*Make sure you don't lose sight of the most important reason why you're wrapping in the first place: to get your load from its origin to its destination in the same condition in which it left. Machines wrap better than people, but they are not capable of making decisions as they work, so you'll need to understand a few things about what you want the machine to be able to do, so you can make the right choice.*

**8** **KEY THINGS  
TO REMEMBER  
WHEN PICKING  
YOUR MACHINE**



Machines wrap better than people, but they are not capable of making decisions as they work, so you'll need to understand a few things about what you want the machine to be able to do, so you can make the right choice.

**1****What kind of wrap will you be using?**

More than likely, the stretch wrap you've always used for hand wrapping won't work on a machine. You've got to consider the gauge, the pre-stretch ability, and the material of the film.

**2****How much load containment force do you need?**

The top, middle, and bottom layers of your load need to all have the correct amount of containment force: the wrap force multiplied by the number of film layers. The right amount of containment force depends on the type of load you're wrapping. Heavy loads may require more containment force and lighter loads may require less.

**3****How will you wrap the pallets and how many wraps will be necessary?**

The way the load is wrapped depends on your settings. You need to choose the number of top and bottom counts. You must also decide the wrap force setting and how much overwrap you want applied on the top of the load.

**4****What will you do to limit breakage?**

Breaks are more than just an annoyance. They're the biggest problem in stretch wrapping. Often they lead to a chain of disastrous consequences. Breaks in the wrap are, indeed, the enemy. To limit your risk for breaks, there are a few things you can do.

- Keep your products from overhanging the pallet and try to eliminate sharp corners.
- Train operators to properly handle film. Improper film threading is a main cause of film breaks.
- Film breaks often can occur when the film roll experiences nicks. These nicks happen when the film roll has been dropped or mishandled.
- Don't buy "cheap" film, which has higher risk for flaws (gels, nicks, tears). Cheap film doesn't have the ability to stretch as far as performance films.
- Don't set the wrap force too high. Depending on your film and product, play around with the tension of the film to determine the best setting.



5

**Do you need additional reinforcements?**

You may need to secure partial layers with the roping technique or you may need to band. Sometimes your load may even call for steel or polyester strapping. Stretch wrap can't solve all your potential issues, especially if your load is heavy and/or unstable.

6

**What type of stretch wrapper is best suited for your specific application?**

Think about the size, weight, and variability of the loads you will be wrapping. Highly variable loads would benefit from certain types of machinery, such as orbital, horizontal wrappers that attach the load most securely to the pallet. Stable, light-weight loads of consumer goods would do well with a turntable style wrapper, while unstable or heavy loads would do better with a rotary arm machine. For the best all-around performance, rotary ring machines can handle heavy and variable loads, such as construction supplies, pet food and beverages while still handling the highest volume lines.

7

**What kind of production speed to you require?**

If you're moving from a hand wrap application to simple automation, a semi-automatic stretch wrapper may be all that is required. Although these machines still requires a person to manually attach the film to the load at the beginning of the wrap cycle and cut the film at the end of the cycle, they can achieve rates as high as 35 loads per hour.



UP TO

35

loads per hour on a  
semi-automatic machine

150

loads per hour on an  
automatic machine

8

**Who is the best partner?**

The easiest thing to do is a quick internet search for "stretch wrap machine" and click on the top link. But doing the easiest thing is not how you need to run your business, especially when you have multiple costs riding on your final decision. Finding a knowledgeable distributor in your area who understands both the stretch wrap and the equipment you'll need based on your facility, as well as package engineering concepts, allows you to get the help you need in determining what exactly will meet your facility's specific needs.

Experience, resources, specialists, and engineers at your distributor's location proves that they're more than just order takers; they're partners in productivity.

## 4: Can stretch automation save money? The 4 main ways to justify cost

Return on investment: it can be difficult justifying to upper management the need to spend money on a machine to replace an already established process. A careful analysis of the actual quantified savings can help even the staunchest cost conscious manager start to think twice.

### Damage

The scariest word to anyone who does any shipping is damage. Damaged products equal lost revenues because damaged products either need repair or replacement.

Recent studies have shown that approximately 14% of loads were not wrapped to the pallets on which they are shipped and nearly 9% of loads with stretch wrap applied had issues that could cause instability and result in damage to the shipment.



*Approximately **14%** of loads were not wrapped to the pallets on which they are shipped*



*Nearly **9%** of loads with stretch wrap applied had issues that could cause instability and result in damage to the shipment.*

It's critical to remember that using stretch wrap alone is not enough; it must be tied to the pallet base to provide maximum stability. Remember the primary reason you wrap loads is to provide protection during shipment. Every time you put a load in the back of a truck, you run the risk of it being damaged during transit. Think of all the reasons loads can fail in transit: all of those things are out of your control.

However, by creating stable loads and wrapping them properly, it is possible to recover up to as much as **50%** of your potential lost products. And that adds up quickly.

Products Shipped	How Much You're Losing	Potential Recovery
\$1 MILLION	\$25,000	\$12,500
\$2 MILLION	\$50,000	\$25,000
\$3 MILLION	\$75,000	\$37,500

## Material Savings

Stretching the film before applying it to a load actually improves load integrity. Because of its inherent elasticity, wrap that is stretched before applied, known as pre-stretched wrap, naturally tightens after application, allowing for a stronger hold with less product.

Stretch wrap machines use two rollers to turn at two different speeds, stretching the film as it leaves the machine and wraps around the pallet; these are standard on most machines and can be adjusted to offer up to 300% stretch.

# 300%

*Most machines can be adjusted to offer up to 300% stretch.*

Roll Size	100%	200%	300%
4,000 FT.	8,000 FT.	12,000 FT.	16,000 FT.
6,000 FT.	12,000 FT.	18,000 FT.	24,000 FT.
9,000 FT.	18,000 FT.	27,000 FT.	36,000 FT.

If you're tripling your product yield, you're automatically saving money. For instance, if you're ordering a pallet of stretch wrap once a month, you could potentially find yourself ordering a pallet once a quarter. If it typically costs you \$1,500 for a pallet of stretch wrap, well, then you've just saved \$3,000 in one quarter!

In addition to the benefits of using machines to pre-stretch the film, moving away from hand wrapping allows for consistency in wrapping techniques. Instead of Worker A using 6 wraps per pallet, Worker B using 10 wraps, and Worker C using between 7 and 9 wraps, all of the pallets will be wrapped 4 times by the machine, uniformly and consistently, saving the extra wraps that Workers A, B, and C were completing and the extra product they were using to do so.

### ROI EXAMPLE

**Company:** Leading Chemical Manufacturing Company

**\$ 8,103.00** Projected film cost reduction per year

**11.7 MONTHS** Projected ROI on Stretch Wrap Machine purchase

## Labor Savings

The cost of labor is steadily going up. In 2014, the Employment Cost Index recorded its largest increase in 5½ years for the cost of US labor.<sup>2</sup> With an average increase of 2% annually<sup>3</sup>, labor costs will continue to be a large factor when it comes to total cost of doing business.

Even at minimum wage, paying one person for a 40 hour work week, to do nothing by hand wrap pallets and move them onto the truck, you're spending approximately \$15,000 a year, just on wages. If you are a large enough facility and you've got five people doing the same job to accommodate all of your production lines, that's a staggering \$75,000 in wages to have people wrapping your pallets.

### ROI EXAMPLE

**Company:** Emergency Construction and Erosion Supplier

**\$ 6,023.00** Projected film cost reduction per year

**\$ 4,725.00** Projected labor cost reduction per year

**8.9 MONTHS** Projected ROI on machine purchase

Then, take into account their inconsistency, their inevitable over usage of materials, and the propensity for damage when you compare hand wrapped pallets to machine wrapped pallets and the total cost quickly sky rockets. And that's just for one year. Next year, you'll see an average rise of 2% in labor costs, as has been the trend the last few years.

## Companies report

THAT  
UP TO

60%

**of their total packaging costs are labor-related.**

Despite the rise in labor costs, it's possible to trim some costs in ways you may have never imagined. Think about stretch wrapping and most specifically the labor involved in hand wrapping a load. It's a time-consuming process. Besides manually wrapping the load, the operator must continually get on and off the forklift.

You can actually avoid some of these tedious steps when you use a stretch wrapper with productivity enhancing features. When you eliminate unnecessary steps, you eliminate labor inefficiencies, refocusing them to other tasks, including palletizing another load, printing shipping labels, or completing necessary reports.

<sup>2</sup>CNBC.com, July 2014.

<http://www.cnn.com/2014/07/31/us-labor-costs-post-largest-increase-in-more-than-5-12-years.html>

<sup>3</sup>Employment Cost Index news release, June 2015.

<http://www.bls.gov/news.release/eci.nr0.htm>

## Safety

Another hidden cost saving initiative that switching to a stretch wrapper can provide is an increase in worker health and safety.

Musculoskeletal injuries are the leading cause of employees missing work. Non-fatal workplace injuries related to musculoskeletal disorders cost businesses more than \$21 billion every year and account for over 40% of total cost burdens to business.<sup>4</sup>

On average, it takes someone 4 minutes to hand wrap a pallet. Multiply that by the number of pallets needed to be wrapped along with other laborious daily activities and it becomes quite apparent why warehouse workers are at least 8 times more likely to suffer back problems than other workers.

According to the Bureau of Labor Statistics, there were nearly 400,000 musculoskeletal injuries in 2013; approximately one quarter of those injuries were because of worker motion or position.<sup>6</sup> While the BLS doesn't carry cost data about these injuries, various sources suggest that the average back injury (sprain/strain) can cost anywhere from \$3,000 to \$10,000 in direct costs and from \$30,000 to \$100,000 in indirect costs.<sup>7</sup> And none of that includes the liability involved in an actual lawsuit and settlement or judgment.

Good stretch wrappers reduce the physical stress on a worker's body. Great stretch wrappers incorporate safety features so that you don't just trade one set of risks for another. You want the people who will be operating the machine to be as safe as possible.

Some machines can even eliminate steps that create safety hazards, like dismounting forklifts. Forklift accidents cost companies hundreds of millions of dollars every year. Accidents associated with getting on and off the forklift can be reduced by machines that will automatically attach and cut film each cycle, taking away the necessity to get on and off a truck.

**Non-fatal workplace injuries related to musculoskeletal disorders cost businesses more than**

**\$ 21 BILLION  
PER YEAR**



**Average time to hand wrap a pallet**

**4 MINUTES**

**The average back injury can cost**

**\$3,000 - \$10,000** in Direct Costs

**\$30,000 - \$100,000** in Indirect Costs

**Choosing a safe-to-operate machine will have the following characteristics:**

- All wires and motors are enclosed to prevent trip, scrape, or burn hazards.
- The film delivery system:
  - is located on the same side of the mast as the controls to prevent the operator from walking between the mast at the load.
  - has guarding surrounding the rollers to prevent the operator's hands from getting caught inside.
- The turntable is large enough for the pallet to fit inside it without protruding corners. This eliminates trip hazards and collision points.

<sup>4</sup>Liberty Mutual

<sup>5</sup>[www.osha.org](http://www.osha.org)

<sup>6</sup><http://data.bls.gov/>

<sup>7</sup>National Safety Council



## 5: Choosing the right supplier for stretch wrap automation makes the difference

Finding a stretch wrap supplier is pretty easy. If you're reading this, it may be because you found our web site by searching online. Searching online has taken a lot of the guesswork out of finding all types of suppliers.

By typing "stretch wrap machine" or "stretch film equipment" into any search engine, you'll end up with thousands of choices. Most may be little more than amateur web pages with a couple of pictures, a price, and a biased statement about the greatness of the product.

Don't waste your time on a search, a website, or a salesperson who is not making an effort to help you determine what you actually need. Try a more detailed search like "stretch wrap equipment buying guide" or "stretch wrap machine basics." This will allow you to find sites that have good valuable content for review. Reputable companies will take the time and effort to provide this type of information; they are not looking for the quick sale, rather they are developing trust and building relationships.

*There are many companies that will sell you any stretch wrap or machine. Most, in fact, have very little knowledge about how stretch wrap really works. They will ask you what you are looking for and will quote a few cents lower than what you may be currently paying. This flea-market mentality will provide no value in the long term because a few cents saved today may end up costing you thousands of dollars over the next five years.*

# EXPERIENCE MATTERS.



When choosing a supplier, the goal is to find one who has a great deal of experience in the market in which you are operating; suppliers who are well-versed in e-commerce may not be able to provide you the same expertise and knowledge if you're in heavy automotive component manufacturing. And longevity isn't always the key; for example, finding a supplier who has sold boxes for 50 years will not serve you as well as finding someone who has specialized in selling stretch wrap automation for 25 years.

The truly reputable suppliers will be able to provide background on their experience. They'll be able to provide customer testimonials and will be willing to provide ways to prove that they stand behind their sales.

## CUSTOMIZED & PERSONALIZED SERVICE.



It is critical to make sure that they have the ability to provide information based on your specific needs. They must have knowledge about how to improve consistency and quality; they must understand what it takes to eliminate potential bottlenecks or how the size, shape, and scope of your production will be taken into account when providing information about placing new machinery into your facility.

An order-taker is great if that's all you want; if you want to click a button to add something to your online shopping cart without interacting with anyone, using a quick and easy site may fit best. However, if you've gone through the process of determining your needs for automating and upgrading to a stretch wrap machine (which is a safe assumption, considering you're reading this eBook), you need someone who can walk you through every step of the process.

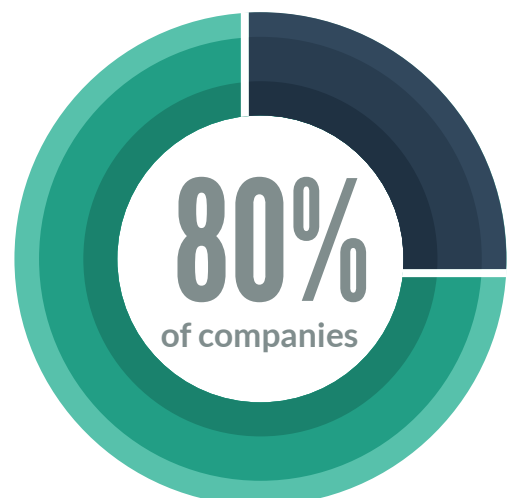
**Packaging engineers are more in demand than ever.** Time to market is critical; damage prevention is essential. When it comes to packaging products, many companies are turning to professional packaging engineers, either on-staff or as an outsourced asset to their manufacturing or production facility.

What a packaging engineer can bring to the table can range from design conceptualization to product placement; all the steps of the manufacturing process must be taken into account in the design of packaging.

In 2013, Logic Packaging, headquartered in Greer, South Carolina, did a survey of companies who use package engineering services in their operations. They found that more than 80% of companies are looking for someone who can assist them in reducing shipping damages, reducing packaging expenses, and reducing transportation and material costs.

With a heavy emphasis on package engineering and improving automation, finding a supplier with knowledgeable engineers on staff can be a great asset when looking for someone to be a partner in packaging.

### *How much of a role does packaging engineering play?*



**are looking for someone who can assist them in reducing shipping damages, reducing packaging expenses and reducing transportation and material costs.**

**The last thing you want when you talk to a supplier is being forced to choose a product that is not going to fit your company's needs.** It is critical to talk to a supplier who represents multiple product lines, technologies, and manufacturers. Not only will they be more knowledgeable about the general marketplace, there won't be a push to pick one product over another; it will only be about what your specific facility needs.

Finding a neutral dealer who can demonstrate expertise in multiple different industries and product lines may seem difficult, but there are companies in the marketplace that are willing to do whatever they can to win your business. And that may not be offering you the lowest price; it may, in fact, be offering you something a little higher than the dealer down the street, but that they can back up with support, service, engineers, and long-term relationships with manufacturers that will end up saving you thousands of dollars down the line.



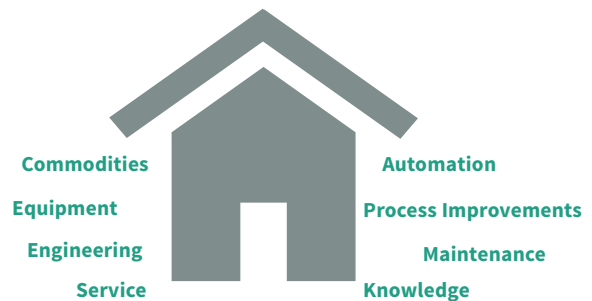
## FIND A COMPANY THAT UNDERSTANDS SCALABILITY.

**While you are buying for today's specific needs, don't forget that tomorrow will be here before you know it.**

Looking for a company who understands how to prepare for the future will save you the time and headaches of having to go through the same process in a couple of years.

For example, three years after you buy your first stretch wrapper, your loads may look different, as load widths, lengths, heights, weights, and stability often change over time. Maybe you decide to start double stacking loads. But the problem is your wrap height only goes to 80 inches.

***Choose a company with numerous capabilities and offerings under one roof.***



Don't worry. You don't always have to buy a brand new stretch wrapper to get what you need. Retrofitting a machine with a new component can be cheaper and faster than buying a new one. Besides, you found a supplier who will be able to offer you the retrofits you'll need, including that one that increases the wrap height to 110 inches tall.

**Common in-field retrofits or upgrades. Make sure you are including these capabilities in your search:**

- Mast Height Extensions
- Base Extensions
- Film Delivery Systems
- Ramps
- Remote Controls for Mounted Forklift Operations
- Load Locking Devices

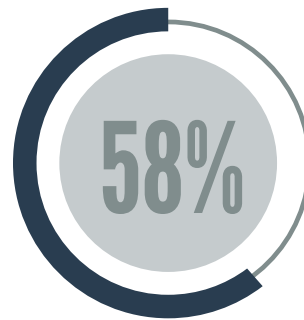
## Conclusion: Automation saves money

Packaging plays an extremely important role in the reduction of product damage and unsaleable rates.

*According to an Unsaleables Benchmark Report, manufacturers that were able to reduce their unsaleable costs in one year did so primarily by improving packaging. Companies that were most effective at limiting damage made many packaging improvements at the unit load level.*

When a load is not protected or secured, it may compromise the integrity of all of the individual products on the pallet. According to recent reports by the Grocery Manufacturers Association/Food Marketing Institute (GMA/FMI), as much as 58 percent of all products returned to manufacturers or distributors are due to damage. Crushed, dented, torn, punctured, and cut products arrive at distribution centers every day and make up a significant portion of the \$2.05 billion cost of unsaleable items.<sup>10</sup>

End of line stretch wrappers that are integrated into the packaging process provide essential control, film delivery, and load handling. These machines require a supplier to work closely with the end user and/or distributor to ensure optimum use of automation for high productivity.<sup>11</sup>



**of all products  
returned are  
due to damage.**

**Stretch wrap machines save money through material and labor savings, as well as load unitization improvements. Correctly utilized, most machines can pay for themselves in less than a year.**

**4 ways that automation  
saves money.**

1. Material Savings

2. Reducing Labor Costs

3. Ergonomics

4. Productivity Gains

## 4 ways automation saves money

### Material Savings

Stretch wrap works better when pre-stretched. Because of its engineered properties, stretch wrap has greater holding ability, as well as much higher puncture and tearing resistance when stretched.

Today's high-performance machines pre-stretch the wrap by 250% or more. This means that every foot of the stretched film covers 2.5 times more area than unstretched film. That's a win-win for any operation that must wrap pallets and other loads.

***These labor reductions allow for re-engaging employees in other necessary tasks or cutting down workforce demands.***

### Ergonomics

Manual stretch wrapping is one of the warehouse workers' least favorite tasks in no small part due to the physical demands.

Manually stretch wrapping a pallet requires bending, stooping, and rolling the handheld wrap around: all things that can contribute to injuries and strains. Utilizing machine stretch wrappers can reduce repetitive motion injuries and the worker compensation claims that tend to follow.



***Material savings is optimized when an operation upgrades from manual wrapping, which provides only 10-20% stretch.***



***A machine is capable of pre-stretching film 250% or better.***

### Reducing Labor Costs

Manual hand wrapping involves 100% direct labor. In semiautomatic stretch wrapping, a worker attaches the stretch wrap to the pallet load, starts the machine, and then cuts the film tail when it's finished. He's free to do other productive things while the pallet is wrapping.

Fully automatic wrapping machines require virtually no direct labor. After the load is delivered, the system automatically wraps the load, cuts and weighs down the film tail, and transports the wrapped load to a staging area ready for pickup. Little human interaction is required.

### Productivity Gains

Productivity gains from faster stretch wrapping and the operational advantages of freeing workers for more value-adding duties should be part of your stretch wrapper justification. Machine wrapping can also reduce damage during shipment because the pallet is wrapped properly, efficiently, and consistently.

<sup>10</sup> <http://www.gmaonline.org/downloads/research-and-reports/2006UnsaleablesBenchmarkFinal.pdf>

<sup>11</sup> <http://www.cisco-eagle.com/catalog/t-article-stretchwrap-machine-justification.aspx>



## Let's Get Started

Justifying the decision to automate your stretch wrapping process at your facility doesn't have to be difficult. In fact, the whole experience can be truly beneficial. But first, you need to find out what is right for you.

### You need a solution.

With costs and competition increasing daily, how can you stay competitive? You need to increase your throughput while reducing costs. It seems counterintuitive trying to do more with less resources, but that is the direction of American manufacturing. With imports arriving daily produced for much less, American companies are turning to new and innovative ways to make sure that they are competitive in the constantly evolving world economy.

Most manufacturing facilities have found ways to automate many aspects of the production cycle. There are machines on the floor that help eliminate workers having to manually handle the product. Lean manufacturing focuses on the elimination of waste in waiting, inventory, defect production, over production, and unnecessary motion.

## WE'RE HERE TO HELP

Automating your process has many benefits, and we're here to make sure you benefit from every single one of them.

Step 01

#### Get in touch.

Our product specialists are ready with the answers you need.

Step 02

#### Get answers.

We'll assess your needs and show you how we can help.

Step 03

#### Get a solution.

Damage prevention starts with the right solution. We'll provide that solution.



### Call Us

Our knowledgeable specialists are ready with solutions.

**855-513-0327**

### Email Us

No time to call? No worries, send us an email.

**knowledge@ipack.com**



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