

Are You Using The Right Stretch Film?

If you have palletized loads of materials, you are likely using stretch film wrap to secure them during transport and protect them from dust and damage. Stretch wrap is commonly a linear low-density polyethylene (LLDPE) film in rolls of varying thickness, strength, and other properties. Depending on your application, it is applied to the unitized load by hand or machine.

But did you know that not all film is applicable for every type of load? Choosing the correct stretch wrap film for your application can reduce waste and costs.

Thicker Isn't Always Better

Gauge is the measurement used for the thickness of the wrap. It plays a part in the strength of the wrap, but it is not the only factor that determines strength and puncture resistance. If you are experiencing wrap tearing or your loads are shifting or tipping in transit, your wrap may be too thin or the wrong type for your application. Using the wrong stretch film can lead to damaged products and higher costs beyond the cost of the film.

If the gauge of your film is thicker than needed, you might be spending more than you need to. For decades, the industry standard has been 20-inch, 80 gauge film, but this is no longer the case. The technology of plastics stretch films has come a long way since then. Films are available in varying levels of performance. During processing, additives added to the plastic provide additional strength and other physical characteristics. It is often possible to use 55 gauge and get the same force and load numbers as you do with 80 gauge.

Pre-Stretched Film Reduces Safety Risks and Saves Money

Sometimes your application may require you to hand wrap the plastic film. Handling bulky rolls of stretch film can cause operator fatigue and potentially create safety hazards. For example, operators must walk backward to get the torque required to apply it correctly, which puts them at risks for falls.

A pre-stretch film can reduce the hazards. One benefit is that it is lighter — by as much as 40 percent. Since it is pre-stretched and requires minimum torque and little to no stretching, operators can apply it while walking forward, allowing them more control and increasing safety. The pre-stretched film can grasp and hold corners on uneven C-type loads while providing superior load-holding force and puncture resistance. Pre-stretch films are, on average, about half the thickness of traditional film but are double the strength.

Environmental Concerns

Plastic often gets a bad rap when it comes to environmental concerns. But plastic stretch wrap is entirely recyclable. Additional environmental benefits can be found with coreless film. You don't have to worry about core disposal, and it also saves you money since you aren't paying for a center core. If you use a lot of film, you likely have a lot of cores to dispose of. It is estimated that coreless film eliminates 5,400 pounds of paper cores per truckload. That is a huge reduction in waste. Coreless film offers the advantages of being lighter weight, easier to handle, and allows you to use every bit of film.

The film is applied using a reusable ergonomic applicator that screws together inside the core. Different applicators are available depending on the plastic manufacturer, but Interplast Group patented a unique one. The [free-spinning dispenser](#) is designed to work with its coreless pre-stretched film. The dispenser has free-spinning handles that remove the contact friction between the operator's hands and the roll of film.



Film Optimization Evaluation

If you are experiencing performance issues with your film, the natural instinct might be to use a thicker film or wrap more times around the load. The better and more cost-effective option would be to have a film optimization evaluation performed to test your load to see if it performs within specific parameters.

Tyoga and stretch film experts will visit your facility and perform a force to load test, also called containment force test. They will then recommend other films that will offer the same performance with less material and cost. This is often called rite-gauging (using the right amount of film, applied properly) or downgauging (moving to a lesser gauge while maintaining structural integrity). The test is designed to ensure you are confident in the stretch film you will be using.

When you are ready to start saving money on your stretch film, [contact Tyoga](#). Tyoga can ensure you are using the best film for your application.