

8µm HIGH TENACITY POWER STRETCH FILM

Enabling High-Performance Stretch Wrap with 35% PCR Content



The demand for sustainable packaging solutions is rapidly increasing globally - driven in the EU by the recent implementation of the PPWR. Producers of cast stretch film must address the dual challenge of reducing the environmental footprint of tertiary packaging while maintaining the film's consistent mechanical performance, to facilitate load unit stability. The objective is to engineer a cost-efficient machine film, that meets the legal requirements for certified recycled content, lowers CO₂ emissions and delivers performance metrics equivalent to virgin-grade materials. This presents a significant challenge for flexible film applications requiring high stretchability, such as stretch wrap – an essential material for ensuring pallet load stability during transportation.

The developed High Tenacity Power Stretch (HTPS) Film integrates 35% certified postconsumer recycled content to ensure compliance with PPWR quotas. ExxonMobil's Exceed™ Flow and Vistamaxx™ polymers provide the film's high tenacity while smoothing out the quality variations coming from the PCR. The inline folded edge mechanism within FILMEX™ Stretch Lines, improves the film's tear propagation resistance at high wrapping speeds and so enhancing the wrapping consistency.

Comparative load stability testing confirmed that this sample film achieves equivalent holding force to virgin film. At comparable film weight, 8µm HTPS film wrapped under HTPS conditions matched the performance of a 12µm Power Pre-stretch (PPS) film stretched at 250% under standard PPS conditions. All in all, this demonstrator delivers easier processing with PCR, high-speed wrapping performance with excellent containment force and reliable load stability.

Your advantages

-  Protects against product damage with increased sustainability of transport packaging
-  Adheres to EU Packaging and Packaging Waste Regulation (PPWR) by using 35% certified PCR content within machine film
-  Excellent performance on the wrapper thanks to high tenacity with excellent tear propagation resistance for wrapping pallets at > 30rpm
-  Proven load stability comparable to thin gauge virgin film alternative

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FILMEX™ STRETCH

For flexible, efficient and profitable
cast film production

FILMATIC PS

Our highlights:

- ✓ Producing ultra thin machine films with consistent performance during wrapping without film breakage
- ✓ Ability to produce films with PCR
- ✓ Outstanding melt homogeneity and uniform melt temperatures
- ✓ In-line continuous melt filtration to remove specific non-polymeric contaminations
- ✓ State of the art winding technology that includes patented bleedless folded edge technology to improve film's tear propagation resistance when wrapping at high speeds