

CAST MDO-PE POUCH WITH BARRIER

Barrier pouch designed for recycling and packaging performance



Why Cast MDO-PE pouch with barrier?

Driving the future of recyclable pouches with MDO-PE

Today's PET-based pouches deliver excellent stiffness, clarity, and processability - but their multi-material composition makes them difficult to recycle. As brand owners and consumers demand fully recyclable packaging, the industry needs a monomaterial solution that doesn't compromise performance.

Our answer: Cast MDO-PE technology.

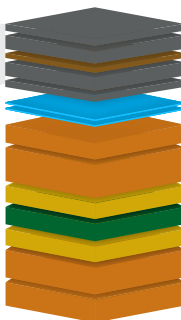
By stretching polyethylene films in the machine direction (MDO), we precisely tailor the film's mechanical and optical properties, achieving stiffness and transparency comparable to PET. This enables high-speed processing, premium shelf appeal, and, most importantly, a true monomaterial design that fits seamlessly into existing PE recycling streams.

Your advantages

-  MDO-PE design delivers PET-like stiffness and clarity while being 100% compatible with recycling streams
-  Outstanding heat-resistance enables high-speed bag manufacturing
-  Low haze down to 3% and high flatness ensure premium shelf appearance and precise downstream converting
-  High-speed printing on HELIOSTAR II gravure press up to 500 m/min with excellent register accuracy

MDO-PE Printing Film

Amount	Resins	Layer Thickness	Functions
100%	HDPE	14 µm	Printing, Lamination
100%	HDPE	45.5 µm	Mechanical Properties
100%	LDPE	21 µm	Tear Propagation
100%	HDPE	45.5 µm	Mechanical Properties
100%	HDPE	14 µm	Thermal Resistance
Total 140 µm			
The primary film thickness is 140 µm and stretched down 1:5.6 to a secondary film of 25 µm.			
Adhesive			Solventless Recycle Ready Adhesive



Sealing film

Amount	Resins	Layer Thickness	Functions
100%	LLPDE	5.6 µm	Printing, Lamination
100%	LLPDE	28 µm	Mechanical Properties
100%	TIE	4 µm	
100%	EVOH	4.8 µm	High barrier
100%	TIE	4 µm	
100%	LLPDE	20 µm	Mechanical Properties
100%	LLPDE	13.6 µm	Sealing
Total 80 µm			

Our partners



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Cast MDO for consistent high film quality of MDO-PE and MDO-PP

- ✓ Maximum flexibility through a powerful design that enables stretching of both CPE and CPP
- ✓ Optimal film properties, process stability and neck-in control thanks to automatically adjustable stretching gaps
- ✓ Gentle stretching, even with 100% inline fluff refeeding, enabled by a second stretching gap
- ✓ Precise shrinkage behavior control achieved via adjustable annealing roller settings
- ✓ Fastest time-to-good-profile and superior film profiles ensured through continuous, adaptive inline profile control