

# 50% PCR COLLATION SHRINK

New Collation Shrink Film using more PCR while maintaining 100% Film Performance



**OPTIMEX**



## Why 50% PCR Collation Shrink?

Windmüller & Hölscher is aware of its responsibility for creating sustainable packaging solutions. One strategy of sustainability is based on the concept of the circular economy.

This means that raw materials that have already been used can be used again and again in packaging solutions. The new collation shrink film presented by W&H uses recycled PE taken from post-consumer waste, while maintaining its optical and mechanical properties.

- The use of recycled PE results in lower virgin resin consumption
- The PCR is taken from post consumer LD/LLDPE waste
- Film mechanical properties and machine processability are like virgin material

## Our partners

**ExxonMobil**



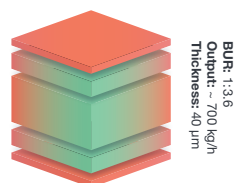
## Your advantages

- ✓ All new collation shrink film with 50% post-consumer recycled material
- ✓ Same shrink values and mechanical properties as conventional, non-PCR recipes
- ✓ Enables customers to make a sustainable choice when buying packed goods

## Recipe

### Collation Shrink with 50% PCR

Amount	Resins	Layer thickness	Functions
75% 25%	mLLDPE LDPE	Exceed™ S Nexxstar™	3 µm Gloss; Mechanical Properties Rigidity
60% 40%	PCR LDPE	Saica Nexxstar™	7 µm Holding Force Rigidity; Shrink
60% 40%	PCR mLLDPE	Saica Enable™	20 µm Holding Force Stiffness; Shrink
60% 40%	PCR LDPE	Saica Nexxstar™	7 µm Holding Force Rigidity; Shrink
75% 25%	mLLDPE LDPE	Exceed™ S Nexxstar™	3 µm Gloss; Mechanical Properties Rigidity



Learn more about **PCR COLLATION SHRINK**:  
[www.wh.group/int/en/sustainability/circular\\_economy/using\\_recyclates/pcr\\_collation\\_shrink](http://www.wh.group/int/en/sustainability/circular_economy/using_recyclates/pcr_collation_shrink)

Find more information about **OPTIMEX**™ on the back of the page.



# OPTIMEX<sup>™</sup>

3-Layer and 5-Layer Blown Film Line dedicated to Polyolefin Applications



## Why OPTIMEX<sup>™</sup> ?

The OPTIMEX<sup>™</sup> is suited for a wide range of films with 3- or 5-layers and combines high output rates with outstanding film quality. It is made for **OPTIM**ized **EX**trusion and comes with a variety of components and working widths you can choose from. The OPTIMEX<sup>™</sup> is for all types of polyolefins/propylenes and biomaterials and, of course, for recycled materials.

- OPTIMEX<sup>™</sup> extruders deliver excellent melt quality
- Field-proven MAXICONE die concept – the perfect fit for your application
- Air ring and profile control ensure perfect film quality at maximum output and best film tolerances
- Full integration of all machine components to enable our unique control and automation system
- Long collapsing unit for excellent flatness
- Intelligent automation modules for economical production

## Your advantages

- ✓ Optimized extrusion line: 3- or 5-layers for a wide range of PE-applications
- ✓ Cost-effective blown film line with state-of-the-art technology
- ✓ Full integration of all machine components for control along with automation systems from W&H

## Technical Data OPTIMEX<sup>™</sup>

Line widths	1300 – 2600 mm
Number of film layers	3 or 5
Extruder screw diameters	60, 70, 90, 105 mm
Die diameters	160 – 630 mm
Raw materials	PE, PP, PLA, Biomaterials, recycling materials
Winders	FILMATIC <sup>™</sup> O (surface/center winder) FILMATIC <sup>™</sup> T (turret winder)



Learn more about **OPTIMEX<sup>™</sup>**:  
[www.wh.group/int/en/our\\_products/extrusion/  
 blown\\_film\\_lines/optimex\\_ii](http://www.wh.group/int/en/our_products/extrusion/blown_film_lines/optimex_ii)

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