

HIGH PERFORMANCE COLLATION SHRINK

Reducing Material Consumption by using High Performance Polymers



Why High Performance Collation Shrink?

Downgauging collation shrink film to 35 µm while meeting all performance requirements of the final packaging solution is a challenge. Such a thin film requires very small thickness tolerances and consistent layer distribution to achieve the needed performance. W&H's 5-layer polyolefin-dedicated (POD) technology combines consistent film performance with maximum machine output to boost line efficiency.

Instead of downgauging, a performance polymer PE, acting as a booster, can be used to incorporate high amounts of post consumer recycled material while maintaining the original film thickness.

Our partner



This joint development between ExxonMobil

and W&H provides a highly competitive market with a cutting-edge solution. The performance polyethylene combined with high precision 5-layer film extrusion technology created enough reserves in the film strength, holding force and sealing performance, to add a high percentage of PCR.

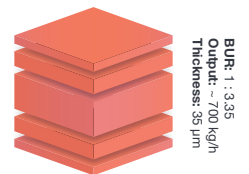
Your advantages

- ✓ Excellent film and roll quality
- ✓ Reduced virgin material consumption
- ✓ Maintaining the same critical properties of established collation shrink films

Recipes

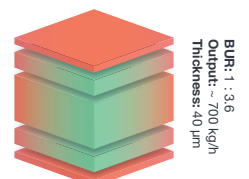
High Performance Collation Shrink

| Amount | Resins | Layer thickness | Functions |
|------------|----------------|------------------------------|--|
| 70% 30% | mLLDPE LDPE | Exceed™ S ExxonMobil LDPE | 3.5 µm Toughness; Sealability Optics |
| 100% | mLLDPE | Enable™ | 6.5 µm Processability Holding Force; Shrinkage |
| 60% 40% | LDPE mLLDPE | ExxonMobil LDPE Enable™ | 15 µm Shrinkage; Shrink Speed Holding Force; Shrinkage |
| 100% | mLLDPE | Enable™ | 6.5 µm Processability Holding Force; Shrinkage |
| 70% 30% | mLLDPE LDPE | Exceed™ S ExxonMobil LDPE | 3.5 µm Toughness; Sealability Optics |



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 **HIGH PERFORMANCE COLLATION SHRINK**
www.wh.group/int/en/sustainability/produce_sustainably/reduce_material_waste/high_performance_collation_shrink

Find more information about **VAREX™** with **FILMATIC™ V** on the back of the page.



VAREX[™] WITH FILMATIC[™] V

Safe and easy – Efficient winding performance for VAREX[™]



Why VAREX[™] with FILMATIC[™] V?

The goal of this new winder generation was to achieve best-in-class winding performance, easy operation and excellent safety standards. The start of the winding process is critical, therefore we improved the surface winding from the beginning to the very end of the roll. To make the highly-complex winding process easy and reliable for all operators, W&H has developed a completely new human machine interface. Among other safety features, new light curtains and laser-supported core alignment promoted meeting the highest international safety standards.

- Single point of operation reduces the risk of operator errors
- Integration of W&H automation and assistance modules
- Improved flexibility due to possible change of the winding direction
- Improved accessibility for easier maintenance
- Option for right angled cut with no foldback

Your advantages

- ✓ FILMATIC[™] V offers safe and easy winding performance for VAREX[™] blown film lines
- ✓ Highest level of process stability and flexibility with the most demanding applications
- ✓ Integration of automation and assistance modules like TURBOSTART and EASY2 Change
- ✓ FILMATIC[™] V is easily retrofittable

Technical Data VAREX[™]

| | |
|--------------------------|--|
| Line widths | 1300 – 3600 mm |
| Number of film layers | 1, 3, 5, 7, 9, 11 |
| Extruder screw diameters | 50, 60, 70, 90, 105, 120, 135 mm |
| Die diameters | 160 – 900 mm |
| Raw materials | Biomaterials, recycling materials, PE, PP, EVOH, PA, ionomers, ... |
| Winders | FILMATIC [™] V (surface/center/gap winder) FILMATIC [™] T (double turret winder) FILMATIC [™] N (surface/center/gap winder) |
| Special equipment | Side gussets, water bath, annealing units, MDO, ... |



Learn more about **VAREX[™] with FILMATIC[™] V:**
www.wh.group/int/en/our_products/extrusion/winders/#wuh-46443

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