

Stretch Film



Machine Film

Product range

Performance driven

We design, we produce and we deliver blown and cast films, with outstanding mechanical properties for maximum performance on your production line.

Load securement

No compromises on safety and stability. Our field expertise and technical knowledge is at your service for the best film and machine association.

Cost efficient

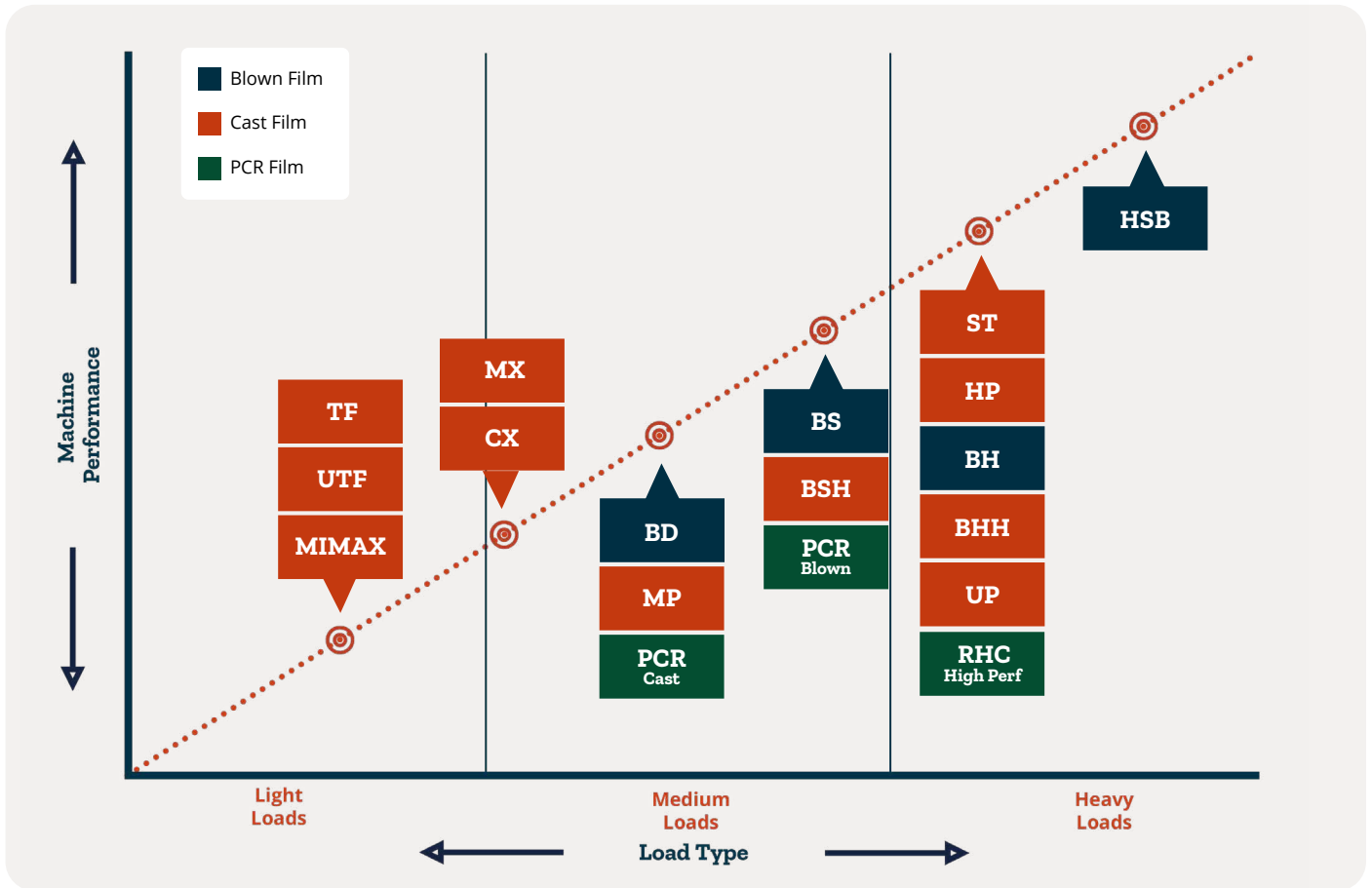
Always looking for the best cost versus efficiency results. Our holistic step by step validation process is key to maximizing pallet stability at the best cost.

100% recyclable

Our stretch films are 100% recyclable. We invest in new production methods to become more sustainable and improve our carbon footprint.

Product Line Overview

The right film, for the right application



Reasons why our Stretch Film product range are the key choice for consumers

Quality & Performance

All our stretch films are designed, produced and delivered with the highest grade of quality control. We make no compromises on safety, traceability and performance. Our quality incidence report was < 0.1% in 2023. We are BRC / IOP, ISO 9001,14001 and 50001 certified.

Consistency

We select purposefully, top quality raw materials, sourced in Europe and carefully controlled to perfect our recipes and make your application work flawlessly. As a producer we understand the absolute necessity to keep your lines running with no incident, that is why our product range is designed to bring the most consistent results depending of the mechanical properties of the film.

Producer Expertise

40+ years experience as the pioneer stretch film producer in Europe. We produce both Cast and Blown films on our 3 production facilities located in Belgium and Ireland.

Research & Development

We are consistently improving our products in order to find better solutions for our customers, we also commit our focus to sustainability, waste reduction and carbon footprint.

Technical Consultancy & Holistic Approach

We deliver to our customers superior technical support and expertise. Our film specialists provide ad-hoc and on site audits to perfectly match the right film with the right machine and application. We do not only rely on weight or cost, we analyze your whole production and supply chain process, from primary to tertiary packaging and automated storage to provide you the best solution, both in stability and economical performance.

Our laboratory and test centers – unique in Europe – are powerful tools to achieve the best-in-class performance according to your needs.

Sustainability

How we are making a difference

Stretch film is fully Recyclable

Stretch film is made with Linear Low Density PolyEthylene (LLDPE) which is 100% recyclable and can be reused for recycled stretch film or numerous applications depending on the purity of the collected material.



Produced locally in Belgium & Ireland

The raw material that we use for our films is carefully selected and sourced in Europe. Mass balanced, bio based and recycled raw materials in order to reduce environmental impact are our top priorities.



Technical Consultancy to our Customers

Being closer to our customers and contributing to optimal consumptions is one of our commitments. The best stretch film is the one you don't waste by being overpacked.



Energy Management

More than 50% of 2021 Capital Investments are Sustainability related projects. As an example, 3600m² solar panels were installed in 2021 for our Virton plant, with an objective of using 40% green energy, to end 2021.



Internal Recyclability

Our Target is to reuse 100% of internal scrap by 2023 latest. Today our Gorey factory in Ireland is a leader in this commitment with almost 100% of the internal scrap reprocessed and reused in house.



Quality Performance

We make no compromises on quality with an average return rate of <0.1% in 2020. This prevents multiple trips, unnecessary resources and carbon footprint increase.



PCR Stretch Film

The sustainable alternative to fossil fuel based stretch film

PCR: One of our ways to contribute to a better circular economy

Reducing environmental impact through the re-usability of stretch film

What is Post Consumer Recycled (PCR)?

PCR, is recycled materials collected from industrial waste packaging. In order to produce PCR Resin, waste packaging must be sorted to isolate LLDPE (linear low density polyethylene) and processed through the recycling chain. This includes returns of used stretch film material.

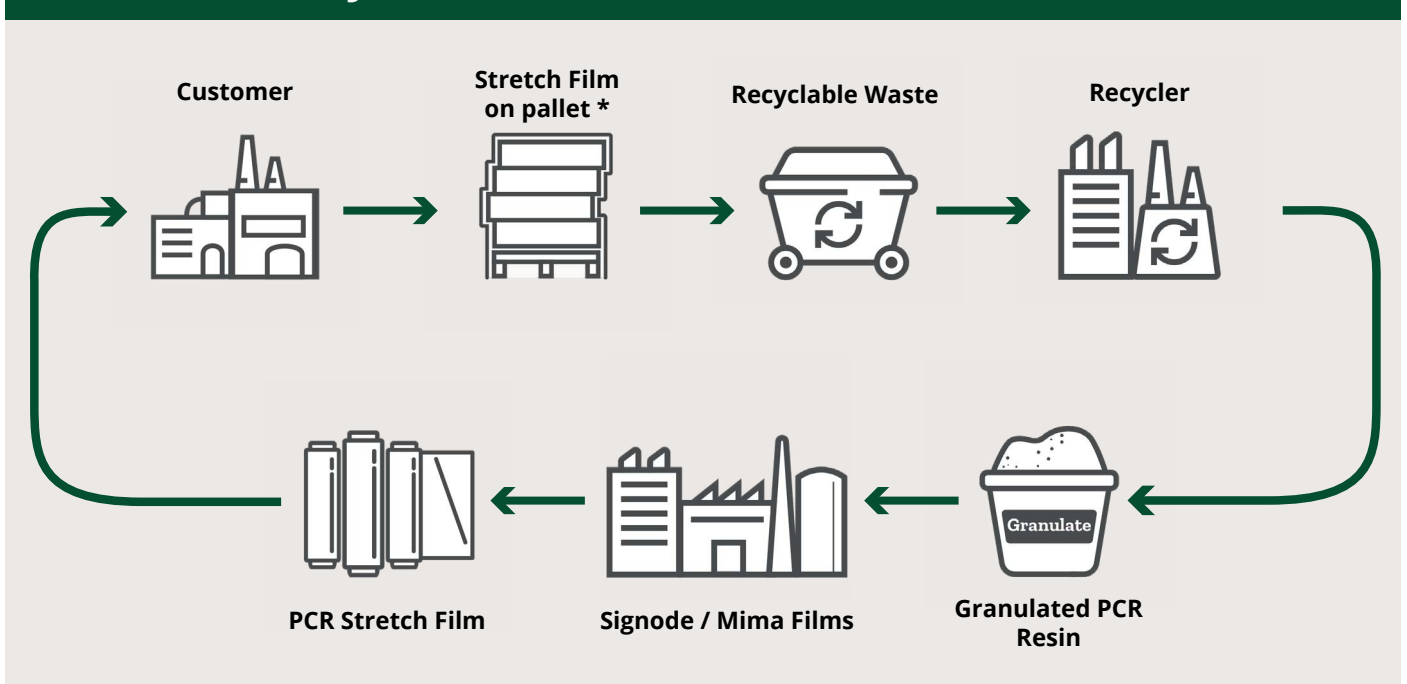
We acquire PCR Resin, from our trusted circular economy partners, with the highest grade of purity to ensure the same mechanical properties as regular stretch film.

How Does PCR Stretch Film perform?

When it comes to mechanical performance there is no difference between PCR Stretch films and fossil fuel based films. We have invested time and resources in to research and development to create the optimum recipe for the highest quality.

Stretchability of film requires a strong and stable molecular chain to achieve consistent results. By using 30% PCR resin in product composition we ensure a reliable and consistent quality, with the highest performance standards.

Material Life Cycle of PCR Stretch Film



* Fossil fuel based and PCR stretch film can be recycled several times in this loop



Benefits of using PCR stretch films

Why PCR is the key choice for a more sustainable method of wrapping pallets

■ A More Sustainable Industry

Made with 30% PCR content, recovered from post consumer waste streams. Signode stretch film delivers the same mechanical performance and transportation efficiency as film produced with virgin raw material, maintaining full recyclability.

■ CO2 Reduction

The fossil fueled raw material production process involves numerous steps with high CO2 impact. By recycling used LLDPE you minimize CO2 emissions, in comparison to the production of film, made from virgin raw material. It also prevents the export of plastic waste outside of the EU and it's associated CO2 emissions.

■ Cuts Tax Costs in EURO

The EU plans to raise a tax per ton of non-recycled plastic content. Each metric ton of non-recycled plastic is a loss and potentially a cost, both financially and environmentally. By using PCR stretch film you reduce the volume of non-recycled plastic, minimizing waste & contributing to EU environmental goals.

■ Future Ready

The trajectory of industries is leading towards a more sustainable way of re-using waste packaging. By using Signode PCR stretch film, you contribute to prevent the use of unnecessary resources, involved in the production process of new packaging.



Granulated PCR Resin

Technology & Expertise

How we can help you achieve premium packaging for your pallet

POP Center: Our packaging test and optimization program in Europe

Unrivaled integrated test center with 40+ years of producer knowledge

■ Stability Expertise

As a stretch film producer, we were pioneer at developing the first integrated stability test center in Europe. Our POP Center (Pallet Optimization Program), located in VIRTON (Belgium) and our Test Center in SØNDERBORG (Denmark) production plants provides a holistic study of the load you want us to improve.

■ Test Protocol

From primary packaging to the wrapping cycle, we analyze the stability level of your pallets with unique test protocol including...

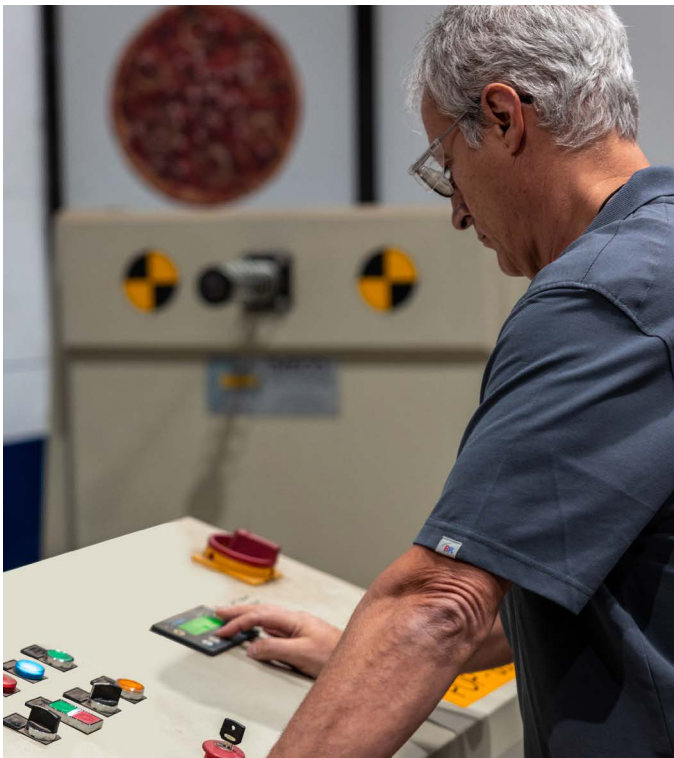
- Acceleration table (G-Force tool)
- Vibrations platform
- Tilt table
- Water resistance test

■ Data Analysis

Once we have a reliable and data driven overview of your current stability level, our dedicated engineers start to perform a series of tests with our films and Octopus wrapper machine, to provide you with a customised, best in class solution, both in stability and economic performance.

■ From Test Centre to your Production Line

Our POP Center is today a unique tool and perfect solution to design optimized packaging according to your requirements.



Dedicated Engineers



G-Force Tool in action

Stability tool: independent lab certified transportable unit

The best way to check and improve pallet stability

■ Pallet Stability Check

Our Stability tool is a transportable solution designed by an independent laboratory in Belgium. This mobile tool records in real time the forces, both in position and intensity, applied by the film on your pallet during the wrapping cycle. It allows us to check accurately on your own production line the most important indicators regarding the stability of your pallet.

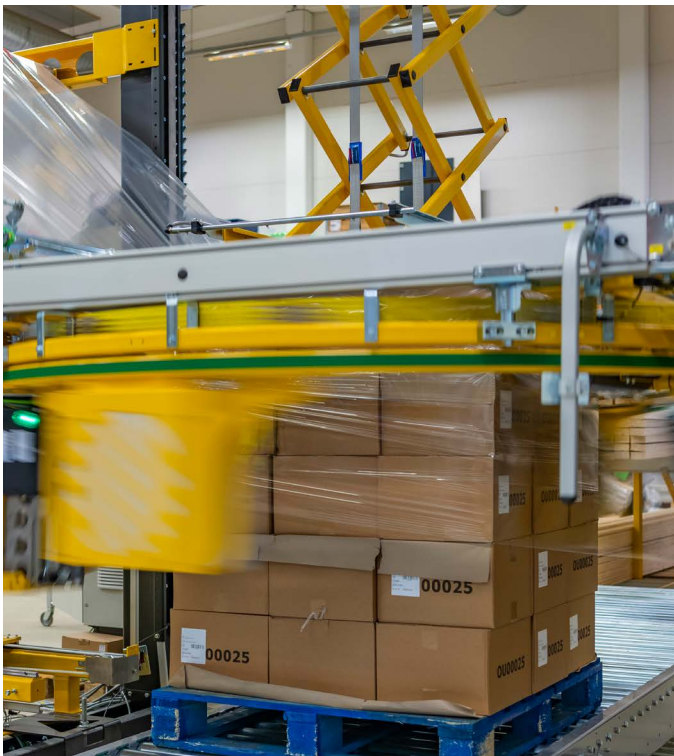
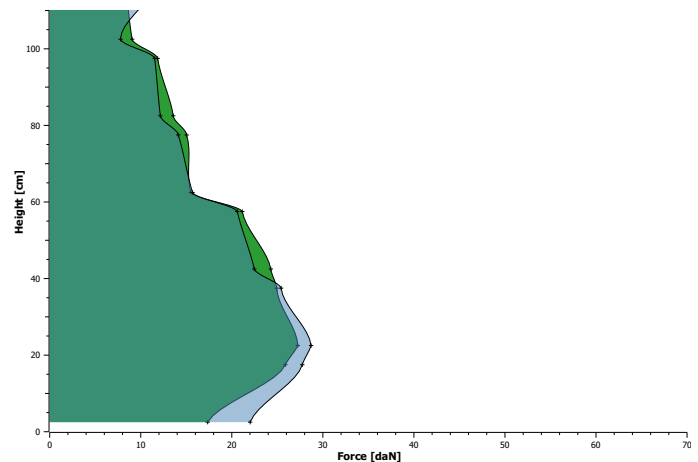
■ Real Time Feedback

Weak points or overpacked parts of your load are instantly spotted by the sensors on our device and transmitted wirelessly to our dedicated software for analysis and comparison. Reliable data sent by the Stability tool allows ad hoc stability studies, in depth optimizations to solve or upgrade according to your needs.

■ Replicability and Accuracy

The Stability tool is a Perfect solution to ensure optimal pallet loading, especially when combined with the POP Center, to duplicate results from one machine to another.

Real Time Force Diagram recorded with the stability tool



Real time data collection, on pallet during wrapping cycle



Sensors on edge of pallet

PCR Cast line

The sustainable industrial cast film



Introducing PCR Cast line, the industrial cast stretch film that uses 30% post consumer recycled material, for identical mechanical performance. The sustainable all around film.

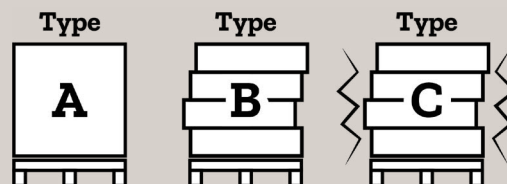
PCR Cast Line Benefits

- Consistent high performance stretchability
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Optimum machinability
- Silent unwind

Applications

- Up to 220% PPS stretch (1 m => 3,2 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17PCRC501	20PCRC501	23PCRC501
Thickness μ	17 μ	20 μ	23 μ
Film width (mm)	500	500	500
Reel length (m)	2300	2000	1750
Recommended Pre-Stretch	+/- 180%	+/- 200%	+/- 220%
Cling	Inside	Inside	Inside
Core weight (kg)	1,04	1,04	1,04
Reel weight (kg GFN)	18,928	19,340	19,454
Pallet size	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2
Nr of reels/pallet	28	28	28
Pallet gross weight (kg)	530	542	545
Pallet net weight (kg)	501	512	516

Please contact us for more information or visit
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PCR Blown line

The sustainable industrial blown film



Introducing PCR Blown line, the industrial blown stretch film that uses 30% post consumer recycled material, for identical mechanical performance. The sustainable heavy duty film.

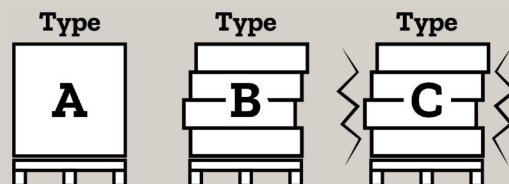
PCR Blown Line Benefits

- Consistent high performance stretchability
- Extremely versatile, can be used on all load types
- Superior toughness / puncture resistance
- Optimum elongation with very high load force
- Extra low noise

Applications

- Up to 220% PPS stretch (1 m => 3,2 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17PCRB501	19PCRB501	22PCRB501
Thickness μ	17 μ	19 μ	22 μ
Film width (mm)	500	500	500
Reel length (m)	2300	2110	1830
Recommended Pre-Stretch	+/- 180%	+/- 200%	+/- 220%
Cling	Outside	Outside	Outside
Core weight (kg)	1,04	1,04	1,04
Reel weight (kg GFN)	18,928	19,381	19,459
Pallet size	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2
Nr of reels/pallet	28	28	28
Pallet gross weight (kg)	530	543	545
Pallet net weight (kg)	501	514	516

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RHC line

The high performance PCR cast film



Introducing RHC High Performance PCR line, the industrial cast stretch film with 30% post consumer recycled material and edge cutting performance, up to 280% PPS.

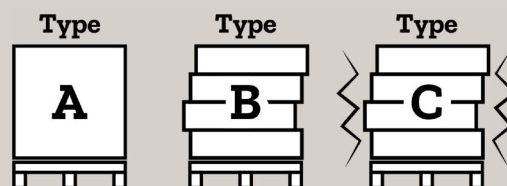
RHC Line Benefits

- Consistent high performance stretchability
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Optimum machinability
- Silent unwind

Applications

- Up to 280% PPS stretch (1 m => 3,8 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	20RHC501
Thickness μ	20 μ
Film width (mm)	500
Reel length (m)	2000
Recommended Pre-Stretch	+/- 280%
Cling	Inside
Core weight (kg)	1,04
Reel weight (kg GFN)	19,340
Pallet size	800 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	28
Pallet gross weight (kg)	542
Pallet net weight (kg)	512

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MX line

Differential cling film



Introducing MX, the original differential cling film that provides consistent performance on all stretch equipment.

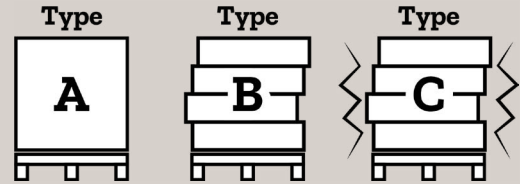
MX Line Benefits

- Non-migratory two side cling film
- Excellent clarity and optics
- Silent unwind
- Consistent machinability

Applications

- Up to 180% PPS stretch (1 m => 2,8 m)
- Type A, B and C loads
- Multipurpose product unitisation

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	23MX500
Thickness μ	23
Film width (mm)	500
Reel length (m)	1750
Recommended Pre-Stretch	+/- 180%
Cling	Differential
Core weight (kg)	1.04
Reel weight (kg GFN)	19.454
Pallet size	1000 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	38
Pallet gross weight (kg)	739
Pallet net weight (kg)	700

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CX line

The original cast film



Introducing CX, the outstanding consistent film performing on all stretch equipment, an excellent general purpose film.

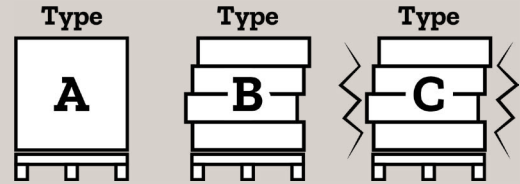
CX Line Benefits

- Excellent clarity and optics
- Optimum machinability
- Silent unwind

Applications

- Up to 180% PPS stretch (1 m => 2,8 m)
- Type A, B and C loads
- Multipurpose product unitization
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17CX501	17CX500	20CX501	20CX500	23CX501	23CX500	30CX500
Thickness μ	17 μ		20 μ		23 μ		30 μ
Film width (mm)	500		500		500		500
Reel length (m)	2300		2000		1750		1350
Recommended Pre-Stretch	+/- 150%		+/- 150%		+/- 180%		+/- 180%
Cling	Inside		Inside		Inside		Inside
Core weight (kg)	1,04		1,04		1,04		1,04
Reel weight (kg GFN)	18,928		19,340		19,454		19,569
Pallet size (mm)	800 x 1200	1000 x 1200	800 x 1200	1000 x 1200	800 x 1200	1000 x 1200	1000 x 1200
Outside diameter (mm)	250		250		250		250
Inside core diameter (mm)	≥ 76		≥ 76		≥ 76		≥ 76
Palletization/nr of layers	2		2		2		2
Nr of reels/pallet	28	38	28	38	28	38	38
Pallet gross weight (kg)	530	719	542	735	545	739	744
Pallet net weight (kg)	501	680	512	695	516	700	704

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MP line

The all around industrial cast film



Introducing MP, the all around cast film specifically developed for industrial automatic wrappers.

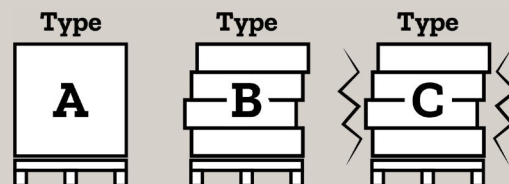
MP Line Benefits

- Consistent high performance stretchability
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Optimum machinability
- Silent unwind

Applications

- Up to 270% PPS stretch (1 m => 3,7 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	12MP501	15MP501	17MP501	20MP501	23MP501
Thickness μ	12 μ	15 μ	17 μ	20 μ	23 μ
Film width (mm)	500	500	500	500	500
Reel length (m)	3340	2700	2300	2000	1750
Recommended Pre-Stretch	+/- 200%	+/- 250%	+/- 270%	+/- 270%	+/- 270%
Cling	Inside	Inside	Inside	Inside	Inside
Core weight (kg)	1,04	1,04	1,04	1,04	1,04
Reel weight (kg GFN)	19,377	19,569	18,928	19,340	19,454
Pallet size	800 x 1200	800 x 1200	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	250	250	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2	2	2
Nr of reels/pallet	28	28	28	28	28
Pallet gross weight (kg)	543	548	530	542	545
Pallet net weight (kg)	513	519	501	512	516

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BD line

Standard blown film



Introducing BD, a cost efficient blown film designed to provide optimal holding forces and pallet stability for standard applications.

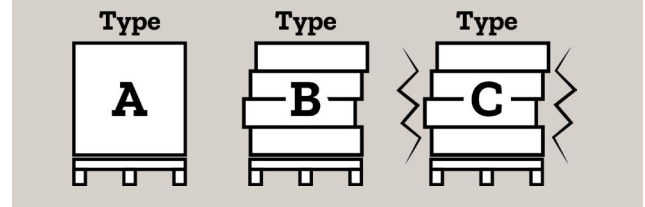
BD Line Benefits

- Consistent performance stretchability
- Extremely versatile, can be used on all load types
- Absolute slip side
- High cling level
- Up to 170% PPS depending on conditions
- High holding force
- Good puncture resistance

Applications

- Up to 170% PPS stretch (1m => 2.7m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	15BD501	17BD501	19BD501	22BD501
Thickness (µ)	15	17	19	22
Film width (mm)	500	500	500	500
Reel length (m)	2700	2300	2110	1830
Recommended Pre-Stretch	+/- 150%	+/- 170%	+/- 170%	+/- 170%
Cling	Outside	Outside	Outside	Outside
Core weight (kg)	1.04	1.04	1.04	1.04
Reel weight (kg GFN)	19.569	18.928	19.381	19.459
Pallet size	1200 x 800	1200 x 800	1200 x 800	1200 x 800
Outside diameter (mm)	250	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2	2
Nr of reels/pallet	28	28	28	28
Pallet gross weight (kg)	548	530	543	545
Pallet net weight (kg)	519	501	514	516

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BS line

Optimum blown film for heavy duty loads



Introducing BS, the optimum blown film for high load stability, irregular shaped loads with excellent abrasion and scuff resistance.

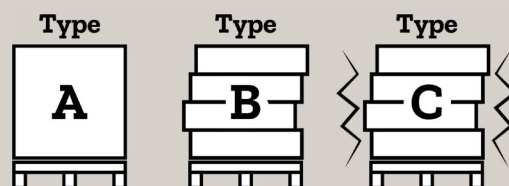
BS Line Benefits

- Consistent high performance stretchability
- Extremely versatile, can be used on all load types
- Superior toughness / puncture resistance
- Optimum elongation with very high load force
- Extra low noise

Applications

- Up to 220% PPS stretch (1 m => 3,2 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	15BS501	17BS501	19BS501	22BS501	30BS501
Thickness μ	15 μ	17 μ	19 μ	22 μ	30 μ
Film width (mm)	500	500	500	500	500
Reel length (m)	2700	2300	2110	1830	1350
Recommended Pre-Stretch	+/- 180%	+/- 200%	+/- 220%	+/- 220%	+/- 220%
Cling	Outside	Outside	Outside	Outside	Outside
Core weight (kg)	1,04	1,04	1,04	1,04	1,04
Reel weight (kg GFN)	19,569	18,928	19,381	19,459	19,569
Pallet size	800 x 1200	800 x 1200	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	250	250	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2	2	2
Nr of reels/pallet	28	28	28	28	28
Pallet gross weight (kg)	548	530	543	545	548
Pallet net weight (kg)	519	501	514	516	519

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BSH & BHH line

The heavy duty cast film



Introducing BSH & BHH, a cast alternative to blown film for heavy duty, irregular shaped and difficult pallets.

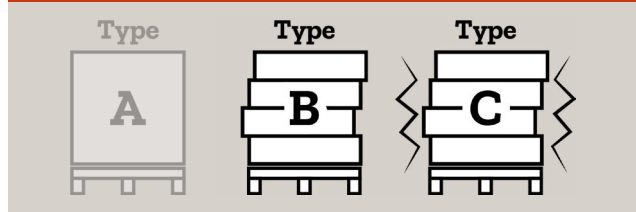
BSH & BHH Line Benefits

- Superior toughness / puncture performance
- One side cling / one side slip package
- Optimum elongation with similar load force to blown film
- Good clarity and optics
- Silent unwind

Applications

- Up to 250% PPS stretch (1 m => 3,5 m)
- Type B and C loads
- Unstable, heavily sensitive loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17BSH501	19BSH501	22BHH501
Thickness μ	17 μ	19 μ	22 μ (BHH)
Film width (mm)	500	500	500
Reel length (m)	2300	2110	1830
Recommended Pre-Stretch	+/- 200%	+/- 220%	+/- 250%
Cling	Outside	Outside	Outside
Core weight (kg)	1,04	1,04	1,04
Reel weight (kg GFN)	18,928	19,381	19,459
Pallet size	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2
Nr of reels/pallet	28	28	28
Pallet gross weight (kg)	530	543	545
Pallet net weight (kg)	501	514	516

Please contact us for more information or visit
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UP line

Top quality cast film for industrial applications



Introducing UP, our original high performance cast film, up to 270% pre stretch on fast wrapping machines and for difficult unit loads.

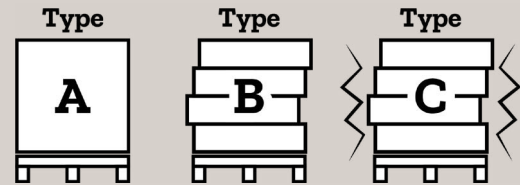
UP Line Benefits

- Consistent high performance stretchability
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Optimum machinability
- Silent unwind

Applications

- Up to 270% PPS stretch (1 m => 3,7 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17UP501	17UP500	20UP501	20UP500	23UP501	23UP500	30UP501
Thickness μ	17 μ		20 μ		23 μ		30 μ
Film width (mm)	500		500		500		500
Reel length (m)	2300		2000		1750		1350
Recommended Pre-Stretch	+/- 200%		+/- 220%		+/- 270%		+/- 270%
Cling	Inside		Inside		Inside		Inside
Core weight (kg)	1,04		1,04		1,04		1,04
Reel weight (kg GFN)	18,928		19,340		19,454		19,569
Pallet size	800 x 1200	1000 x 1200	800 x 1200	1000 x 1200	800 x 1200	1000 x 1200	800 x 1200
Outside diameter (mm)	250		250		250		250
Inside core diameter (mm)	≥ 76		≥ 76		≥ 76		≥ 76
Palletization/nr of layers	2		2		2		2
Nr of reels/pallet	28	38	28	38	28	38	28
Pallet gross weight (kg)	530	719	542	735	545	739	548
Pallet net weight (kg)	501	680	512	695	516	700	519

Please contact us for more information or visit
www.signode.com

BH line

Made to endure and secure the most difficult pallets



Introducing BH, the perfect blown film for high performance applications and heavy duty loads.

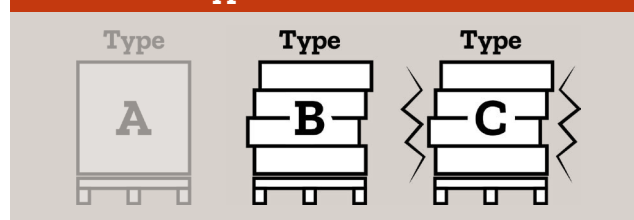
BH Line Benefits

- Superior toughness / puncture resistance
- Non migratory one side cling / one side high slip package
- Optimum elongation with very high load force
- Good clarity and optics
- Extra low noise

Applications

- Up to 300% PPS stretch (1 m => 4 m)
- Type B and C loads
- Unstable heavy loads
- Irregular shaped loads
- Heavy bulk product load sensitivities

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	17BH501	19BH501	22BH501	30BH500	30BH501
Thickness μ	17 μ	19 μ	22 μ	30 μ	
Film width (mm)	500	500	500	500	
Reel length (m)	2300	2110	1830	1350	
Recommended Pre-Stretch	+/- 220%	+/- 250%	+/- 270%	+/- 300%	
Cling	Outside	Outside	Outside	Outside	
Core weight (kg)	1,04	1,04	1,04	1,04	
Reel weight (kg GFN)	18,928	19,381	19,459	19,569	
Pallet size	800 x 1200	800 x 1200	800 x 1200	800 x 1200	1000 x 1200
Outside diameter (mm)	250	250	250	250	
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76	≥ 76	
Palletization/nr of layers	2	2	2	2	
Nr of reels/pallet	28	28	28	28	38
Pallet gross weight (kg)	530	543	545	548	744
Pallet net weight (kg)	501	514	516	519	704

Please contact us for more information or visit
www.signode.com

ST line

Superior performance



Introducing ST, a film specifically designed to provide optimal holding forces and pallet stability at the highest pre-stretch levels.

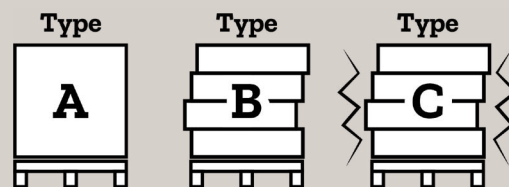
ST Line Benefits

- Consistent high performance stretchability
- Extremely versatile, can be used on all load types
- High levels of flexibility
- Designed to ensure easy off-loading of product
- Up to 300% PPS depending on conditions
- High holding force
- Excellent performance in chilled/frozen product applications

Applications

- Up to 300% PPS stretch (1 m => 4 m)
- Type A, B and C loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	15ST501	17ST501	20ST501	23ST501
Thickness μ	15 μ	17 μ	20 μ	23 μ
Film width (mm)	500	500	500	500
Reel length (m)	2700	2300	2000	1750
Recommended Pre-Stretch	+/- 300%	+/- 300%	+/- 300%	+/- 300%
Cling	Inside	Inside	Inside	Inside
Core weight (kg)	1,04	1,04	1,04	1,04
Reel weight (kg GFN)	19,569	18,928	19,340	19,454
Pallet size	1200 x 800	1200 x 800	1200 x 800	1200 x 800
Outside diameter (mm)	250	250	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2	2
Nr of reels/pallet	28	28	28	28
Pallet gross weight (kg)	548	530	542	545
Pallet net weight (kg)	519	501	512	516

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High speed films

Ultimate performance stretch films



Introducing HSB, the ultimate blown film for high speed machines and high production outputs.

HSB 25 μ blown film

Reel & Packaging Specifications

Product Reference	25HSB501
Film width (mm)	500
Reel length (m)	1600
Recommended Pre-Stretch	350%
Cling	Outside
Core weight (kg)	1,04
Reel weight (kg GFN)	19,340
Pallet size	800 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	28
Pallet gross weight (kg)	542
Pallet net weight (kg)	512

Film Tolerances

Thickness Tolerance	+/- 10% tolerance
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

HSB film Benefits

- Ultimate toughness / puncture resistance
- Non migratory one side cling / one side high slip package
- Optimum elongation with very high load force
- Good clarity and optics
- Extra low noise

Applications

- Up to 350% PPS stretch (1 m => 4,5 m)
- Especially designed for type B and C loads
- Easy loading / unloading of products
- Recommended for highspeed machines/ high production outputs

Introducing HP, the original cast film for superior performance and consistent quality, on high speed equipment.

HP 23 μ cast film

Reel & Packaging Specifications

Product Reference	23HP500
Film width (mm)	500
Reel length (m)	1750
Recommended Pre-Stretch	250%
Cling	Differential
Core weight (kg)	1,04
Reel weight (kg GFN)	19,454
Pallet size	1000 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	38
Pallet gross weight (kg)	739
Pallet net weight (kg)	700

Film Tolerances

Thickness Tolerance	+/- 10% tolerance
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

HP film Benefits

- Consistent high performance stretchability
- Non migratory two side cling film
- Good clarity and optics
- Silent Unwind
- Optimum machinability

Applications

- Up to 250% PPS stretch (1 m => 3,5 m)
- Type A, B and C loads
- Easy loading / unloading of products

Thin films

Reduced thickness for standard applications



Introducing UTF, a thin cast stretch film for semi automatic machines. Available in lightweight or high capacity rolls according to your needs.

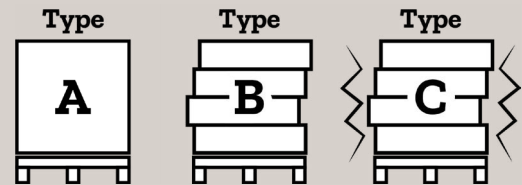
UTF Line Benefits

- Consistent high performance stretchability
- One side cling / one side slip package
- Low coefficient of friction
- Silent unwind

Applications

- Semi automatic machines, up to 50%
- A, B and C loads
- Unstable, medium and heavy loads
- Easy loading / unloading of products

Pallet Load Types



Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	6 ± 3 mm
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications

Product Reference	8UTF504	8UTF501	9UTF501
Thickness μ	8 μ	8 μ	9 μ
Film width (mm)	500	500	500
Reel length (m)	1500	4850	4440
Recommended Pre-Stretch	+/- 50%	+/- 50%	+/- 50%
Cling	Inside	Inside	Inside
Core weight (kg)	1,04	1,04	1,04
Reel weight (kg GFN)	6,530	19,340	19,322
Pallet size	1000 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	160	250	250
Inside core diameter (mm)	≥ 76	≥ 76	≥ 76
Palletization/nr of layers	2	2	2
Nr of reels/pallet	84	28	28
Pallet gross weight (kg)	570	575	568
Pallet net weight (kg)	460	548	541

Thin films

Reduced thickness for standard applications



Introducing TF, a 12 μ cast film designed for semi-automatic machines for economic performance on type A & B loads.

TF 12 μ cast film

Reel & Packaging Specifications

Product Reference	12TF501
Film width (mm)	500
Reel length (m)	3340
Recommended Pre-Stretch	100%
Cling	Inside
Core weight (kg)	1,04
Reel weight (kg GFN)	19,377
Pallet size	800 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	28
Pallet gross weight (kg)	543
Pallet net weight (kg)	513

Film Tolerances

Thickness Tolerance	+/- 10% tolerance
Core Protrusion	6 \pm 3 mm
Tolerances on weight	$\pm 5\%$
On Reel length	$\pm 5\%$
On Film width	± 4 mm

TF film Benefits

- Excellent Clarity and Optics
- Optimum machinability
- Silent unwind

Applications

- Up to 100% PPS stretch (1 m => 2 m)
- Type A and B loads
- Easy loading / unloading of products
- Multipurpose product unitization

Introducing MIMAX, a 9 μ technical cast film dedicated to semi-automatic machines for optimum cost effectiveness.

MIMAX 9 μ cast film

Reel & Packaging Specifications

Product Reference	MIMAX501
Film width (mm)	500
Reel length (m)	4440
Recommended Pre-Stretch	50%
Cling	Inside
Core weight (kg)	1,04
Reel weight (kg GFN)	19,322
Pallet size	800 x 1200
Outside diameter (mm)	250
Inside core diameter (mm)	≥ 76
Palletization/nr of layers	2
Nr of reels/pallet	28
Pallet gross weight (kg)	541
Pallet net weight (kg)	512

Film Tolerances

Thickness Tolerance	+/- 10% tolerance
Core Protrusion	6 \pm 3 mm
Tolerances on weight	$\pm 5\%$
On Reel length	$\pm 5\%$
On Film width	± 4 mm

MIMAX film Benefits

- Stiff film
- Excellent mechanical properties
- One side cling, one side slip

Applications

- Up to 50% PPS stretch (1m => 1,5 m)
- Type A, B and C loads
- Designed to be used on semi-automatic machines with core brake and / or can be pre-stretched up to 50%

Additional Products

Available on request



Interested in more specific dimensions or items?

■ Film width

Find the correct width for your needs, with choices between: 250mm, 300mm, 500mm, 750mm and 1000mm on certain product ranges.

■ Coloured films

We offer specific white and grey film product ranges, which help to prevent light exposure and increase your product confidentiality during transport.

■ Narrow films

Our Narolite range is specifically dedicated to banding applications, in both logistic and industry.

■ Macro-perforated films

Our Climawrap range is dedicated to industrial applications, where breathability is mandatory to deter excess moisture & temperature regulation.

■ Top Sheets

We produce 50µ top sheets with blown extrusion for superior toughness and load protection, exclusively for automated lines.

■ UV stabilized films

We produce UV stabilized stretch films in transparent grey or white for external storage

Please contact us for more information or visit www.signode.com

Sources:
Signode Europe Outside-In Customer Study
conducted 2020



WE'LL PROTECT IT FROM HERE.

Signode is the multi-billion-dollar global Transit Packaging Division of Crown Holdings, with 80 manufacturing facilities, 33 within Europe where we have over 2000 employees. The breadth and depth of Signode's experience and product portfolio allows the company to offer the resources, reach, and vision to provide transit packaging solutions, from the smallest to largest of customers.