

RoRo StretchPack®:

Packaging of rolls 100% waterproof



RoRo StretchPack®:

Perfect packaging with high repeatability

RoRo StretchPack® is an automated packaging solution, which is very suitable for horizontal packaging of roll materials.

Using a tubular stretch film, RoRo StretchPack® perform 100% sealed packaging to protect rolls against penetration of dust and moisture.

RoRo StretchPack® is not only improving the packaging quality of your rolls it is also a way for you to benefit from a fully automated packaging line.



RoRo StretchPack® is suitable for roll packaging

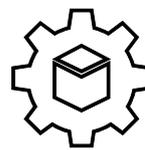
- Nonwovens
- Geotextiles
- Artificial grass
- Carpets
- Technical textiles
- Similar roll materials

RoRo StretchPack® is suitable for both packaging "eye to wall" rolls and "eye to sky" rolls.



Seal and protect your products

- 100% sealed packaging (option open ends)
- 100% dust and waterproof
- Improved load stability
- Smooth and uniform packaging
- Optimal for print and branding



Automate your packaging

- 100% automatic packaging
- Full integration in the production line
- High production capacity with high uptime
- Handles large load sizes

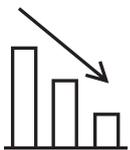
RoRo
STRETCH PACK



RoRo StretchPack® is designed to give you a high packaging capacity and high uptime. It fits into a highly efficient production line - inline or as a stand-alone solution. The packaging and sealing are done in one automated operation, so the machinery fills up less compared to other solutions.

RoRo StretchPack® is designed for high uptime

- Large film capacity on a film roll
- up to 6 km depending on thickness
- Fast change of film roll - 2-4 minutes
- Automatic shift between different film sizes
- Minimal cleaning and maintenance
- Packaging of both batch and in random order



Reduce your packaging cost

- No cost for manual handling
- No energy cost for heat shrink system
- Low maintenance cost
- Reduce film cost



SUSTAINABLE
DEVELOPMENT
GOALS

Support your sustainability

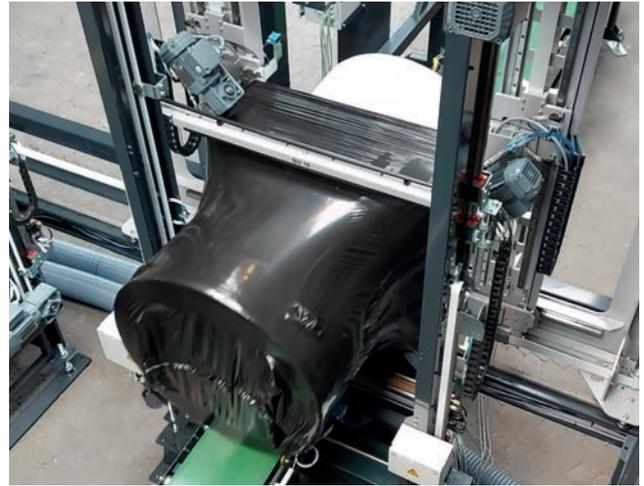
- Up to 60% reduction in film consumption
- No energy consumption for heat shrink system
- Improves working environment
- Supports UN's Sustainable Development Goals

RoRo StretchPack®:

Protect your rolls with 100% waterproof packaging

RoRo StretchPack® uses a tubular stretch film for packaging. During the packaging process, the roll ends are sealed with a strong temperature-controlled sealing. It ensures 100% sealed packaging, and protects against the penetration of dirt and water.

The stretch film used for RoRo StretchPack® has high tear and puncture-resistant. It reduces damages on the packaging during handling and transport.



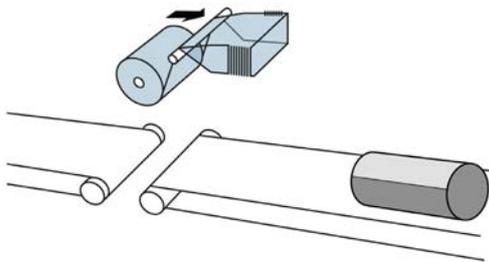
RoRo StretchPack® is quality packaging

- 100% sealed and waterproof
- Uniformity and high repeatability
- High tear and puncture-resistance
- Smooth surface (not sticky film)
- Short strong sealings in the ends
- Optimal for branding

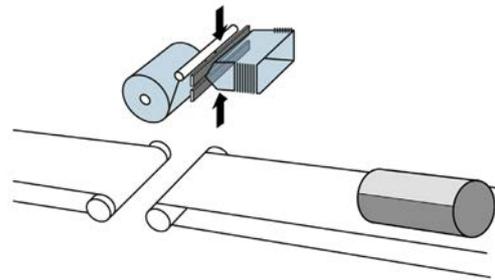




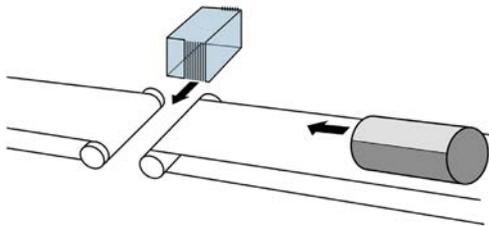
RoRo StretchPack® step-by-step



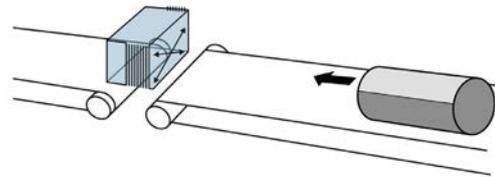
- 1** A tubular stretch film is rolled on the gripper arms.



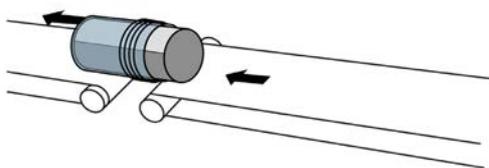
- 2** The tubular stretch film is cut and a front sealing is made.



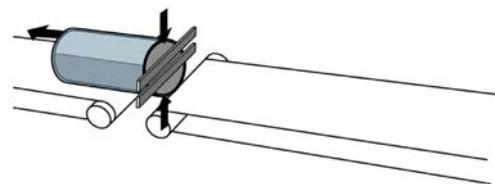
- 3** The front sealed film tube is moved to the product lane.



- 4** The film is now stretched until it is slightly larger than the roll.



- 5** The film is rolled off the gripper arms while the roll is being packed.



- 6** Finally, a back sealing is made to complete the packaging process. The packaging cycle can now start over again.

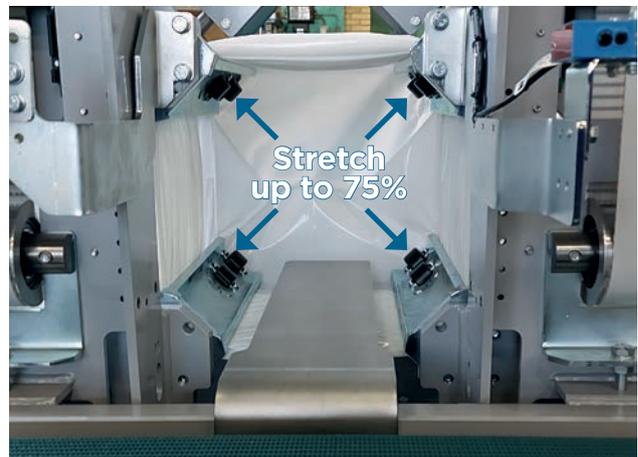


RoRo StretchPack®:

Up to 60% in film savings

Due to the properties of the tubular stretch film, RoRo StretchPack® uses less film for packaging compared to conventional packaging. It is without compromising the packaging quality. From our customer's cases, we typically see between 25-60% in film saving when shifting to RoRo StretchPack®.

By reducing film consumption, you reduce resource use and the environmental impact of your packaging line. At the same time, you get the opportunity to reduce your film cost.



RoRo StretchPack® reduces film consumption

- Single layer packaging
- Full use of the film - due to stretching
- Thinner film - due to stronger film type
- Tight packaging (customizable)
- Minimum waste during packaging

Unlike orbital wrapping, RoRo StretchPack® is single layer packaging. RoRo StretchPack® is also using a film smaller than the roll and stretches the film by up to 75% to pack the roll. In contrast, heat shrink packaging uses a film larger than the roll and reduce the excessive amount of film during the packing. These are among the reasons why RoRo StretchPack® is a film saving packaging solution.

Support your sustainability goals



Correct packaging protects your products and prevents resource waste because of damaged products during storage and transport. At the same time, the environmental impact from the packaging process must be reduced to a minimum.

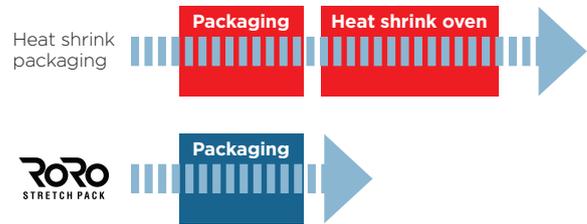
RoRo StretchPack® protects your products optimally with a minimum of film and energy consumption. It supports your sustainability goals.

Supports the UN SDG

Using RoRo StretchPack® you will not only reduce your environmental impact. You are also supporting several targets within these UN's Sustainable Development Goals:

- **UN SDG 7 Affordable and clean energy**
- **UN SDG 8 Decent work and economic growth**
- **UN SDG 9 Industry, innovation and infrastructure**
- **UN SDG 12 Responsible consumption and production**

Supporting the UN's Sustainable Development Goals will help you develop a more attractive business for customers, employees and other stakeholders.



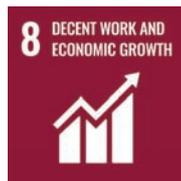
When installing RoRo StretchPack® you can remove the heat shrink oven from your packaging line.

Reduce energy consumption by up to 90%

RoRo StretchPack® packs and seals in one operation. It means that you can remove the heat shrink oven from your packaging line and reduce your energy consumption by up to 90%.



Improving energy efficiency



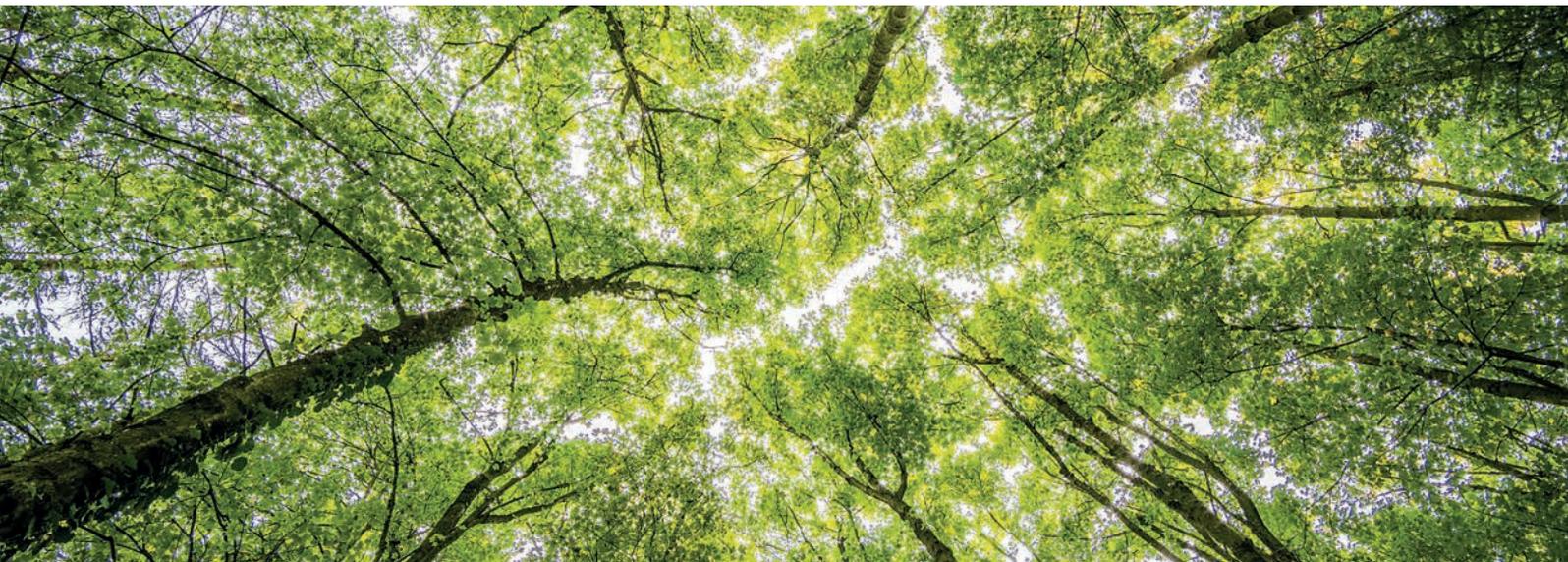
Improving production and growth



Reducing carbon footprint



Recycling and reducing resource consumption



RoRo StretchPack®:

Nice packaging promotes your quality rolls

The packaging has more functions than protecting your roll products. For instance, the appearance of the rolls affects how customers perceive the quality of your products.

The horizontal packaging using a tubular film provides nice uniformed and tightly packed rolls. There are no long sealings along the roll exposed to damages during handling. The film has low friction, which means no sticking between the packed rolls e.g. when there are stacked and moved again by a forklift with a carpet pole.



RoRo StretchPack® packaging is suitable for branding and product information.



RoRo StretchPack® improves branding

- Uniformed, smooth and tight packaging
- Sealings are only in the roll ends
- Film is suitable for a print of logo etc.
- Film can be transparent or coloured
- Film with UV filter is an option



Comparison of packaging techniques

	Orbital wrapping	Heat shrink packaging	RoRo STRETCH PACK
Film type	Stretch wrap film	Shrink film	Tubular stretch hood film
Six-sided packaging	✗	✓	✓
Single layer packaging	✗	✓	✓
100% waterproof and dustproof	✗	✗	✓
Packaging and sealing in one operation	✗	✗	✓
Uniform packaging	✓	✗	✓
High repeatability	✓	✗	✓
Smooth film surface - non sticky	✗	✓	✓
Printable film for logo and graphic	✗	✓	✓
High tear and puncture resistant	✓	✗	✓
Large film rolls available (more than 6 km film depending on thickness)	✗	✗	✓
Low maintenance (film change, production stop, cleaning etc.)	✗	✗	✓
Film consumption	-	-	↓
Energy consumption	-	↑	↓

RoRo StretchPack® solution with core plug applicator and "heat on-demand"



RoRo StretchPack®:

Automation increases capacity

Automation is a keyword if you want to optimize your packaging line. That is why a RoRo StretchPack® solution can be equipped with different functionalities to automate all the processes during packaging. It increases your packaging capacity, while it will free up labour from the packaging line.

Core plugging is often a bottleneck in the production line. This bottleneck can be eliminated by integrating a core plug applicator in the packaging line. It can insert core plugs in rolls with diameters up to 1400 mm.



By integrating a core plug applicator into your packaging line increase your production capacity.



Tilt conveyor with load cells

RoRo StretchPack® automates your packaging line

- 100% automated packaging and sealing
- Automated core plug applicator
- In- and outfeed conveyors
- Tilt and swing conveyors
- Load cells for weighing
- Sensors for measuring
- Heater blower for "heat on-demand"



Heater blower for "heat on-demand"

Standard machine range



Series	Film unit left (L)	Film unit right (R)	Standard configuration	Dimensions
Large Simplex	S1		<ul style="list-style-type: none"> 1 film unit (Large FU) 1 gripper unit (Large GU) 1 back sealing unit (Large BU) 	<ul style="list-style-type: none"> Length 3.420 mm Height 2.700 mm Width 4.250 mm
	S2		<ul style="list-style-type: none"> 2 film units (Large FU) 1 gripper unit (Large GU) 1 back sealing unit (Large BU) 	<ul style="list-style-type: none"> Length 3.420 mm Height 2.700 mm Width 5.750 mm
	S3			<ul style="list-style-type: none"> 3 film units (Large FU) 1 gripper unit (Large GU) 1 back sealing unit (Large BU)
Large Duplex	D2		<ul style="list-style-type: none"> 2 film units (Large FU) 2 gripper units (Large GU) 1 back sealing unit (Large BU) 	<ul style="list-style-type: none"> Length 3.420 mm Height 2.700 mm Width 7.700 mm
	D4		<ul style="list-style-type: none"> 4 film units (Large FU) 2 gripper units (Large GU) 1 back sealing unit (Large BU) 	<ul style="list-style-type: none"> Length 3.420 mm Height 2.700 mm Width 10.700 mm
Large Extended Simplex	S1		<ul style="list-style-type: none"> 1 film unit (XL FU) 1 gripper unit (Large Extended GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.570 mm Height 2.700 mm Width 5.000 mm
	S2		<ul style="list-style-type: none"> 2 film units (XL FU) 1 gripper unit (Large Extended GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.570 mm Height 2.700 mm Width 7.000 mm
	S3			<ul style="list-style-type: none"> 3 film units (XL FU) 1 gripper unit (Large Extended GU) 1 back sealing unit (XL BU)
Large Wide Simplex	S1		<ul style="list-style-type: none"> 1 film units (Large Wide FU) 1 gripper unit (Large Wide GU) 1 back sealing unit (Large Wide BU) 	<ul style="list-style-type: none"> Length 3.375 mm Height 2.700 mm Width 7.460 mm
XL Simplex	S1		<ul style="list-style-type: none"> 1 film unit (XL FU) 1 gripper unit (XL GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.755 mm Height 2.730 mm Width 5.542 mm
	S2		<ul style="list-style-type: none"> 2 film units (XL FU) 1 gripper units (XL GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.755 mm Height 2.730 mm Width 7.542 mm
	S3			<ul style="list-style-type: none"> 3 film units (XL FU) 1 gripper units (XL GU) 1 back sealing unit (XL BU)
XL Duplex	D2		<ul style="list-style-type: none"> 2 film units (XL FU) 2 gripper units (XL GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.755 mm Height 2.730 mm Width 9.542 mm
	D4		<ul style="list-style-type: none"> 4 film units (XL FU) 2 gripper units (XL GU) 1 back sealing unit (XL BU) 	<ul style="list-style-type: none"> Length 3.755 mm Height 2.730 mm Width 13.542mm

For machines with other configurations please contact Tentoma

About Tentoma

Tentoma was founded in 2011 as Frank Bruhn ApS and was servicing vertical stretch hood machines. Based on the experiences from the stretch hood industry, we refined the technology and developed the RoRo StretchPack® for horizontal stretch film packaging.

Today we are focusing on developing and manufacturing RoRo StretchPack® packaging solutions, particularly for packaging of building materials and roll materials.

Tentoma is located in Denmark and installs and service packaging solutions worldwide. Based on new investors and a clear strategy we have experienced great growth in our customer portfolio in recent years.



Selected references within roll packaging:



Watch our YouTube channel
RoRo StretchPack

