



# FRESH PRODUCE & AGRICULTURAL INDUSTRY SOLUTIONS

R&E

ROBOTICS &  
END OF LINE

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BREATHABILITY | SECURE CONTAINMENT | INCREASED PROFITABILITY



Organic products, such as fresh-picked fruits and vegetables, need to breathe and vent naturally-occurring gases during storage and transportation. This helps preserve fresh appearance, prevents decay and limits product shriveling and weight loss. To facilitate air flow, these products are commonly packed in vented cases or trays. Applying a full wrap of stretch film to contain these pallets would defeat the purpose of the breathable, vented containers and ultimately speed the rate of product decay.

While options like netting and perforated film exist, on a cost-per-load basis, they can cost almost four times as much as roped regular pre-stretched wrap film.

## BREATHABILITY, STABILITY, & COST SAVINGS

### STRETCH FILM ROPING VS. OTHER BREATHABLE ALTERNATIVES

Roping is the narrowing of a web of stretch wrap film to create bands. While there are several alternatives to full wrapping which include mesh /netting, perforated vented film, and pallet wrapping (clear tape)with each providing varying degrees of breathability and load stability. However, only roped stretch film provides the combined benefits of optimum load security, significant cost savings and breathability.

Of the ways to provide breathability, the most practical and economical is Orion's method of roping the stretch film as it exits the film carriage of the wrapper. This creates an extremely strong and elastic band of film that, when wrapped around the load, creates breathing spaces while maintaining load stability. Roping the film also increases the overall strength of the stretch film, which can lead to fewer film breaks and an increase in productivity. On a cost-per-load basis, netting and perforated film can cost almost four times as much as roped film.

### ROPING WITH ORION STRETCH WRAPPERS

Roping packages are available with most of Orion's automatic and semiautomatic wrappers. So, regardless your operation, Orion stretch wrappers cover the gamut of throughput and automation needs.

In most cases, roping is applied in the same pattern as a full wrap. However, unique, need-specific applications are also possible.





# WHY CHOOSE ORION?

Orion offers the most comprehensive, highest quality, heavy-duty industrial stretch wrapping equipment available and sets the standard for durability, efficiency, flexibility, reliability and performance. Our advanced film pre-stretch system assures the most efficient and cost effective use of every inch of stretch film. Made in the U.S.A. quality & technical support, along with a nationwide network of trained distributors further define the advantages of selecting Orion equipment.

## ORION SPLIT & ROPE

Orion's Split & Rope System uses a single roll of 20" stretch film to create two ten inch webs. Using a dedicated film carriage setup, first the film is pre-stretched a standard 260% to maximize film savings and load containment. Then a blade (Figure 1) on the film carriage cuts the full film web into two strips. These are then run between rollers to create bands (Figures 2 & 3). Reducing the space between rollers, increases the film narrowing, and the strength and tear resistance of the film.

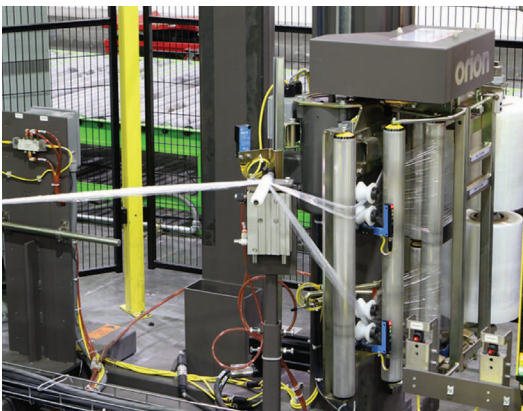
The rollers can be programmed to adjust between roping and full wrapping mode in the course of the wrap. This programmed method allows the wrapper to be used for either roping or full wrap, as needed.



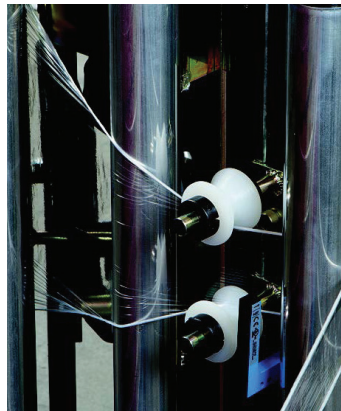
**Figure 1** - A knife inserted on the carriage splits the film in two to strips of film which is then passed through the rollers system (See figure 2) to create the film bands.

## DUAL ROLL ROPING

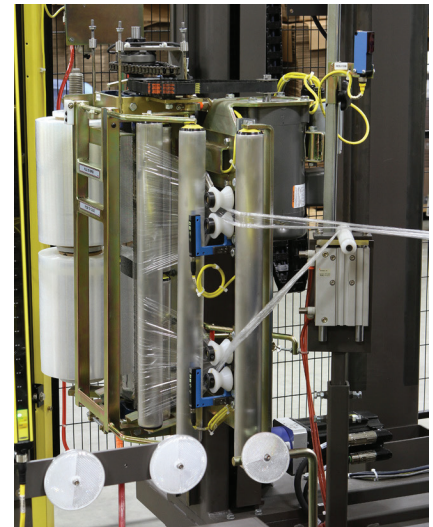
Orion's specially designed film carriage uses two rolls of 10-inch stretch film (Figure 4) to create the film ropes to secure the breathable load. The film is pre-stretched and elongates 260% for maximum economy and holding power. Then each strip passes between the rollers which create the load stabilizing bands.



**Figure 2** - The most common method of roping uses rollers at the top and bottom of the film web positioned to push up and down against the web. This narrowing can range from a few inches at either edge to maximum reduction creating a true rope of film.



**Figure 3** - Here the rollers are spaced further apart, creating a strap of film several inches wide.



**Figure 4** - Two ten-inch rolls are loaded. Each is passed through a set of rollers that forces the film into bands.



Orion manufactures automatic and semi-automatic stretch wrapping equipment, offering the most comprehensive line of cost-effective pallet wrapping solutions at unparalleled value. As a leader in heavy-duty industrial stretch wrapping technology, Orion is dedicated to creating durable and film efficient machines without compromise to the safety and security of each pallet load. Orion is a product brand of ProMach, a global leader in packaging line solutions. As part of the ProMach Robotics & End of Line business line, Orion helps our packaging customers protect their reputation and grow the trust of their consumers. ProMach is performance, and the proof is in every package.

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