



# SOLARIS EVO

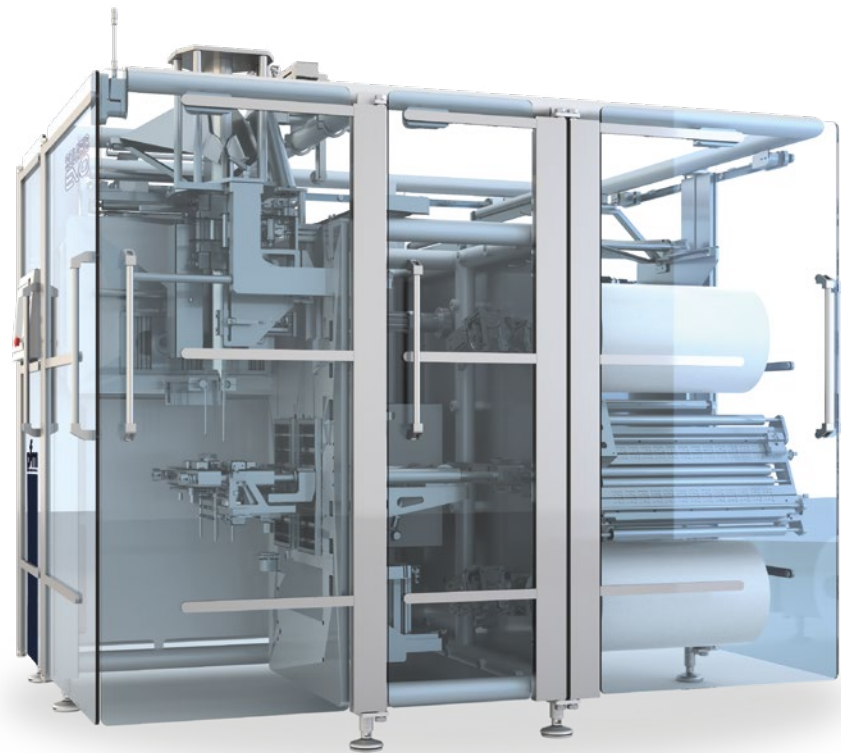
The EVOLution of VFFS Wrappers – Continuous Motion



# SOLARIS EVO:

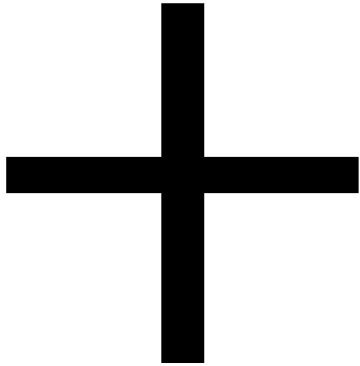
## **Continuous Motion VFFS wrapper**

The Solaris EVO is a new High Speed Continuous motion vertical form fill and seal wrapper that produces 3-side sealed pillow-bags, block-bottom and Steelo- bags, Doy-style also with zip and eurohole.



# SOLARIS EVO

## BENEFITS:

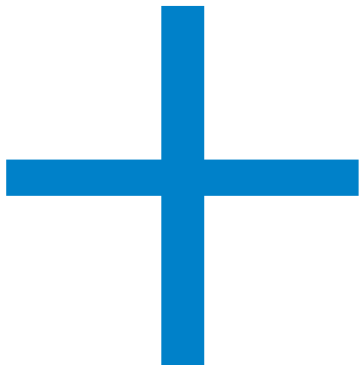


### **Reduced changeover time**

A series of technical features including the double reel-holder shaft with easy film splice, the Doy-style sealing unit with complete replacement of the forming assembly and the two-way film transport system have drastically reduced the time needed for format change.

### **Aesthetically nicer bag**

The continuous control of film tension, film centering and edge alignment, together with even distribution of film pull force guarantee perfect pack aesthetics and seal integrity.



### **Increased production speed**

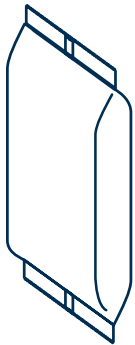
The machine reaches speeds up to 150 pillow-bags per minute, 100 Doy-style and 100 Steelo-bags per minute.

# TWO-WAY FILM CONCEPT:

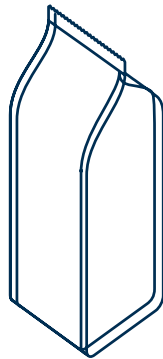
The **Solaris EVO** two-way film transport system allows standard pillow-bags, Steelo-bags, block-bottom bags and Doy-style bags to be produced without the need to rotate the Box-Motion sealing unit.

## Film coming from side A:

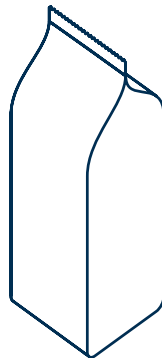
With film coming from side A **Solaris EVO** produces pillow-bags, Steelo-bags and block-bottom bags.



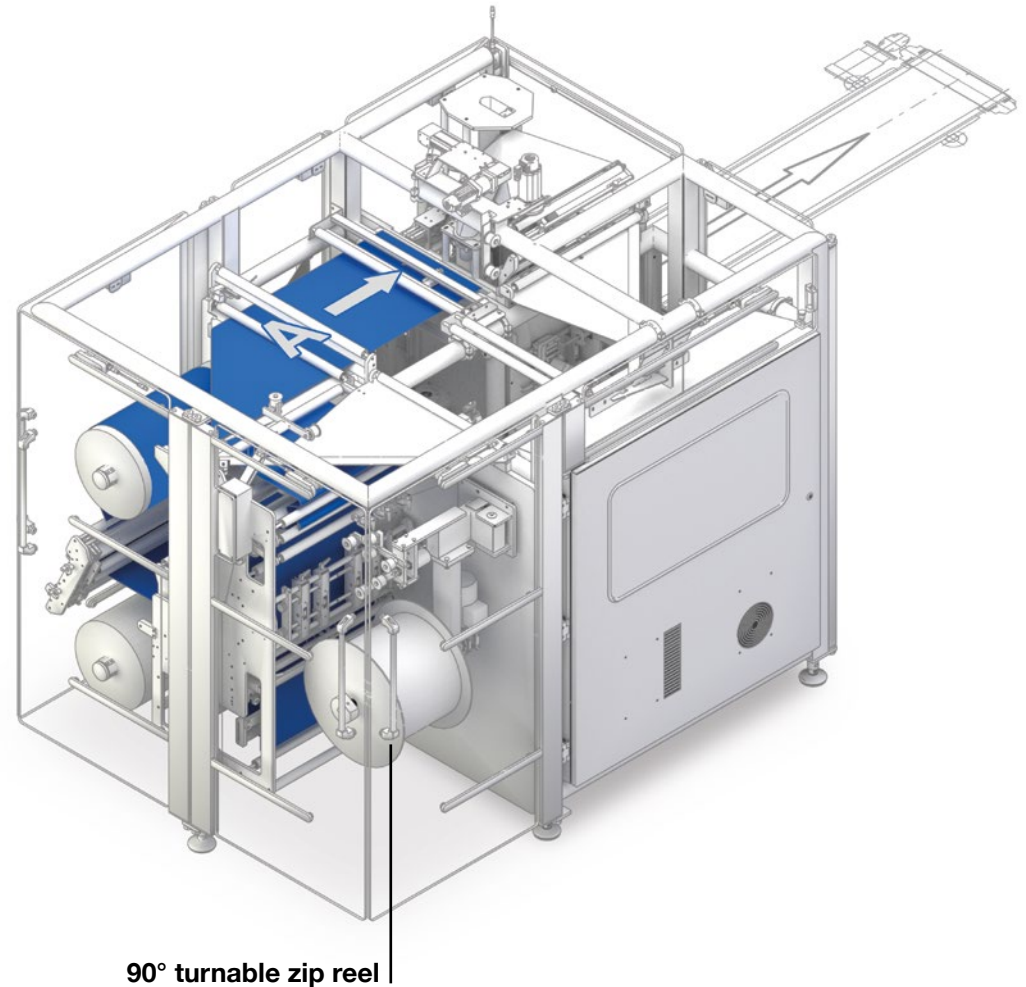
**Pillow-bag**



**Steelo-bag**



**Block-bottom bag**

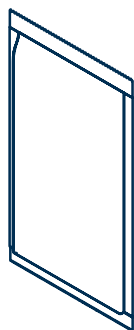


## Film coming from side B:

With film coming from side B Solaris EVO produces 3-side and 4-side sealed pillow-bags with or without zip and eurohole, Doy-style bags and Doy-style with zip and eurohole.



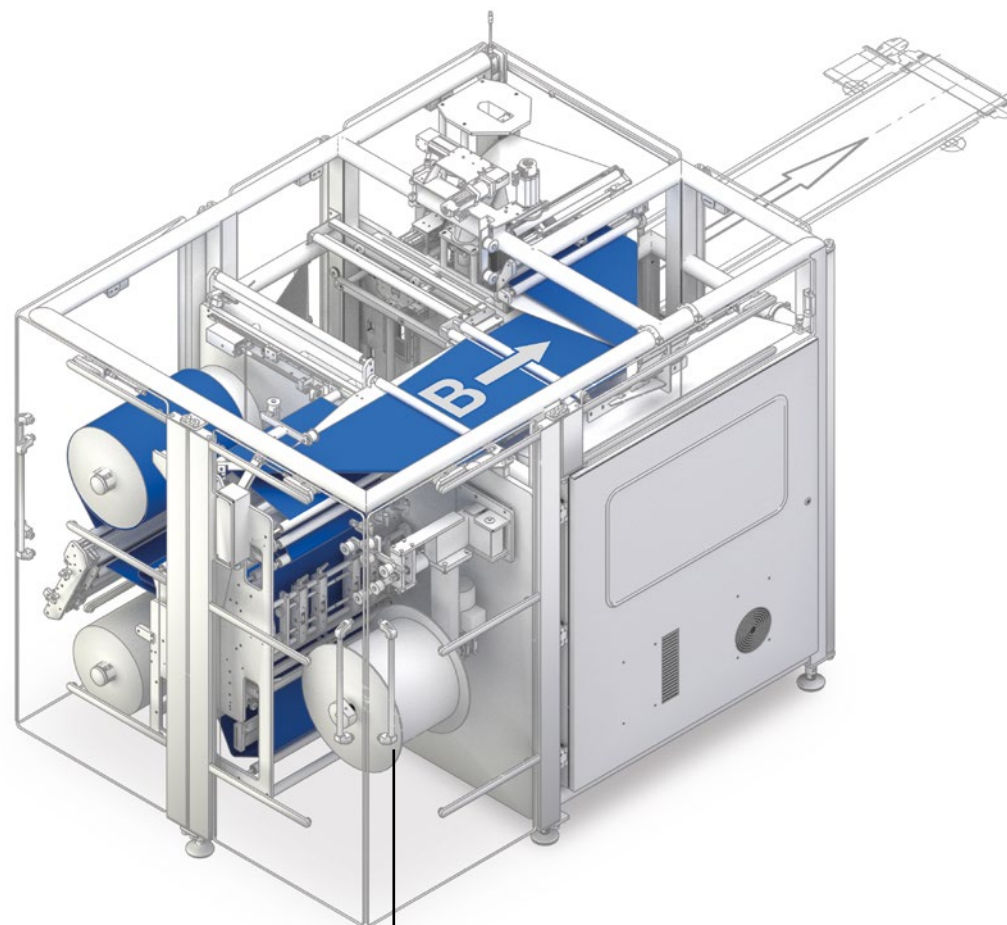
**Doy-style and  
Doy-style with Zip**



**4-side sealed  
pillow-bag**

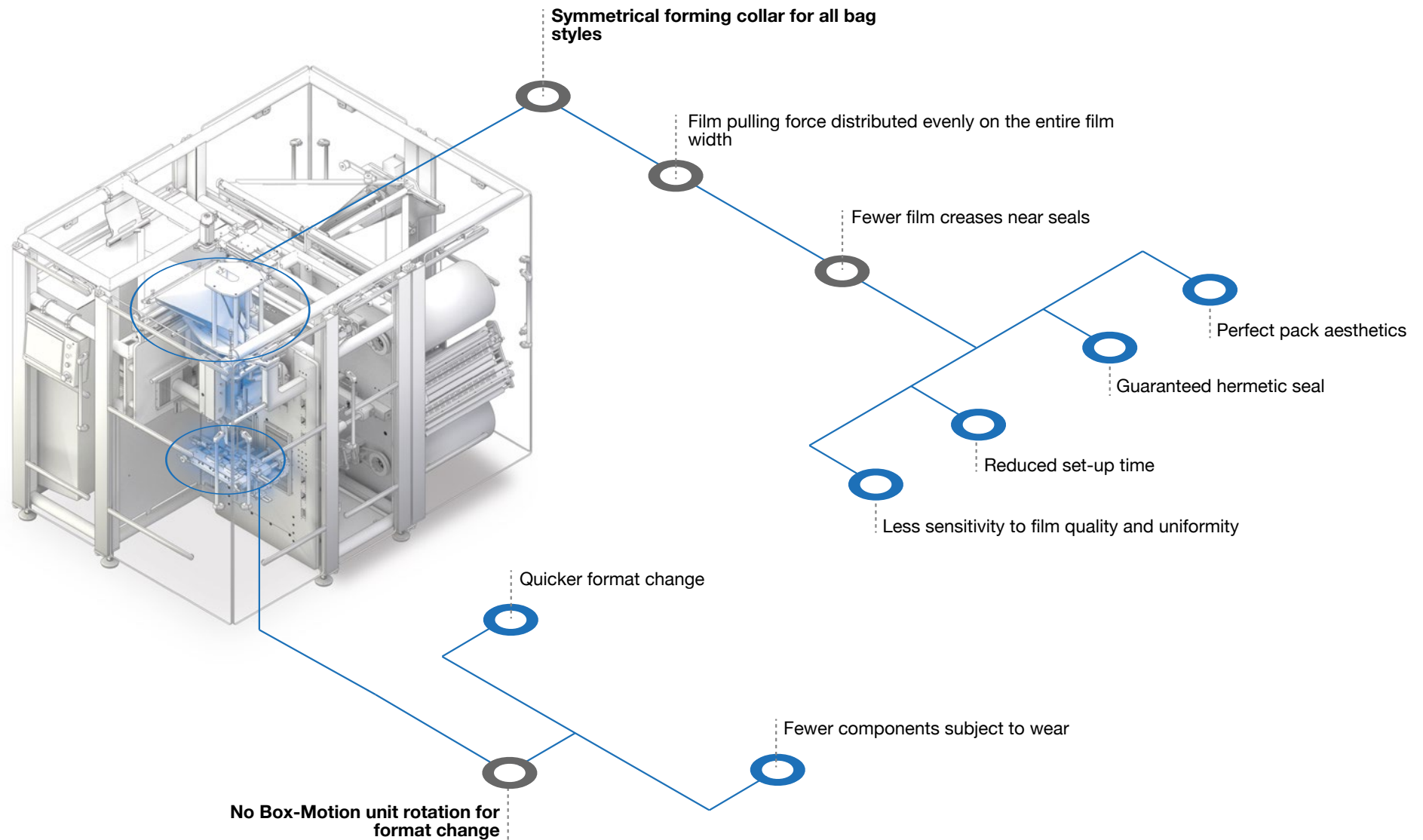


**3-side sealed  
pillow-bag**



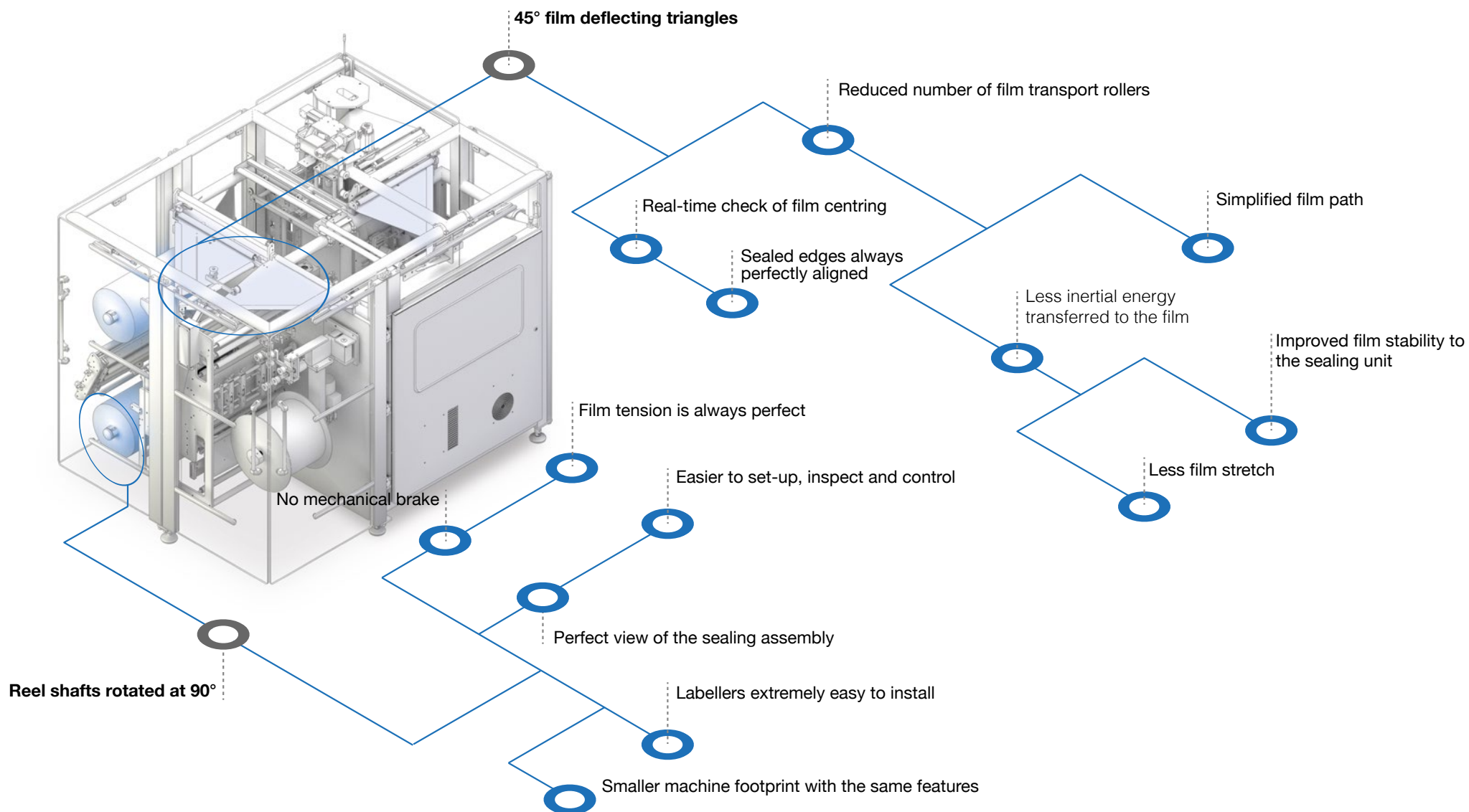
**90° turnable zip reel**

# QUALITY EVOLUTION:





# SOLARIS EVO



# FEATURES:

## Full Servo

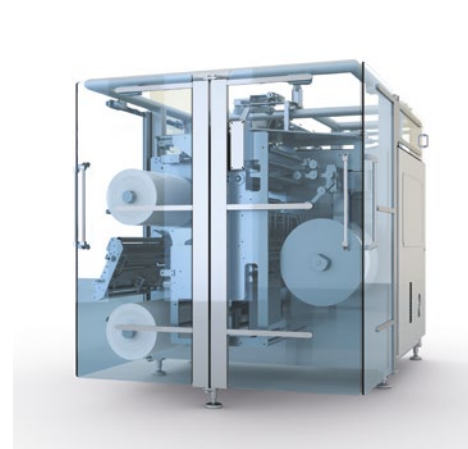
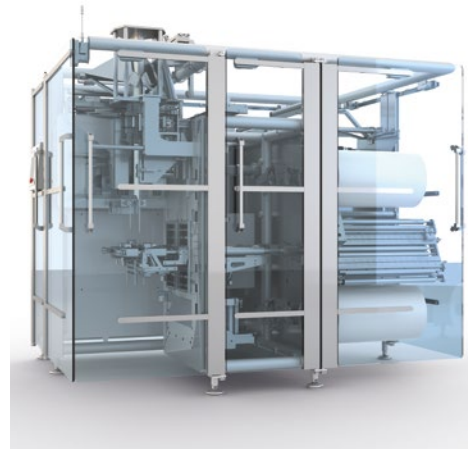
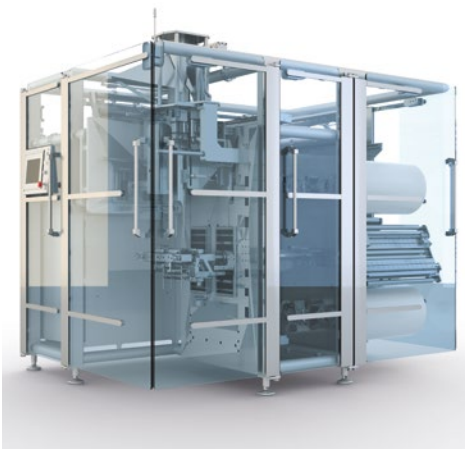
- Up to 10 brushless motors (depending on the configuration).
- 12" or 15" Industry 4.0 touch screen.
- It calculates (with precision) the reel diameter and can then indicate the reel run out time and the number of bags remaining on the reel.

## N 1+1 (optional) Motorized reel holder with easy film splicing

- No adjustment necessary for mechanical brake.
- Automatic film tensioning.
- Easy film reel splicing.

## Automatic film tracking on calendar assembly

- It guarantees perfect centering of the sealed edges.
- No adjustment necessary during production.







# SOLARIS EVO

## FEATURES:

### **Steelo-bags formed on the calendar assembly**

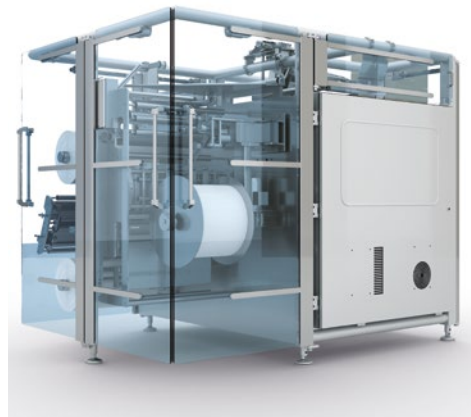
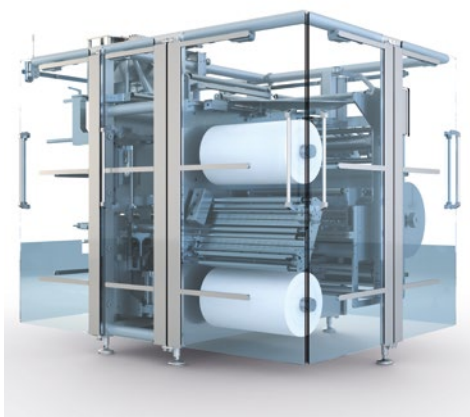
- Easily accessible with a clear view of the film path.
- Adjustable sealing interaxis.
- Complete replacement of the forming assembly (format change).

### **Box-Motion transverse sealing assembly with 2 independent motors mounted on the machine frame**

- Fewer moving parts and less wear.
- Faster acceleration.
- Increased sealing pressure.

### **Vertical sealing bar with continuous belt for pillow-bag and Steelo-bag**

- Consistent sealing temperature on the film.
- Driven by brushless motor.
- Easy change over.



# FEATURES:

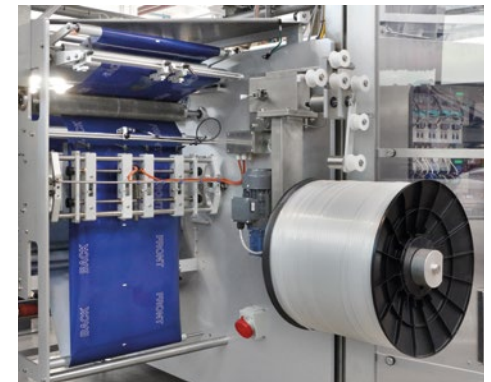
## **Vertical sealer for pouches (zip) and eurohole (optional) “up & down” movement**

- Maintains contact with the film during transit optimizing sealing time and zipper control.
- Adjustable Eurohole position.

## **Zip applicator unit for Doy-style bags**

- Driven by brushless motors.
- Follows the same film speed.
- 90° turnable zip reel.

**90° turnable zip reel.**

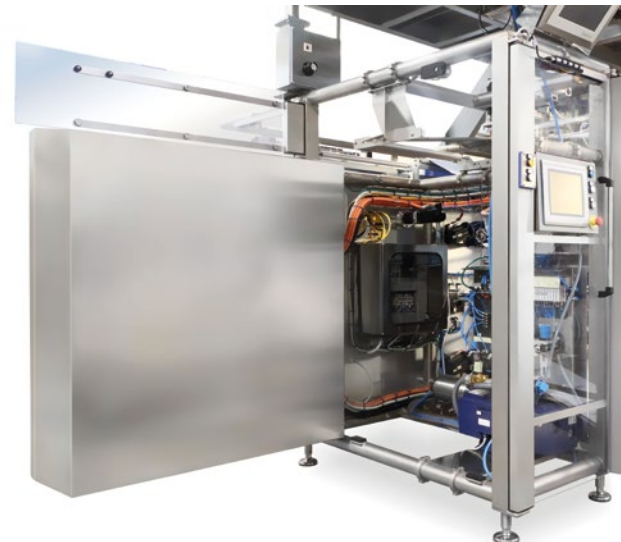


## Open-Frame structure

- Hygienic stainless steel machine body.
- Perimeter protection on all 4 sides.
- Perfect view of all the main machine components.
- Electrical cabinet with hinged door.



Electrical cabinet with hinged door.

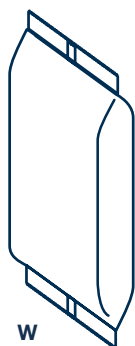


# FEEDING SYSTEMS:

The **Solaris EVO** packaging machines are fully integrated with MBP multihead weighers (Series C1, C2) and PFM volumetric dosing systems.

- For granular products, the DMA concept applied to MBP weighers, together with top weighing precision, exponentially increases the number of possible combinations.
- For products in powder form, maximum dosing precision is guaranteed by the screw's accurate construction, the perfect finish of product contact surfaces and the precision in the shifting angles and the screw rotation.





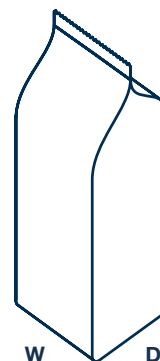
## Pillow-bags

Up to 150 bags/min  
(cutting pitch up to 150 mm)  
W: 80 - 300 mm  
L: 80 - 400 mm



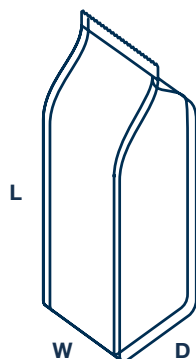
## Gusseted-bags

Up to 120 bags/min  
W: 80 - 300 mm  
L: 60 - 400 mm



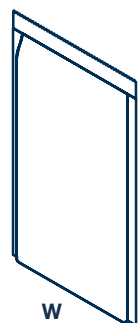
## Block-bottom bags

Up to 100 bags/min  
W: 80 - 280 mm  
D: 60 - 140 mm  
L: 80 - 400 mm



## Steelo-bags

Up to 100 bags/min  
W: 80 - 280 mm  
D: 60 - 140 mm  
L: 80 - 400 mm



## 3-sided and 3-sided with Zip

Up to 100 bags/min  
with cross seal  
W: 80 - 300 mm  
L: 80 - 400 mm

Bag feed direction rotated 90°



## 4-side sealed pillow-bags

Up to 100 bags/min  
W: 80 - 300 mm  
L: 80 - 400 mm

Bag feed direction rotated 90°



## Doy-style and Doy-style with Zip

Up to 100 bags/min  
with cross seal  
W: 80 - 300 mm  
D: 40 - 100 mm  
L: 80 - 400 mm

Bag feed direction rotated 90°

N.B. The sum of the length of the sides (W + D) plus the sum of the width of the seal thickness has to be less than or equal to 690 mm.

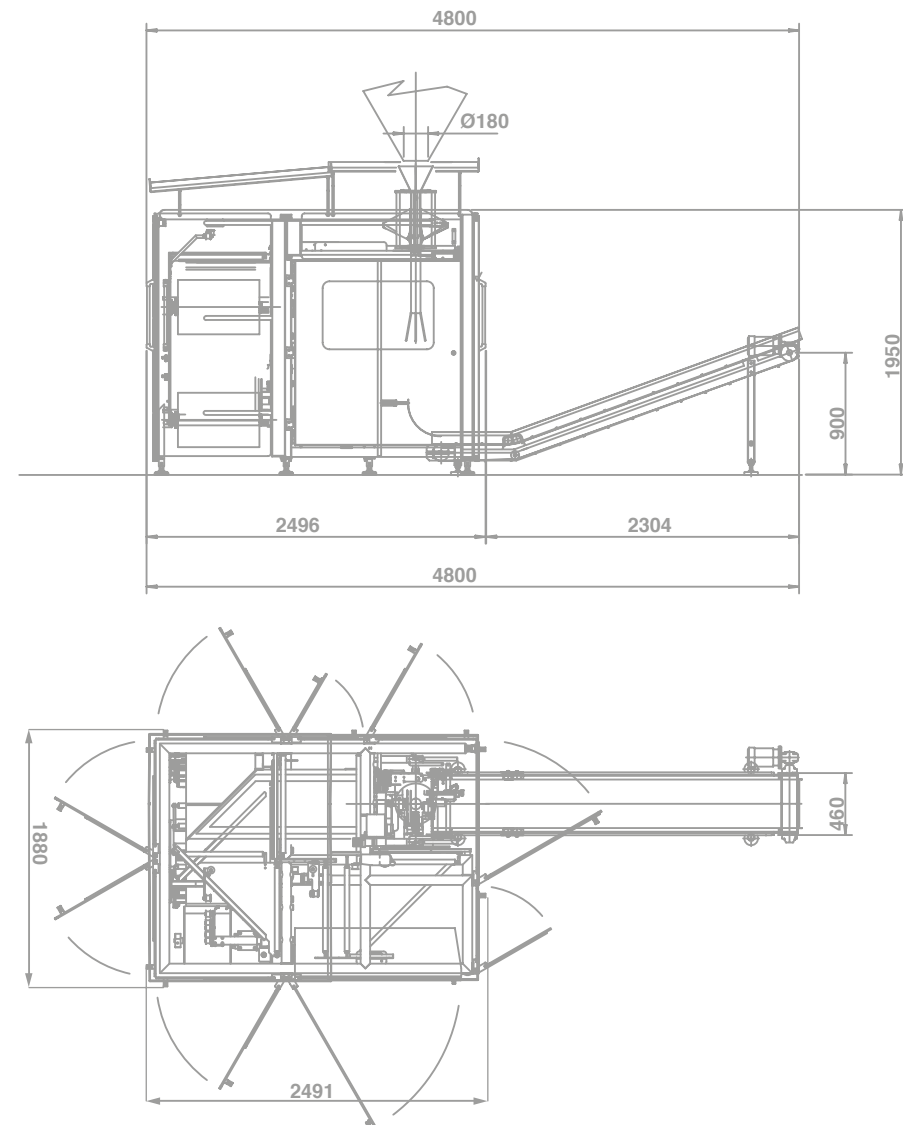
N.B. The speed is related to the dimensions of the bag, type and quality of products to be wrapped as well as wrapping material used.

Min. and max. bag dimensions to be approved by PFM Technical Dept. depending on the required bag styles, sizes and wrapping film used.

# TECHNICAL DATA:

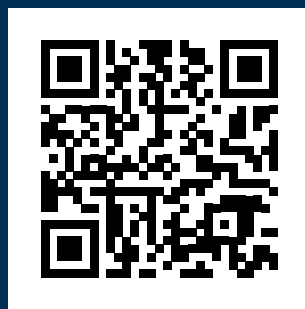
Reel bandwidth	700 mm
Reel holder shaft type	Pneumatic expansion type
Max reel diameter	350 mm
Min./max. pack sizes	See diagram
Crimper width	330 mm
Reel shaft drive (1+1 optional)	1+1 Brushless
Film centring device drive with respect to the calender's sealing unit	1 Step motor
Unwind drive	1 Brushless
Triangular film centring device drive (1+1)	2 Step motors
Vacuum film pullin belts drive	2 Brushless
Box-Motion drive (2 high-precision recirculating ball screws)	2 Brushless
Gusset tucking drive (optional)	1 Brushless
Zip pull unit drive (optional)	1 Brushless + 1 AC
Vertical sealer drive	pneumatic
Frame	Tubular Open-Frame in AISI 304 stainless steel
Electrical panel	IP65 movable, for internal inspection of the machine
Safety guards	Integral perimeter, excluding reel compartment
Electronics	Rockwell or Siemens
Pneumatics	Festo
Suction system for vacuum belts	Motorised vacuum pump

N.B.: PFM reserves the right to modify technical data without notice.





TECH AREA ACCESS



**[www.pfm.it/solaris-evo](http://www.pfm.it/solaris-evo)**

