



### **CHISIAMO**

Da oltre 30 anni Finpac è un riferimento nel settore del packaging e delle sleeving machines.

Dalla nascita di questa moderna tecnologia, alla fine degli anni 80,

Finpac è stata tra le prime aziende a commercializzare sistemi di shrink sleeve in Europa, occupandosi direttamente di installazione, messa in servizio e assistenza post vendita.

Nel 2005, l'esperienza accumulata nel settore e presso i clienti finali confluisce nel primo shrink sleeve system interamente progettato in house.

Oggi i sistemi Finpac operano con successo in oltre 40 Paesi.

Grazie a una squadra di professionisti del beverage, del packaging, del printing e del converting, l'azienda supporta i clienti in tutte le fasi del progetto, affiancandoli con un team di tecnici dedicato, per installazioni internazionali e assistenza, anche remota.

# SHRINK SLEEVE

Finpac Sleeve fornisce soluzioni all'avanguardia per l'etichettatura termoretraibile: applicatori e linee complete studiati per rispondere alle esigenze di clienti e prodotti molto diversi, e offrire sempre la migliore esperienza di etichettatura possibile.

L'offerta comprende soluzioni per ogni tipo di applicazione e materiale (anche riciclati ed eco), sviluppate nel beverage, nella cosmesi e nella detergenza, in sinergia con le realtà più prestigiose del mondo del packaging.

Le shrink sleeve solution Finpac Sleeve nascono da un processo di innovazione continuo e da un'attività di ricerca e sviluppo costante, che consente di proporre prodotti sempre più affidabili, performanti ed efficienti.

L'azienda può vantare un know how unico, costruito nei tanti progetti internazionali portati a termine con successo. Alla base delle soluzioni per l'applicazione di etichette termoretraibili ci sono le iconiche e versatili serie di macchine Finpac Sleeve, caratterizzate da molteplici configurazioni e accessori dedicati.







# Shrink Sleevers



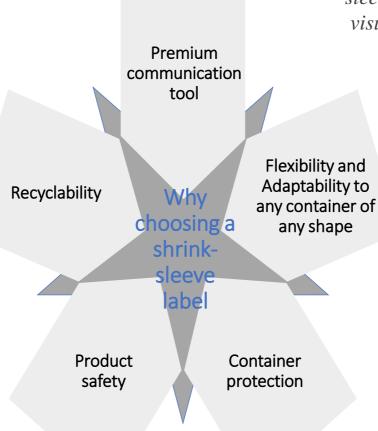


### Why shrink sleeving?

A product enhanced with a shrink sleeve label has a highly attractive visual impact on the store shelves

Shrink-sleeve labels respond perfectly to the reuse and recycling policies of the container.

The shrink-sleeve label protects the product from oxidation, ensuring a longer shelf-life and Application of the tamper evidence seal – Useful for product authenticity assurance



The shrink-sleeve labels have no limitations in terms of product material or container shape

The sleeve can protect the lightweight bottle in transport and safeguard it against damage

Shrink-sleeve on plastic bottle help the consistency of bottle and permit to reduce the thickness of bottle



### **Shrink Sleeve main applications**

**WEAREINNOVATION** 

# FINPAC SLEEVE



**Tamper evident** 



**Full body** 



Multipack



Cans



**Partial body** 



Full body + Tamper evident



Aerosol



FFS cups



#### WEAREINNOVATION

# FINPAC SLEEVE

### Shrink sleeve main products







**Shaped bottles** 





**JNSDIT** 



**Dairy** 



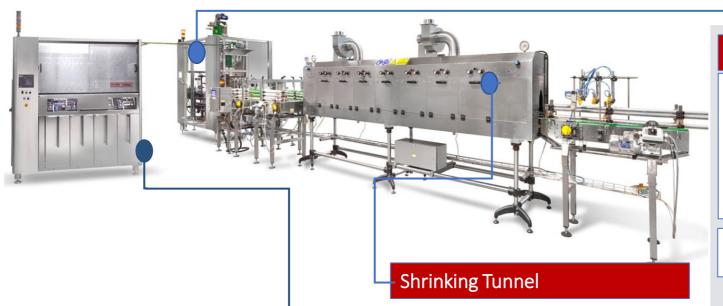
Food



**HPC** 



# FINPAC SLEEVE Linear sleeving machine



Reel storage & Splicing

Automatic splicing (available soon)

Nebulizer

Quality controls

Reject units

**OPTIONALS** 

#### Sleeve applicator

- Motorized dancing unit
- Label Control Unit
- Pre- perforations
- Mandrel and transport film unit
- Cutting and label shot units
- Sleeve positioner
- Partial body unit
- By steam
- By hot air

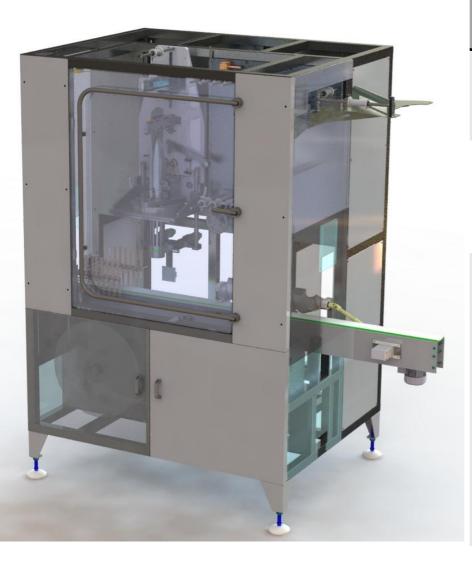
#### Linear layout means:

- Easier and cheaper maintenance program.
- Smaller footprint
- Quickest format change over (approximately 30-40 minutes according to machine operators skills)

CORE



## FINPAC portfolio



### MOD. SHM LS

**CONTAINER SIZE** 

\*non-round shaped to be evaluated

Diameter min 40 mm max 108 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 60 mm up to 175 mm CL from 30 mm up to 320 mm

#### **OPERATING SPEED**

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently properly tested before shipment)

Full Body 1.500 up to 10.000 bph (depending on CL)

Tamper Evident up to 12.000 bph

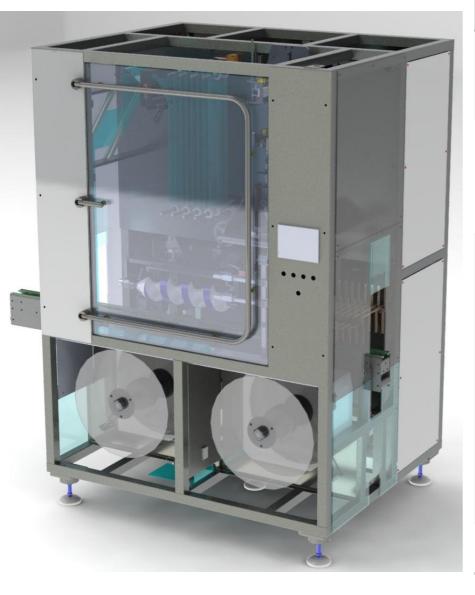
**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 9 Kw

MACHINE WEIGHT

Approx 900 Kg



### MOD. SHM A5

**CONTAINER SIZE** 

\*non-round shaped to be evaluated

Diameter min 40 mm

max 108 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 60 mm up to 175 mm  $\,$ 

CL from 30 mm up to 320 mm

**OPERATING SPEED** 

Full Body up to 12.000 bph (depending on CL)

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently properly tested before shipment)

Tamper Evident up to 15.000 bph

**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 9 Kw

MACHINE WEIGHT

Approx 1.000 Kg





### MOD. SHM B4

**CONTAINER SIZE** 

Diameter min 19 mm

max 148 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 33 mm up to 236 mm CL from 30 mm up to 320 mm

**OPERATING SPEED** 

Full Body up to 18.000 bph (depending on CL)

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently properly tested before shipment)

Tamper Evident up to 21.000 bph

**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 9 Kw

MACHINE WEIGHT

Approx 1.200 Kg





### MOD. SHM HS

**CONTAINER SIZE** 

Diameter min 32 mm max 107 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 53 mm up to 171 mm CL from 30 mm up to 320 mm

#### **OPERATING SPEED**

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently properly tested before shipment)

Full Body up to 36.000 bph (depending on CL)

Tamper Evident up to 30.000 bph

**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 16 Kw

MACHINE WEIGHT

Approx 1.800 Kg





### MOD. HS2 TWIN

**CONTAINER SIZE** 

Diameter min 32 mm max 107 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 53 mm up to 171 mm  $\,$ 

CL from 30 mm up to 320 mm

**OPERATING SPEED** 

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently

properly tested before shipment)

Full Body up to 44.000 bph (depending on CL)

Tamper Evident up to 60.000 bph

**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 20 Kw

MACHINE WEIGHT

Approx 2.500 Kg





### MOD. HS2 DL

**CONTAINER SIZE** 

Diam: min 40 mm max 108 mm

Height max 330 mm

**SLEEVE DIMENSIONS** 

LF from 60 mm up to 175 mm

CL from 30 mm up to 320 mm

#### **OOPERATING SPEED**

Full Body up to 66.000 bph (depending on CL)

(We guarantee a sleeving machine efficiency up to 98%, with tendency to 99%, provided that packaging materials will be in compliance with Finpac's specifications approved by our technical dept. and consequently properly tested before shipment)

Tamper Evident up to 72.000 bph

**ELECTRIC SUPPLY** 

400 V 3 Ph + N + Pe, type TT

50/60 Hz, 10 Kw

**MACHINE WEIGHT** 

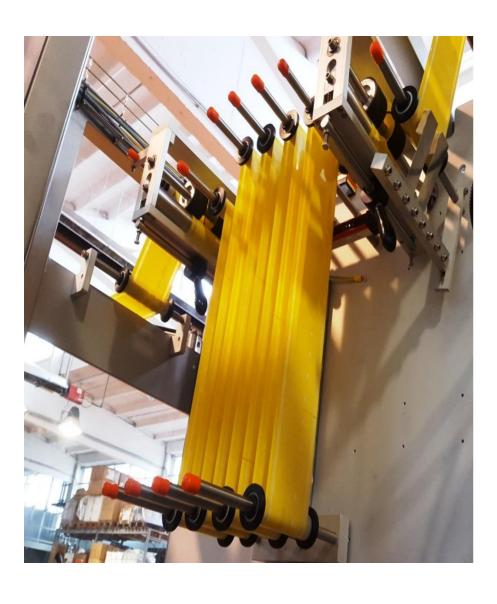
Approx 4.000 Kg



**Some Special Features** 

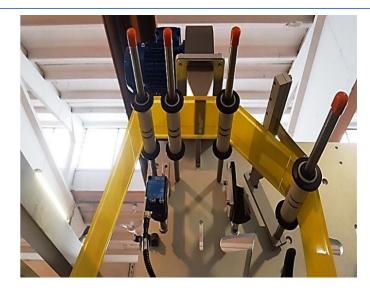


### **Motorized dancing unit**



#### Improved performance

- The function of the dancer unit is to maintain constant tension of the sleeve pulling it from the buffer and feed the cutting head.
- It keeps extra film in store so that film feed is constant
- Film tension is avoided
- One laser sensor regulates the level of accumulation by managing the entrance in the dancer motor.
- For high-speed solutions, the final accumulation unit is obtained by an air blower which creates a friction-free loop
  → this solution offers more sensitivity and precision during the phases of film dragging and cutting.





## Mandrel and transport film unit





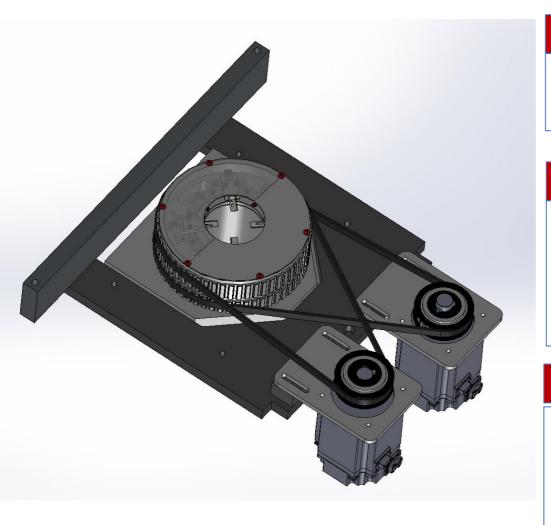
#### Label application precision

- The transport unit feeds film in the machine cycle: Four rubber wheels, other than support the mandrel, drag the film beyond the cutting blades for as long as has been defined by the user, or according to the eye mark sensor.
- The four wheels are connected to a servo motor by belts.



## **Cutting Unit for HS Series**

# FINPAC SLEEVE



#### Intuitive and easy operations

- **Easier to insert the label film**: closer to the operator position and with an openable roller.
- Reduced cutting shells changing time

#### Accessibility and ease of maintenance

- More accessibility to change operations. Operators can carry out operations from an ergonomic position
- Possibility to carry out all the ordinary and extraordinary maintenance on site.
- It allows the use of the same cutting blades for bottles of different diameters (within certain ranges)

#### Improved performance

- The rotating blades are designed so that 4 sides can be used
- The fixed blade is slightly inclined, enabling the "SCISSORS" effect; very neat label cut
- Cutting unit with servo motor for high performance and precise cut



**Shrinking Tunnel** 



### Shrinking tunnel: by steam

#### **Features**

- Stainless steel frame (AISI 304);
- 3 / 5 / 7 / 11 sections with steam nozzles and independent position adjustments;
- Steam limitation valve and pressure gauge, steam extraction, steam manual valve;
- Independent left sided / right sided regulation;
- Low energy consumption.
- The steam shrink tunnels are equipped by the "active steam system" and the "automatic constant temperature" control
- They can be single, double or triple module
- Working pressure: max 3 bar
- Shrinkage on empty bottles without inside contamination

#### Perfect application quality

- Perfect heat shrinkage on any type of container without changing the label characteristics
- Steam nozzles are positioned correctly inside the oven: precise and punctual nozzles convey steam on the containers
- Efficient steam blowing technology inside the tunnel: thermographic studies show that the steam jet exactly heats the exact portion of the label on the container
- Temperature adjustments for both sides of the oven are made directly from the HMI
- Mechanical adjustments are only made on the operator side for both sides of the machine



steam tunnel TV 250 (3 sections)



steam tunnel TV 500 (7 sections)



hot air tunnel (4 sections)

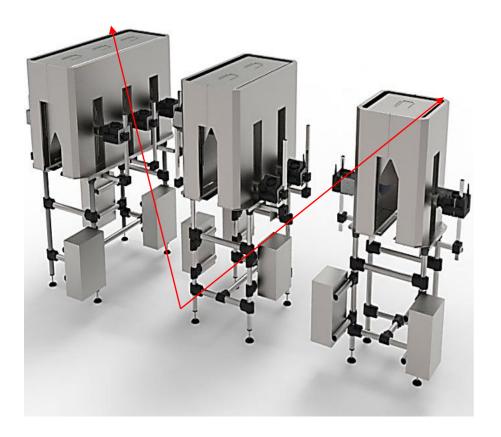


### **Shrinking tunnel: by HOT AIR**

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#### Perfect application quality

- HOT AIR SHRINK TUNNELS are also realized in multiple sections with independent adjustment of air flow and temperature settings.
- Hot air shrinking tunnels are necessary for Tamper Evident application and usually also for powders.
- Suitable for tamper evident, transparent labels and small labels. Precise air flow on the label.







**Change Format** 



### **Change over**

30 minutes changeover time

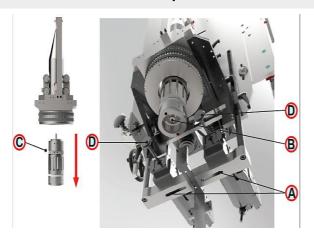
HS Line -> change format composed of

- Cutting unit
- Mandrel
- Screw

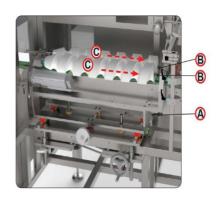
40 minutes changeover time

B4 Line -> change format composed of

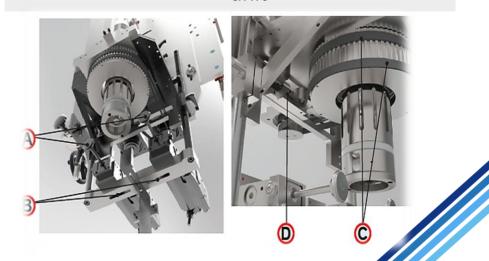
- Mandrel
- Screw
- Knife
- 2. Replacement of sleeve applicator shot part



1. Replacement of sleeve applicator screws



3. Replacement of sleeve applicator cutting unit





**Optionals** 



### Reel storage & Splicing

THE REEL HOLDERS are equipped with a splice table to make a joint between two reels during the change-over: a buffer, up to 100 meters, provides a time lap allowing to make the splice without the machine stopping.

The reel holders can be at floor level or hanging up, single or double reel.

- No stoppages needed
- Manual junction
- Buffer of 100mt



reel holder at the floor level



reel holder hanging up



double reel holder (approx. 100 mts buffer)



### **Automatic splicing**



#### Improved performance

THE AUTOMATIC SPLICING SYSTEM allows automation for sleeves feeding, with 4 reels load.

- Splices are applied with no operator action.
- No manual operations needed
- Automatic junction





# FINPAC SLEEVE

### Partial body unit





Static (fixed guides)





Dynamic (motorised belt)



Hot air

**Dynamic fixing** is equipped with motorised belt

THE **FIXING SYSTEM** is a hot-air blade keeping the shoulder sleeve / tamper evident in the correct position, before entering the shrink tunnel.



### **Nebulizer**



#### Improved label application

- If bottles are sticky, a silicon-based solution SPRAYER is highly recommended prior the sleeve application
- The device consists of a system that includes and distributes a liquid solution on compressed air onto the bottles in transit on the conveyor.
- Sprayer system can manage and adjust concentration of specific liquid solution product with water through the use of a series of nozzles so to have slippery bottles.



### Sleeve positioner

#### Improved label application

THE SLEEVE POSITIONER is utilized to correctly position the sleeve on the container before shrinkage.

There are different types of positioners depending on the sleeving mode:

- **new belt positioner**: a motorized conveyor that keeps the label stretched. Belts allow you to keep the label in the correct position → for Full and partial body labels on shaped containers
- brush positioner: label for round container (total body labelling) → Full body on round bottle
- vibration positioner: tamper evident labelling



motorized belt positioner



brush positioner



vibration positioner



# FINPAC SLEEVE T-SHAPED Pre-perforations



Pneumatic preperforator (up to 12.000 bph)

Servo driven mechanical preperforator (up to 24.000 bph)

#### Label quality & ease of use

THE PRE-PERFORATOR produces micro-holes perforated in vertical and / or horizontal directions, for tamper evident easy opening.

There are two different kinds of pre-perforators:

- pneumatically operated;
- mechanically operated.
- rotary system for high speed currently under development

# SOON AVAILABLE A SOLUTION FOR HIGHER SPEEDS NEEDS







### Rejects unit

The **REJECT SYSTEMS** are designed depending on container characteristics and, therefore, with three different basic features:

- for empty plastic containers;
- for filled plastic containers;
- for glass and alu containers.



empty plastic containers



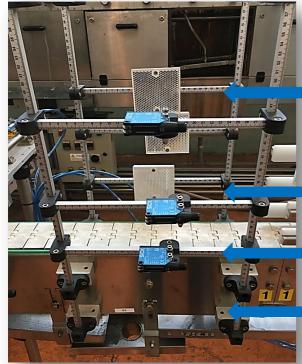
filled plastic containers



glass and alu containers



### **Quality Controls**

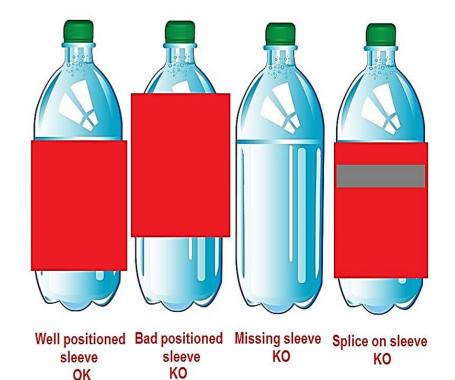


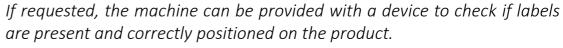
Label position

Label presence

Bottle presence

Alu tape splice





If reject device is installed on the machine, a pneumatic actuator will transfer the product into a collector table.

In the standard configuration conformity detection is carried out by three sensors.



**Some References** 



#### **WEAREINNOVATION**

# FINPAC SLEEVE

### **FINPAC** some references













































DANONE

















