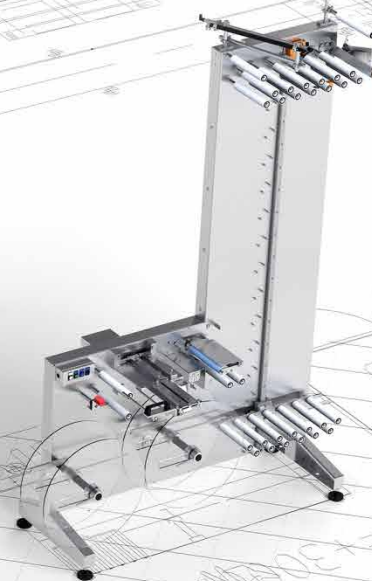


# Sleevematic

A machine series for all sleeve types





## The proper outfit for every situation

How to dress so that it looks nice but is also practical?

A simple question – at least with regard to many consumables. Your answer: sleeves!

Flexible plastic films seamlessly adapt to the most varying container shapes and offer a lot of space for many eye-catching designs. At the same time, they prove to be especially robust in everyday life: whether rain or long transport distances, sleeves make containers look great in any situation.

We think: such a multifaceted decoration variant deserves an equally talented machine technology. Therefore, the KRONES Sleeveomatic is classified into four different model variants. Shrinking, stretching, or both alternately? Small output or top-speed operation? The Sleeveomatic series provides the proper technology for each application.

### All models at a glance

- Sleeveomatic M: wide output range for shrink sleeves
- Sleeveomatic TS: the turbo machine for shrink sleeves
- Sleeveomatic AF: proven technology for stretch and shrink sleeves
- Sleeveomatic ES: processing of super-elastic stretch sleeves



## Why go for sleeves?

### Sleeve features

- Individually adapt to the container contour
- Close-fitting to the container side wall
- Fully embrace the containers
- Are applied without glue or container dryer
- Made of plastic film
- Can be recycled, depending on the film material

### Obtained result

- Precise fitting even with specially shaped containers
- Pleasant surface feel
- Many options for design and text information
- Efficient with regard to energy and resource consumption
- Perfect protection from moisture and light
- Gentle use of resources



## Shrinking or stretching? That's up to you!

### Stretch sleeves

- Are suitable for containers with straight to substantially shaped silhouettes, depending on the sleeve type
- Can be stretched and automatically adjust to the container shape
- Can be easily removed and are thereby suitable for returnable bottles
- Consume only little material due to their elasticity



### Shrink sleeves

- Also suitable for containers with strongly shaped silhouette
- Are shrunk in the steaming tunnel to closely cling to the container
- Can also be made of especially thin films
- Are suitable for flexographic, offset and gravure printing





In direct comparison: all sleeve variants

Stretch sleeves	Standard stretch sleeve	Modified stretch sleeve	TripleS stretch sleeve				
	10 %	20 %	55 %	Maximum stretching rate	Shrink sleeve		
	< 5 %	< 16 %	< 35 %	Possible variance of bottle diameters	< 75 %		
	LDPE	LDPE	LDPE	Material	PET	OPS	PVC
	Yes	Yes	Yes	Recyclability	No	Yes	No

Saving tip

- The higher the stretching rate, the lower is the material consumption
- Super elastic TripleS sleeves save up to 30 % costs\*

\* As compared to shrink sleeves





## Sleevevematic M – wide output range for shrink sleeves

### Applications

- Shrink sleeves – also special formats

### Technical features

- Wide output range thanks to modular design
- Linear machine
- Electronic gap detection at the machine infeed
- Infeed worm with servo drive
- Sleeve feed via a stand-alone sleeve buffer system
- Sleeve supply unit for reel change-over without machine stop
- Height-adjustable cutting unit with sleeve conveyor
- Integral control cabinet, ready for connection
- Option: split sleeve mandrel

### Output

- Sleevevematic M1: up to 27,000 containers per hour
- Sleevevematic MD2: up to 54,000 containers per hour

*M = modular / MD = modular, dual*





## Sleevevematic M – method of operation

- The infeed worm separates arriving containers and transmits them to the conveyor.
- The sleeve is unwound from the reel by four feed rollers and fed to the cutting unit via the sleeve supply unit.
- At the sleeve applicator, the flat sleeve is drawn over a mandrel and spread.
- A servo-controlled cutting unit precisely cuts off the open sleeve according to the selected length.
- Two servo-controlled rollers accelerate the cut-off sleeve and apply it onto the container.
- The downstream positioning unit ensures that the sleeve is exactly positioned.
- In the steaming tunnel, the sleeves are shaped perfectly around the container contour.





## Sleevevematic M – benefits for you

### Short change-over times

The Sleevevematic M can be changed to other formats within minimum time.

### High-precision sleeve application

The servo-controlled cutting unit grants exact cutting lengths. The belt station can exactly be adjusted in millimetres and thereby ensures infinitely variable adjustment of the sleeve height on the container.

### Hygienic design

The machine base frame is completely made of stainless steel. The container handling parts are of open design and therefore easily cleaned.







## Sleevevematic TS – the turbo machine for shrink sleeves

### Applications

- High-speed processing of shrink sleeves

### Technical feature – main machine

- At the push of a button, the contact pressure of the feed rollers is adjusted via pneumatic cylinders.
- Sleeves are conveyed without slippage via servo-motor-driven rollers.
- The new sleeve perforator exactly separates the cut off sleeves.
- The perforating blades can be exchanged within two minutes.
- An integrated climbing aid for operators enables the ergonomic replacement of handling parts.
- The infeed worms are stored directly in the machine and therefore ready for use at any time.

### Technical features – sleeve buffer system

- Stand-alone and can therefore be individually positioned
- Capacity for two sleeve reels with a total of approx. 4,000 m of film



*TS = Top Speed*



## Sleeveomatic TS – method of operation

The Sleeveomatic TS uses a completely new cutting method. Unlike at other machines, the Sleeveomatic TS cuts the sleeves in an ongoing movement and not in cycles with a stop-and-go operation.

- It sleeves up to 50,000 containers per hour with only one labelling station
- It applies sleeves with micro perforation
- It employs rotating perforating blades
- It works continuously without any cycles





## Sleevevematic TS – benefits for you

Thanks to rotary cutters which perforate the film sleeve continuously in stead of in cycles, the Sleevevematic TS can process **50,000 containers per hour**. The highly precise perforation blades ensure a straight cut even at high speed.

A set of perforation blades can perform **70 million cuts** before it wears out. Conventional cutting units can only master a tenth of this.

The change-over of the perforating blade takes **2 minutes**.

The change-over to other sleeve lengths does not require any handling parts change-over . Owing to the fact, that the rotating perforation cutters are operating regardless of the format, the Sleevevematic TS requires significantly less handling parts than all other sleeving systems.







## Sleevevematic AF – proven technology for stretch and shrink sleeves

### Applications

- Stretch sleeves with a stretching rate of up to 15 percent
- Shrink sleeves

### Technical features

- Rotary machine
- Depending on the required output, available as single or double carrousel variant
- Electronic cap inspection and gap detection at the machine infeed
- Infeed worm with safety clutch
- Feeding of sleeves from two sleeve reels
- Sleeve supply unit for reel change-over
- Height-adjustable cutting unit with sleeve conveyor
- Electronic container counter
- Integral control cabinet, ready for connection
- Central lubrication points

*AF = applicator fork*







## Sleevevematic AF – method of operation

- The sleeve film is unwound from the reel via feed rollers and conveyed to the cutting unit,
- where the sleeve film is opened by pulling it over a mandrel.
- Several servo-controlled cutters cut the sleeves exactly to the set length.
- The application fork pulls the sleeves over the containers to their final position.
- While the application fork is lowered, a gripper holds the sleeve and the container tightly in place.
- To prevent the sleeve from slipping, the gripper remains closed until the container has been transferred to the discharge starwheel.





## Sleevevematic AF – benefits for you

### Long-life design

The rugged mechanical design makes sure that the Sleevevematic AF provides a high operational reliability and a long service life.

### Precise operation

The cam-controlled application fork reliably transmits the sleeve label onto the container. Even humidity and moisture do not affect machine operation: In any case, it ensures perfectly fitting sleeves.

### Uncomplicated and flexible technology

The machine is suitable for handling different sleeve lengths and diameters. It can be easily cleaned and provides optimum access and is therefore an agreeable partner in day-to-day operation.







## Sleevevematic ES – flexible machine for all sleeve variants

### Applications

- Stretch sleeves with a stretching rate of up to 55 percent
- Shrink sleeves

### Technical features

- Rotary machine
- Energy-efficient servo drives
- Vacuum-supported sleeve transfer
- Output\*:
  - up to 27,500 containers per hour with one labelling station
  - up to 55,000 containers per hour with two labelling stations

*ES = enhanced stretch*

*\* For a sleeve length of 170 millimetres*





## Sleeveomatic ES – method of operation

- Feed rollers unwind the sleeve film from the reel and convey it to the perforation unit.
- The flat sleeve film is there provided with a micro perforation.
- The flat sleeve film is pulled over a mandrel and opened.
- A servo-controlled feed unit separates the sleeve at the horizontal perforation and fits it onto the spreader.
- Ring-type arranged spreading fingers further spread the sleeve. Vacuum is generated to ensure that the sleeve does not slip during this process.
- The container is pushed from below into the stretched sleeve.
- As neck-handling grippers pick up the container, the sleeve adjusts to the shape of the container contour.
- For fault-free transfer, the friction between the sleeve and spreading finger is minimised with compressed air so that the sleeve glides over an air cushion and onto the container.







## Sleeveomatic ES – benefits to you

### Maximum flexibility

Stretch today and shrink tomorrow? That is everyday operation for the Sleeveomatic ES: The multi-flexible machine is able to process all sleeve variants, even the super elastic TripleS sleeves.

### Permanent saving of material costs

Thanks to their high elasticity, stretch sleeves consume only little plastic during production. The super elastic TripleS sleeves save up to 30 percent material costs as compared to shrink sleeves.

### Lower energy consumption

You do not require a shrinking tunnel, nor a container drying unit to process the stretch sleeves.

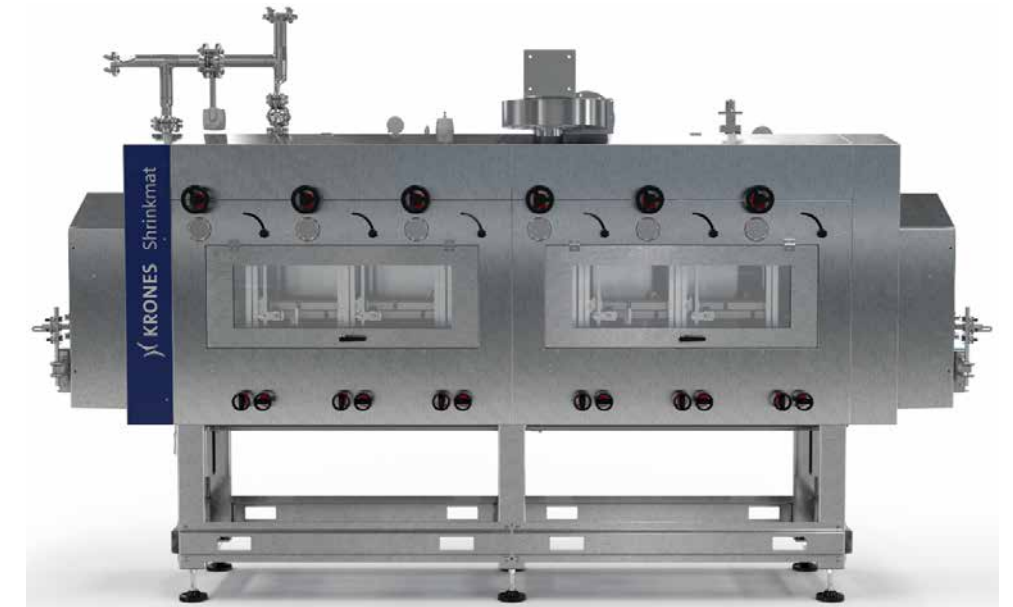


## Optional components



### Shrinkmat steaming tunnel

- Thanks to its modular design, it can also be expanded at a later point
- Thanks to its adjustable nozzles bars, it ensures a reproducible shrinking result
- Prepared for a quick installation for the connection to a steam supply system provided by the customer
- Can be equipped with transparent doors for a better view into the machine



### Checkmat inspector

- Individual selection of the inspection performances, e.g. splicing point detection, sleeve position, etc.
- High production safety thanks to automatic rejection of faulty containers
- Transparent production due to comprehensive inspection statistics
- Inspection of different containers without manual adjustment
- Automatic data exchange with the Sleeveomatic

### Coding/dating unit

- Available as an ink-jet coding/dating device or laser printer
- Prepared for signal exchange with the Sleeveomatic already prior to delivery



Option



## Optional components

### Linadry dryer

- High-quality stainless steel version
- Up to 20 percent saving of energy via frequency-controlled blowers with a consumption of 11 kW
- Visualisation, control and monitoring via the Sleevevematic TS touch-screen
- Noise-reduced operation with maximally 83 dB
- Optional automatic cleaning system



### Sleeve magazine Multireel S

- Keeps six or eight film reels in storage
- Operates up to eight hours without any operator interference
- Enables film reel splicing while the Sleevevematic operates at rated speed







## Optional components

### **Spraying system**

- Increases the gliding properties of the sleeves on the bottle
- Compensates deviations of the material properties of the bottles

### **remote service**

Professional assistance around the clock: with the remote service platform GRS (Global Remote Service), a Krones expert can log on to your machine via a safe internet connection, in order to, for instance,

- optimise your settings,
- adjust a new type,
- train the production/operator staff.







## Everything from a single source

### **Training sessions at the KRONES Academy – trained personnel increases your line efficiency**

The versatile training offer ranges from operation, servicing and maintenance to management training. We will gladly also establish your individual training programme.

### **KRONES Lifecycle Service – partner for performance**

Also after having purchased a new machine, KRONES will take care of your line; the LCS experts are always ready to consult you and translate your goals and wishes into optimal LCS solutions.

### **KIC KRONES adhesives – the all-rounder for a strong grip**

Regardless if PET or glass, plastic or paper, labels or packagings – at KIC KRONES, you will find your ideal adhesives for a high-quality product presentation.

### **KIC KRONES cleaning agents make your machine shine**

Only if the production environment is immaculate, can your product be brilliant. KIC KRONES provides you with the optimum cleaning agents and disinfectants for each individual production step.

### **Lubricants from KIC KRONES for every production step**

Whether for gears, chains or central lubrication systems – our greases and oils are true all-round talents. You can reach every lubrication point, protect your line and provide gentle treatment for your product thanks to our products' suitability for food.



Digitalisation



Process  
technology



Bottling and  
packaging equipment



Intralogistics



Lifecycle  
Service

We do more.

 **KRONES**