

# **Food Industry**





#### **Industry characteristics**

When it comes to strapping of food products hygene is the key focus: machines along the entire process chain need to work fast and must be easy to clean. That's where the advantages of our SoniXs ultra sonic technology become apparent: Instead of the common heat welding unit the strap ends are welded efficiently and with low emission using ultrasonic. This way the cleaning of the heating element can be elimanated, which minimizes the maintenance effort and protects the environment. Some of our machines are specified for the use in the food industry and are made of corrosion resistant steel. They can be cleaned with water without rusting. This eliminates the need for manual protection (such as a plastic hood) of non-rusting components. Especially in case of perishable foods a fast clean process is crucial: Since we know that safe processes are essential, our machines work consistently and reliably.

On the following pages you can get an overview of our range of machines for the food industry. We are happy to advise you personally to find the perfect solution for your application – as a complete package including suitable strapping materials and versatile services.

#### Mosca – your system supplier in strapping matters

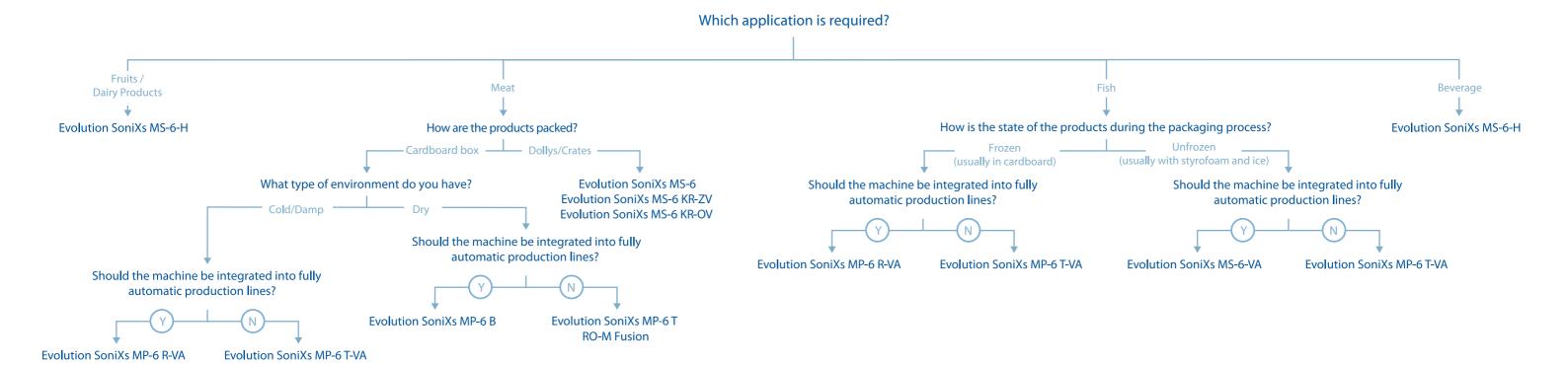
At Mosca we rely on the philosophy that the one-stop-principle brings about a lot of advantages for our customers. Through regular maintenance we ensure the longevity of our machines.

As part of our ONE Service concept we offer you a global service network that is unique in the industry. More than 100 Mosca service technicians and over 30 additional specialists employed by partners all over the world ensure that our strapping machines run perfectly at every location. A central system across countries incorporates information on machines and maintenance intervals. This means we can work closely with you to significantly extend the service life of your machines. It also enables preventive maintenance to avoid breakdowns by using data evaluation.

But ONE Service goes far beyond maintenance and repair. It includes installations, relocations, technical training, and technical expert meetings focusing on the potential to optimize your strapping machines. We always respond to your conceptions and individual requirements to develop the best possible strapping solution.

In addition to strapping machines and their maintenance, we attach high priority to the plastic strapping material made of Polypropylen (PP) and Polyester (PET). Since 2008 we have been producing the straps in one of the most modern fully automatic plants in Europe.

### **Product Finder**



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#### Stainless steel machines from Mosca

The food industry demands reliable and high-performance packaging solutions in adverse environmental conditions. The strapping machines of the VA-series meet these requirements: their corrosion-resistant components are designed specifically for the cold and damp environment in the food industry.

With the automatic strapping machine Evolution SoniXs MP-6 T-VA as entry-level model and the types Evolution SoniXs MP-6 R-VA and Evolution SoniXs MS-6 VA as fully automatic solutions, these three stainless steel variants cover the entire range of the food industry claiming full corrosion resistance. This is ensured by the use of high quality stainless steel and aluminum materials. The machines feature a sealed splash-proof control cabinet and operation panel where all cables are wired in sealed terminal boxes.

The Evolution SoniXs MP-6 R-VA moves the product on a rugged roller conveyor with a ridged v-belt drive that eliminates belt tracking issues and allows an exact product positioning. Oversized casters make rolling on plant floors and drain openings easy. As an option, the Evolution SoniXs MP-6 R-VA's conveying direction can be reversed, providing maximum flexibility in operations that have lines with both right and left-handed equipment layouts. With its side seal design, the Evolution SoniXs MS-6-VA is able to prevent the sealing head from falling debris, water and ice which can affect strapping performance, making it a great choice for seafood industries where dripping water can often be a concern.



#### **Evolution SoniXs MP-6 R-VA**

- Fully automatic stainless steel strapping machine
- Easy integration into automated production lines
- Machine completely corrosion resistant (use of stainless steel or corrosionresistant materials, for example V2A, V4A aluminum)
- Sensitive components (e.g. motors) are equipped with additional covers



Fully automatic



sealing unit







#### **Evolution SoniXs MP-6 T-VA**

- Automatic stainless steel strapping machine
- Stepless turnable operator panel for many-sided operation
- Machine completely corrosion resistant (use of stainless steel or corrosionresistant materials, for example V2A, V4A aluminum)
- Sensitive components (e.g. motors) are equipped with additional covers



Automatic



sealing unit



600 x 600 mm



per minute



resistant



#### **Evolution SoniXs MS-6-VA**

- Automatic stainless steel side-seal strapping maschine
- Equipped with conveying systems convertible into a fully automatic version
- Optional double strap dispenser for increased uptime by fully automatic coil changes
- Made entirely from corrosion resistant materials; built to IP56 Standards
- Full wash-down capability



Automatic





650 x 600 mm



Up to 52 cycles per minute



application

#### **Entry-level machines**

The automatic strapping machine RO-M Fusion is equipped with a heat-welding sealing unit and represents the Mosca entry-level machines portfolio. Due to the turnable operation panel operators are able to place packages on the table from both sides for flexible working. The strapping can be released by foot panel or via the operator panel. Alternatively, the RO-M Fusion can be equipped with an E-package, which allows the strapping to be released by a light sensor in the table plate. The light sensors mounted on the side of the frame allow operators to save up to three different strap tensions.

The Evolution SoniXs MP-6 models offer a decisive advantage for the advanced entry-level strapping machines: They are equipped with the SoniXs ultrasonic sealing unit for welding the strap ends. Thanks to this technology no vapours are produced during the strapping process that could affect the food industry's products. Thus there is no need for fume extraction - for customers this is not only a cost and space factor but also an argument in terms of energy efficiency. With this product-friendly welding technology, we ensure the best product handling.



#### **Evolution SoniXs MP-6 T**

- Automatic strapping machine
- Stepless turnable operator panel for many-sided operation
- Easy accessibility and tool-free disassembly of strap way components
- Strapping release via foot pedal or operator panel
- Toggle switch for super soft strapping of individual or very delicate packages
- Optional hold-down device for strap positioning by slight product compression



Automatic



Standard-6 sealing unit





Up to 58 cycles per minute



#### **RO-M Fusion**

- Automatic strapping machine
- Stepless turnable operator panel for many-sided operation
- Strapping release via foot pedal or operator panel
- E-package: Automatic cycle release via light sensor
- Toggle switch for super soft strapping of very delicate packages
- Strap end detection with ejection of remaining strap







600 x 500 mm 1250 x 600 mm



per minute

### **Evolution SoniXs MP-6 B**

- Fully automatic strapping machine
- Stepless turnable operator panel for many-sided operation
- Easy accessibility and tool-free disassembly of strap way components
- Optional automatic strap tension adjustment by bundle height detection
- Easy integration into automated production lines







1000 x 800 mm



per minute

#### **Side sealing strapping machines**

Besides an easy cleaning process, the focus in the food industry is on high availability in order to process sensitive products quickly. Contamination or falling parts must therefore not affect the performance of the machine.

Our side sealing machines offer a decisive advantage here: As the ultrasonic sealing unit is located at the side of the frame and not underneath the products to be strapped, it is less susceptible to contamination by falling parts, such as the polystyrene of the transport boxes, ice or food.

Thanks to the ultrasonic sealing unit, which is installed in most of the Mosca machines as a standard feature, the sensitive products are additionally protected: There is no heat development during the welding of the straps and thus no vapour, that could affect the products. This also prevents particles from sticking to the unit.

Optional parts like a double strap dispenser additionally increase the efficiency. The double strap dispenser automatically switches to the second strap coil as soon as the first one is empty. The empty coil can then be changed without interrupting operation.



#### **Evolution SoniXs MS-6 KR-ZV**

- Automatic side-seal strapping machine with flap frame, strap lance and moveable sealing unit
- Equipped with conveying systems convertible into a fully automatic version
- Optional double strap dispenser for increased uptime by fully automatic coil changes
- Runs both with PP or PET straps
- Horizontal sealing unit stroke up to 340 mm







in 200 mm steps



Up to 6 cycles





#### **Evolution SoniXs MS-6**

- Automatic side seal strapping machine optionally with roller conveyor MS-6 Base or Pro
- Equipped with Mosca conveying systems convertible into a fully automatic
- Optional double strap dispenser for increased uptime by fully automatic coil changes
- Runs both with PP or PET straps
- Particularly suited for heavy products transported closely to the ground





side sealing unit





Up to 52 per minute



#### **Evolution SoniXs MS-6 KR-OV**

- Automatic side-seal strapping machine with flap frame and moveable sealing unit
- Equipped with Mosca conveying systems convertible into a fully automatic
- Optional double strap dispenser for increased uptime by fully automatic coil changes
- Runs both with PP or PET straps
- Horizontal sealing unit stroke up to 340 mm



Automatic



side sealing unit



in 200 mm steps



per minute

#### **Horizontal strapping**

Heavy products or items transported close to the ground, such as furniture or household appliances, can best be secured for transportation using horizontal strapping. The Evolution SoniXs MS-6-H is ideal for this task, because the sealing unit is attached to the side of the machine. The MS-6-H has a vertically adjustable frame to secure the packages horizontally in different levels. A side pusher presses the product against the strapping unit for very precise positioning of the straps. In high-end applications, the Evolution SoniXs MS-6-H can triple strap up to 180 packages per hour. Up to ten different strapping positions ensure the package is securely strapped for safe transport.



#### **Evolution SoniXs MS-6-H**

- Fully automatic horizontal strapping machine
- Equipped with Mosca conveying systems convertible applicable as fully automatic line
- Runs both with PP or PET straps
- 10 freely configurable programs with up to 10 strapping positions





Standard 6 side sealing unit



1000 x 1000 mn 1000 x 1400 mm 1400 x 1000 mm 1400 x 1400 mm



### **Options**



#### **Vertical Edge Protection Feeder**

The vertical edge protection is mainly used in the fruit industry to reliably secure horizontally stacked layers. This device positions solid cardboard protection elements on the four outer edges of the product to be packaged before the machine straps them horizontally.

The standard Evolution SoniXs MS-6-H magazine can be loaded with edge protectors in three different sizes. Along with the length of the entire element, the wing width and material thickness are variable. This ensures the ideal protection for each application. The edge protectors are made from solid recyclable cardboard, which offers an eco-friendly alternative to stretch wrapping or other methods that use plastic film to hold stacked layers in place. When the supply of edge protectors is used up, the empty magazine can be quickly removed from the machine and replaced with a full one. This saves time, material and production costs.

Edge protectors are positioned on the stack precisely and efficiently – without manual intervention. Laser beams detect the four corners of the stack as soon as it is placed on the machine. The edge protectors are then simultaneously brought into place on the product and carefully attached. Product height is also automatically detected by the machine and the process is usually completed with two to five straps applied horizontally.



#### **In-line Label Applicator**

To send pre-packaged and strapped product composites, such as those used in the beverage industry, to the right recipient with low effort an appropriate labelling is required. A labeller downstream the strapping machine sticks a label on the load allowing precise tracking.

With the help of two-sided labelling after the strapping process, downtimes are avoided and the label is optimally placed on the product. Customer-specific data can thus be automatically applied to individual products if required.

Additional advantage: The labeller can be installed without additional protective housing.

## **Icon Key**

### Proud to work with

#### **Icon Key**



Mosca strapping machines for the food industry are equipped with different types of sealing units: The state-of-the-art Standard 6 sealer is available both with Mosca's SoniXs ultrasonic system as well as with a temperature-controlled heat-sealing unit.



Mosca strapping machines are available in many different frame sizes. For detailed information about all individual specifications, please refer to our sales staff or the technical data sheets on our website www.mosca.com.



The BPM (Bundles per Minute) factor indicates the maximum number of single or double strapped products per minute. It depends on several criteria such as frame size, conveying speed, strap width, product size or additional options.



Mosca strapping machines of the VA-series are manufactured entirely of stainless steel and other corrosion-resistant materials. In addition, sensitive components (e.g. motors) are protected by covers granting high moisture resistance. All machines are built according to IP56 standard rating, signifying a high degree of protection against liquid intrusion. Therefore, our VA strapping machinery with SoniXs ultrasonic sealing is fully wash-down capable and thus ideal for usage in the seafood, poultry and meat industry.



After correct positioning of the pallet in the machine, the strap lance moves between the pallet feet, closes the strap guide frame and secures the goods by strapping on the pallet.

#### **Level of Automation**



The product is transported and strapped without any operator involvement by the strapping system's integral conveyors and controls or in some cases by signal exchange with an external controller.



Requires an operator to feed the product into the strapping machine and to release the fully automatic strapping cycle via foot pedal, operator panel or light sensor.









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