

SIMPLE-IN

VALVE SACK PACKERS



PAGLIERANI

mechatronics at its best.

The valve sack packers for pre-made sacks, according to the chemical-physical chara

FINE POWDERS (> 50 micron) • AVERAGE ABRASIVE MIXED POWDERS & GRANULES • MOIST SALT • SMALL AND MEDIUM SIZE CHIPS GROUND BY-PRODUCTS • CRUSHED ANIMAL FEED

SIMPLE AC

SIMPLE A1

VALVE DIMENSIONS.

STANDARD

The SIMPLE and IN series machines can be fitted with filling nozzles suitable for the following standard valve sizes: 110 mm · 130 mm · 150 mm · 180 mm

SPECIAL

On request, special nozzles can be fitted to suit valve sizes different than those shown above.

SIZE CHANGEOVER

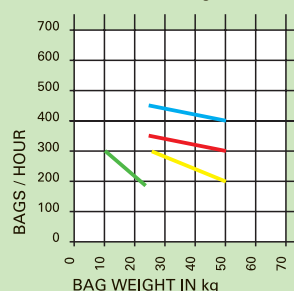
The same packer can be equipped to fill sacks of different valve sizes. Changing from one size to another means a “changeover time” is required substitution of the nozzle and this is variable depending on the model:

- mod. SIMPLE (SIMPLE AC, SIMPLE A1): 45 mins
- mod. IN (IN G, IN V): 15 mins

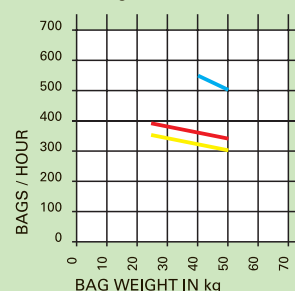
HOURLY OUTPUTS.

The size of the valve, the type of product and the bag weight are the variables which determine the output. The graphs clearly show this interaction.

SIMPLE BULK DENSITY 0,5 kg/litre

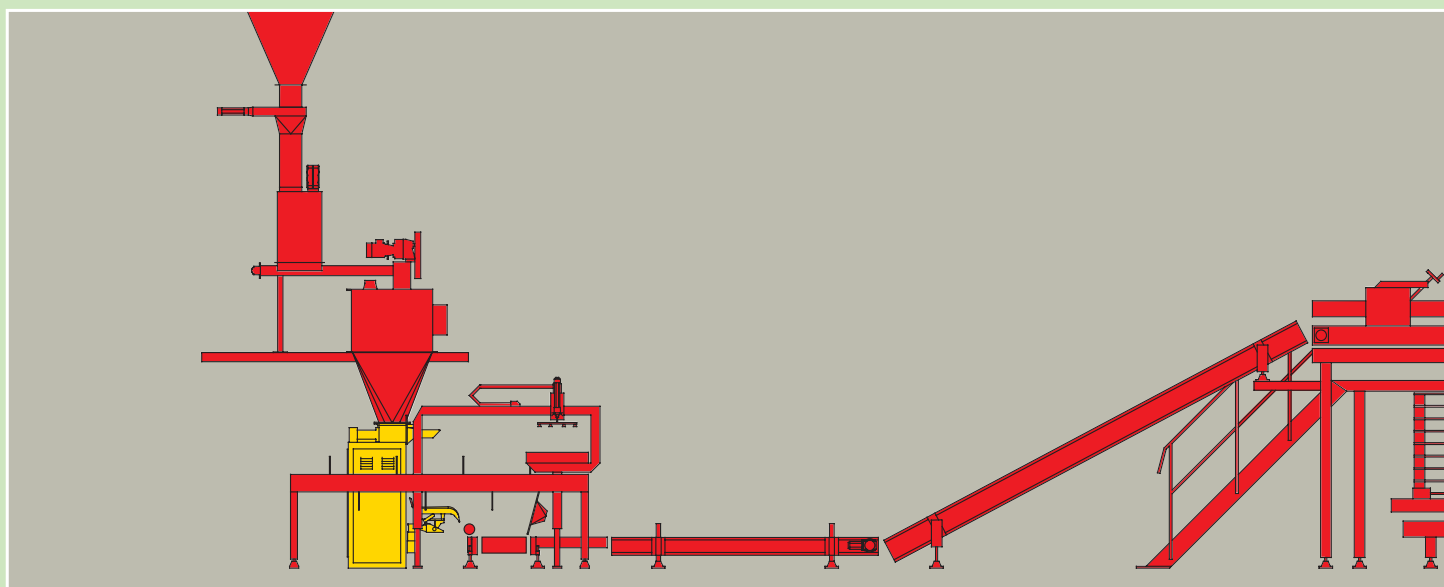


IN BULK DENSITY 1,0 kg/litre



NOZZLE FOR VALVE

110 130 150 180



Series SIMPLE and Series IN, are deployed
characteristics of the products to be handled.



**GRANULAR CHEMICAL FERTILIZER • PLASTIC GRANULES
CRYSTALLISED SUGAR • CASTOR SUGAR • SEPIOLITE
DRY CRYSTALLISED SALT • DRY SAND • CEREALS**

IN G

IN V

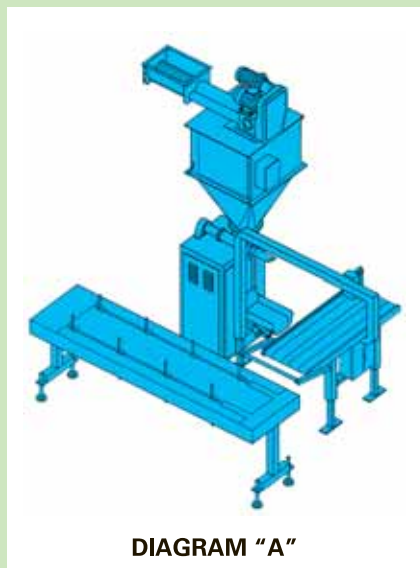


DIAGRAM "A"

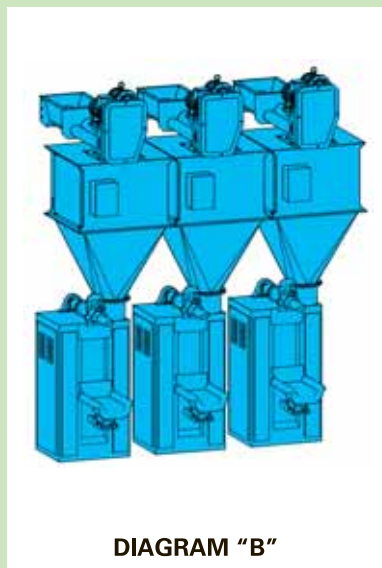


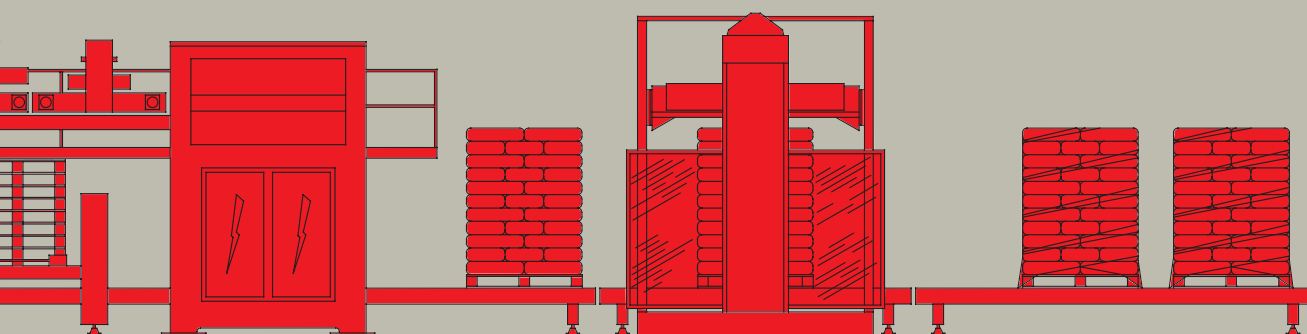
DIAGRAM "B"

PLANT LAYOUT.

In line with PAGLIERANI'S ideology of creating integrated systems designed to achieve higher output capacity, the SIMPLE AC, SIMPLE A1, IN V and IN G packers can be coupled with net. Weight scales mod. NP or mod. NE. (Diagram A) According to the production requirements, one or more packers can be installed side-by-side. (Diagram B)

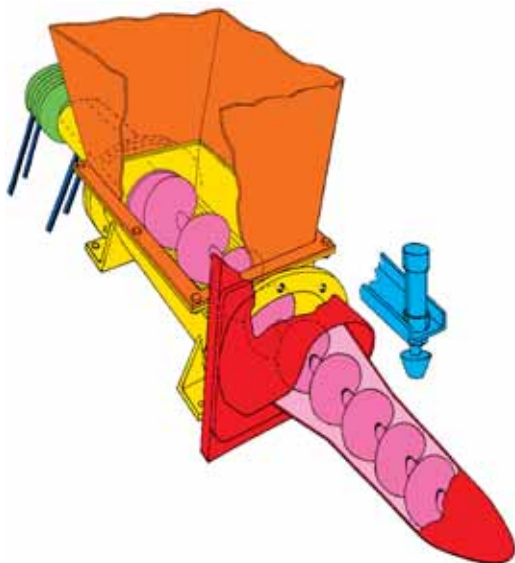
Automation is achieved by adding the empty bag placing unit (mod. FB). (Diagram A)

PAGLIERANI: A LINE MADE UP OF STRONG POINTS.



SIMPLE AC

AN EFFICIENT SYSTEM
FOR POWDERS OR CHIPS.



MAIN CHARACTERISTICS.

SACK VIBRATION with variable stroke from 1 - 8 mm obtained through a special eccentric wheel.

REDUCTION IN DUST COLLECTION AREAS in accordance with the most stringent health & safety directives.

BEARING PROTECTION with dust seals using an air purging seal system.

ANTI-DUST OUTLET.

BAG SADDLE ADJUSTABLE IN HEIGHT, for accomodating sacks of differing sizes.

Particularly adept at handling **products of a powdery nature** or **small chips**, for **medium outputs**, the SIMPLE AC packer offers to the user a sturdily-built machine with the bare minimum of maintenance required. The bagging operation is carried out by means of a horizontal axis screw. A **vibrating saddle** supports the sack throughout the filling phase, guaranteeing that the product is compacted by vibration and thus minimising the final overall dimensions of the sack itself.

If requested, full bag ejection can be carried out, thanks to the automatic pivoting action of the bag saddle. The modular construction offers the possibility of coupling two or more packers together in-line to achieve high outputs (up to 1200 bags/hour) as well as the complete automation of the system with the application of the automatic empty bag presenter (mod. FB) **or application of the ultrasonic valve sealing system.**



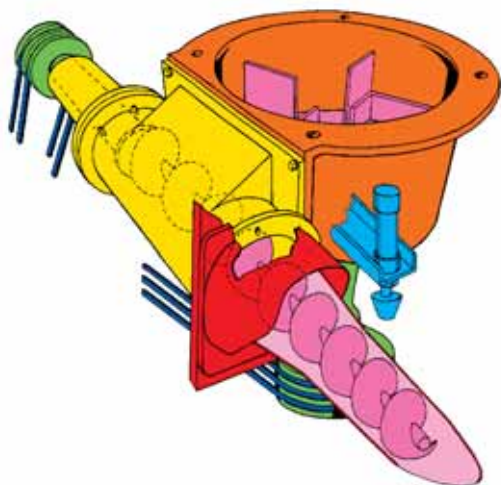
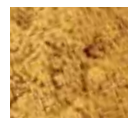
SIMPLE A1

A PATENT FOR
HIGH PERFORMANCES.



The singular charms of **sturdiness** & the **bare minimum of maintenance**, together with the capacity to offer **elevated production outputs**, are factors which have created the global success story of the SIMPLE A1. Over **1200 installations** covering **five continents**, testify to the ideal instrument for rapid & efficient bagging requirements. The principle operating mechanism, born from a 1955 **Paglierani patent**, entails the working of a vertical axis turbine which constantly feeds the horizontal axis bagging screw. This integrated action guarantees maximum efficiency whilst at the same time minimising dust emissions. A **vibrating saddle** supports the sack throughout the filling phase, guaranteeing that the product is compacted by vibration and thus minimising the final overall dimensions of the sack itself. Rapid, automatic full bag ejection can be carried out if required thanks to the pneumatic pivoting action of the bag saddle.

The modular construction offers the possibility of coupling two or more packers together in-line to achieve high outputs (up to 1200 bags/hour) as well as the complete automation of the system with the application of the automatic empty bag presenter (mod. FB) or **application of the ultrasonic valve sealing system**.



MAIN CHARACTERISTICS.

SACK VIBRATION with variable stroke from 1 - 8 mm obtained through a special adjustable eccentric wheel.

REDUCTION IN DUST COLLECTION AREAS in accordance with the most stringent health & safety directives.

BILATERAL VERSION, right-hand or left-hand to aid space & layout requirements.

BEARING PROTECTION with dust seals using an air purging seal system.

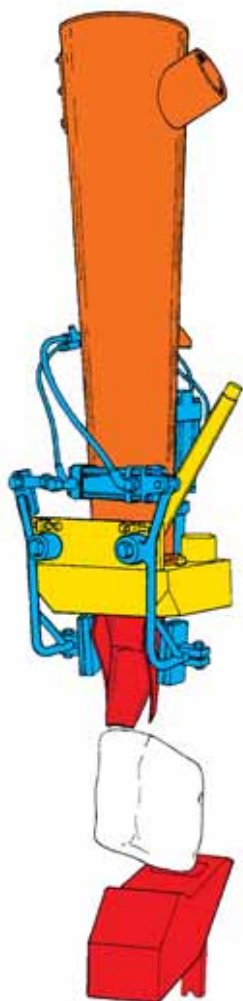
ANTI-DUST OUTLET.

BAG SADDLE ADJUSTABLE IN HEIGHT, for accomodating sacks of differing sizes.



IN G

GRAVITY ACCELERATION FOR GRANULAR PRODUCTS.



MAIN CHARACTERISTICS.

MINIMUM MAINTENANCE thanks to the absence of moving parts.

IDEAL FOR TROUBLESOME APPLICATIONS (a version manufactured in stainless steel is also available for use in corrosive environments).

ANTI-DUST OUTLET.

BAG SADDLE ADJUSTABLE IN HEIGHT, for accomodating sacks of differing sizes.

Purposely designed for the handling of high-density, **free-flowing granular products**, the IN G model uses the principle of gravity acceleration to reach very high outputs with minimum need for maintenance (no moving parts). The IN G is particularly effective on **granular fertilizer** and **dry sand**.

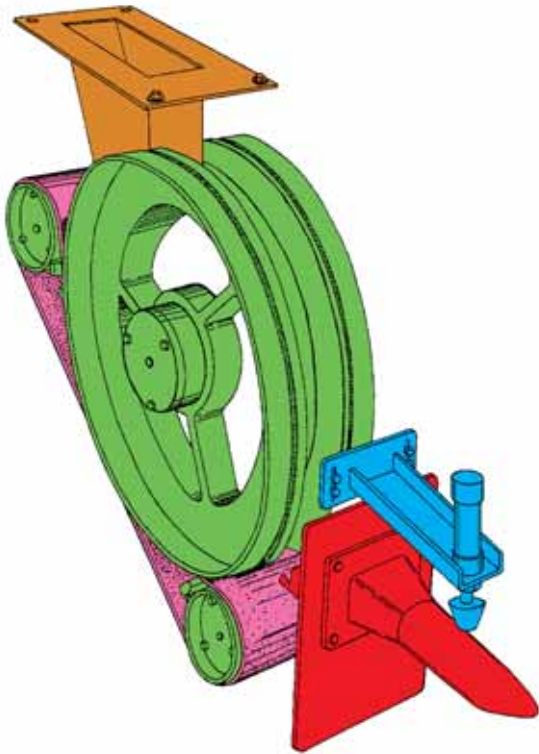
The presence of a special **dosing catchgate** at the inlet guarantees a perfect regulation of the product to be bagged, in accordance with its density and flowability, to achieve the best possible results.

The height-adjustable **bag saddle** ensures that the product is settled inside the bag thanks to a vibrating action. The automatic ejection of the full bag (optional) is achieved by a pivoting movement of the saddle (activated pneumatically). It is possible to install two or more packers in-line in order to reach high outputs (up to 1400 bags per hour). The whole system can be automated by adding a PAGLIERANI robotic empty bag placer (mod. FB) or **application of the ultrasonic valve sealing system**.



IN V

CENTRIFUGAL ACCELERATION FOR GRANULAR PRODUCTS.



Designed for bagging **granular products**, the IN V packer employs the principal of **centrifugal** acceleration. A rotating fly-wheel accelerates the product flow which is then bagged into the sack through the filling nozzle. This procedure permits even non free-flowing products to be handled, such as low density treated or granular cereals. The IN V model has been created to operate with minimum maintenance, while at the same time guaranteeing **optimum performance** and eliminating completely any risk of damaging the product.



This makes it the perfect tool for handling **cereal products, seeds, crystallised or castor sugar, destined** to be sown where maintaining an undamaged product is of the utmost importance.

During the filling phase, the bag is supported on a **vibrating bag saddle** which compacts the material inside and results in a reduction of the final overall sack dimensions. The full bag, if required, can be ejected automatically by the pivoting action of the pneumatic bag saddle.

The modular construction offers the possibility of coupling two or more packers together in-line to achieve high outputs (up to 1200 bags/hour) as well as the complete automation of the system with the application of the automatic empty bag presenter (mod. FB) or **application of the ultrasonic valve sealing system**.

MAIN CHARACTERISTICS.

ELECTRONICALLY BALANCED ROTATING FLY-WHEEL to avoid vibrations &/or rapid wear of the acceleration belt.

MINIMUM DUST BUILD-UP areas where dust accumulation may occur are minimal in accordance with the strictest international health & safety regulations.

BEARINGS PROTECTION.

ANTI-DUST OUTLET.

BAG SADDLE ADJUSTABLE IN HEIGHT, for accomodating sacks of differing sizes.



DUST HOOD.

A dust extraction attachment is fitted to the bag filling nozzle to collect the dust generated during the filling operation.



ADJUSTABLE VIBRATION DEVICE.

Except in the IN G bag filling machine, the bag support is vibrated by a cam. The vibration amplitude can be adjusted to obtain the best results in relation to the characteristics of the product being bagged.



AUTOMATIC BAG FILLING CYCLE START SWITCH.

- The bag filling cycle is automatically initiated as soon as the bag is fitted on the nozzle.
- Bag presence detector device (for combination with automatic empty bag placer).
- The sensor inhibits the filling operation if the bag is not placed on the filling nozzle correctly.



OPTIONS



AUTOMATIC ADJUSTMENT OF SUPPORT POSITION (SIZE CHANGE).

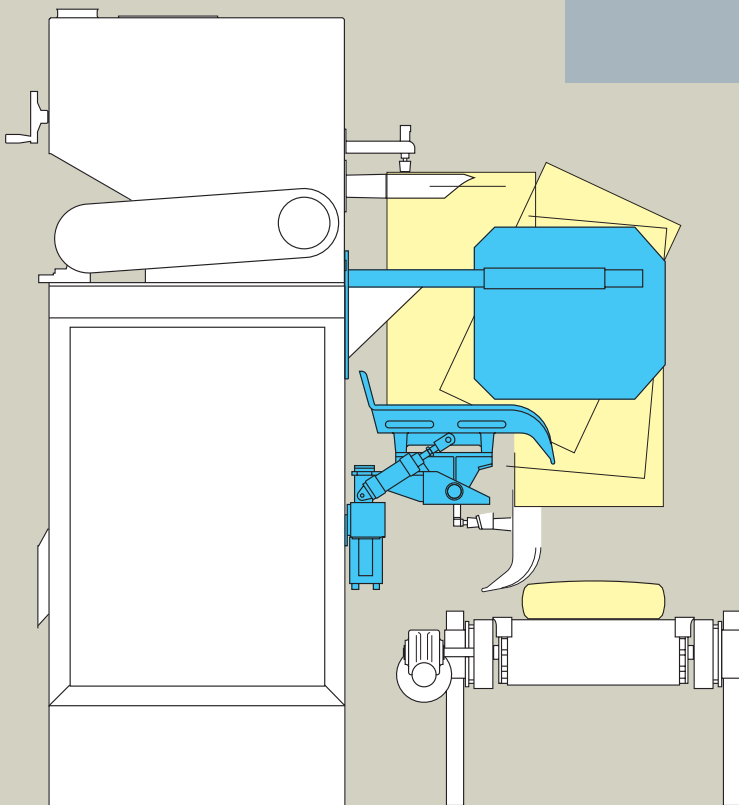
BAG SUPPORT WITH TWO-POSITION ADJUSTMENT (PNEUMATIC).

When the system handles just two types of bags with different heights, the support can be automatically lowered and raised by means of a pneumatic piston.



BAG SUPPORT WITH MULTIPLE-POSITION ADJUSTMENT (HYDRAULIC).

When different heights of bags are used, the bag support saddle can be equipped with a hydraulic cylinder allowing precise positioning to the desired height (automatic support height change depending on the program set).



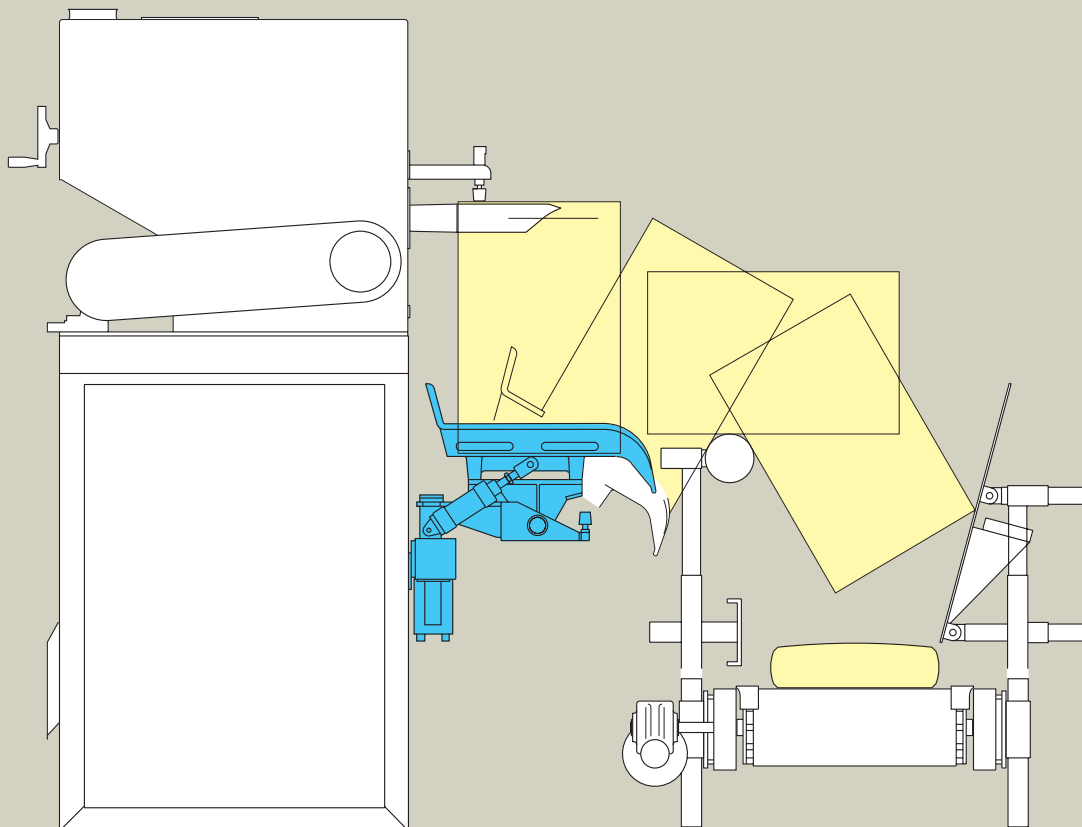
VERTICAL DROP

Fitted in case of an arrangement with three or more bag filling machines in line, with manual empty bag feeding.

180° DISCHARGE

Fitted in case of manual bag feeding (maximum two bag filling machines) or with automatic bag feeder. If the bag filling machine is combined with the automatic empty bag placer, the bag ejector is completed with a pneumatic system which raises and lowers the bag support, to allow:

- correct insertion of the empty bag inside the support;
- perfect opening of the bottom of the bag.



OPTIONS



The empty bag
is positioned
(support in low position).



The filling cycle is activated; the bag is
suspended so that the weight of the
product opens out the bottom.

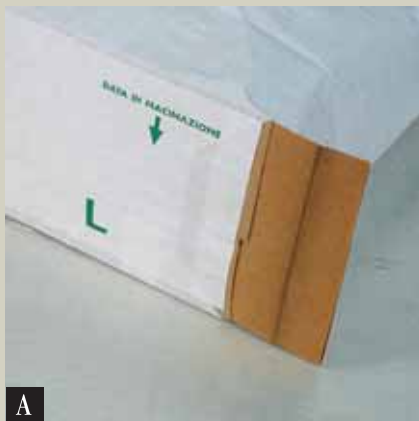


The bag support rises to support
the weight of the product and
the vibration action starts.

ULTRASONIC SEALING

SIMPLE and IN Series Sack packers can be equipped with an ultrasonic sealer system for sealing the sack valve (A). This fully automatic system is installed on the sack packer and incorporates:

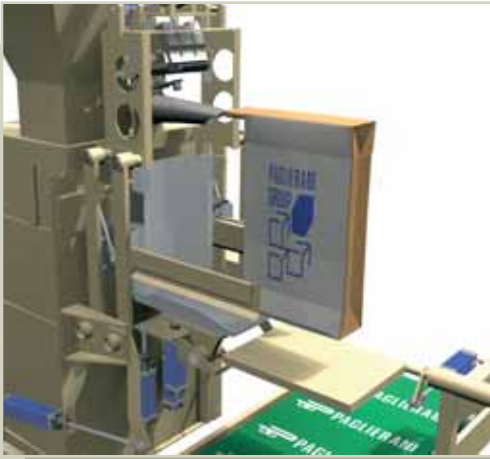
- The ultrasonic sealing hammer (sonotrode) (B);
- The anvil (against which the sealing hammer acts);
- The electronic control unit for setting the ultrasonic power and duration;
- The pusher for extracting the full sack and placing it in the sealing/removal zone.



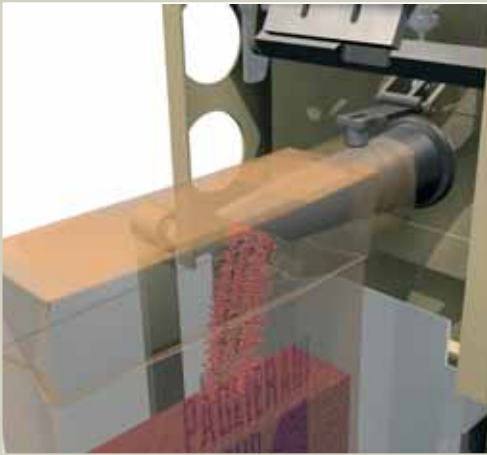
Ultrasonic sealer on SIMPLE A1 Sack packer.

OPTIONS

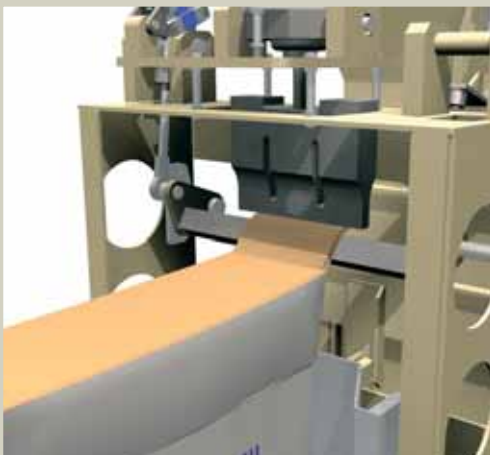
OPERATING PRINCIPLE



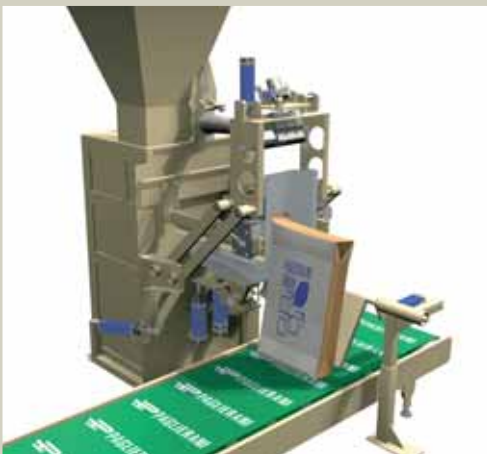
Empty sack ready for insertion.



Sack filling
(pusher and sealer at rest).



Sack expulsion and sealing.



Sealed sack removal.



WEIGHING, PACKING FILLING, PALLETISING &
STRETCH WRAPPING SYSTEMS.

PAGLIERANI s.a.s. · I · 47822 SANTARCANGELO (RN) · Via Emilia, 1938 · Tel. +39. 0541. 350511 · Fax +39. 0541. 621252
www.paglierani.com · info@paglierani.com