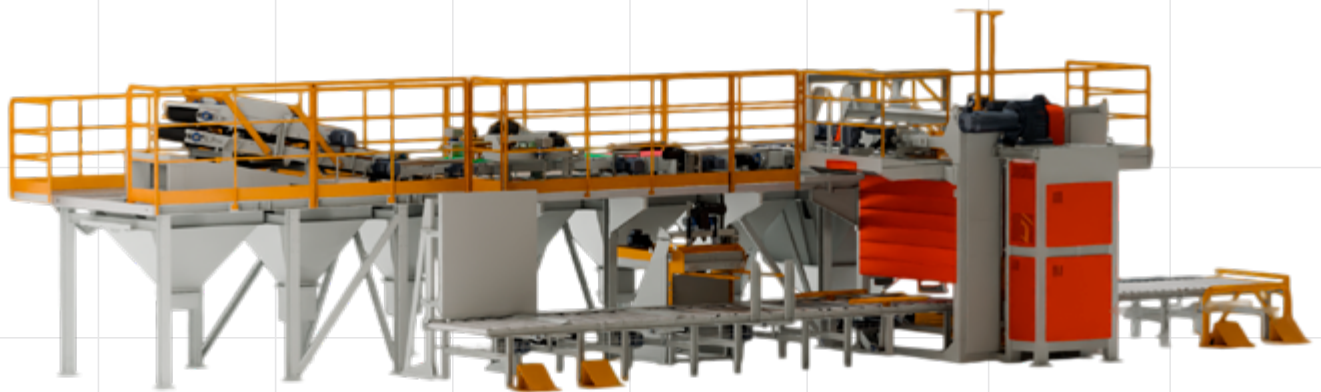
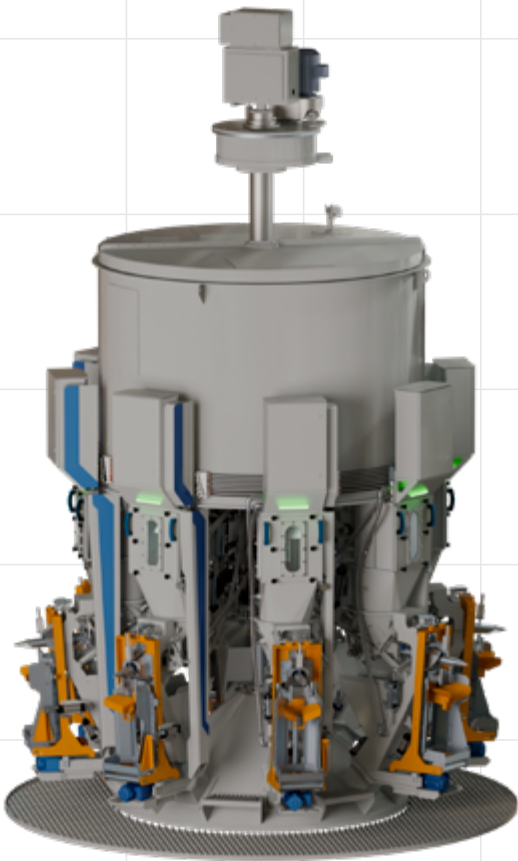


# VENTOMATIC® **COMPLETE** PACKING PLANT SOLUTIONS

EFFICIENCY IN EVERY BAG



# FILL IT UP, SHIP IT OUT

Your packing plant is the final link between production and your customer – where speed, precision, and presentation are critical. Our complete packing solutions are designed to maximise productivity, streamline operations, and ensure every bag is packed cleanly, accurately and safely.

## KEY BENEFITS

■  
Solutions for every bag type and size

■  
Capacities to suit all production levels

■  
Automated equipment improves site safety

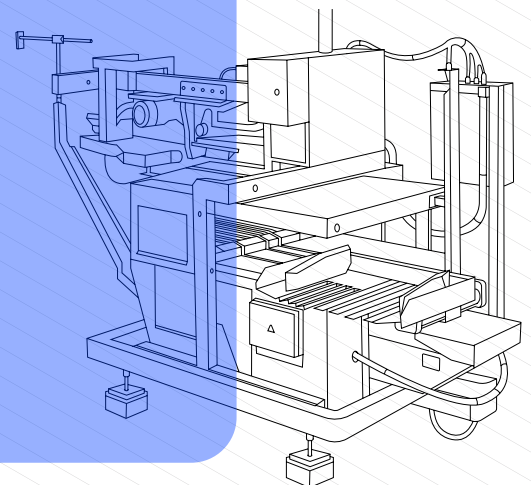
■  
Modular designs ensure simple installation and maintenance


■  
Straightforward HMI for easy operation and rapid changeover

■  
Seamless integration for an end-to-end solution

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# INTRODUCING VENTOMATIC®

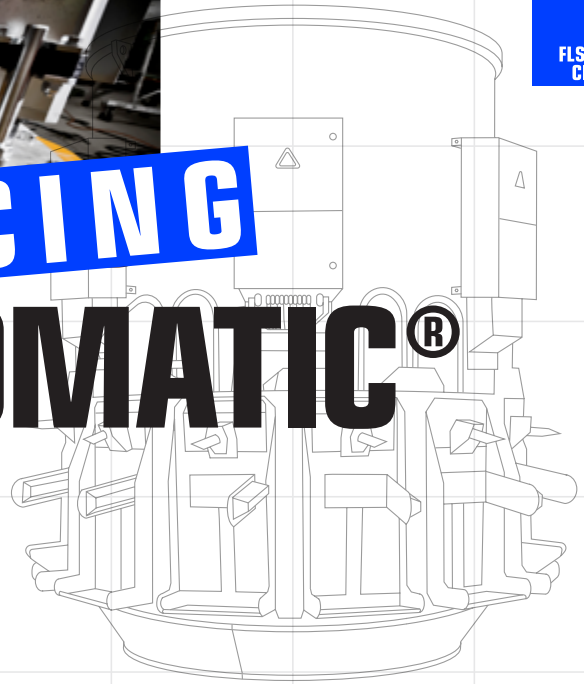
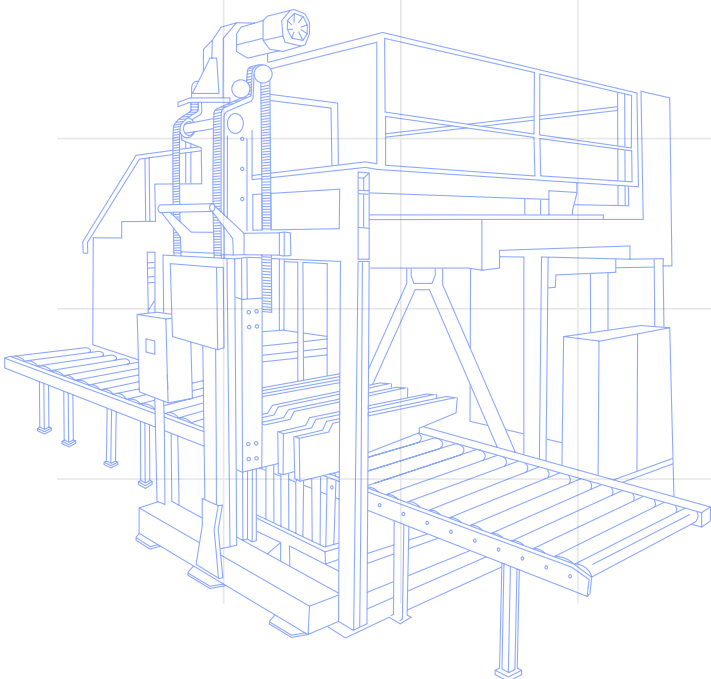
## AVOID BOTTLENECKS WITH END-TO-END PACKING SOLUTIONS FROM VENTOMATIC®

Your packing plant has the potential to be a bottleneck – standing between you and profitability. As production lines grow, packing plants must be able to keep up. Meanwhile, bag materials, sealing methods and sizes evolve and logistics needs change. A diversified product line requires a flexible packing solution, capable of real-time transitions and rapid changeover.

## FUTURE-PROOF SOLUTIONS BUILT ON 50+ YEARS OF EXPERIENCE

Drawing on more than five decades of innovation, Ventomatic® creates high capacity, fully automatic equipment that evolves with you. Our modular systems can be easily expanded, giving you the flexibility to uprate your packing plant when needed.

Our Ventomatic® brand designs and produces complete automatic lines for full bag handling, including packing lines, palletizing lines, truck and wagon loading lines, and more. Full engineering services are provided by our qualified technical staff, and after sales service is taken care of by our global network of experts.



## WE DON'T JUST BUILD – WE LISTEN

We ask customers what they want – and then set out to make it happen. We're continuously working to provide more energy-efficient, more productive and more reliable packing and dispatch solutions for powdery and granular materials in the cement, building materials and other powdery products.

As well as different bag types, we also cater to your transport needs, with options for shrink-wrapped stacks, stretch hood, pallet or no pallet. All our solutions are built around market requirements, so we can deliver a system that works for you.

## BUILDING SOMETHING NEW?

Talk to us about your needs. Our equipment is tailored to your needs, so we can recommend the best, most efficient solution based on your capacity, bag type, and logistics requirements.

## UPGRADING YOUR FACILITY?

All our equipment can be integrated into standard existing packing/loading installations. And with modular designs with little civil works required, installation and commissioning are quick and easy.

## SEEKING IMPROVED EFFICIENCY?

We are continuously evolving our offerings to increase productivity, reduce waste and improve energy efficiency. Talk to us about upgrade and expansion projects.

# FILLING UNITS

The requirements for packing plants continue to grow. High capacities, high accuracy, adaptability to a range of materials and bag types. We meet this demand with Ventomatic® inline and rotary packers for cement, powdery and granular materials and bagging machines for valve bags.

## GIROMAT® ROTARY BAG PACKERS

Electronic rotary packers are cleaner and safer than manual alternatives, and much more productive. Our Ventomatic® GIROMAT® rotary packers are designed for valve bag filling and weighing of a range of products. The flexible, modular assembly grants easy maintenance and operating costs are low thanks to minimal power usage.



### BENEFITS

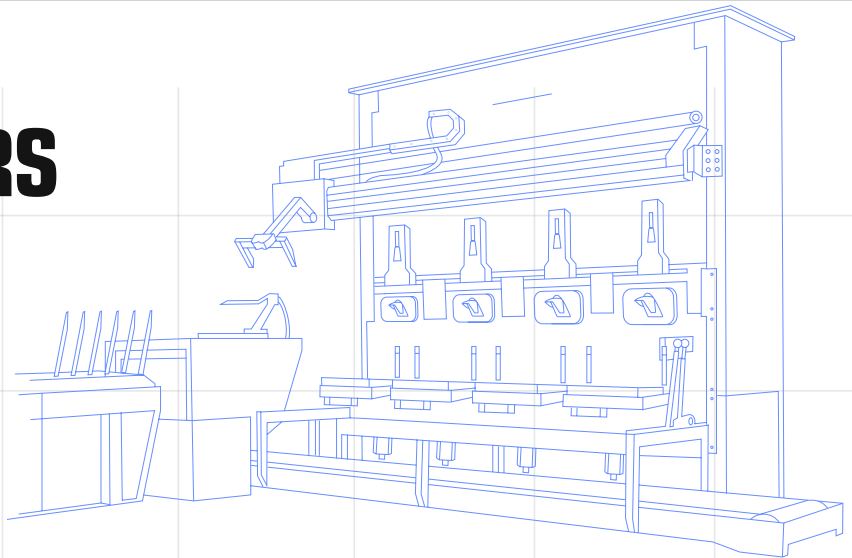
- High capacity – up to 4800 bags/hour (50 kg bags) or 5600 bags/hour (25 kg bags)
- Configurable to different product types
- Suitable for various bag materials and sealing methods
- Quick product changeover
- Optional ultrasonic bag sealing system available
- Precision filling thanks to electronic weighing
- Modular construction enables quick, easy installation

### TECHNICAL FEATURES THAT DRIVE PERFORMANCE

Enjoy precise, high-speed bagging with minimal dust and maximum flexibility. Our rotary packers feature a seamless optical infrared connection between the rotating filling units, operator panel and control system—ensuring smooth, uninterrupted operation. Each unit is equipped with an advanced electronic weighing system (EWU) for exceptional accuracy. You can handle a wide range of materials, including cement, drymix, gypsum and granulates, with your choice of impeller or air-type filling units to suit your product. Fully automatic regulation makes it easy to switch between bag sizes (10–50 kg) and perform fast product changeovers. And with the EVO (Electronic Versatile Open-ended) design, you get built-in flexibility for different bag types and materials, support for manual or automated settings, and a future-ready system that can grow with your production needs.

# LINEAMAT™ INLINE PACKERS

For low to medium capacity bagging lines with up to four spouts, the Ventomatic® LINEAMAT™ inline packer for powdery and granular materials is cost-effective, reliable and easy-to-operate. Available with impeller or air type filling, it's simple to install and can be equipped with an innovative automatic bag applicator and empty bag storage.



## DESIGNED FOR SMOOTH, ACCURATE BAGGING

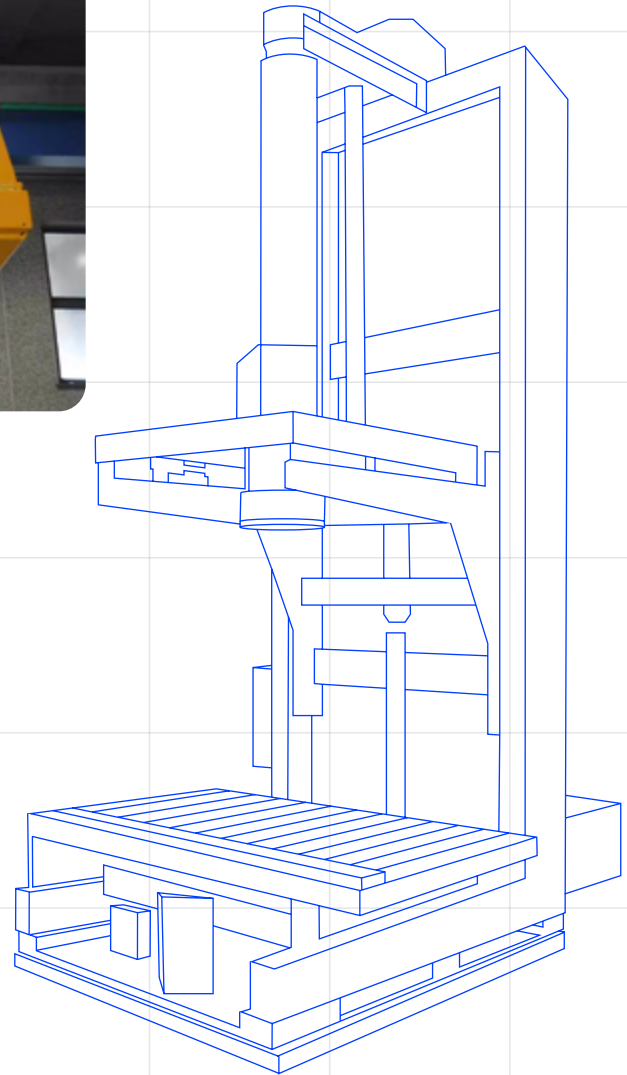
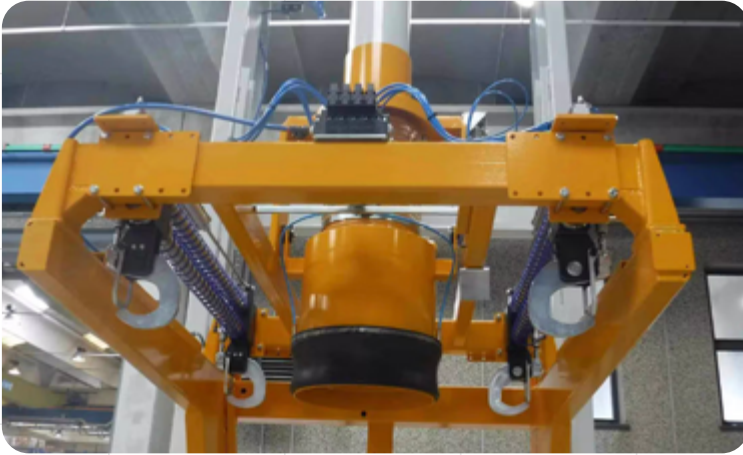
Engineered for construction materials like gypsum, lime, cement, mortars, ready mix and other powdery products, the Ventomatic® LINEAMAT™ delivers fast, accurate valve bag filling with low operating costs. The redesigned filling unit and impeller profile ensure a smooth, efficient process, with vertical or horizontal impellers to suit your product. You can choose guillotine or pneumatic pinch valves for precise flow control, depending on your material. Each spout features an advanced electronic weighing unit, with the latest design allowing the bag to hang directly on the nozzle—maximising accuracy and ensuring even product distribution.

For a fully automated packing and dispatch solution, LINEAMAT™ can be supplied with empty bag handling, bag treatment, spillage recovery, palletizing and stretch hooding. You can also add an onboard ultrasonic bag sealing system for the ultimate security if required.

## BENEFITS

- Suitable for a wide variety of construction products
- Low-cost filling solution
- Easy to integrate with empty bag storage, feeding and applicator
- Digitally enabled for easy operation and remote supervision
- Precise bag weighing with electronic weighing





# BIG BAG FILLING SYSTEMS

Big bags are a cost-effective way to move bulk materials around, but to really get the benefit you need to ensure accurate filling and safe and clean handling. The Ventomatic® BIG BAG filling system provides highly accurate filling, automatic handling and a safe and clean working area.

## BENEFITS

- Capable of handling bags of different sizes up to 2 t per bag
- Easy to operate and maintain
- Excellent weight accuracy
- Flexible enough to cope with various powdered and granulated products
- Safer, cleaner working environment

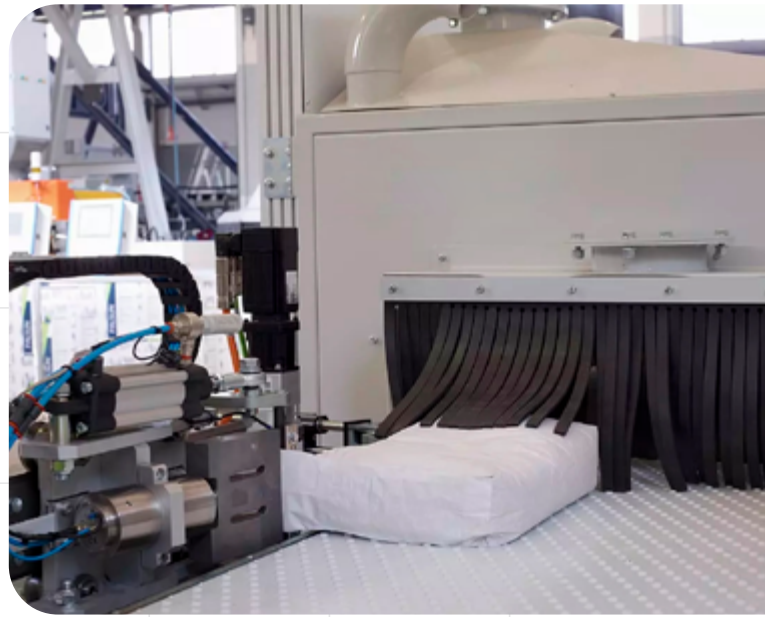
## PRECISION-ENGINEERED FOR EFFICIENCY AND SAFETY

The Ventomatic® BIG BAG filling system is designed for accuracy, efficiency and safety. Equipped with electronic weighing units and a multi-position throttle valve, it ensures precise filling while helping reduce costs and maintain product consistency for your customers. Manual handling is minimised thanks to automated bag management, creating a safer work environment. An inflatable ring around the spout prevents dust emissions, and the bag is pre-inflated before filling to ensure even product distribution. Four tilting hooks hold the bag securely in place for easy loading and automatic release. Everything is managed via an intuitive control panel located right next to the filling unit for smooth, hassle-free operation.

FILLING UNIT ACCESSORIES

# VENTOSEAL™ CL ULTRASONIC VALVE BAG SEALING SYSTEM

No one wants to see materials escaping from incompletely sealed bags. Not only is it a health hazard for your operators and customers, it also means that contaminants could be getting into the bags, putting product quality at risk. VENTOSEAL™ CL is an ultrasonic bag sealer suitable for paper and plastic bags. It is designed for both new installations and as a retrofit for existing packing plants of any make or model.

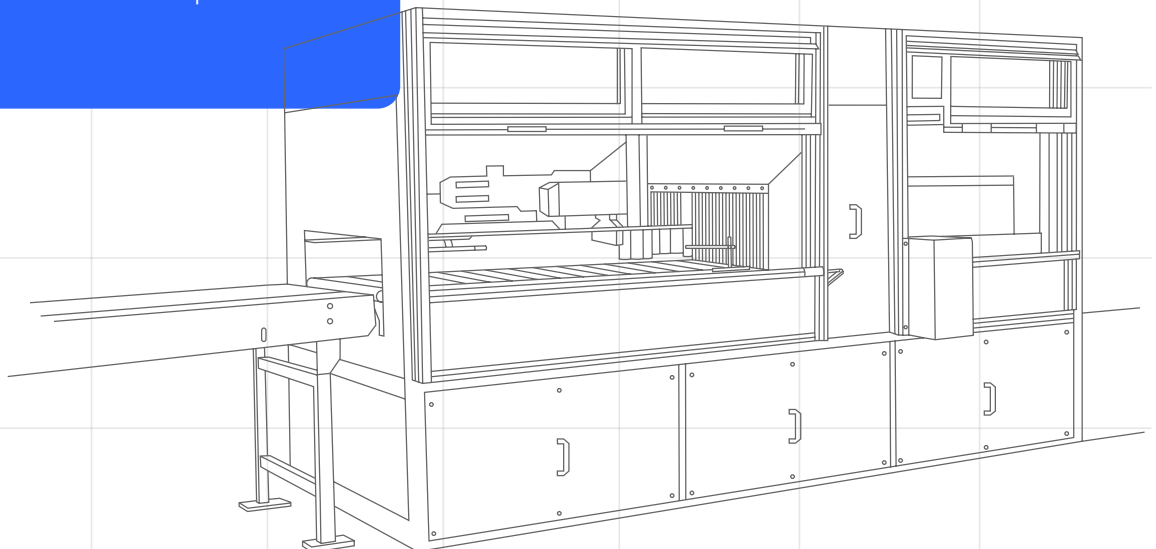


## BENEFITS

- High productivity bag sealing – up to 3000 bags/hour
- Plug and play concept – the VENTOSEAL™ CL is a simple, standalone machine
- Works with any kind of packer
- VENTOSEAL CL can be bypassed when not required
- VENTOSEAL CL can be incorporated into packing machines where space is limited

## HOW ULTRASONIC SEALING SECURES YOUR PRODUCT

As bags are discharged from the packing machine, they remain on the belt conveyor and are precisely aligned for treatment. The valve is then carefully cleaned to prepare it for sealing. A roller gently fixes the bag in position, allowing the ultrasonic sealing clamp to accurately intercept the valve and create a perfect seal. The result? A 100% sealed valve that keeps your product safely inside, eliminates dust emissions, and protects quality from the plant to the end user.



# EMPTY BAG HANDLING & STORAGE

Modern packing plants require greater accuracy, greater flexibility and greater productivity than ever before. Ventomatic® automatic bag applicators and empty bag handling systems are up to the challenge. We supply systems catered to your material, capacity and other logistics requirements, suited to traditional self-closing glued bags, bags with sealing valve, stitched bags, as well as different bag manufacturing materials – including paper, PP and HDPE.

## INFILROT® AUTOMATIC BAG APPLICATOR FOR ROTARY PACKERS

Ventomatic® INFILROT® bag applicators can achieve capacities of up to 6000 bags/h. Highly efficient and accurate, these empty bag placing machines cater for a range of bag characteristics, materials and sizes. And they're designed for easy, cost-effective maintenance.

### BENEFITS

- High capacities thanks to automated design
- Suitable for different bag characteristics
- Integrates with different bag storing and feeding systems





## CHOOSING THE RIGHT BAG APPLICATOR FOR YOUR PLANT

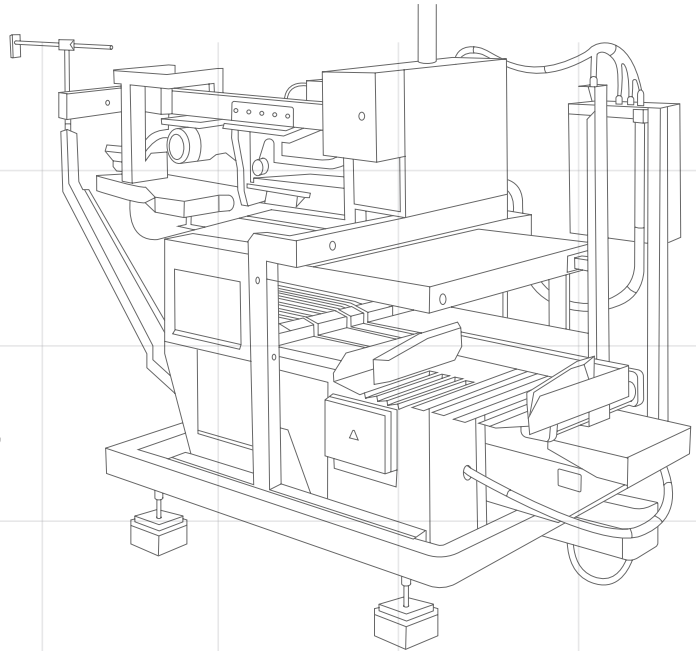
Different applications require different solutions, and we are the only supplier to offer two distinct design concepts:

- Mechanical arm type (INFILROT® BU range)
- Shooting type (INFILROT® Z range)

The choice depends on several factors such as: capacity, packer characteristics, bag dimensions, bag quality, environmental conditions, etc. As a guide, please see the below.

For glued valve or stitched valve bags made of paper, PP or HDPE, opt for the INFILROT® BU mechanical robotic arm concept with electronic axis control.

- Capacity up to 3000 bags/h and reliability not less than 99,5%
- High flexibility for bags manufactured with different materials
- Low sensitivity to bag manufacturing quality
- Suitable for different bag dimensions with automatic adjustments
- HMI system for recipes, timers, parameters and manual/automatic controls
- Cabinet to control the automatic cycle and the automatic calibration and synchronisation with rotary packer



For very high capacities, handling only glued valve bags made from paper or WPP, choose the INFILROT® Z shooting type concept.

- Capacity up to 6000 bags/h and reliability not less than 99.5%
- Suitable for different bag dimensions with automatic adjustments
- HMI system for recipes, timers, parameters and manual/automatic controls
- Cabinet to control the automatic cycle and the automatic calibration and synchronisation with rotary packer

## DIFFERENT BAG STORAGE AND FEEDING SYSTEMS

Regardless of which model you choose, all bag applicators can be interlocked with empty bag storage and feeding solutions.

**NORIAMAT™** empty bags storage has a stock capacity up to 1600 bags and is available in 3 or 6 m lengths. The new design grants more stability to the bag bundle and supports easier maintenance thanks to the new plastic forks.



The **VENTOFEED™ SR** empty bag de-palletizer is completely automatic and compatible with several bag sizes and pattern layers. It works with bag bundles, palletized as usual, and on all bundles including the bottom layer, in an 8-hour shift system. If needed, you can also add an empty pallet stacker.



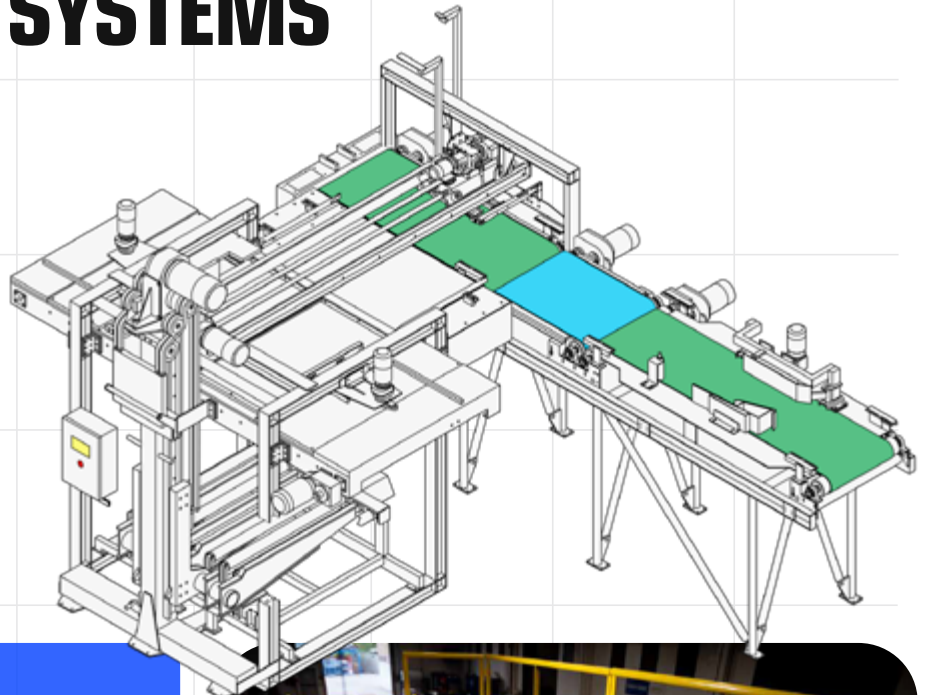
# PALLETISING

Whatever your capacity, bag type, or logistics requirements, our Ventomatic® palletizing solutions are designed to offer high reliability, optimised productivity, and ultimate flexibility.



## POLIMAT® BAG PALLETIZING SYSTEMS

Our modular VENTOMATIC® POLIMAT® palletizers and automatic bag stackers are suitable for a range of capacities up to 5600 bags/hour; for different bag sizes and different stacking configurations. Slip sheet, stretch hood, a wooden pallet base or no pallet at all – we can meet your requirements with innovative design and reliably high performance.



### BENEFITS

- Easy operation through user-friendly HMI
- Capacities up to 5600 bags/hour
- Modular construction is simple to install, commission and maintain
- Suitable for a variety of stacking configurations
- Integrates seamlessly with other Ventomatic® solutions
- Flexible to different bag sizes and types



## TRUE FLEXIBILITY: PALLETIZING AND AUTOMATIC BAG STACKING TO SUIT YOU

Our VENTOMATIC® palletizing solutions are designed to suit every kind of application, whether handling plastic, paper or woven PP bags, and whatever the weight and size. VENTOMATIC® POLIMAT® can be automatically adjusted via the easy-to-use centralised operator panel, which memorises your preferred stacking parameters. You also benefit from: diagnostic data and troubleshooting support; machine data with local back-up; easy interface with a supervision system for data exchange; fieldbus control network, and of course machine alarms and historic alarm log.



## A SECURE AND STABLE STACK

We cater for a range of solutions to secure your stack, including:

- Stretch hood for stack protection and stability
- Pallet-less for waterproof packaging of the load, available in different configurations according to the stacking capacity
- Hot process (thermal-shrinking film with electrical or gas heating according to required capacity)
- Cold process (stretch hood film).

## EASY INTERFACE WITH TRUCK LOADING SOLUTIONS

The VENTOMATIC® POLIMAT® is designed for easy interface with the VENTOMATIC® Flying Fork-Lift FFL and VENTOMATIC® FFL-4C automatic truck loader for direct loading on open trucks, closed trucks or standard containers. You can choose to connect the palletizing line directly or store the stacks first and retrieve them later.



# TRUCK & WAGON LOADING

At the point of dispatch, your truck and wagon loading operation needs to be seamless – and flexible enough to cope with different bag sizes, truck types and loading needs. We offer automatic, semi-automatic and manual loading systems for open and closed-top trucks, all adaptable to your fleet, bag type and logistics needs.

## CARICATECH™ AUTOMATIC TRUCK LOADER

### OPEN TOP TRUCK LOADING

Based on an innovative mechanical concept, the CARICATECH™ automatic truck loader can load up to 3300 bags/h and easily adapt to changing bag and truck characteristics.

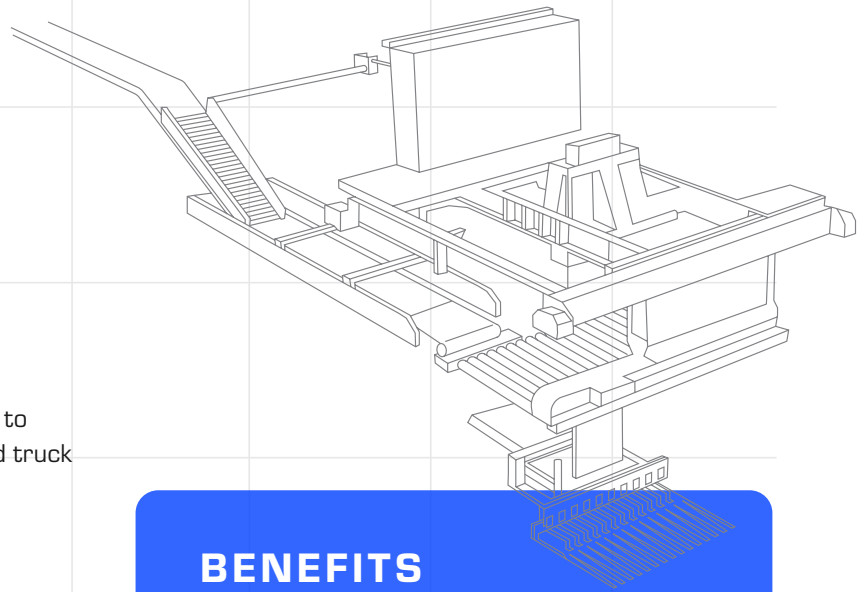
#### BAG LOADING PRINCIPLE

The CARICATECH™ forms the bag layer above the truck on a special roller bed and then transfers the layer onto the truck platform using forks. With the CARICATECH™ SB model, the loading pattern is automatically adjusted to the truck dimensions, ensuring absolute stability. This makes it the ideal solution for HDPE non-laminated bags, which are typically more difficult to handle with automated loading machines than paper or woven polypropylene glued bags.

#### EASY OPERATION AND SUPPORT

Control of the CARICATECH™ truck loader is based on IPC technology, which replaces the classic PLC hardware. This gives incredibly high performance, as the machine control logic and human-machine interface (HMI) run on a common platform. Setting loading parameters is easy and intuitive, and these can be changed in real time.

Diagnostics and troubleshooting operations are also improved, thanks to a dedicated operating environment. And we can provide remote assistance in real time via VPN or internet connection.



### BENEFITS

- Highest output on the market – 10% greater productivity than closest competitors
- Flexibility to adapt to different bag and truck sizes
- Rapid truck changeover time, with tens of seconds between loading cycles
- Digitally enabled for easy operation and remote support
- Suitable for all types of bags and materials



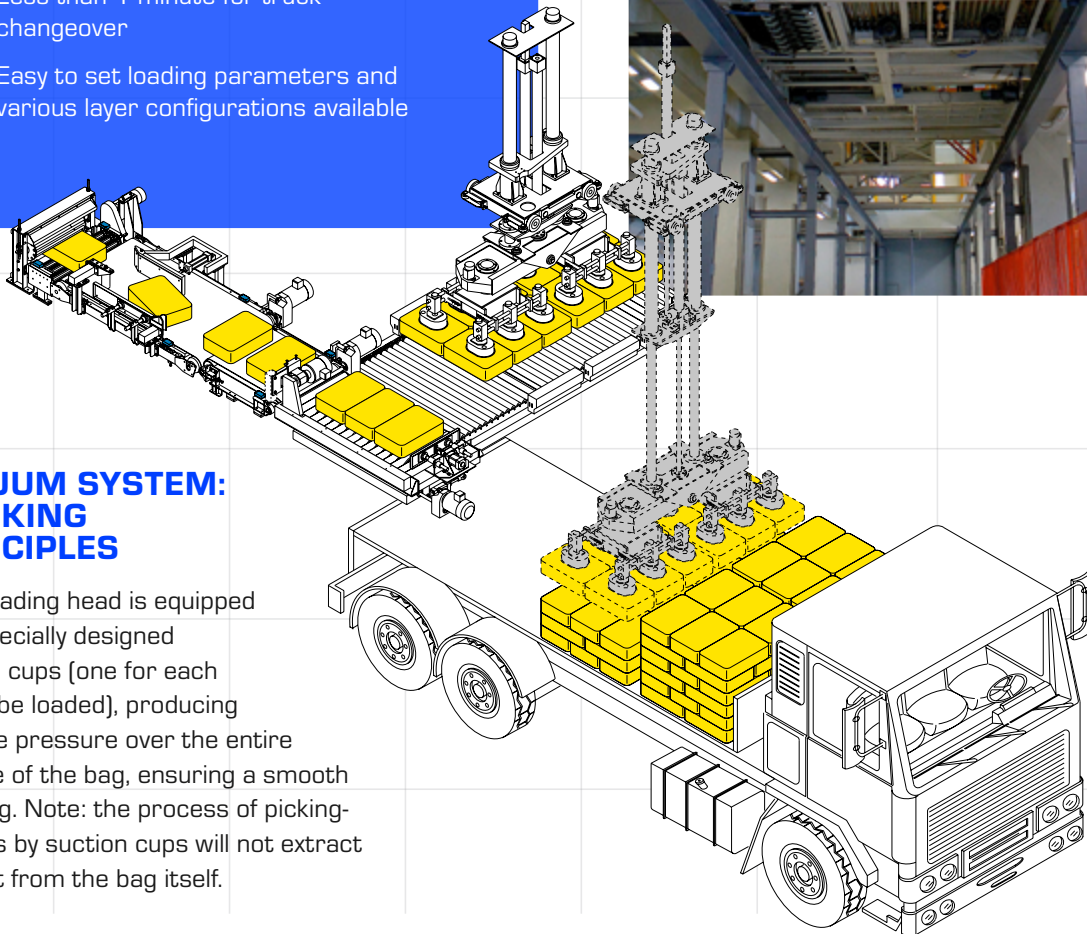
# CARICAMAT® AUTOMATIC TRUCK LOADER

## OPEN TOP TRUCK LOADING

The Ventomatic® CARICAMAT® palletises full bags directly onto truck platforms (with or without pallet). The patented suction disc system allows the loading of all kinds of paper and plastic bags onto all types of open-top trucks and trailers with standard configuration of 5x1, 5x2 or 6x2 bags per layer. The high capacity up to 3000 bags/hour) combined with easy and fast positioning of the equipment (useful when the truck is not aligned into the loading bay) guarantees you a high overall capacity of the packing line.

### BENEFITS

- High output – up to 3000 bags/hour
- Complete truck platform filling, regardless of truck type (minimum width 2000 mm)
- Unparalleled stack stability during transport
- Less than 1 minute for truck changeover
- Easy to set loading parameters and various layer configurations available



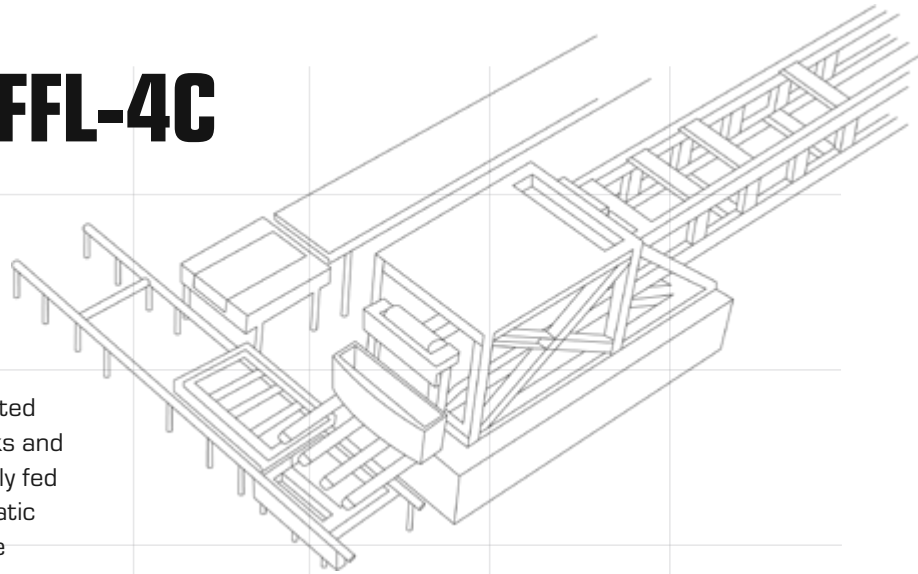
### VACUUM SYSTEM: WORKING PRINCIPLES

Each loading head is equipped with specially designed suction cups (one for each bag to be loaded), producing a gentle pressure over the entire surface of the bag, ensuring a smooth handling. Note: the process of picking-up bags by suction cups will not extract cement from the bag itself.

# VENTOMATIC® FFL-4C

## AUTOMATIC LOADING FOR CLOSED TRUCK AND CONTAINERS

The Ventomatic® FFL-4C is an intelligent, automated solution that transforms the way closed-top trucks and containers are loaded. Pallets or stacks are simply fed from the warehouse, palletizer or from an automatic storage and retrieval system (ASRS) direct to the Ventomatic® FFL-4C, which uses a smart loading system to transport them into the container – without touching the container floor. You can load pallets, jumbo bags, pallet-less stacks, and any kind of stackable containers.



### FAST AND EFFICIENT

With up to 30 loading cycles per hour, and up to 5000 kg per loading cycle, the Ventomatic® FFL-4C offers a fast, efficient loading process. A 40-foot container is typically loaded in just 20 minutes.

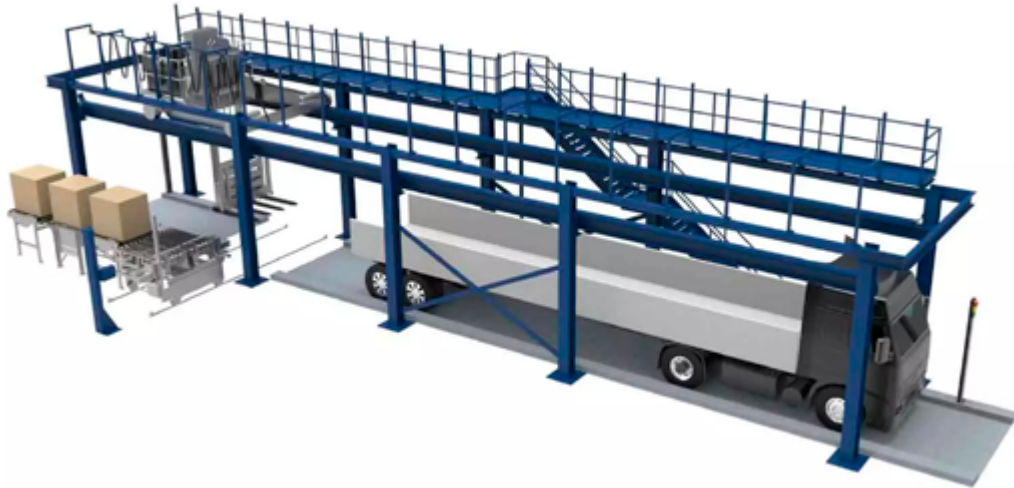
### BENEFITS

- Safe, with no manual intervention required – just one operator supervising
- Gentle handling avoids damage to product or truck
- Fast and efficient – loading up to 150 t per hour
- Interchangeable pallet or palletless loading
- Easy installation and operation

### HOW IT WORKS

The truck positions itself in front of the machine. The system verifies the correct positioning of the truck and confirms there are no possible obstacles inside the container / closed truck. (This check is performed before each stack is pushed into the truck.) The operator starts the loading sequence based on the dispatch requirements from the user-friendly HMI. The system integrates with both your palletiser software and your plant logistics SW to ensure you always select the right product. It can be fed either direct from the palletiser, from the warehouse via standard forklifts, by an ASRS, or a combination of these. The interchangeable loading fork can be configured for either palletized or palletless stacks, giving you total flexibility to switch between different products and packaging methods.





# VENTOMATIC® FFL™

## AUTOMATIC LOADER FOR OPEN-TOP TRUCKS

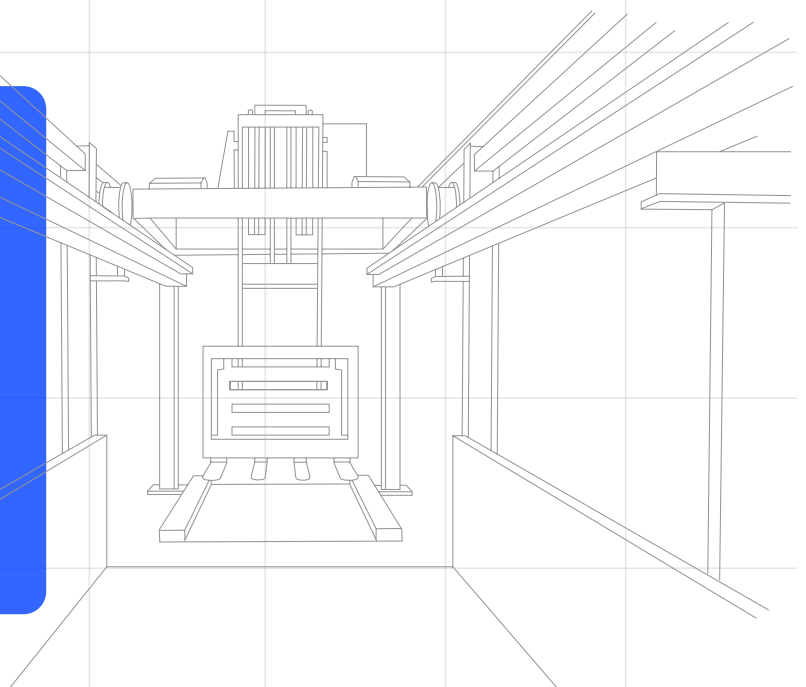
The Ventomatic® FFL™ is a totally mechanized system that works just like a regular forklift truck to move stacks or pallets from the palletizer to the truck for dispatch – or to the warehouse, if the bags are staying in storage. But a clever push-pull mechanism and overhead rails enable the whole action to happen automatically with no manual intervention and only one member of staff to supervise. The intelligent system can even scan the parameters of the truck to calculate the best loading configuration – and it makes continual checks throughout and between loading cycles to ensure that everything is working optimally.

### FLEXIBLE USE

There are times when you want to keep running your packer and palletizer to top up your warehouse stock. The Ventomatic® FFL™ can still be used in these situations to take stacked or palletized loads from the palletizer to a new position, from where they can be moved around the warehouse in the usual way. And when you want to load that warehouse stock onto a truck, you just move the stacks back into position and the Ventomatic® FFL™ will take care of the rest. It's a flexible system that works equally well in-line, or independently.

### BENEFITS

- Safer for products and staff
- Compact footprint, minimal civil work required
- High loading capacities
- Seamless interface with other Ventomatic® equipment
- Flexible loading of trucks with or without lateral sides



# GIROMAT® UPGRADES

DECADES OF RELIABILITY

POWERED BY SMART UPGRADES

## ELECTRONIC UPGRADES TO ROTARY PACKERS

Replace outdated slip ring technology with advanced infrared communication for reliable, maintenance-free data exchange between your rotating packer and control systems.

### MAGIC BOX

Infrared data transmission device for connecting the bag filling units (installed on the rotating part) with the operator panel and the control system.



### ENCODER

For tracking the angular position of each bag filling unit and control the bag filling cycle.

### VENTODIGIT™ IV

Multi-microprocessor electronic weighing unit designed for bag filling application. OIML and PTB certified.



## BENEFITS

- **LOWER OPERATING COSTS** - Contact-less infrared communication eliminates slip ring maintenance, air system upkeep, and product waste from false readings
- **ENHANCED PRECISION** - High-accuracy encoder and electrical bag sensors optimise filling timing and eliminate false detection for faster throughput
- **CENTRALISED CONTROL** - VENTODIGIT™ IV weighing units (OIML/PTB certified) connect via CANBUS network with user-friendly IP65 operator panel
- **FUTURE-READY TECHNOLOGY** - Dust-proof components provide stable, lifetime communication resistant to vibrations and interference



# MECHANICAL UPGRADE PACKAGE

Transform bag filling with intelligent saddle systems and precision-engineered components that address inconsistent detection, manual adjustments, and maintenance-intensive sensors.



## FILLING UNIT

Impeller, fluidization system, guillotine valve, nozzle and supporting frame, all designed for high weight accuracy, high output and low dust emission.

## BAG SADDLE

Available for wide-range of bag types and sizes, with manual or automatic adjustment (two or multi-position)

## BENEFITS

- **INCREASED PRODUCTIVITY** - Reliable electrical sensors extend filling arc and boost throughput while eliminating calibration downtime
- **ULTIMATE FLEXIBILITY** - Accommodates wide bag range with optional automatic size adjustment and integrated sealing systems
- **OPTIMISED PERFORMANCE** - Complete filling unit engineered for maximum accuracy, output, and minimal dust emission
- **CLEANER OPERATION** - Eliminates air blow systems, improving working environment and reducing energy consumption

# COMPLETE UPGRADE TO LATEST GENERATION GIROMAT®

Combines all electronic and mechanical improvements for maximum transformation and return on investment.

## COMPLETE PACKAGE ADVANTAGES:

- **TOTAL SYSTEM INTEGRATION**  
- All components work seamlessly together for highest possible performance gains
- **COMPREHENSIVE MAINTENANCE REDUCTION** - Eliminates multiple maintenance points simultaneously across the entire system
- **FUTURE-PROOF INVESTMENT** - Latest generation technology with enhanced process control and predictive maintenance capabilities
- **BEST TOTAL COST OF OWNERSHIP** - Combined installation maximises cost savings versus individual upgrades



# FILLPRO™ DUST REDUCTION KIT FOR GIROMAT® EVO ROTARY PACKERS

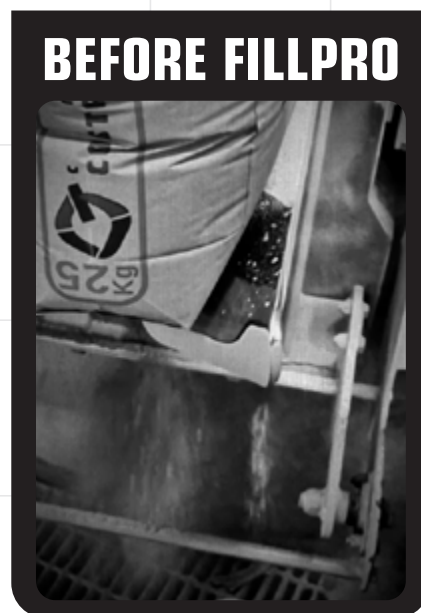
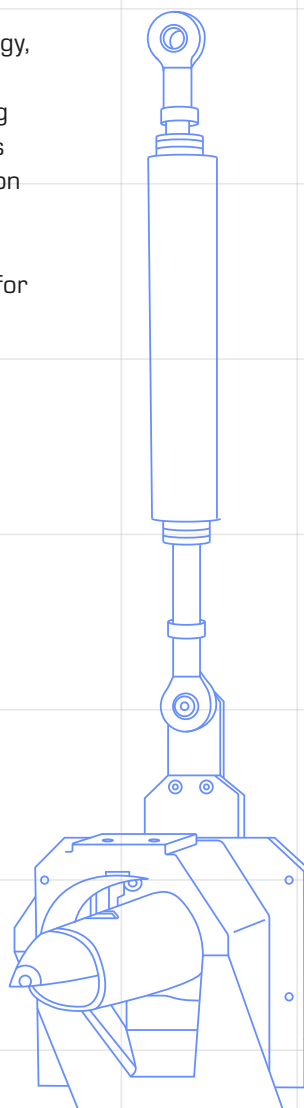
The FILLPro™ dust reduction kit for GIROMAT® EVO rotary packers is a low-cost, easy retrofit that instantly reduces dust, blockages and product loss. By capturing and returning escaped dust to your process, you can reduce lost profit – plus minimise dust emissions and reduce wear and tear on your equipment.

## UPGRADE YOUR PACKER WITH SMARTER DUST CONTROL

The FILLPro dust reduction kit brings measurable performance upgrades to your existing GIROMAT® EVO rotary packer. Its redesigned guillotine shape improves flow dynamics by optimising kinetic energy, reducing the need for compressed air injection, and helping prevent blockages. A new anti-clogging system minimises product infiltration and ensures smoother operation, while the enhanced fluidisation system extends guillotine life and improves dust handling. Any product released during the final stage of filling is captured within the packer body for recovery – virtually eliminating waste and keeping your operation cleaner and more efficient.

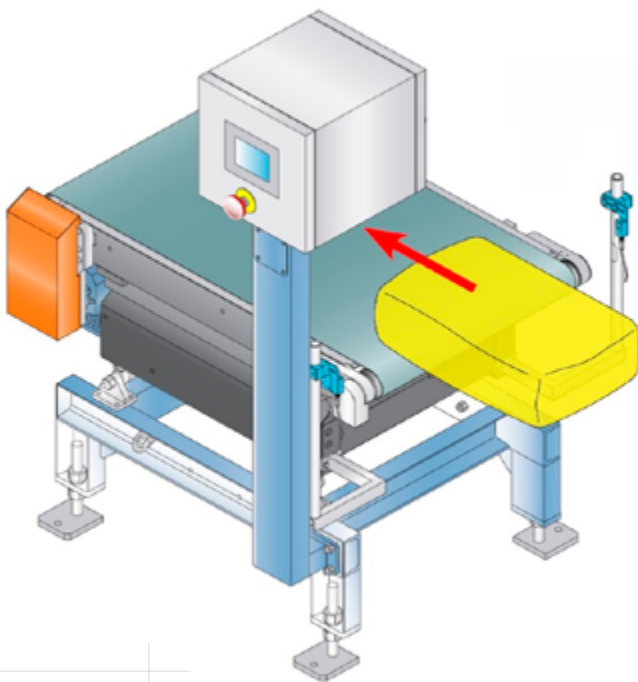
### BENEFITS

- Reduce dust emissions and product loss
- Minimise wear and tear
- Prevent clogging in the filling pipe
- Increase availability and operational efficiency
- Integrates seamlessly with GIROMAT EVO rotary packer





## OPTIONAL IMPROVEMENTS



**VENTOCHECK™** Belt Checkweigher – Provides downstream weight verification with OIML R51 certified accuracy. Automatically detects problem bags, provides real-time feedback for setpoint corrections, and delivers detailed statistical analysis with automatic unit disabling for consistent quality.

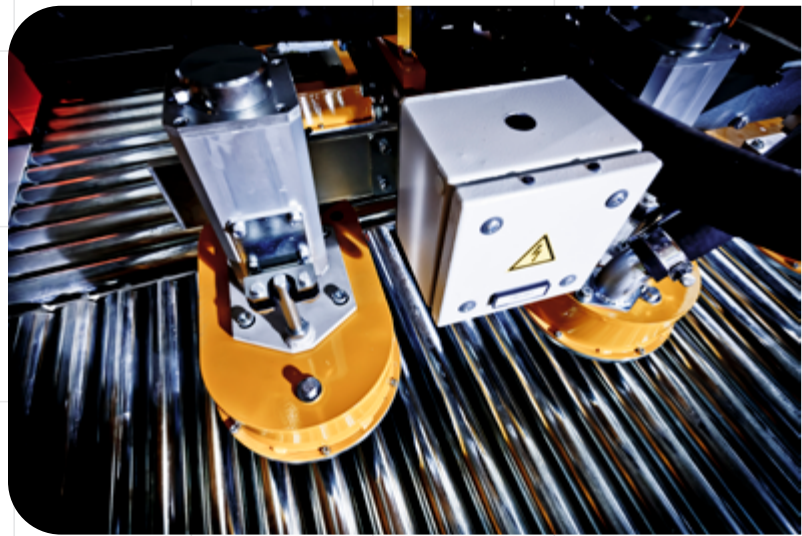
**VENTOLINK PRO™** Data Collecting System – Transforms production data into actionable insights with customisable statistical monitoring and Gaussian curve analysis. Monitors up to five packing plants simultaneously with real-time supervision, detailed cycle analysis, and alarm management for proactive maintenance planning.

# CARICAMAT® UPGRADES

Even the best solutions can be improved. Whether you're seeing a gradual reduction in performance over time, or looking for ways to increase productivity and availability, you can get more from your CARICAMAT® with these straightforward upgrades.

## CARICAMAT® HEAD UPGRADE

The CARICAMAT® head moves on three axis and lifts heavy bags at rates up to 3000 bags per hour. Over time, it is subject to wear and tear, and if not properly maintained it can lose performance and even become unsafe. While it is possible to replace parts of the CARICAMAT® head with spares, patchy repair work can result in more downtime and higher costs over the long-term. By contrast, replacing the CARICAMAT® head in its entirety ensures high quality across the piece, plus only one pause in production, which reduces the overall cost. The head replacement includes suction cup support, head support, pantograph, head carriage and head column. If you're replacing the complete CARICAMAT® head, you can also add a new component to enable a greater range of movement.



## HYDRAULIC CONTROL UPGRADE

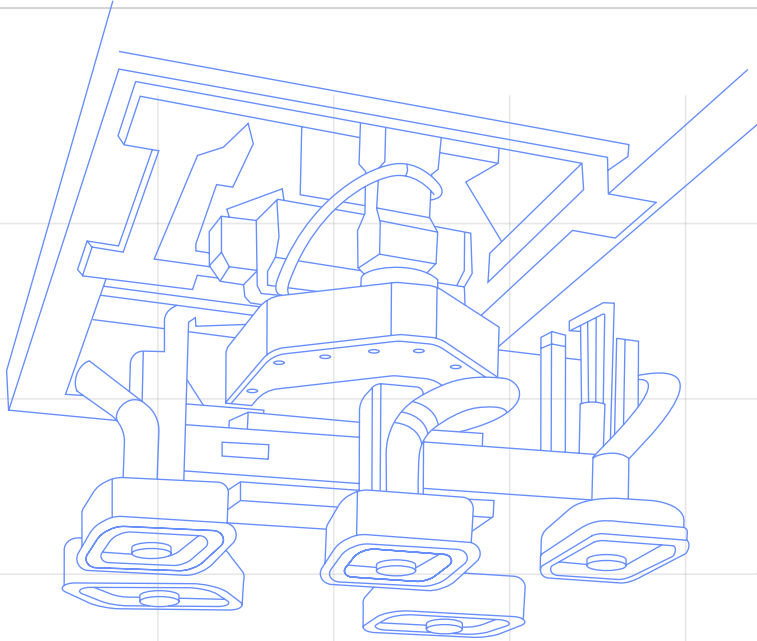
The stress placed on the CARICAMAT® by the high speeds at which it operates can cause damage to the main frame and lifting head. To reduce this stress, we are offering an optional improved hydraulic control, which can be easily retrofitted to existing machines.

The kit consists of:

- A hydraulic part for handling movements
- A mechanical part for feedback control of movements
- An electrical part
- New software

Adding the hydraulic kit helps to minimise shocks and vibrations by optimising speed changes and by improving the control of movement on both transverse and longitudinal strokes. The result is less stress on all involved parts – which reduces wear and tear – as well as reduced stress on all machine frames. With this relatively minor addition, you can significantly reduce the risk of cracks or breakage.





## VACUUM UNIT UPGRADE

The vacuum operation is integral to the success and safety of the CARICAMAT® solution. Seeking to avoid unscheduled downtime and improve overall performance and efficiency, we offer an upgrade to the CARICAMAT® vacuum unit:

- **DRY VACUUM UPGRADE** – increasing the pump size to increase performance.

Older dry vacuum systems may use multiple small pumps, all running at maximum capacity to achieve the necessary performance. Replacing many small pumps with larger pumps not only increases the system performance but also its efficiency. With higher efficiency, there is also less to go wrong – which means maintenance is reduced. Moreover, because the system no longer must run at maximum speed, the wear on motors is reduced, and life cycle is improved. Included in both upgrades, there is a new electric panel board that connects the rotary blowers and dedusting filters. There is a dedicated HMI operator panel to enable optimisation of the vacuum system separate from the CARICAMAT® control.

## HYDRAULIC UNIT REPLACEMENT

Over time, contaminants such as fine dust may accumulate on hydraulic rod surfaces, and oil leaks can develop, leading to valve leakage, raised oil temperature and increased internal pressure within the hydraulic unit – all of which reduce performance. Replacing the hydraulic unit at the first signs of wear or contamination is essential to restore optimal operation and maintain long-term efficiency.

## HMI AND PLC UPGRADE

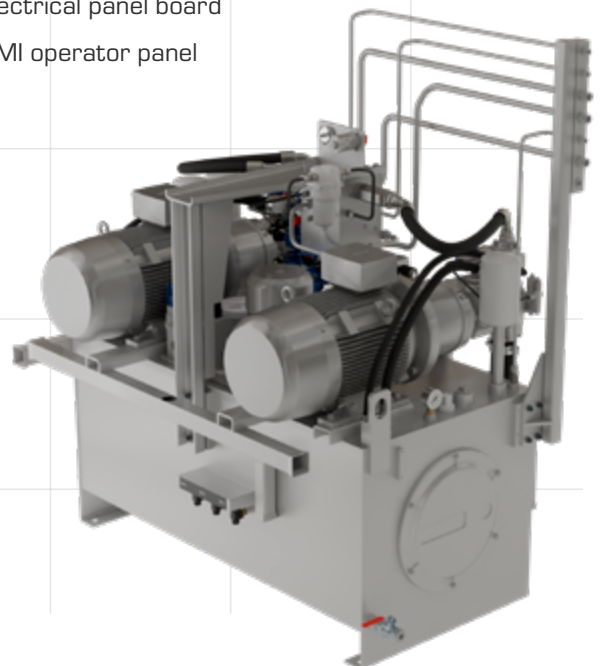
As electronic and control components age, the risk of obsolescence increases – making spare parts harder or even impossible to source. Upgrading the HMI and PLC eliminates this risk by replacing outdated hardware with the latest technology. In addition to long-term component availability, the new system brings improved machine performance, enhanced usability, and access to updated software features that ensure greater efficiency and control.

## VENTOMATIC GROUND LOADING SYSTEM

Some operations need more than just truck loading. For customers with export potential or storage needs, the Ground Loading System adds palletizing capability to the CARICAMAT®. This optional add-on transforms the machine into a dual-mode loader – ready for both truck dispatch and warehouse handling.

Adding the Ventomatic® ground loading system ensures continuous operation even when there is not a truck to be loaded. The system includes:

- Pallet Feeder
- Pallet Centering System
- Palletizing Roller Ways
- Safety Equipment
- Electrical panel board
- HMI operator panel



# PACKING & DISPATCHING EQUIPMENT SERVICES

Successfully getting your product ready for delivery is essential to a well-functioning production cycle. We will make sure your equipment is efficiently installed and commissioned, and then we'll take care of maintenance, on-the-job training, and help you troubleshoot any issues. Keeping your packing and dispatch equipment in excellent condition for productivity, we offer:

- Expert field-service visits
- Programmed maintenance services and audits
- Online technical support
- Fast spare-parts supply for programmed maintenance and for emergencies
- Equipment modernising and enhancement

## MAINTENANCE SITE VISIT

A maintenance site visit is the ideal way to help you solve emergencies, tackle repairs, and conduct troubleshooting. This visit includes preventive maintenance, calibrations, mechanical fine-tuning, and an optimisation of process parameters. Usually a mechanical site visit is a single intervention, open book agreement (payment according to fees for supervising personnel).



## SERVICE AGREEMENT

A service agreement helps you achieve maximum plant uptime and provides valuable preventive maintenance support to avoid unplanned shutdowns. The result is a stable production yield at the optimum level. Each service agreement contract is individually customised to meet your needs in terms of inspection, maintenance, and training. Usually, a service agreement contract includes a minimum of two visits per year (payment is via a lump sum).

## TRAINING

VENTOMATIC® offers you dedicated, tailor-made training to improve the skills of your staff and the performance and reliability of your installed equipment. The training can be held either onsite at your plant or at our VENTOMATIC® facility in Italy.

## SECURE PARTS YOU CAN TRUST

Get assistance with both existing and new equipment. We'll visit you to audit your equipment, to ensure you have the correct spare-parts stock and maintenance schedule. We can consult with you and offer relevant potential upgrades of your machinery to optimise the efficiency and productivity of your complete installation.

# FLSMIDTH CEMENT

[www.flsmidth-cement.com](http://www.flsmidth-cement.com)

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