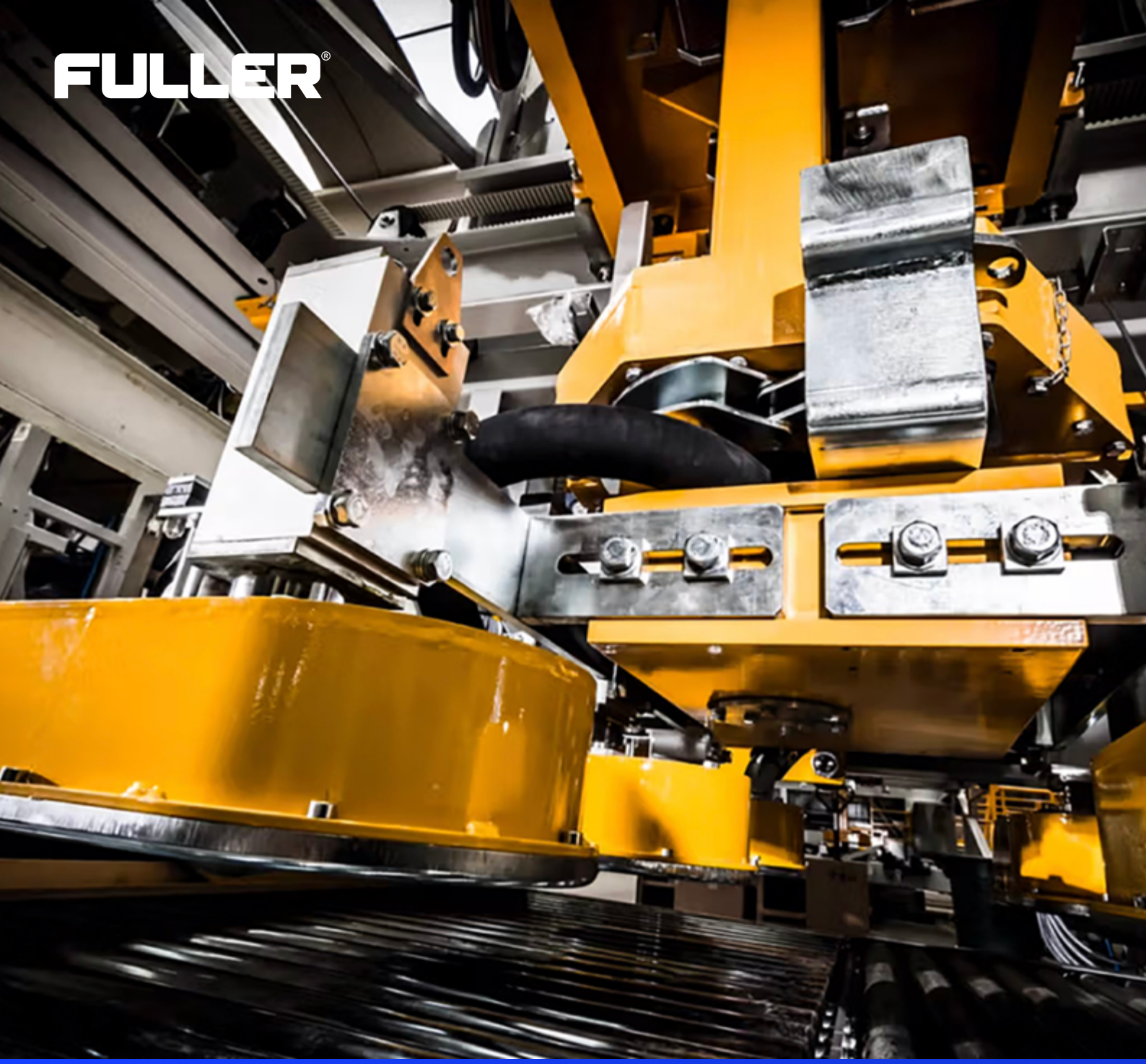
FULLER®



VENTOMATIC® UPGRADE SOLUTIONS FOR CARICAMAT® AUTOMATIC TRUCK LOADER

A COMPLETE AND FAST SOLUTION FOR RENEWAL

LOADING HEAD REPLACEMENT

Over time, mechanical wear can gradually reduce the performance of the automatic loader and increase the risk of operational failure. This wear can lead to unscheduled downtime and decreased overall plant efficiency — risks that can be effectively prevented with a complete head replacement.

KEY BENEFITS

01

Renew the performance of the automatic truck loader

02

Increase bag placement precision, speed and efficiency

03

Reduce maintenance costs and less downtime

LOADING HEAD REPLACEMENT

EVERY BAG AFFECTS THE BOTTOM LINE

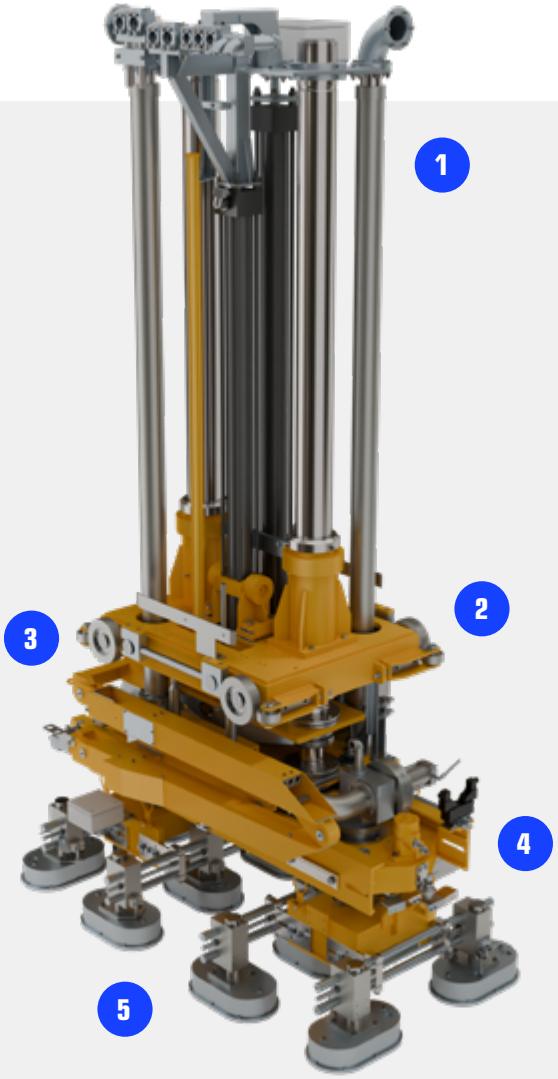
A full head replacement restores structural integrity and ensures continuous, reliable operation by renewing all components subject to wear.

The CARICAMAT® Automatic Truck Loader has been the premier truck loading solution for bagged bulk materials since the 1960s. It is a robust piece of equipment, but most of the strain is put on the loading head, which moves on three axis and lifts heavy bags at rates up to 3000 bags per hour.

Between the heavy lifting and the movement, the loader is subject to wear and tear over time, and if not properly maintained can lose performance and even become unsafe.

While it is possible to replace parts of the loading head with spares, patchy repair work can result in more downtime and higher costs over the long-term.

By contrast, replacing the loading head in its entirety ensures high quality across the piece, plus only one pause in production, which reduces the overall cost.



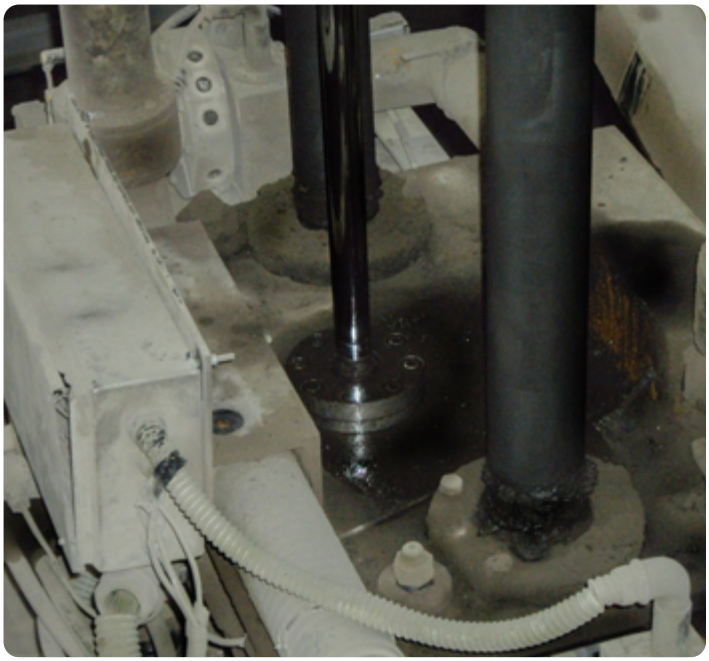
1. **Head column**
2. **Head carriage**
3. **Pantograph**
4. **Head support**
5. **Suction cups support**

The head replacement includes suction cup support, head support, pantograph, head carriage and head column.

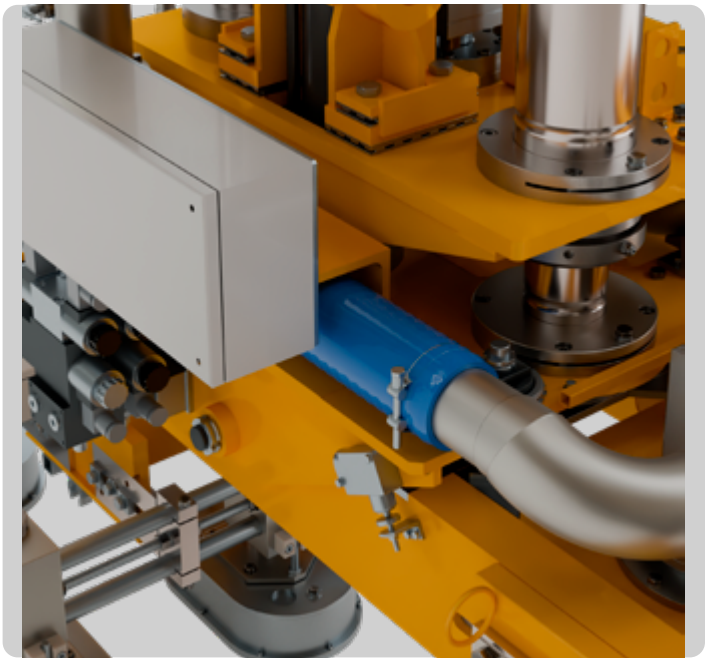
Safer handling

Lack of maintenance on the loading head — such as missing fasteners or insufficient lubrication—can compromise structural integrity and create unsafe working conditions.

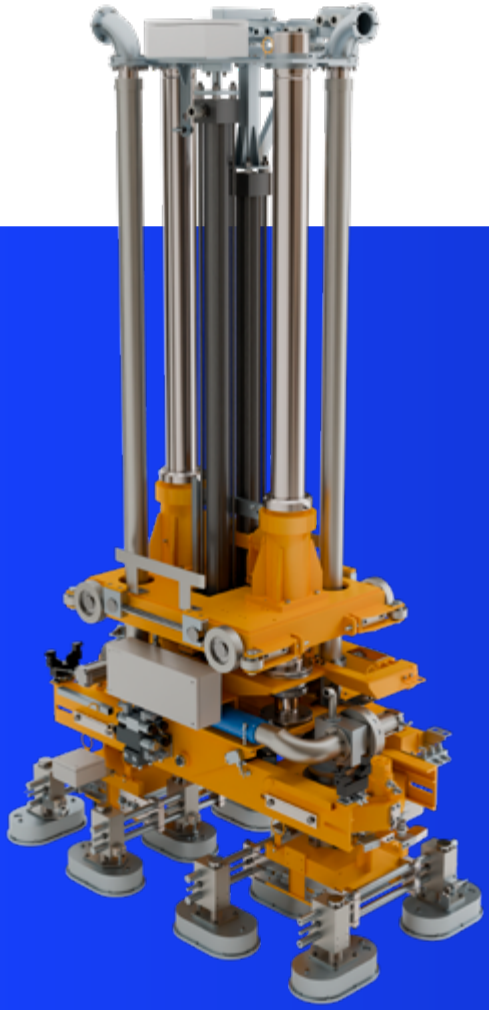
Proactive maintenance is essential to prevent such scenarios. Where wear is advanced, replacing the complete head ensures the recovery of safe, reliable handling operations and restores full equipment functionality.



Example of a poorly maintained loading head



New loading head with upgraded components



INCREASE BAG PLACEMENT PRECISION, SPEED AND EFFICIENCY

RENEW THE PERFORMANCES

REDUCED MAINTENANCE COSTS AND LESS DOWNTIME

MAXIMIZE THE ROI OF YOUR PRODUCTION

Optimize performance and profit: complete CARICAMAT® loading head replacement for guaranteed efficiency.

First scenario

From 1800 to 2300 bags/hour

Investment	Benefit	Payback Time
NEW LOADING HEAD REPLACEMENT PRICE	PRODUCTION INCREASE FROM 1,800 TO 2,300 BAGS/HOUR + SAVINGS ON MAINTENANCE	ABOUT 5 MONTHS

ROI 243%

investment recovered in 5 months

Second scenario

From 1800 to 2600 bags/hour

Investment	Benefit	Payback Time
NEW LOADING HEAD REPLACEMENT PRICE	PRODUCTION INCREASE FROM 1,800 TO 2,600 BAGS/HOUR + SAVINGS ON MAINTENANCE	ABOUT 3 MONTHS

ROI 391%

investment recovered in 3 months

IMPROVE PERFORMANCE - REDUCE MECHANICAL STRESS

IMPROVED HYDRAULIC CONTROL

The high operating speeds of the automatic truck loader place significant mechanical stress on the main frame and lifting head. To minimise these effects, an optimised hydraulic control upgrade is available, ensuring smoother speed transitions and precise movement control, with seamless integration into existing machines

KEY BENEFITS

01

Reduced stress on mechanics and frame

02

Increased equipment life

03

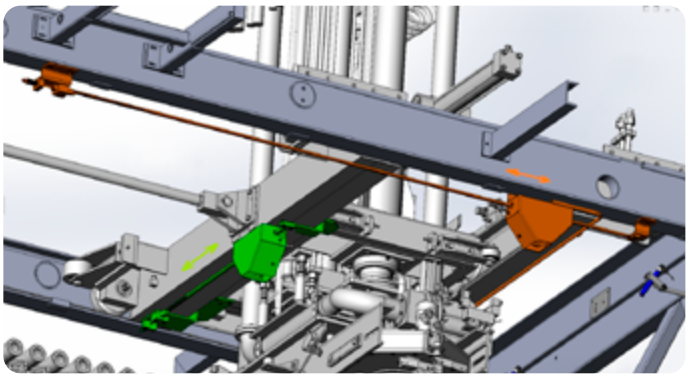
Lower maintenance

04

Smoother speed transitions

05

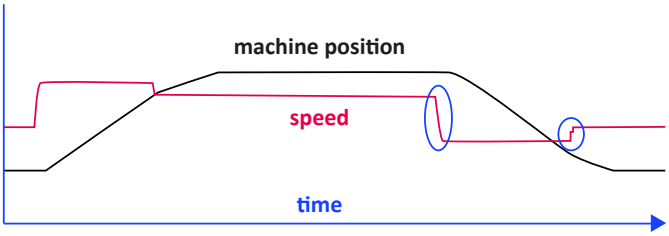
Precise movement control



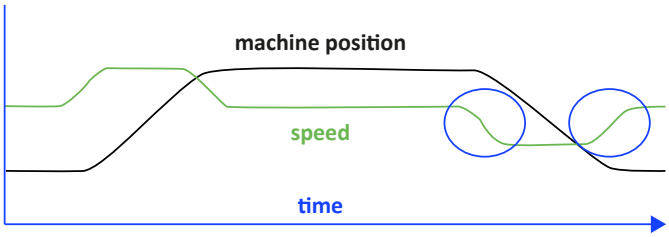
IMPROVED HYDRAULIC CONTROL

EVERY STROKE COUNTS TOWARD HIGHER OUTPUT

The addition of the hydraulic kit minimises shocks and vibrations by optimising speed transitions and enhancing movement control along both transverse and longitudinal axes. This leads to reduced mechanical stress across all critical components, lowering wear and tear and relieving stress on the structural frames. Despite being a relatively small upgrade, it significantly decreases the risk of cracks or structural failure.



WITHOUT KIT: sharp speed changes.
Generation of high mechanical stress.

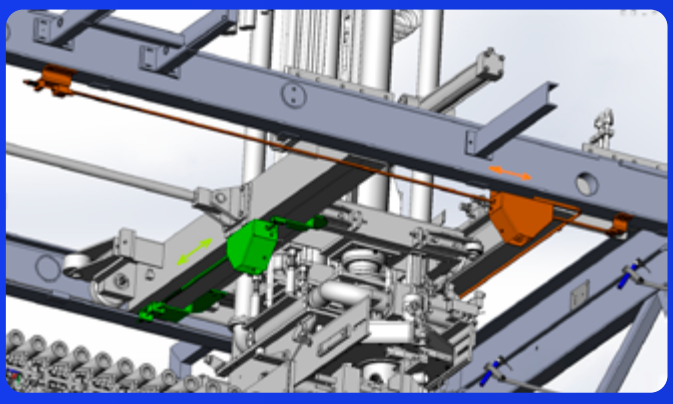


WITH KIT: smooth speed transitions.
Acceleration is reduced at minimum.

The kit consists of:

- A hydraulic part for handling movement.
- A mechanical part for feedback control of the movements
- A control unit, installed inside the main board
- New software

BETTER SPEED TRANSITIONS,
IMPROVED EFFICIENCY



BOOST PRODUCTIVITY AND CUT MAINTENANCE

VACUUM UNIT REPLACEMENT

Older 65-sized vacuum pumps require higher motor speeds to generate sufficient suction, leading to more wear, higher energy use, and increased maintenance. An upgrade to more powerful and efficient 85-sized pumps is now available. This retrofit significantly lowers motor RPM, enhancing vacuum performance while reducing maintenance frequency and spare parts consumption.

KEY BENEFITS

01

Improved reliability

02

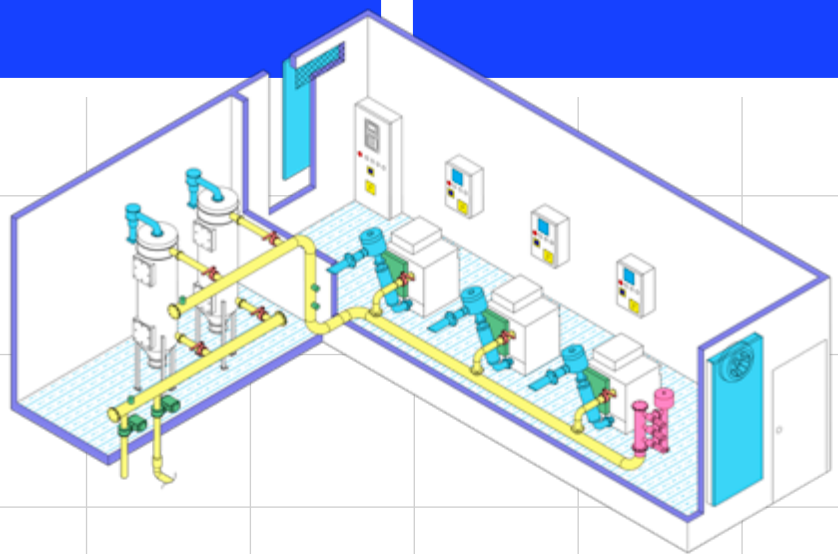
Easier maintenance

03

Reduced equipment stress

04

Increased productivity and equipment life



VACUUM UNITS REPLACEMENT

INCREASING THE PUMP SIZE TO ENHANCE PERFORMANCE

Vacuum operation is essential to the functionality and safety of the CARICAMAT® system. Without it, the equipment cannot operate, and any failure in the vacuum unit disrupts dispatch operations, causing process bottlenecks. Upgrading to a high-performance dry vacuum unit offers a reliable solution to reduce unplanned downtime while enhancing overall efficiency and operational continuity.

Resizing the system

Older dry vacuum systems may use multiple small pumps all running at maximum capacity to achieve the necessary performance. Replacing these with larger pumps increases the power and performance of the vacuum, but also reduces stress and maintenance, as the bigger pumps don't have to run at maximum speed.

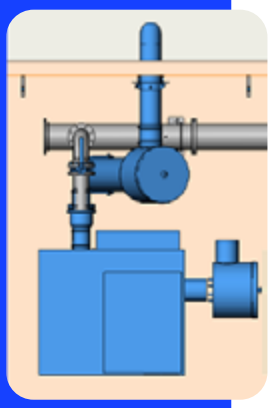
As part of the dry vacuum system upgrade, new dedusting filters are included to ensure high filtration efficiency and reliable operation.

Digital upgrade

A new electric panel board is included in the upgrade to connect the rotary blowers and dedusting filters. A dedicated Human Machine Interface (HMI) operator panel enables optimisation of the vacuum system separate from the automatic truck loader control.

The upgrade package includes:

- The pump
- Dedusting filters
- Piping
- Automatic and manual butterfly valves
- An electrical control panel
- A Human Machine Interface (HMI) operator panel



RESTORE OPTIMAL OPERATION AND LONG-TERM EFFICIENCY

HYDRAULIC UNIT REPLACEMENT

Contaminants such as fine dust may build up on hydraulic rod surfaces, potentially leading to progressive oil leakage. These conditions can cause valve leakage, increasing oil temperature and internal pressure within the hydraulic unit. The outcome is a gradual decline in system performance, reduced reliability, and a higher risk of failure.

KEY BENEFITS

01

Ensures consistent performance over time

02

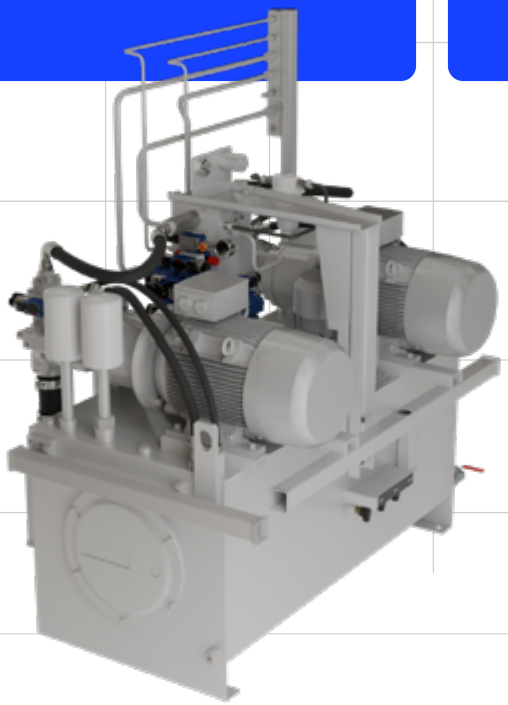
Performance restoration

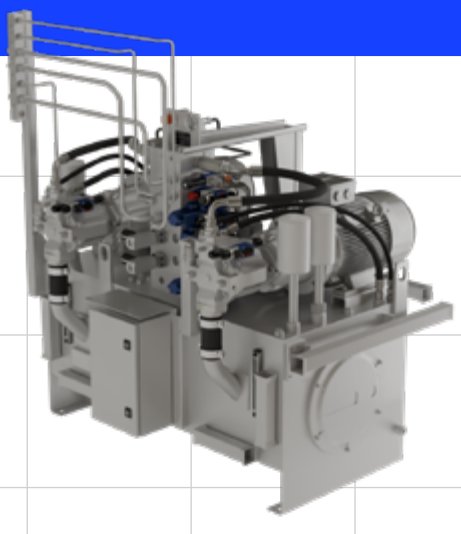
03

Reduce downtime

04

Lowers maintenance costs





MODERNIZE YOUR MACHINES, MAXIMIZE EFFICIENCY

HMI AND PLC UPGRADE

As electronic and control components age, the risk of obsolescence increases, making spare parts harder to source. Replacing outdated hardware with the latest technology ensures long-term availability, access to updated software features, and improved efficiency, control, and performance.

KEY BENEFITS

01

Elimination of electronic component obsolescence

02

Improved machine performance and responsiveness

03

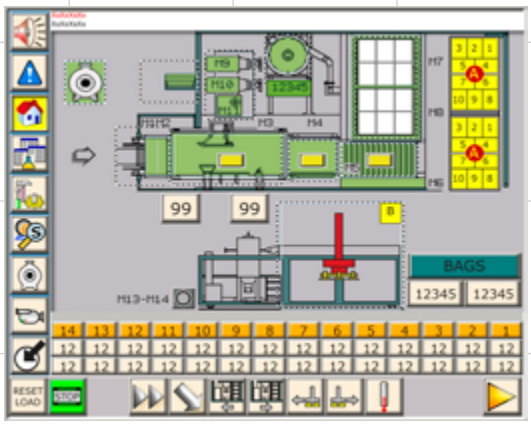
Modern user interface with upgraded software

04

Enhanced data collection and analytics

03

Increased system reliability and reduced downtime



MAXIMUM VERSATILITY FOR LOADING

VENTOMATIC® GROUND LOADING SYSTEM

The system adds palletizing capability to the truck loader, making it a true dual-mode loader. Ready for both truck dispatch and warehouse handling, it combines the functionality of two machines in one, offering direct truck loading and efficient pallet management.

KEY BENEFITS

01

Dual loading capability: direct truck loading and pallet loading

02

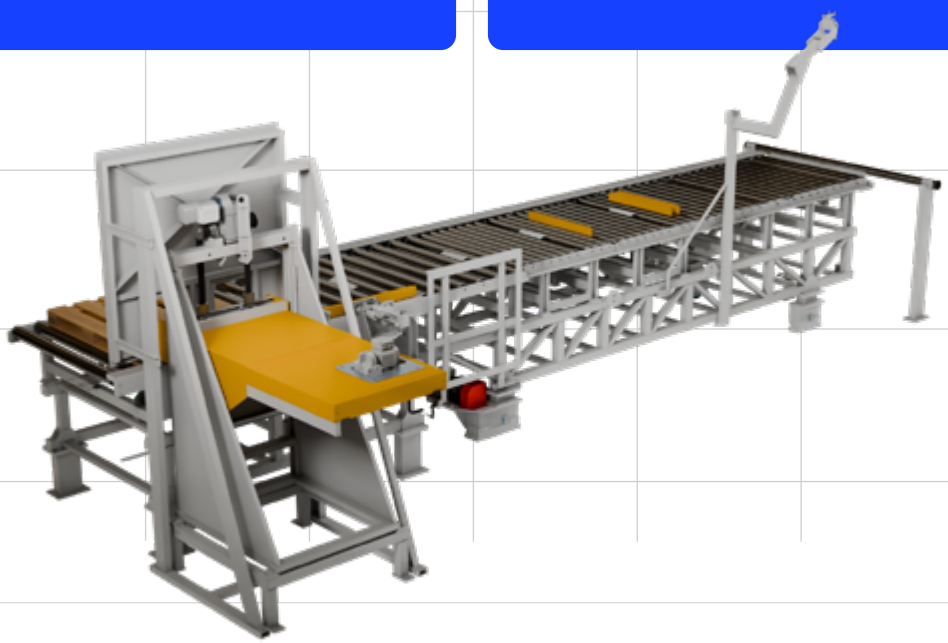
Two machines combined in one

03

Increased flexibility in loading operations

04

Automated pallet handling process



VENTOMATIC® GROUND LOADING SYSTEM

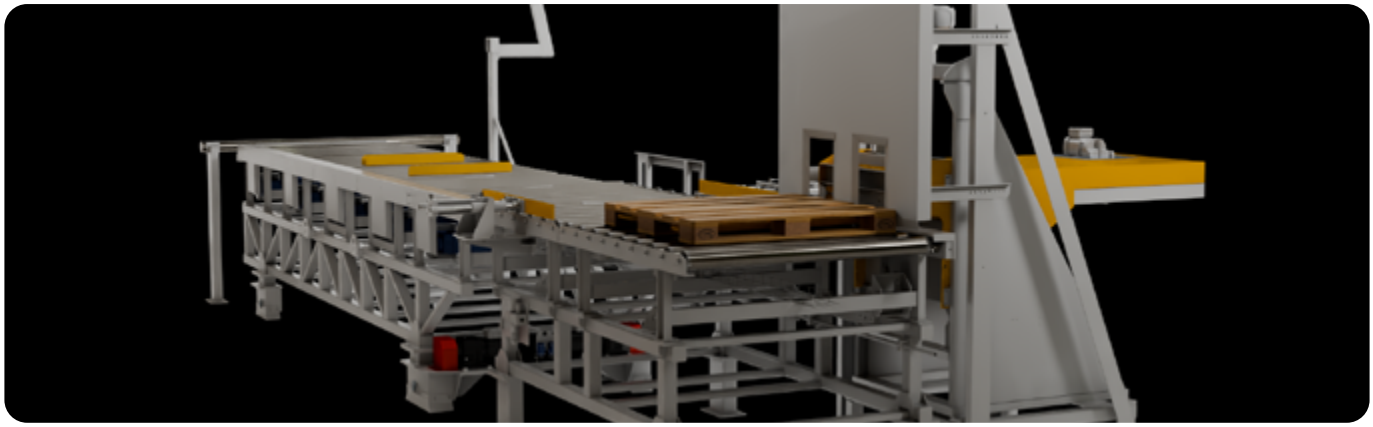
ADAPT YOUR LOADER TO STORAGE AND EXPORT BAGS

Increased flexibility in loading operations

Adding the VENTOMATIC Ground Loading System in a plant allows the use of the automatic loader even when there is no truck available to be loaded. This ensures continuous operation and increased flexibility in the overall production flow.

Automated pallet handling process

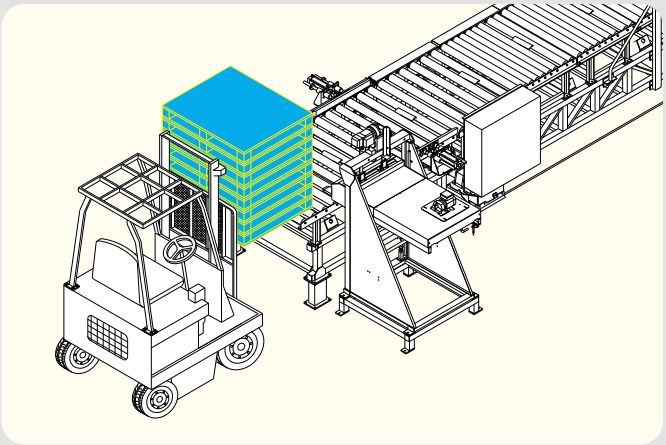
The system includes an empty pallet feeder with roller way and a mobile roller way for the palletization operation. The feeder deposits empty pallets, which are conveyed by the motorized roller ways to the loading area. Once positioned, the automatic loader begins depositing layers of bags according to the programmed loading patterns. After loading is complete, the full pallets are transferred to the take-up area, where they are collected by an operator using a forklift and moved to the pallet storage area.



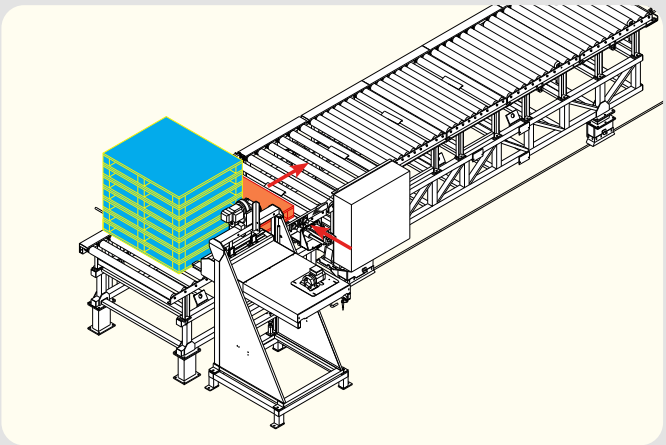
The ground loading system includes:

- Pallet feeder
- Pallet centering system
- Palletizing roller ways
- Safety equipment
- Electrical panel board
- HMI operator panel

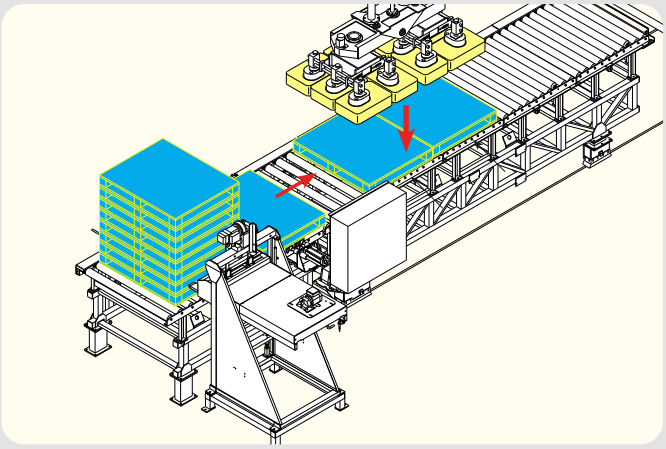
STEP-BY-STEP LOADING PROCESS



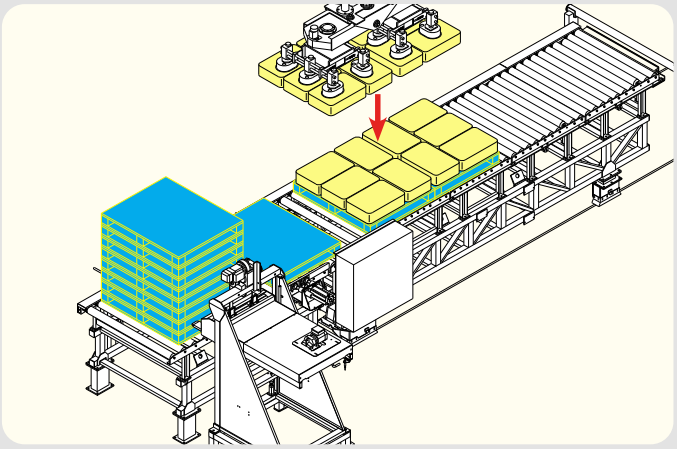
1 A forklift truck positions a stack of empty pallets on the roller way.



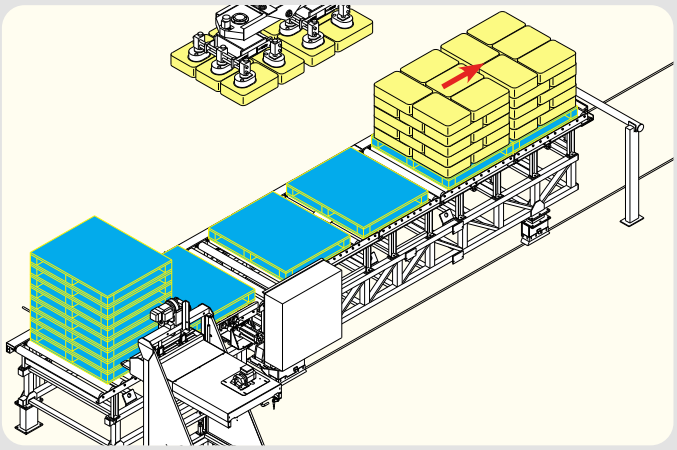
2 The pallet feeder lifts the stack of pallets and deposits the first empty pallet on the roller way. The pallet conveyed by the roller ways is positioned by the centering blades.



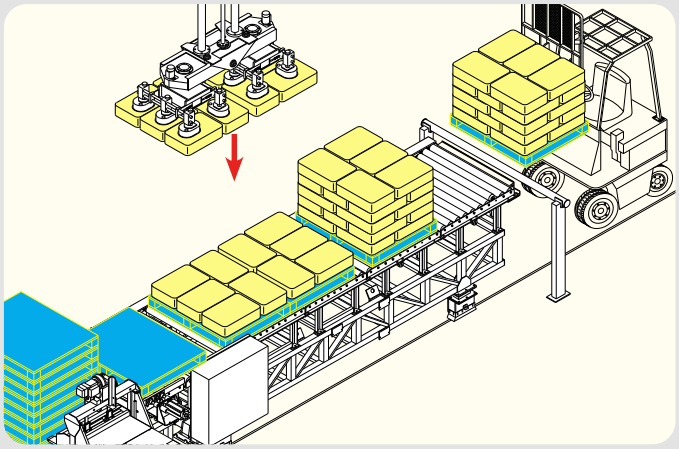
3 The empty pallets move onto the bag-loading roller ways.



4 The automatic loader deposits the layers of bags on the pallets until the stack has been completed.



5 The full pallets move onto the unloading roller way.

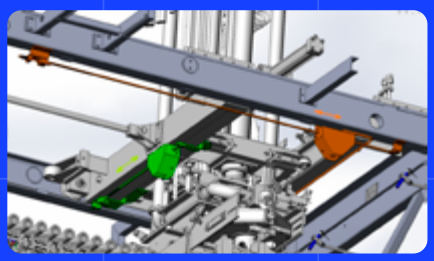


6 A forklift truck takes the full pallets from the roller way and deposits them in the pallet stock area.

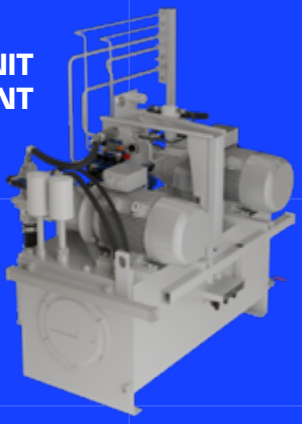
CARICAMAT® UPGRADE SOLUTIONS RESTORE FULL EFFICIENCY

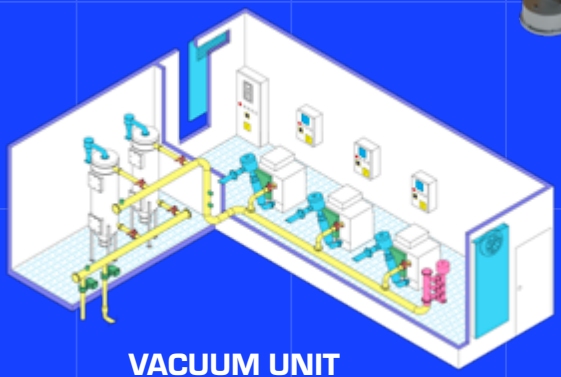
LOADING HEAD REPLACEMENT

IMPROVED HYDRAULIC CONTROL



HYDRAULIC UNIT REPLACEMENT





VACUUM UNIT REPLACEMENT

VENTOMATIC GROUND LOADING SYSTEM

HMI AND PLC UPGRADE

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