

VENTOMATIC® PACKAGING AND LOGISTICS

CARICAMAT® UPGRADE SOLUTIONS

Restore your CARICAMAT® to the best performance





CARICAMAT® HEAD REPLACEMENT

RESTORE THE PERFORMANCE OF YOUR CARICAMAT® WITH A NEW HEAD Over time, your CARICAMAT® can suffer wear and tear that impacts performance. When the damage gets too great, production capacity drops, and the risk of failure increases. No manufacturer can afford to lose productivity.

Return your CARICAMAT® to optimal productivity, reliability and performance with a complete CARICAMAT® Head replacement.

KEY BENEFITS

- Renew the performance of your $\textsc{CARICAMAT}^{\mbox{\tiny (B)}}$
- Increase bag placement precision, speed and efficiency
- Improved range of vertical strokes
- Reduced maintenance costs and less downtime

Every bag affects the bottom line

The CARICAMAT[®] 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 CARICAMAT[®] 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 CARICAMAT[®] 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 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.



Safer handling

The picture shows a poorly maintained CARICAMAT® head. Missing bolts and a lack of grease create a hazardous operating environment. If the CARICAMAT® head was to fail during operation, there is a risk that machinery or full bags of product could fall, injuring personnel in the loading bay. Of course, proper maintenance should prevent the machinery from reaching this state. Fortunately, with a new CARICAMAT® head, this cement operator was able to regain the full performance of its truck loading operation.

Increased loading range

The original CARICAMAT[®] was built with a fixed vertical range of movement, i.e. able to pick bags up and place them onto trucks at specific heights. But, as loading operations have evolved, we have seen there are times when a greater range of movement is required – for example, if your first floor is a non-standard height, or your truck platform has changed since you installed the CARICAMAT[®]. If you're replacing the complete CARICAMAT[®] head, you can add a new component to enable a greater range of movement.



Example of a poorly maintained CARICAMAT®





CARICAMAT® UPGRADE VACUUM UNIT REPLACEMENT

Restore productivity and reduce maintenance with a vacuum unit replacement

KEY BENEFITS

Increased productivity

Improved reliability

Easier maintenance

Reduced equipment stress

Increased equipment life

If you want to avoid unscheduled downtime and improve overall performance and efficiency, there are two options to upgrade your CARICAMAT® vacuum unit.

- Wet to dry the replacement of the liquid ring vacuum unit with a dry system.
- Dry vacuum upgrade increasing the pump size to increase performance.

In both cases, the result is greater efficiency, reduced maintenance and longer equipment life.

From wet to dry

Wet vacuum units have complex operational and maintenance needs. The water level, pressure and temperature must be kept stable for the vacuum to work efficiently. Meanwhile, the space required for water storage is significant. Plus, in areas where water is not abundantly available, water transport is also essential and can be very expensive. All of these issues can be avoided by switching over to a dry vacuum process.

Dry vacuum units benefit from greater reliability and easier maintenance as there are fewer parts. The elimination of water also significantly reduces the footprint of the system and of course there are no longer concerns about water consumption, water transport or water quality.

This upgrade package includes the pumps, dedusting filters, piping, and automatic and manual butterfly valves.



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.

Where a dry vacuum system is being upgraded, new dedusting filters are not included as standard but can be provided if required.

Digital upgrade

A new electric panel board is included in both upgrades to connect the rotary blowers and dedusting filters. A dedicated HDMI operator panel enables optimisation of the vacuum system separate from the CARICAMAT[®] control.





CARICAMAT® UPGRADE IMPROVED HYDRAULIC CONTROL

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 hydraulic control upgrade, which can be easily retrofitted to existing machines.

KEY BENEFITS

Reduced stress on mechanics and frame

Increased equipment life

Lower maintenance

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



Without kit: sharp speed changes. Generation of high mechanical stress 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.



With kit: smooth speed transitions. Acceleration is reduced at minimum

The kit consists of:

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





HMI software is installed with the new system, which can be used by personnel during installation and start-up to configure parameters and facilitate troubleshooting.

A502 MACCHINA SPENTA GEN				
RUNTIME >> KIT UPGRADE				
	KEADY			
2	ALARM	ACTIVE		
<u> </u>	V I/O ERROR	Standby		
A	Motor start: r	otor start: numn 1		
	Motor start: pump 2		OFF	OFF
1	Pressure control: pump 1		OFF	42.5
	Pressure control: pump 2		OFF	37.5
	Flow control: longitudinal		-26.9	
Ě	Flow control: transversal		-Q,1	0,0 0.0 579 0 mm/sec 579 0
\vdash	Power on		OFF	SPEED POSITION DAG ERK.
	Automatic		OFF	
	Reset command		OFF	

The HMI operator panel after the upgrade

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