HAVER & BOECKER





WE SET THE STANDARDS!
HAVER ROTOCLASSIC®

HAVER ROTOCLASSIC®

The new ROTOCLASSIC® from **HAVER & BOECKER unifies** years of experience, innovative technology and the market requirements. By using a modular design, it offers a level of flexibility which up to now has been unheard of. The HAVER ROTOCLASSIC® is ahead of its time and we are able to fulfil a wide range of customer wishes and needs and it keeps pace with the ever increasing demands of the rapidly changing global markets.

Every filling spout is practically a fully functional single-spout filling machine. For maintenance purposes, a single module can be removed and filling operation can still continue to run without problems.

Also maintenance and operator friendliness have been improved considerably. Using only a few motions of the hands, the main wear parts can be replaced quickly and easily. The machine's compact design reduces the need for space. In addition to high packing speeds, HAVER technology also ensures clean packing operation. Reduced dust contamination and minimal energy consumption are additional advantages.

Our MEC® weighers assure high weight accuracy.

This rotating packing machine is designed for packing loose, bulk products at the high speed range of up to 6,000 bags/hr.

With the ROTOCLASSIC®, the following bulk materials can be filled:

Powder-type, fine and coarse grain, difficult flowing products, including mixtures of fine and coarse components, granulates, crystals or similar agglomerated goods.

4 to 16-spout packers are available for filling cement into 25 kg or 50 kg valve-bags. The ROTOCLASSIC® goes to work also in the building materials and chemical industries.

Our broad product range offers the right solution for every need along with high standards of flexibility.

The HAVER ROTOCLASSIC® handles all kinds of valve bags:



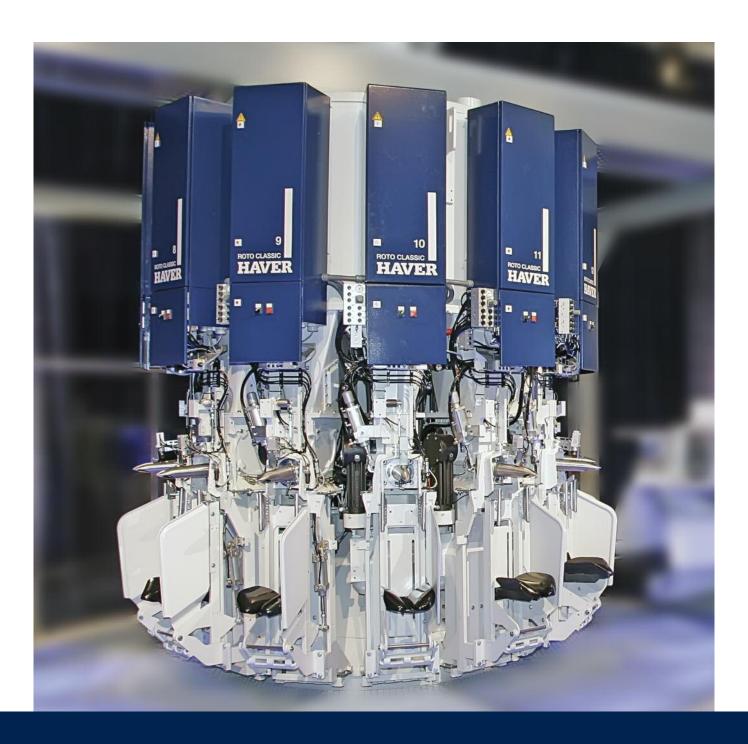












HAVER ROTOCLASSIC® Capacity overview / unsealed

Spouts	up to bags/hr	
	25 kg	50 kg
4	1,500	1,300
6	2,250	1,950
8	3,000	2,600
10	3,750	3,250
12	4,500	3,900
14	5,250	4,550
16	6,000	5,200

depending on the product

Solution at hand

The HAVER ROTOCLASSIC® family starts with the 4-spout design and concludes with the high performance 16-spout HAVER ROTOCLASSIC®. A wide product range offers an ideal

solution for each project and high flexibility. With the modular design the machine can grow with the constant changing requirements of your company!







Proven technology is standard

The improved vertical impeller system and the MEC® electronic weighing system are the main features of the new HAVER ROTOCLASSIC®. Of course the HAVER ROTOCLASSIC® already fulfils all required calibration laws world-wide today.

Compactness and maintenance

The HAVER ROTOCLASSIC's more compact design allows constant easy maintainability. Only a few steps are necessary to change the main wear parts quickly and easily. This assures reduced downtime and greater plant efficiency. Its overall reduced space requirements decrease transport costs and on-site space requirements.

Flexibility and security

The modular design of the HAVER ROTOCLASSIC® offers maximum of flexibility, and thus we can respond exactly to individual customer requirements. Dismantling the modules can be done by the customer without problems. After dismantling and during maintenance, packing operation can continue with the remaining modules. This guarantees high machine availability and maximum plant efficiency.

In addition to the high filling capacities up to 6,000 bags/hr, HAVER technology ensures clean packing operation, also without using the valve sealing technology! If requested, an extension to the proven ROTOSEAL® technology is possible at any time. Tightly sealed bag valves guarantee maximum cleanliness and security.

Environment and Technology

The development of the HAVER ROTOCLASSIC® placed its focus on minimising energy consumption. The impeller drive uses 4-kW standard motors. The de-dusting systems of the filling system also consume minimal energy and have low dust emissions.

The heart of complete solutions

The ROTOCLASSIC® is not only sold as a single machine, but it is also the heart of a sophisticated packing and despatching plant.

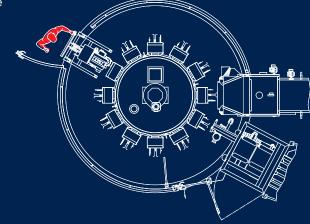
Automation using the bag applicator

For increasing speed, we offer the automatic bag applicator as a supplement to the HAVER ROTOCLASSIC®.

Easy maintenance via easy access

Due to its highly accessible base design and a clear arrangement of the control elements, the HAVER ROTOCLASSIC® offers a high level of maintenance comfort. The disassembly of a complete filling spout for performing annual overhauls or replacing parts is possible while still allowing the machine to operate.

- Increased ease of maintenance while allowing the machine to continue operation
- Simple tools and just a few motions of the hand allow assembly and disassembly in little time





Clear arrangement

New aeration cartridges have been developed to facilitate the rapid and easy exchange of aeration nozzles. Only three screws are dismantled to remove the aeration cartridge.

Maintenance is done in just minutes, for example disassembling a seal package in three steps:

- Disassemble filling box cover (loosen 4 screws)
- Disassemble impeller wheel (loosen 3 screws)
- Remove seal package (loosen 8 screws)

Afterwards the seal package is taken off, and the worn seals are replaced. The components are installed in the reverse order and packing operation can then resume.



HAVER ROTOSEAL CLASSIC®

The filling module portfolio of the HAVER ROTOCLASSIC® also includes the ROTOSEAL® filling module. In addition to sealing the bag valves completely shut at the filling spout, it can reach a packing speed of over 4,000 bags/hr, and do so with the highest standards of cleanliness. The modular design of the filling spout allows an upgrade from a conventional portfolio to a high-performance product.

Cleanliness via ultrasonic bag closing

For the greatest possible cleanliness over the entire packing and transport process, we recommend equipping the spouts with ultrasonic bag-closing units. This not only reduces costs arising from wear, but also decreases filter capacities and energy consumption.

How do you profit from the HAVER ROTOSEAL® system?

The list of advantages:

- The bag valve is completely sealed shut.
- A separate sealing unit for each spout means greater capacity utilisation.
- Bag cleaning systems are eliminated.
- Reduced filter requirements
- Reduced energy consumption
- Longer operating lifetimes for downstream machines
- Improved work conditions from less dust emissions
- Dust-free transport from the packer to the palletizer
- Reduction in maintenance costs through a belt conveyor

The filling module portfolio

ROTOCLASSIC®

 for ambitious applications without sealing technology

ROTOSEAL CLASSIC®

 for complete sealing of the bag valve at the filling spout

now does full modularity benefit your packing plant? The list of advantages:

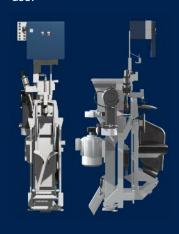
- On-site disassembly of a complete filling module for inspections now possible.
- At the same time, production continues for the remaining filling spouts.
- With the installation of several packing machines, the filling module can be replaced by one spare filling module, thus assuring full packing machine capacity utilisation.
- Your plant is not bound for years to a single filling technology and a limited packing rate.
- Extension or replacement by larger packing units, for example upgrading from 8 to 12 spouts, possible at any time
- Retrofitting or expansion to higher packing units by replacing the module carrier ROTOCLASSIC® while keeping and further using the filling module is possible.
- In addition to further conversion and extension possibilities, the large filling boxes can be exchanged by smaller ones, or the filling technology can be converted from vertical to horizontal.
- Replacement by a completely new machine is no longer necessary.



Optimizing individual demands

The filling module contains all components and assembly groups necessary for the filling system. It can be described as an almost fully functional 1-spout machine that is arranged in a sequence of 4 to 16 spouts. Through the targeted extension of components, it is easy to fulfil the individual requirements of the filled

products and the bags you use.



The filling module portfolio

The next grade above the cement module (see photo left) is the ROTOSEAL® module (see photo right), which offers various equipment possibilities depending on your needs.

Here the bag's valve is sealed shut using ultrasonic welding technology, thus fulfilling the highest standards with regards to bag cleanliness.



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