

HAVER & BOECKER



CEMENT

PACK YOUR POWDER IN PE **WATERPROOF. CLEAN. PROFITABLE.**

Your System Guideline for
Production, Sales and Marketing



HAVER & BOECKER

INTRODUCTION

PACK YOUR POWDER

What if there was a way to package your products into a completely water-tight packaging? To offer your clients this waterproof, clean and profitable container with a high performance.

Well, there is today.

HAVER & BOECKER developed the ADAMS® technology in order to allow powdery bulk material producers to fill their powderbulk product into an attractive, safe and tear-resistant PE packaging.

Chemicals have been filled into PE using FFS technology since the 1970s. Traditionally, FFS technology could only be used when filling granular product. Filling powder into plastic was always impossible. The reason was residual air. Air is naturally in powdery products, avoiding compact packing and easy handling.

Motivated to break this technological paradigm, HAVER & BOECKER created the ADAMS®, a hybrid concept that combines the traditional valve-bag filling process with the FFS technology.

Worldwide currently we have more than 100 ADAMS® spouts installed, filling cement continuously in PE bags.



Enjoy studying this guide and learn more about a high-performance packaging. In case you have any more question, please get in contact with us or all our experts on **www.packyourpowder.com**.

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The bags, which we fill with our ADAMS® Technology, are pure PE-based and 100% recyclable. This is another step forward to a circular economy.



PROCESSING STORAGE MIXING FILLING PACKING PALLETIZING LOADING AUTOMATION





FOCUS:

Your advantages as a manufacturer of cement

For your Production

- Allows year-round production as packaged goods can be stored outdoors
- Stable in storage up to 24 months
- Less space needs for empty bags
- Tear-resistant, water-tight and precisely weighed packaging
- Dust-free work surroundings for workers produce a satisfying work atmosphere
- Clean bag filling means less production downtime from cleaning works
- Safe transport allows for trouble-free handling
- Increased process reliability for the entire packing line
- Reduced capital investment for peripheral systems

For your Sales / your Marketing

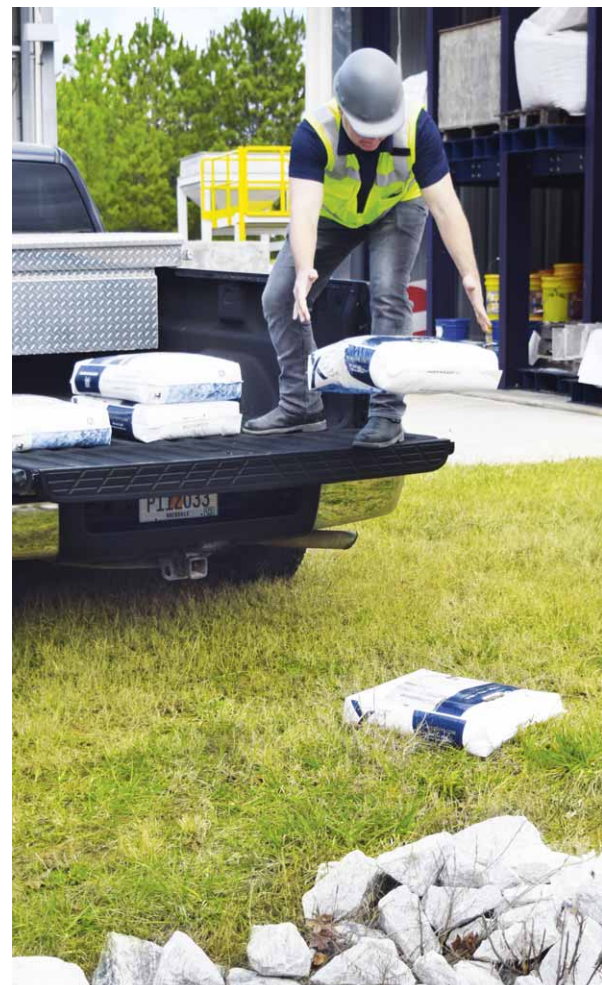
- Potential for price increases
- Boosting market share
- Strong arguments against competition with the new, higher performance packing:
 - clean
 - attractive
 - tear-resistant
 - water-proof
 - can be totally emptied
 - recloseable
 - stability in storage
 - recyclable
- Positive impact on the company's and product's image for customers and employees
- Attractive appearance directly at the point-of-sale makes your product stand out above the rest
- Secure transport means satisfied customers and end-consumer
- Contributes to sustainability
- Goods and bags cannot be copied
- Potential for perfect bag printing



FOCUS:

Your advantages as a dealer

- Potential for price increases
- Boosting market share
- Tear-resistant and water-tight packaging
- Outside storable
- Less covered space requires
- Stable in storage up to 24 months
- Attractive and clean presentation
- Dust-free work surroundings for workers produce a satisfying work atmosphere
- Strong arguments against competition with the new, higher performance packing:
clean • attractive • tear-resistant • waterproof
can be totally emptied • stability in storage
reclosable • recyclable
- Safe transport means trouble-free handling and satisfied customers and end-consumer
- Positive impact on the company's and product's image for customers and employees
- Attractive appearance directly at the point-of-sale makes your product stand out above the rest
- Contributes to sustainability
- Less material loss due to safe packaging



FOCUS:

Your advantages as an enduser

- Tear-resistant and waterproof
- Outside storable
- Less covered space requires
- Less material loss due to the safe packaging
- Safe transportation and clean handling
- Longer durability
- Residual-free emptying
- Reclosable
- Easy removable packaging due to recyclable value fabric packaging
- Positive impact on the company's image for the customer and employees
- Contribution to sustainability

YOUR BENEFIT:

WATERPROOF

Top quality in PE bags

The highest quality right from the beginning – this is what products filled with the ADAMS® technology as well as their plastic packaging offer. Tightly sealed PE bags stand for a long lifetime and a consistently high product quality for powdery products along the entire transport and storage chain.

Stored outside or inside.

Thanks to the robust and exceptionally tight PE material, you have the following advantages:

- PE bags offer a high level of UV and aroma protection, and thus the quality of the filled product provides high performance over the long-term.
- Since they are especially durable, PE bags help to prevent customer complaints – and ensure top product quality.
- The tear resistance of the packaging guarantees up to 95% less transport and warehousing damage.
- Due to the high level of frost and weather resistance offered by PE bags, the packed products are always reliably protected even under harsh outdoor weather conditions and allow your customers to order in large quantities.



At www.packyourpowder.com interested visitors can get informed on the filling of powder products into PE packages.

www.packyourpowder.com
www.haverboecker.com



YOUR BENEFIT:

CLEAN

Clean and attractively packed

A clean and appealing presentation at point of sale is crucial for a product's success.

The packaging not only protects the product, but it also conveys a message to your customers. On the market it bears your company's image. At building sites, during transportation or storage, on the sales floor, inside or outside – PE bags ensure dust-free surroundings, as well as a clean and attractive presentation along the entire delivery and storage chain.

The ADAMS® technology already achieves clean results during the filling process, amongst others due to product compaction within the package.

This allows the following advantages:

- Clean filling coupled with the packaging's tear-resistance assures low dust levels – and thus high protection of your operating personnel.
- During filling, transport or storage, the bags protect the environment from possible pollution from hazardous contents.
- The improved printed, glossy image offers new possibilities for layout and design. The end-buyer always receives an attractive and clean package that contains a long-lasting and premium quality product.



YOUR BENEFIT:

PROFITABLE

Highly economic

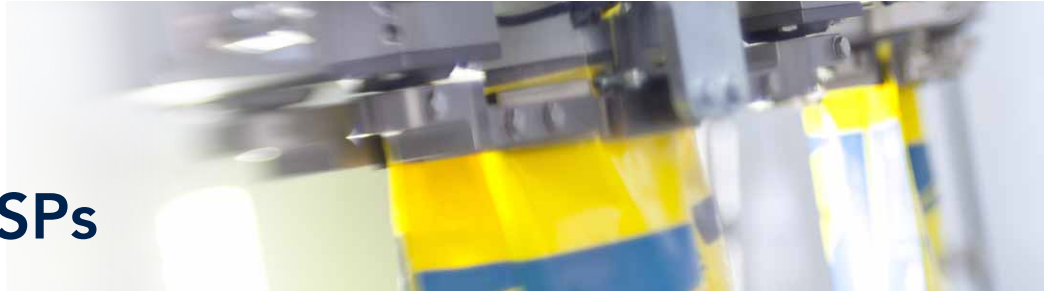
PE bags that are handled with the ADAMS® technology can be presented in an appealing manner, and offer a decisive competitive advantage. Further more offers cost savings in storage, transportation, material and staff.

Practically this are your advantages:

- Ultimately the packaging's appearance is decisive when it comes to competitive advantage. A masterful presentation by PE bags in the environment of complimentary products brings with it a sales-boosting value that gets reflected in market share.
- Because products now may be stored outdoors, they are no longer seasonal. Your plant can produce with a constant capacity utilization over the entire year. This secures sales during periods of peak orders, makes production smoother, saves on unnecessary extra work and simplifies planning.
- Already before filling, the empty bags need less space in transport and storage - thus leading to lower costs. Moreover they can be stored outdoors and so reduce the need for roof cover. The employees save time with ordering and the feeding of the filling machines.
- Because of low dust levels during filling there is less wear and tear to the machines and downstream systems. The needed materials for maintenance and repair decrease and machine downtime is reduced. The results: constant production capacity utilization and lower operating costs.
- By using PE bags you can also significantly save on energy and reduce CO² emissions.



The ADAMS® USPs



HAVER & BOECKER ADAMS® technology stands for the filling of powder-type products and those with difficult flow properties into watertight PE packaging.

Packing with Form Fill Seal machines has long been the rule for granular and grainy products. And to allow air escape, packaging material may be needled or micro-perforated.

But this is not possible with powder-type products because the product's dust portion leaks out. Product compaction inside the bag and air escape during filling are the fundamental requirements for achieving a clean and efficient packing result. The filling systems are based on the HAVER & BOECKER ADAMS® technology, and with their special technical features they are highly convincing.

High performance machines with a complete spectrum of packing performance

We offer to you a high-speed system with a continuous filling speed performance of up to 2,000 bags per hour with its HAVER & BOECKER ADAMS®. In 2014 we round out the lower end of the packaging spectrum by introducing the HAVER & BOECKER ROTO-PACKER® mini ADAMS®. With a steplessly selectable bag weight, the filling of small bags made of prefabricated side gusset film tube or from flat film is possible.

Product specific dosing and vibrating compaction systems (vibrating bottle; patented inner compactor)

Based on the components of the rotating HAVER ROTO-PACKER®, the HAVER & BOECKER engineers developed a new filling module with gross weighing for reduced filling times.

The combined MEC® control and weighing electronics - a development of HAVER & BOECKER - ensures exact fill amounts. Product compaction inside the bag is a fundamental requirement for achieving a clean and efficient final result. Inner and outer vibration compactors provide the needed product compaction. Thanks to micro-vibrations, air bubble automatically rise upwards within the product. The advantages offered by this mechanical process are high reliability and reduced downtimes.

The secret is the air removal at and inside the bag.

Film material savings

HAVER & BOECKER ADAMS® machines also save on film consumption. Thanks to its efficient product compaction, smaller and more compact bags with less volume result in significant material savings for customers.

Reduced height – HAVER & BOECKER machines are compact like no other machine on the market

HAVER & BOECKER ADAMS® machines are characterized by their minimal height. They are compact in design and completely enclosed inside a housing unit. This offers special advantages when existing machines need to be replaced and only limited area and height are available for new replacements.

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