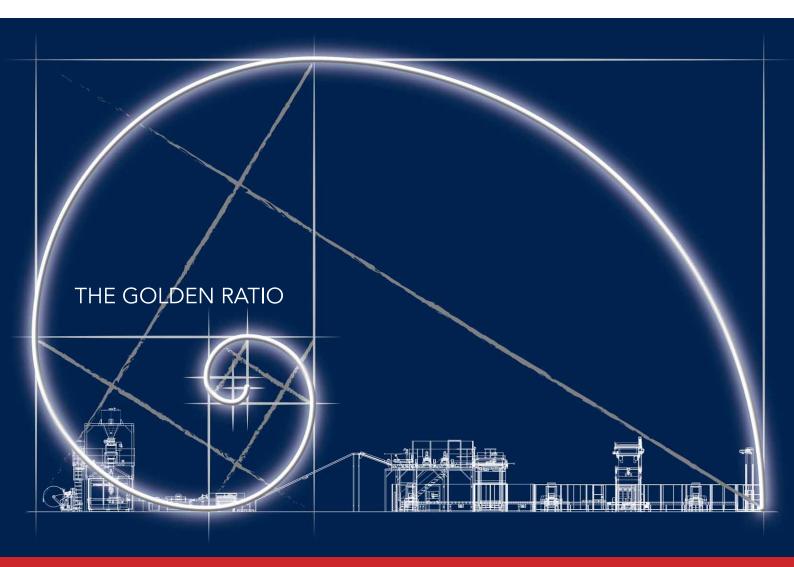
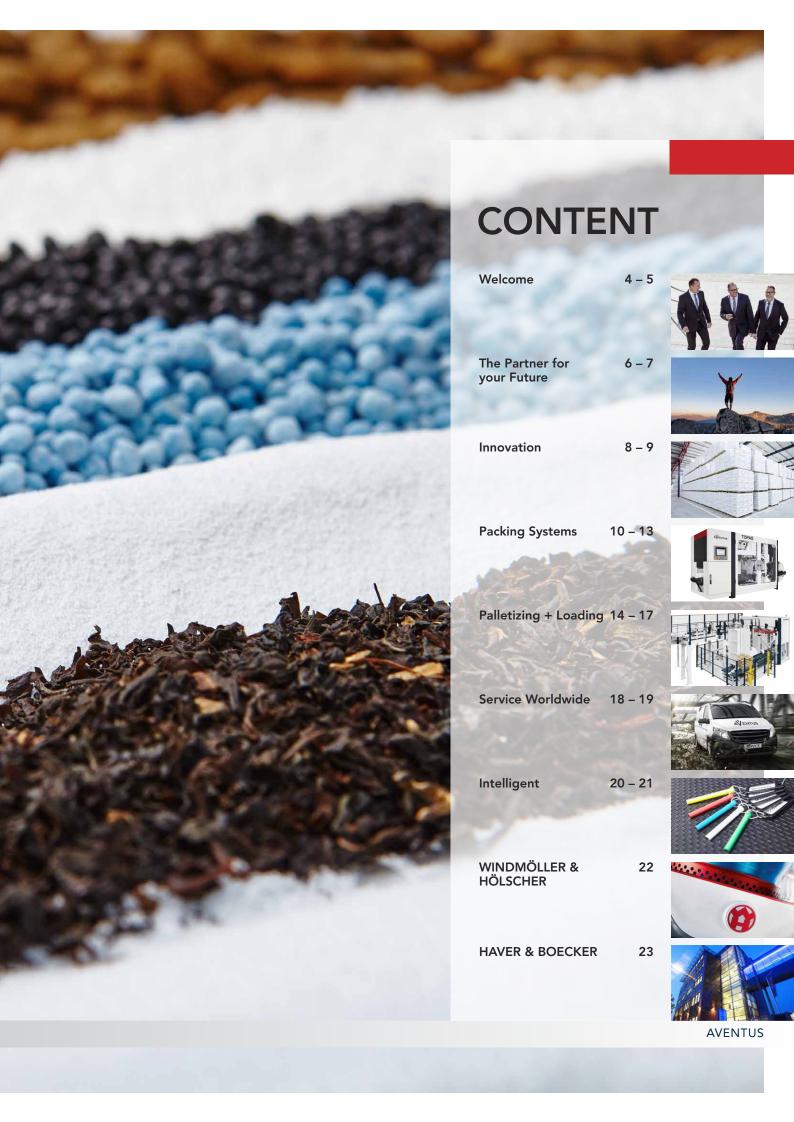


PERFECT PACKAGING TECHNOLOGY FOR FREE-FLOWING BULK PRODUCTS







INNOVATION: CHOOSE THE BEST OF TWO WORLDS



Our product range offers the perfect packing and logistics solutions for the flow of your processes.

FILLING TECHNOLOGY

- TOPAS & INTEGRA® ISF FFS packing machines
- INTEGRA® IOF packing machines for pre-made open bags
- ELEMENTRA® EGF packing machines for Big Bags and octabins

PALLETIZERS

- TERRAM floor level in-feed palletizer
- PLATINUM and ARCUS high level in-feed palletizer

LOAD SECURING

ARGON –Hood stretchers





AUTOMATION

- Process control
- Warehouse management
- Batch management
- Smart factory

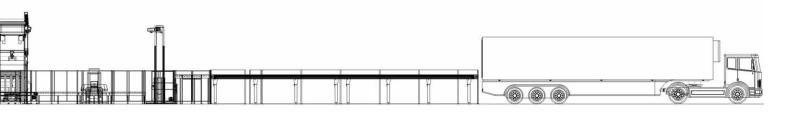
Focus Markets

CHEMICALS

- Petrochemicals
- S-PVC
- Fertilizers
- Salts
- **...**

FOOD AND FEEDSTUFFS

- Sugar
- Rice
- Vitamins
- Pet foods
- Tea
- **...**



TOPAS

by WINDMÖLLER & HÖLSCHER





Bulk Products: with free-flowing behavior



Bag Specifications: FFS PE-film, Aluminium coated film, MDO-film



Bag Weights: (net weighing) 5 – 25 kg 10 – 50 kg



Performance*: 1,800 – 2,800 bags/hr

CLEAN

- Stationary and mobile use
- Protection against dust contamination
- Completely transparent machine housing for optimum visualization
- All components attached to machine ceiling to minimize wipe down areas

INTELLIGENT

- Integrated operating system for the entire line
- · Highly intelligent for efficient personnel deployment and highest possible production time
- Operator support, e.g. with smart phone applications
- Optimized for more rapid product changeovers
- Automated performance optimization via intelligent self-adjusting process
- System Monitoring Packaging 4.0 enables a continuous online overview

- Profitable production at highest performance
- Especially robust with low maintenance
- Individual customization
- Design options for bag and bag films
- Modularly expandable performance with various modules

INTEGRA® ISF FFS EDITION

by HAVER & BOECKER





Bulk Products: with free-flowing behavior



FFS PE-film, Woven PP, Aluminium coated film, MDO-film



Bag Weights: (net or gross weighing) 5 – 25 kg 10 – 50 kg



200 - 2,000 bags/hr

CLEAN

- Stationary and mobile use
- Protection against dust contamination
- Completely transparent machine housing for optimum visualization
- All components attached to machine ceiling to minimize wipe down areas

INTELLIGENT

- Integrated operating system for the entire line
- Highly intelligent for efficient personnel deployment and highest possible production time
- Operator support, e.g. with smart phone applications
- Optimized for more rapid product changeovers
- Automated performance optimization via intelligent network amongst critical components
- QUATTRO System Monitoring enables a continuous online overview

- For profitable production at medium and high performance
- Especially robust with less maintenance
- Individual customization
- Design options for bag and bag films
- Modularly expandable performance with various modules
- Upgradable to eco-line with energy-efficient components using kinetic technology

INTEGRA® IOF

by HAVER & BOECKER





Bulk Products: with free-flowing behavior



Bag Specifications: Pre-fabricated bags made of paper, PE or woven PP



Bag Weights: (net weighing) 10 – 50 kg



Performance*: up to 1,200 bags/hr

CLEAN

- Optimum visualization due to transparent machine housing
- Simple cleaning due to large access doors
- Optimum accessibility to all components

INTELLIGENT

- Controlled full bag handling via intelligent belt system
- Large touch-screen for easy operation
- QUATTRO System Monitoring enables permanent online-control
- MEC® 4.0 control system is configurable individually

- Modular expandable for different performance with auxiliary components
- Ideal empty bag handling via magazine loading during operation
- Various bag closing / sealing systems
- Flexible layout for a broad arrangement of system groups

ELEMENTRA® EGF

by HAVER & BOECKER





Bulk Products: with free-flowing behavior



Bag Specifications: Big Bags in all sizes, materials and designs



Bag Weights: 200 – 1,600 kg



Performance*: max. 30 bags/hr

CLEAN

- Weighing to the exact weight and clean filling for reliable operation
- Completely enclosed material path through inflatable sleeve and counter-pressure ring
- Optional compaction unit with highest possible degree of compaction

INTELLIGENT

- Modular system concept with simple retrofitting of additional options without reworking
- Product-dependent selection of materials and surface coatings
- Various product- and variety-dependent setting options
- Simple adaptation to the customer's process through various conveyor systems
- Special versions: ATEX, food, salt, fertilizer, housing, mobile (stationary, semi-mobile or mobile), cleaning functions
- Drive fulfills explosion proof design requirements even including in food applications
- QUATTRO System Monitoring enables permanent online-control

- · High availability of additional components thanks to the individually configurable modular system
- Durable and low-maintenance due to first-class quality
- User-friendly, safe and ergonomic design allows the system to be operated by just one person
- Use of a wide variety of containers such as big bags, octabins, containers, drums
- Modularly expandable with all auxiliary components to complete a system

PLATINUM

by WINDMÖLLER & HÖLSCHER





Bulk Products: with free-flowing behavior



Bag Specifications: block type full bags made of paper, PE or PP



Bag Weights*: 10 – 50 kg



Performance*: up to 2,800 bags/hr, various layer patterns

CLEAN

- Clear machine arrangement
- Easy access to all machine components
- Large access platform

INTELLIGENT

- Uniform operating concept for the bag discharge unit and palletizer
- Modular design belt conveyors
- Packaging 4.0 data integrated communication network

- Three performance levels and a large range of models
- Short jobsite installation times
- Exceptional robust execution
- Double parallel bag turning clamp system for smooth movements

TERRAM



CLEAN

- Careful handling of the bags
- Easy access and cleaning due to floor level in-feed

INTELLIGENT

- Access to all parameters and diagnostics via large touch screens
- Modular construction
- Reduced noise level
- Can be expanded by QUATTRO System Monitoring for permanent online control

- High palletizing quality
- Easy service on floor level
- Space-saving due to no inclined conveyor and no service gangway need
- Smooth operation and low weight movement due to only bag lifting
- Ecological due to low power needs
- Optional gripper bag handling tool for open type bags (overlapping)

ARCUS

by NEWTEC BAG PALLETIZING





Bulk Products: with free-flowing behaviour, bulk powder



Bag Specifications: block type full bags made of paper, PE or PP



Bag Weights*: 10 – 50 kg



Performance*: up to 2,200 bags/hr, various layer patterns

CLEAN

- Careful handling of the bags by unique layer forming table
- Easy and free accessibility to all components

INTELLIGENT

- Access to all parameters and diagnostics via large touch screens
- Modular construction
- Reduced noise-level
- Can be expanded by QUATTRO System Monitoring for permanent online control

- High palletizing quality with unique second stripper plate
- Optimized accessibility for service
- Space-saving and compact layout
- Optional gripper bag handling tool for open type bags (overlapping)





Product Infeed: Loaded pallets, various dimensions



Film Specifications: 20 – 180 µ stretch film



Pallet Type: max. 2,000 kg max. 2,400 mm height 400 x 400 mm to 1500 x 1500 mm (I/w)



Performance*: max. 180 cycles per hr,

CLEAN

- High quality hood placing
- Easy access to all components

INTELLIGENT

- Moveable head for easy maintenance from ground
- Main components with quick lock
- Full integration into the line automation
- Packaging 4.0 data integrated communication network

- Low friction design grathering fingers
- High performance and hooding quality
- Regular horizontal and vertical stretching preventing thin spots
- Minimum film consumption at maximum load security

MORE INTELLIGENCE AND MORE EFFICIENCY

"Build me a machine that makes it easy for us to operate. It has to be simple. It has to talk to us. It has to let us know what we should do." – YOU

Before developing more intelligence for our systems, we spoke with many of you. Your message was clear: you wanted a packing system that made it easy for you and your team to operate. You told us your team's experience was becoming an increasingly important issue. With less time for training and greatly increased job rotation rate and added process complexity, you require a packaging system that can be operated intuitively. It should be easy to understand and to learn. Most importantly, it has to communicate with you. Our machines fulfill the goals you've given us. Using LED mood lighting, the machine communicates with you. A blue light indicates it is running smoothly, a red light tells you there's a problem, and a white light assists you in maintenance mode. The large touchscreen panel offers you all features at a click of a button. Not only can you detect faults in the system, but you can also watch videos to help with repair work. The system can be set to different user interfaces such as operator, maintenance or service technician. The system monitoring technology allows you to document and to adapt the operational settings according to your team's desires. It also enables you to remotely monitor the machine's conditions.















WINDMÖLLER & HÖLSCHER



"Avena means oats, Ventus means wind. The new name symbolizes our unification of the best of both companies."

Dr. Jürgen Vutz, CEO Windmöller & Hölscher

Windmöller & Hölscher, a family owned company, is world leader for machinery and systems for the manufacturing and converting of flexible packaging. The product portfolio includes high-performance machines for film extrusion, printing and converting. As a global company W&H offers its clients everything from a single source: from expert consultation and engineering to the delivery of high quality machines and complete packaging production lines.

HAVER & BOECKER



"In order to optimally meet the needs of our customers today and tomorrow, we need a strong and focused team. This is exactly what AVENTUS stands for."

Florian Festge, Managing Partner HAVER & BOECKER

HAVER & BOECKER is a family-run company with headquarters in Oelde, Westphalia, Germany. Under the umbrella of HAVER & BOECKER OHG, one finds the Wire Weaving and Machinery Divisions. The Wire Weaving Division produces woven wire mesh and processes it into engineered, woven wire products.

The Machinery Division, with its technology brand names HAVER & BOECKER, W.S. TYLER, IBAU HAMBURG, SOMMER, BEHN + BATES, Feige FILLING, NEWTEC BAG PALLETIZING and HAVER AUTOMATION, specialises in processing, transporting, stocking, mixing, filling, packing, palletizing and loading loose, bulk materials. The product range includes individual machines and complete systems for packing and loading systems for handling loose materials, liquid and pasty products, food, feedstuffs and ship loading and unloading systems. HAVER Automation serves to link the single process steps for forming a transparent and efficient process.

AVENTUS

The HAVER & BOECKER and WINDMÖLLER & HÖLSCHER Company

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