

SOUND TECHNOLOGY HAVER & BOECKER IN AFRICA





EDITORIAL

Africa's Future is Now.

Africa is a fascinating continent. It is rich in everything: full of amazing natural beauty, sun, energy and abundant natural mineral wealth. Most of all, Africa is rich of mankind. This emerging population is hungry for education and employment opportunities, skills development, and an overall positive perspective.

In the economic world order, Africa does not yet play a major role, but it offers huge potential considering its wealth of resources and energy. However, one consideration has to be taken into serious account: Industrial countries should not just concentrate on export business but seek to form mutually beneficial partnerships. It is absolutely necessary to work with Africans on a co-operative basis in order to develop education and build on infrastructure to improve technical plants on a long term basis.

HAVER & BOECKER showed an early interest in Africa, exporting into many African countries. Today, we have three hubs in Africa, with strong representation in Kenya and in Nigeria in addition to our own service company. The Southern African countries are covered by our subsidiary HAVER SOUTHERN AFRICA. This intensive market fieldwork is now very well received by our many customers.

In West-Africa, success is on its way. Nigeria has been a very interesting market for years. We are grateful to partner with our long-term customer, the DANGOTE Group, on their impressive expansion journey.

In East Africa, thanks to our hard working representative U. G. Cement Consult Ltd., we can proudly mention many of references, especially in the cement industry.

This is a solid base from which to intensify the activities of our technology subsidiaries and continue our contribution to the development of the African market with new products and special applications.

Our activities on the African continent are supported by "AFRIKA INITIATIVE", our support office in our home base in Germany: Experts for reconciliation on the various African demands and necessary adaptations to the local needs and processes. This we do in close cooperation with our customers in the different industries.

This brochure gives an insight into our wide field of activities and delivery for our African customers.

To us, Africa is ONE – our mutual – chance for a good future.

HAVER & BOECKER

AFRICA. SOUND SOLUTIONS FOR THE MARKET.

Industry 4.0, the fourth industrial revolution, will herald innovations for intelligent, networked production systems and thus yield more efficient, rapid, flexible and self-optimizing work processes in companies. The new era requires changes in the optimization of value-adding workflows. To our ambitious clients we offer these excellent processes and technologies all along the complete value adding chain of handling bulk material. As an ambitious global supplier, we constantly develop trend-setting products and production processes that not only fulfill the needs of the African market specifically, but which are also optimized to meet the needs of growing globalization. All products of the food, chemical, cement, building products & minerals and mining industries can be managed by the professional and technically advanced equipment of HAVER & BOECKER, whether you produce cocoa, starch, flour, fertilizer, cement, adhesives, valuable soils or other bulk material. We process, mix, pack, palletize, store, load and unload your product, be it dry, pasty or liquid. Our expertise and turnkey solutions enable you to receive systems from a single source delivering premium technology. The HAVER & BOECKER brands, namely W.S. TYLER, IBAU HAMBURG, SOMMER, BEHN + BATES, FEIGE FILLING, NEWTEC BAG PALLETIZING and HAVER Automation, provide high standard and innovative technologies from crushing to loading. This is how we have become close to you worldwide - close to the African market. Our performance is supported by an excellent after-sale service with spare part stock holdings in Africa and beyond. Our international activity guarantees you constant contact and support that exceed your expectations and meet your requirements

HAVER & BOECKER in Africa

- Recognizes opportunities
- Has highly motivated regional subsidiaries
- "Push the limits" Becoming a leading provider of service
- Provides industry specific knowledge and education
- Develops and executes central and local training programs

PROCESSING STORAGE MIXING FILLING PACKING PALLETIZING LOADING AUTOMATION















OUR VALUES







Professionalism

Quality

Experience









Sustainability

Efficiency

Innovation

Family



FOOD. ESSENTIAL AND SO PRECIOUS. BEHN+BATES IN AFRICA.

We believe the packaging line forms an integral part of the value added chain in the highly delicate food market. Within HAVER & BOECKER, BEHN+BATES supplies perfect packing plants for each product, each type of bag in both manual and automatic operations. Our goal is to ensure the optimum protection of precious products such as food, maintain high weighing accuracies and guarantee high machine outputs. Appealing bag shapes are our specialty – in compliance with modern food standards. Food products are natural products, influenced by climatic conditions. We understand that production and storage capabilities vary depending on the region and continent in which they are processed. All these aspects have an influence on the selection of packing technology. Applying the best to our customer needs, we provide you with considerable and long-lasting advantages.

THIS IS OUR COMMITMENT WORLDWIDE. THIS IS HOW WE CONTRIBUTE TO THE AFRICAN MARKET:

- Machine technology specifically designed for food applications
- Minimal product deposits due to food compliant conditions such as wiring, tapered corners, easy cleaning, etc.
- Valve Bag filling will gradually gain international importance and we have excellent solutions for all valve bag applications
- Our portfolio includes manual and fully automatic open-bag fillers for open mouth bags
- Tested local partners are available to provide support, complete from our initial offer to regular service and maintenance of installed machinery









REFERENCES FOOD

Cocoa powder

- Cargill Cocoa, Abidjan, Ivory Coast
- Cargill Ghana Ltd., Accra, Ghana
- Plantation Industries Ltd., Nigeria
- Multi-Trex Integrated Foods Plc., Nigeria
- Cocoa Products (Ile-Oluji) Ltd., Ille-Oluji,
 Ondo State, Nigeria

Flours and Derivatives

■ Five Star Flour Mills, Al Adabiya Suez

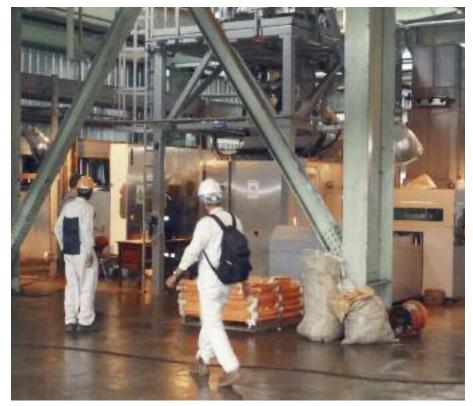
CHEMICAL. BIG SOLUTIONS FOR FINER DETAILS.

Worldwide, we are one of the leading producers and engineers of packing plants for weighing and filling granules and powdery chemical products into various bags be it paper, PE or PP woven bags. Sounds like a big task with a lot of fine details when finding a solution for very specific demands. In many African countries we have successfully developed and delivered systems proficient in storage, packaging and loading. HAVER & BOECKER offers solutions specifically for fertilizers, sulfur and PE granules. We meet your requirements: From a single machine, such as semi-automatic filling system for pre-produced open mouth bags to complete turnkey plants. Our African subsidiaries enable us to maintain a close contact to our customers and provide specialized service at short notice.

- Placing highest demands in our chemical business unit
- Our aim worldwide is to offer our customers reliable solutions that convince through their high performance
- Optimum weight accuracy, clean and dust-free filling, added savings in packaging material and energy
- Both our manual and fully automatic systems meet these demands

REFERENCES TURNKEY SILO AND PACKING PLANT

- Indorama
- Lanxess
- Lignotech
- Sasol Wax
- Dangote







BUILDING PRODUCTS AND MINERALS. A STEPPING STONE ALONG THE PATH OF PROGRESS.

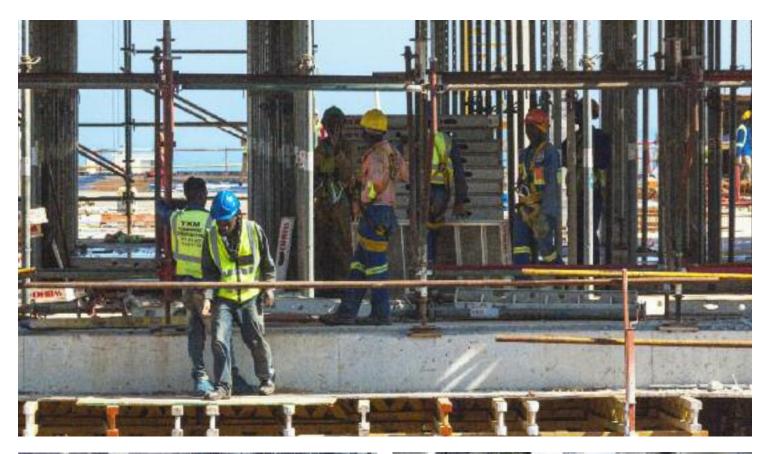
We are – for decades – a keyplayer in the building material industry and frontrunner in technology. By combining all the know-how of our group members, we are able to cover a wide range of mixing and packing powdery products into small or big bags, in addition to mixing and filling liquids and pasty products into buckets and drums. We are willing to support our customers in developing their products and markets, beginning from common mortars to engineered adhesives or insulation plasters. We are the experienced partner for the entire plaster industry. Our research and development lab in Germany supports you with its experience of packing more than 500 different materials.

- Our machine portfolio begins with simple operated machines and installations
- Extensions and automation are possible at any stage
- Our most elementary machine is able to deliver a packing capacity of approx. 150 bags per hour
- Our most advanced automated system exeeds more than 4.000 bags per hour
- Product-oriented filling systems will assure the best possible performance

REFERENCES

- Calderys
- Vesuvius
- Idwala Carbonates
- Udola Lime
- Samia Gypsum
- BASF
- Bostik
- Saint Gobain-Weber









CEMENT. SPECIAL SOLUTIONS FOR A SPECIAL MATERIAL.

Planning, manufacturing and delivery of cement packing plants have been our unit's core competences for decades. Our stocking, packing and dispatching systems have been put into operation in over 130 countries worldwide - making us the global market leader. In Africa we are widely represented with operating machines for storage, packing and loading. Whether it is a stationary filling machine, our infamous ROTO-PACKER® or a turnkey plant, we not only offer the best machine technology, but also a complete engineering concept, tailored and suited to meet any customer wish, worldwide and expressly for the rapidly developing market that is Africa.

- Intensive consultancy services
- Engineering and implementation from one experienced source
- New plants, complicated reconstructions and expansions

REFERENCES TURNKEY SILO AND PACKING PLANT

- Cimfaso
- Afrisam
- Lafarge Holcim
- Pretoria Portland Cement
- Heidelberger Cement
- CIMAF
- Mombasa Cement
- Dzata
- Ciment du Sahel
- Sococim
- Salam Company





PALLETIZING. WE COMPLETE THE WHOLE STORY. WITH END-OF-LINE SOLUTIONS.

NEWTEC BAG PALLETIZING offers bag palletizing systems. We are a specialist in complete end-of-line solutions due to our expertise and broad partnership network. Customers will find a complete range of palletizing systems with a capacity of 300 to 5.000 bags per hour for most markets. Our global policy is to combine production requirements and presentation quality of each product by taking the specifics of the various markets into account. One out of many reasons that makes us ready for the African Market especially in the fields of Agricultural food and Cement Building Products and Minerals.

- Simple and reliable kinematics
- Modularity and flexibility
- Eco-concepts
- Ergonomics and safety
- Performance and reliability

REFERENCES

- Fertial Algeria
- CMPE Safi Marocco
- LFC Milling South Africa
- Timab Tunesia
- Biskia Algeria
- Sasol South Africa









LOADING. GROWING WITH SPEED. FOR LESS WITHOUT LOSS.

HAVER Loading Systems – that is basically automatic loading of bagged goods with and without pallets onto trucks. But there's much more to it, most of all less of efforts without loss of quality standards. Each of the 3 systems SpeedRoad®, SpeedLoad® and SpeedFlexx® requires less effort for quick and efficient truck loading.

Our well-known product line is nourished by our high demands as a provider of process. Customers are fully satisfied and profit from reduced loading, waiting and delivery times. They can count on high quality and stable loads just as much as on high personnel safety and independence.

The entire HAVER Loadings Systems stand for a speedy solution for getting our clients' products on the road wherever and whenever transport is needed. Worldwide and another stepping stone into the rapidly growing African Market.

- Fully-automatic loading
- Direct loading (onto the truck, with or without side walls)
- Maintenance-friendly
- Machines load with or without pallets
- Operator-friendly









MINING. SYSTEM BUSINESS IS OUR BUSINESS.

The Mining unit of HAVER & BOECKER was recently founded, following 80 years of experience in the production of vibrating screens. Within the mining division we combine the competencies of all HAVER & BOECKER companies who continue to master technologies for processing/mining focusing on system business. HAVER Mining offers an entire range of engineering services from feasibility studies to commissioning management. Upon customer request, we are able to supply operator models. A typical value-adding chain in the mining industry covers sectors such as development, extraction, material handling, crushing & grinding, separation and lastly refining. HAVER Mining is active in almost every sector of the chain – from feasibility study through to material handling within the system by offering numerous technologies and services in sectors - concentrating on engineering and plant business. Our contribution to Africa is an investment for a lucrative, future market.

- Ore
- Diamonds
- Fertilizer
- Platinum Group Metals

REFERENCES

- Arcelor, South-Africa
- Namdeb Diamond Corporation Ltd., South-Africa
- Lafarge Tswana Lime, South Africa
- Gmc Ghana Manganese Company Ltd., Ghana













SERVICE. SOLID EFFORTS MAKE IT FLOW.

We understand our customer's desire to ensure that their new or upgraded equipment runs quickly and smoothly in the least possible time. Unplanned interruptions in the flow of operations cause major predicaments. In case of an emergency, fast and reliable help is critical in order to avoid impromptu downtime. In Africa, our support specialists in Nigeria and South-Africa place all their efforts in designing and maintaining the best possible flow for your organization. We are proud to announce an anticipated conversion of other manufacturer's packing machines into state of the art HAVER & BOECKER Technology. Coming soon to the African market!

Perfecting the African flow

- Installation and commissioning support for HAVER & BOECKER packing plants
- Machine conversions and upgrades of HAVER & BOECKER plants and external installations
- Service support through specialists from Nigeria and South-Africa
- Plant Optimizations Programs (POP)

HAVER Service Worldwide

- Commissioning your flow
- Assisting your flow
- Supporting your flow
- With OEM Spare Parts









HAVER & BOECKER TECHNOLOGIES



HAVER & BOECKER/W.S. TYLER

While HAVER & BOECKER started to process minerals in 1930, W.S. Tyler got a

head start in 1872. With technology centers in Germany, Brazil and Canada, both technology brands combine a wealth of knowledge in screening, washing and pelletizing.

info@havercanada.com

www.havercanada.com



IBAU HAMBURG

Founded in 1975, IBAU is an engineering house located directly at the rim of the

harbor in Hamburg. IBAU offers complete solutions for cement handling andstorage as well as mixing and blending solutions. Signature IBAU Technologies are the cone silo, multi-compartment silos, ship unloaders and the design of cement carrying ships.

info@ibauhamburg.de

www.ibauhamburg.de



FEIGE FILLING

Founded in Hamburg in 1972, Feige FILLING GmbH has built up a good

reputation on the market as manufacturer of filling machines and filling equipment, conveyor systems and storage technology for liquids. In 1987, the company relocated its corporate domicile to Bad Oldesloe and belongs to HAVER & BOECKER since 2003. Innovation and growth have allowed the company to develop into the technological leader in filling technology. Customers around the globe trust our technology for filling liquid and pasty products with calibrated accuracy in manual and fully automated operation.

E-Mail: info@feige.com

www.feige.com



BEHN + BATES

Founded in Krefeld, Germany in 1933 BEHN + BATES rapidly became known for

robust and high quality bag filling machines. After being acquired in 1994 by HAVER & BOECKER, we now have specialized in the food and pet food industries from the end of the 90s. We have the packaging solution for every type of bulk product or liquid, for each type of bag or container, and for manual or fully automatic operations.

sales@behnbates.com

www.behnbates.com



NEWTEC BAG PALLETIZING

As the first international offspring of the original inventor of the palletizer, NEWTEC

expanded their diverse line of palletizing systems to include automatic truck loading systems, railcar loading and fully flexible bag loading systems.

info@newtecbag.com

www.newtecbag.com



HAVER Automation

Founded in 2016, HAVER Automation intends to bring Industry 4.0 to the cement

industry. HAVER Automation focuses on designing complete cement plant operating and logistics systems using the latest technologies such as cloud computing.

info@haverautomation.com

www.haverautomation.com



HAVER Engineering

As a by-institute of the Mining University in Freiberg/ Germany, HAVER Engineering

focuses on the design of new working processes within the cement industry. Whether in the quarry or in the packaging plant, HAVER Engineering analyzes procedures and systems, provides basic and further training, and designs build-operatetransfer (BOT) models for interested customers.

hem@haverengineering.de

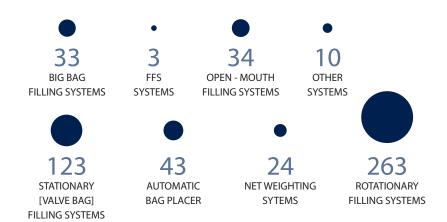
www.haverengineering.de

PACKING AND LOADING MACHINES IN AFRICA

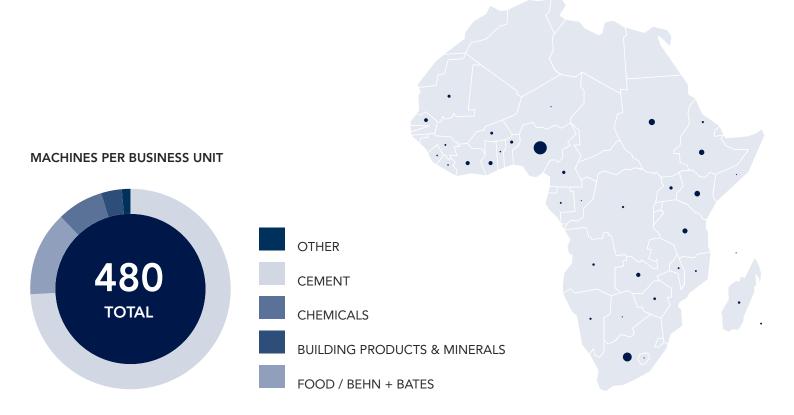
MACHINES PER PRODUCT

BUILDING CHEMICALS	1
CEMENT	355
CHEMICALS	11
FERTILIZER	23
MINERAL PROCESSING	15
SYNTHETIC MATERIAL	2
TITANIUM DIOXYDE	2
UREA	5
WAX	4
FLOUR	5
COCOA	25
STARCH	5
SUGAR	8
OTHER	3

MACHINES PER TYPE



DISTRIBUTION OF H&B MACHINES IN SUBSAHARA AFRICA



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The machines and equipment shown in this brochure as well as the technical parameters represent only examples of customer-specific technical solutions. We reserve the right to make changes at any time without notice!
The ® symbol indicates a registered trademark of HAVER & BOECKER oHG in Germany. Some of the trademarks are also registered in other countries.

HAVER & BOECKER OHG

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