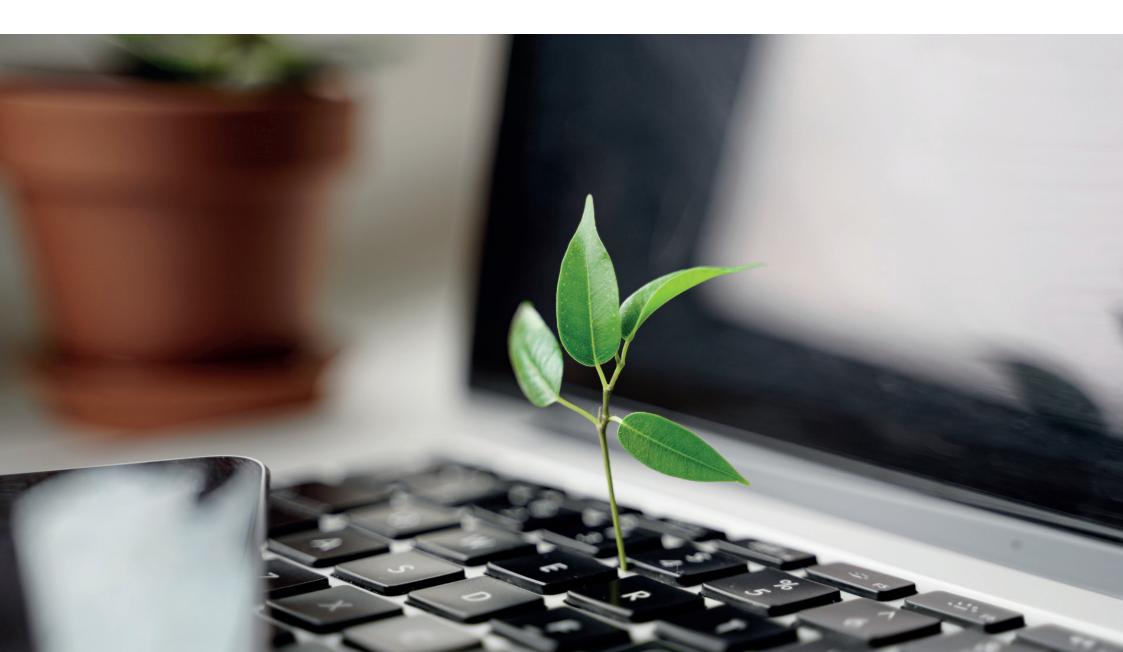




fertiliser industry We shape your packaging future. Swift. Digital. Sustainable.



Keep an eye on quality - rely on the right packaging and logistics partner

Your products

- 🛑 General fertilisers: UREA, ammonium nitrates, nitrogen-based fertiliser (NPK), phosphate fertiliser (DAP and MAP)
- Special fertilisers: NPK fertilisers, potassium fertilisers, complex and special fertilisers, water-soluble fertilisers, special fertiliser mixtures
- Organic fertilisers

The right packaging is not only the perfect finishing touch to your fertilisers, but also the necessary protection against damage from external influences. We design, manufacture and deliver for you:

- FFS bagging machines
- Bag stacking and palletising systems
- Stretch hood machines
- FIBC/Big bag filling systems
- Automation and engineering

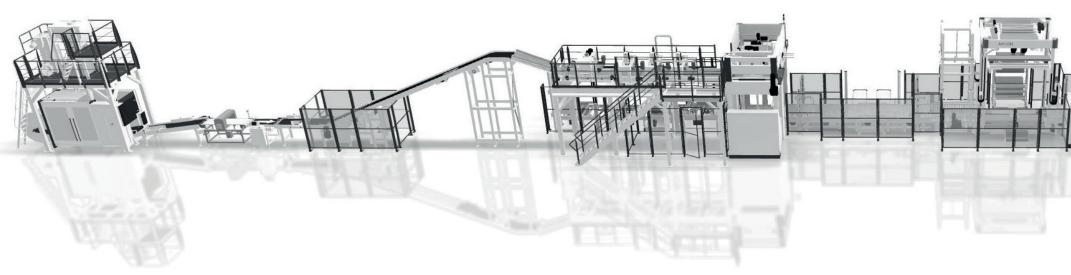
High product protection, improved shelf life, low product loss, attractive bag shapes and sustainability - we ensure smooth and economical packaging operations with easy and intuitive machine solutions. In addition, we also optimise your logistics systems. With the help of our packaging solutions, you, as an industrial specialist, can cover the demand for fertiliser in a high-quality manner.

We deliver the solutions that suit you!

If we are not sure about a product composition, our Technical Centre is there to help and advise. In addition to a complete demonstration plant, it has test equipment for exact analysis of your products.



Our packaging solutions for the fertiliser industry



Reliable accuracy due to our net and gross weighing systems

Precise accompaniment of every filling process from small to bulk containers

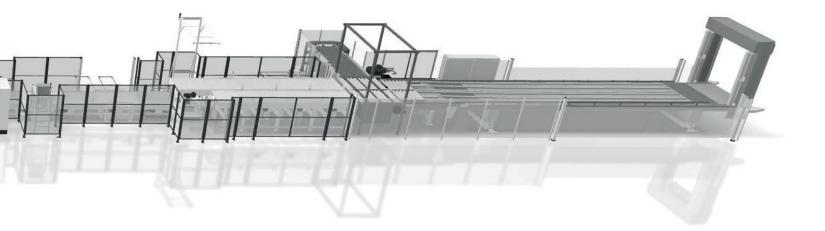
- The weigher control is completely integrated into the filling machine.
- Configurations for containers from 10 50 kg and from 250 - 1,500 kg are available.

Users report: low maintenance requirements, robust design and compact size as well as high user-friendliness characterise the AVENTUS weighing technology.

So that your quality products arrive at your end customers attractively protected

FFS (Form-Fill-Seal) packaging technology for smooth and economical packaging operation

- Our FFS solutions offer the highest level of performance and at the same time excellent ease of operation through good accessibility and intuitive operator guidance.
- Different modern FFS systems FFS 600, ISF and TOPAS enable perfect bagging of fertilisers in bags from 10 to 50 kg.
- Your quality assurance is carried out by subsequent checkweighing, metal detection, automatic bag ejection and signing, etc.



Users report

Our FFS technology convices with

- Excellent product protection against moisture and external influences in a welded PE bag.
- High cleanliness due to low-dust bag filling.
- A space-saving, powerful and robust machine design.
- Intuitive and safe operability through high data transparency.
- Safe processing of the latest modern film qualities, with a recycled content of up to 70 %, or barrier films for increased product protection, or an increased oxygen barrier.

Form stable, cost-efficient, easy to store big bag filling by our ELEMENTRA EGF

What works on a small scale also works on a large scale

- For bagging fertilisers in large containers of 250 1,500 kg (optionally up to 2,000 kg), you can choose between FIBCs/ big bags or octabins. We supply the right filling technology!
- Our big bag filling station ELEMENTRA EGF is adapted to your on-site situation and your fertiliser product, so that reliable filling is guaranteed.

Users report: the AVENTUS ELEMENTRA EGF convinces with weight-accurate product processing, with intuitive operator guidance, reduced maintenance requirements and cost optimisation due to high machine availability.

Your checklist:



 \checkmark A fast and efficient filling process

Attractive bag shapes for high advertising effectiveness

Learn more at:





Our packaging solutions for the fertiliser industry



Reliably stacked - our bag palletisers

How your bags reach your end customers undamaged

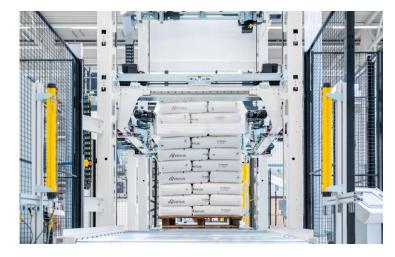
All FFS bagging machines are completed with our TERRAM palletiser with low infeed for up to 1,000 bags/h and our ARCUS, AURUM, PLATINUM palletiser with a high infeed for up to 2,800 bags/h at 5 bags/layer.

The right partner at our side: we achieve careful bag handling and outstanding palletising results in close cooperation with our subsidiary NEWTEC BAG PALLETIZING. For 50 years, the company has focused on the development, manufacture and distribution of bag palletisers - many years of know-how from which you too can benefit!

Users report

Our bag palletisers convince with

- Modern and intuitive user-friendliness thanks to intelligent communication systems.
- A custom-fit palletiser design for your bag types or sizes and pallets.
- Compact design.
- Low maintenance.
- Maximum protection against slipping, tearing and soiling.



Arriving well protected at your customers our stretch hood machines

Save unnecessary effort by securing your full-bag pallets correctly

- Our stretch hood machines offer the greatest possible flexibility when using different pallet types and pallet dimensions.
- A PE film hood is pulled off fully automatically and accurately over the full pallet.

Users report: reduced energy consumption due to the use of state-of-the-art electric motors, a compact as well as modular design and fast and safe maintenance characterise the AVENTUS stretch hood machines.



A net weigher as a dosing system for your truck, wagon or container bulk loading

Why you should use a bulk loading by integrating our net weigher

- Space and cost savings, since no additional infrastructure and intermediate material transport are required.
- A high output of up to 90 t/h.
- Particularly high accuracy.

Silo batteries are realised as a multi-level concept: FFS packing machines or big bag stations as mobile units on the first floor, lorry lanes on the ground floor. Optionally, a metal detector with automatic ejection can be integrated.

Your checklist:

Attractive pallet stacks for optimum storage and freight space utilisation

✓ High accuracy during bulk loading

Learn more at:







Engineering & automation



All from one single source - our engineering

The best technologies for your overall process

Thanks to our close cooperation with our parent companies, we have access to a rich network of outstanding specialists:

- Film and bag making machines: WINDMÖLLER & HÖLSCHER
- Processing technology, silo and storage technology, mixing and filling technology for liquids, packaging technology for powdery products, palletising technology, automation products and wire close: HAVER & BOECKER and its technology brands



Production and processing of your fertiliser products

What counts before the packaging

The screening and pelletising technologies characteristic to our sister company HAVER & BOECKER Niagara support the entire fertiliser production process and ensure your perfect flow.

From individual machines to system configurations and turnkey delivery of complex plants:

HAVER & BOECKER Niagara solutions are focused on sustainability and efficiency in order to improve the mineral processing of your fertilisers.



Completely planned our systems and plants

The additional icing on the cake for the harmonious flow of your processes

Your packaging success is the result of comprehensive planning, carefully selected filling technology, and an overall concept optimally tailored to your project, including upstream and downstream plant components, e.g. silo technology, conveyors, bulk loading technology, etc.

We develop comprehensive solutions for reliable processes in close cooperation with our sister company IBAU HAMBURG the specialist for bulk handling, silos and storage.



Meaningfully processedour data management systems

Use the intelligence of your systems

Networked machines are less prone to failures. We offer various software solutions for your packaging and processing procedures. Starting with the weighing data acquisition and production management systems through to complete dispatch automation.

Users report: increased data transparency and improved data analysis through continuous production data acquisition, reduction of downtimes through fast data-based error analysis, optimisation of your production through improved condition monitoring with data processing in real-time are the hallmarks of our data management systems.

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"Do not rely on a generalist to deliver your equipment as cheaply as possible, but on a family of specialists with great know-how and extensive experience in their respective fields to get the job done as profitably as possible."

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Kai Lammers | Managing Director AVENTUS

Focused specialists:





The guarantee for your trouble-free packaging operation - our services

High-quality plant technology forms the foundation - we also ensure the lasting success

Availability, performance, function - these are the basic expectations on your new packaging line. Expectations which we are pleased to fulfil. Therefore: have the commissioning carried out by our trained specialists who are at home around the globe.

Also one of the cornerstones: regular maintenance

Unexpected plant shutdowns cause stress and costs. Plan for downtime. With regular maintenance you can achieve the maximum service life of your plant and, at the same time, secure the high quality of your packaging. You establish when and how often your plant is serviced. We offer different maintenance packages.

So that you do not lose any time: our digital services are there for you

Rapid action is required when you experience unplanned downtimes. Our hotline supports you, depending on availability, by immediately connecting to your system for checking error messages, parameters, etc. Our Visual Assistance goes one step further: you show our experts live over our special app and our optional data glasses, what you are currently seeing inside or on your machine.



Ready to act at any time: with our original parts

Your customers expect that they will receive the products they have ordered punctually, in attractive packaged bags. Make sure it always stays that way - with our precisely fitting original spare parts for reliability in continuous operation. They can be replaced quickly, even more so if you stock wearing parts according to our recommendation list - and also otherwise through direct and short-term deliveries from our in-house spare parts warehouse.

Remain up-to-date with our PERFORMANCE KITS

Is your ageing packaging system still performing outstanding services, but is no longer technically up to date? Give it a freshening touch-up with our PERFORMANCE KITS. This way you can continue to build on the proven function and benefit from innovations at the same time. You increase your productivity and secure your machine availability.

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"Our service technicians are fully capable of overcoming every hurdle and optimally adapt the plant to meet your individual requirements. They know our machines inside out and understand exactly what needs to be done to provide you with an optimal packaging process."

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Martin Heese| Field Service Manager AVENTUS

Learn more about our services:







VENTUS

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