

Animal feed technologies
Together, we make a difference

ANDRITZ

Your partner in the animal feed production industry



▲ Together, we make a difference

ANDRITZ is one of the world's leading suppliers of technologies, systems, and services relating to advanced industrial equipment for the animal feed industry.

Your experienced partner

We have been delivering products and plant solutions for the feed industry since the 1930s and have thereby gained extensive knowledge and insight into the increasing demands of the specific feed markets. We put this knowledge into all our efforts to ensure that we have satisfied customers.

Advanced technologies

We are strongly committed to excellent performance and the quality of our products, thus making us a strong partner for our customers. Our focus is on innovation and keeping up with the technological developments. We always strive to provide our customers with the newest technologies that will ensure:

- Better and more efficient production
- Minimizing operation cost
- Maximizing energy efficiency
- Environmental protection considerations

We give our customers the advanced technologies that will ensure them a competitive advantage.

Feed processing technologies

ANDRITZ provides processing machines and equipment – from raw material intake to finished feed bagging. Our pelleting and extrusion plants are designed with special attention to food safety and traceability, ensuring that production operations consider animal health and welfare. In addition, hygiene and regulations requirements are in high focus.

Animal feed

Commercially produced animal feed is undergoing continuous processing and quality improvement to keep up with the needs of the agricultural industry as well as the continuously increasing focus on food safety and traceability.

Our animal feed processing technologies appeal to both commercial feed millers producing for the purpose of onward sale, as well as to farmers making their own feed for their animals. Our pelleting technologies enable our customers to create their own unique recipes and combinations of ingredients – making sure that the animals are given the right amount of vitamins and protein.

We offer

- Process line solutions
- Unit machines
- Technical consultancy
- Engineering services
- Aftermarket service and support



▲ The ANDRITZ concept

The ANDRITZ concept

Today's demanding requirements for cost-effective, quality, and high-performance feeds make it obvious that producing quality feeds requires a high level of specialized processing technology.

ANDRITZ is a unique company with the ability to manufacture and supply each and every machine in the feed pelleting line. With an in-depth knowledge of each key process, we can supply a compatible and homogeneous solution, from raw material intake to finished feed bulk loading.

Complete plant solutions

Our solutions are simple and effective. We strive to be a "one-stop" all-round supplier for all pelleting needs. Our packages are tailor-made to suit the specific requirements of our customers, whether it is know-how, engineering, individual process machines, complete processing lines, or spare parts and service availability.

Project management

Easy-to-operate and maintainable plants

and systems with short implementation time and excellent performance set us apart from our competitors. Competence, leading technologies, business units working together worldwide, in addition to staff commitment and dynamics distinguish us from other suppliers. Through outstanding performance, mastery of key process technologies, and engineering capabilities, ANDRITZ has become a globally leading supplier of pelleting equipment and systems.

Experienced project managers and experts from specialized functions ensure that the expected performance will be achieved.

Being the largest supplier worldwide of equipment to the feed industry with more than a century of experience, five manufacturing facilities, and a global network



▲ South Africa
The new feed mill makes use of the latest technology and is more energy efficient compared to the older feed mills in South Africa, and will reduce the cost of producing poultry feed due to lower labour requirements and efficient cost of production.

of sales and service companies, plus a supplementary worldwide distribution network, we are confident in claiming that ANDRITZ is able to supply the optimum technology solution for any possible need in animal feed plants.

Supplier of key machinery and complete process plant solutions

Bulk intake system with aspiration filter

Bulk intake hopper and conveying system with filter, type DFE.

Ingredients silos and hopper scales

Hopper scales for weighing of individual constituents in formula mixtures.

Live bin

For pre-mixing of feed ingredients prior to grinding to ensure optimum hammer mill performance and homogeneous particle size distribution.

Optimill hammer mill

1500/1800 rpm grinder in a variety of sizes for low-fat raw materials and high capacities. Capacity range: 0.5-60 t/h.

Multimill hammer mill

3000/3600 rpm hammer mill with small hammer-to-screen clearance. Screen perforations as small as 0.75 mm (1/32"). Capacity: 0.5-25 TPH.

Roller mill

Roller mills in 1, 2, or 3 layers with easily adjustable and efficient size reduction of grains to provide narrow particle size distribution.

Aspiration filters

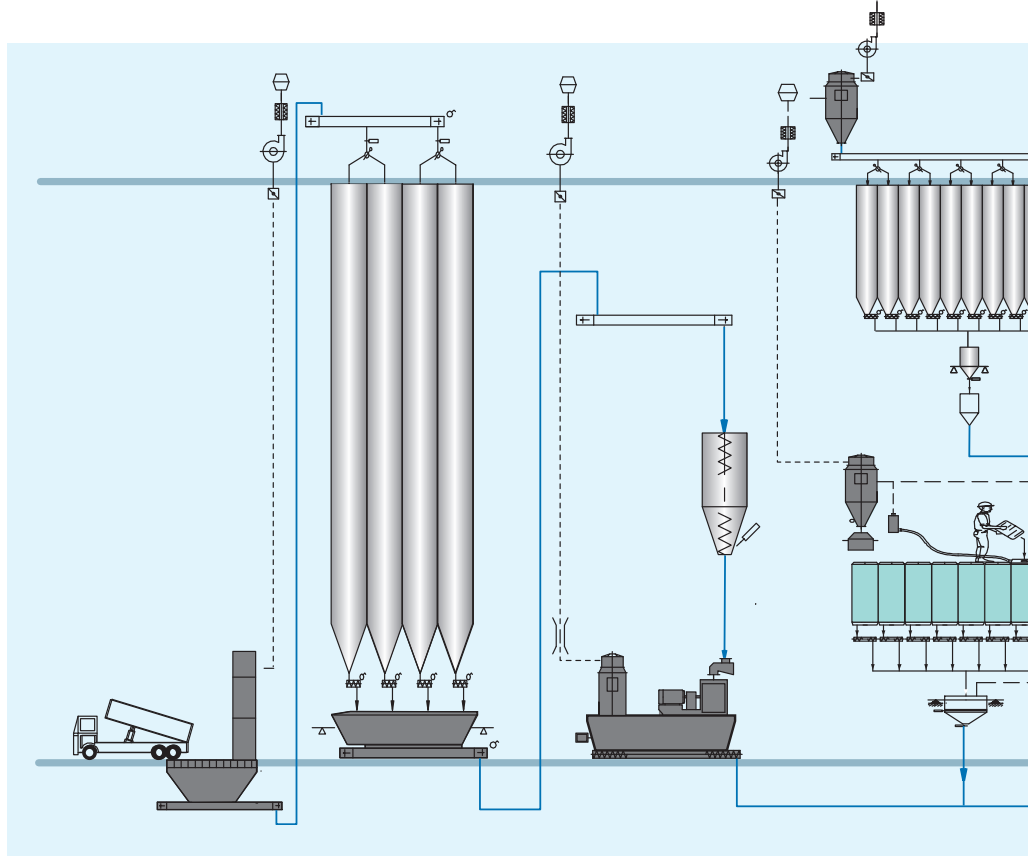
Fully automatic, continuously operating bag filters cleaned by compressed air. A variety of filters support any need for process air filtration throughout the entire pelleting plant.

Premix and micro-ingredients weighing unit

Micro-ingredients weighing unit for weighing/metering of premix and micro-ingredients in formula mixtures.

Paddle mixer

Paddle mixer for dry mixing in connection



▲ Bulk intake system



▲ Ingredients silos



▲ Hammer mill



▲ Aspiration filters



▲ Weighing unit

with addition of high amounts of liquids. Capacity: 0.5-40 t/h. Batches: 0.1-6 t.

Ribbon mixer

Ribbon mixer for standard dry mixing pelleting operations. Capacity: 1.5-60 t/h. Batches: 1-8 t.

Conditioner

CM series for pre-conditioning with addition of liquids and steam, providing optimum mixing and retention time. CRT series for controlled temperature and time,

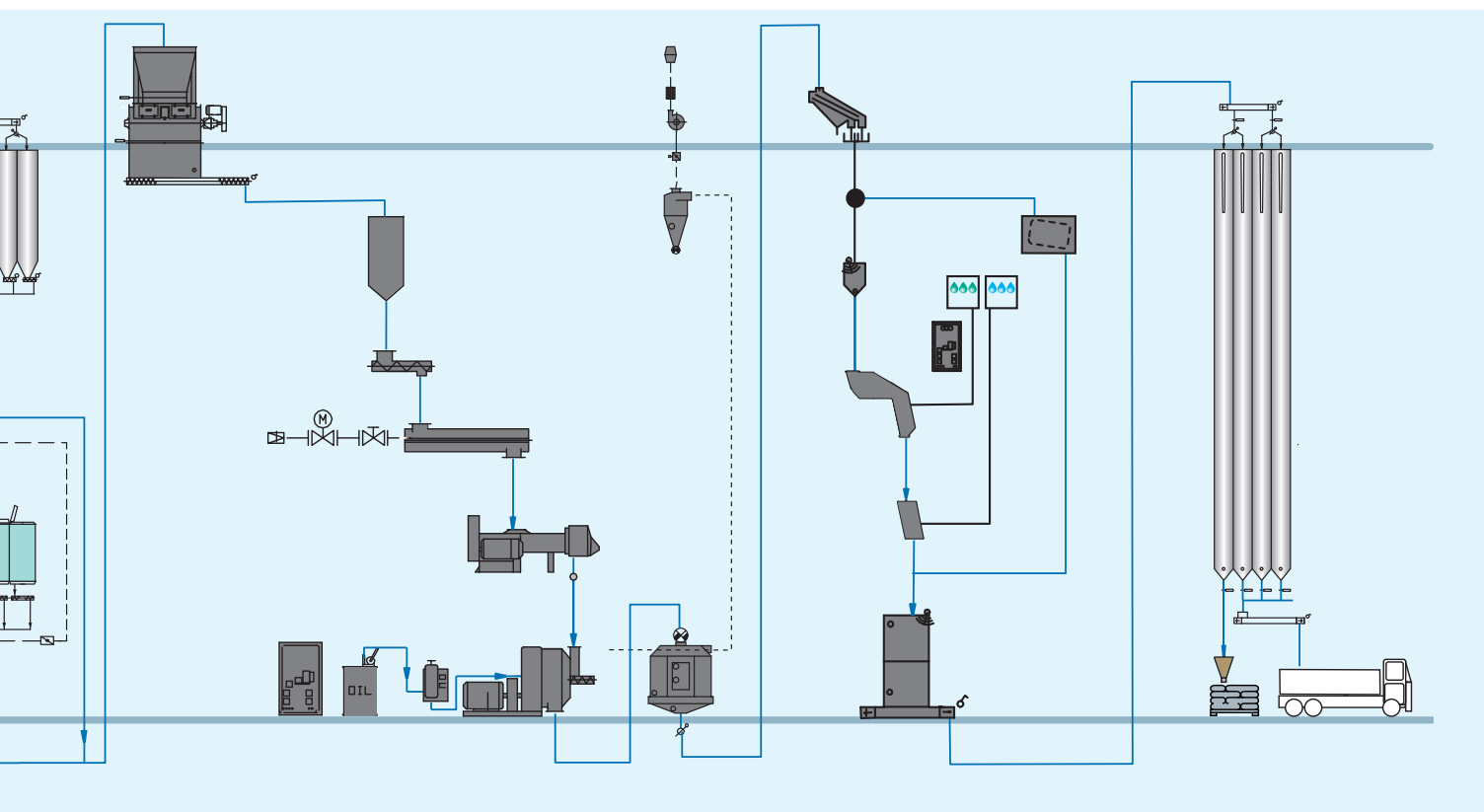
including first-in-first-out solutions for unmatched feed hygiene.

Feed expander

Mechanical/thermal super-conditioning and stabilization of feed mixture. Capacity: up to 80 t/h.

Pellet mill

Pellet mill design with focus on high performance, reliability, feed hygiene, ease of maintenance, controllability, and low energy consumption. Complete range of belt-



weighing and mixing Conditioning and pelleting Cooling Sifting and coating Finished feed silo/packing



▲ Optimix ▲ Feed expander ▲ Pellet mill ▲ Cooler ▲ Crumbler ▲ Micro-fluid addition ▲ Process automation

driven and gear-driven models available, matching any possible feed plant preference. Capacity: up to 100 t/h.

Cooler

Vertical coolers in several models, suitable for the exact types of feed from any feed mill. Capacity: 0.5-60 t/h.

Crumbler

Crumbler for controlled particle size reduction with optional automatic feeding and with roll adjustment. Capacity: 3-40 t/h.

Micro-fluid addition

MFS micro-fluid system for accurate addition of liquid enzymes, vitamins, aromatics, and pigments, for stand-alone use or use in combination with oil/fat coating.

Process automation

Automation systems are available as basic control systems or as fully automatic systems for control of each process machine or of complete process lines. The system ensures cost-effective processing and consistent feed quality. The plant design with

integrated automation solutions provides full traceability of ingredients and process parameters.

Efficient pelleting technology

Industrially produced feed is undergoing a continuous quality improvement process to keep pace with the needs of the agricultural industry. ANDRITZ pellet mills represent state-of-the-art technology, ensuring high-quality feed at minimum operating costs.

ANDRITZ offers a close co-operation based on:

- State-of-the-art technologies
- Complete product range to fulfil every need for process lines
- High performance
- Superior product quality
- PC-based automation and process monitoring

Customized solutions

Products from ANDRITZ ensure high process consistency and flexibility. With multiple design features and modular systems as a starting point, our engineers are capable at any time of designing a solution that meets all demands for high production capacity and quality.

Formula management

After a formula has been entered in the advanced process control system, the complete process – from intake of ingredients to finished product – then begins. The operator can follow the entire process on-screen. The continuous data logging system ensures full process and product traceability, and the automation equipment includes preventive maintenance systems.

The Optimill consists of a hammer mill for raw material grinding of normal to coarse structured feed products, such as cattle, pig and poultry feeds.



◀ CM series for pre-conditioning with addition of liquids and steam, providing optimum mixing and retention time.



▲ Service and support

Aftermarket

After-sales service and support

Our excellent aftermarket service and support is what sets us apart from our competitors. Our cooperation with our customers does not end with the sale – or the machine installation. The good customer relationship is extended through important after-sales service and support.

Our services

Our highly skilled and motivated employees stand ready to help you with:

- After-sales services, support, and follow-ups
- Spare and wear parts, maintenance, and repairs
- Process optimization
- Training of plant operators

Field services

We offer our customers excellent field services, where our service technicians come to you and your plant for assistance. The depth and experience of our field service

specialists is unmatched – backed by the full knowledge and technical support that only the equipment manufacturer can provide.

Benefits

There are several benefits to be gained from continuous upgrades, optimizations, and services on your equipment:

- Maximum production
- Process knowledge and experience
- Reliability and cost efficiency
- Reduced life cycle costs
- Short and effective shutdowns
- Improved energy efficiency



Where to find us

Global supplier – local presence

ANDRITZ is truly a global organization – but also with local presence. We are represented all over the world. The global market for feed technologies is served from five main locations:

- Esbjerg, Denmark
- Sanshui, Guangdong Province, China
- Geldrop, Netherlands
- Muncy, PA, USA
- Humenné, Slovakia

In addition, we operate from several strategic regional sales, engineering, and service locations in China, Vietnam, India, Australia, Mexico, Venezuela, Brazil, Chile, France, the UK, and Germany – and are also represented locally by agents and distributors in many other markets.



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