

Whatever you have in mind.



Plant-based meat with alco.

Optimal combination of products and processes.

Flexitarianism and vegetarianism are fully in line with the food trend. Plant-based burgers, nuggets or gyros – the challenge is the same for all meat substitute products: a stable and formable starting material. Benefit from our know-how to optimize your recipes with our machines and to individually adapt our standardization and convenience technology to your product with maximum yield.



Crunchy outside and juicy, tender inside. Thanks to carefully prepared ingredients and coordinated technology, plant-based meat products with machines from alco meet the taste of your target group and whet their appetite for more.

Plant-based meat

Concentrated veggie competence.

We at alco are experts in plant-based meat and know what distinguishes good veggie products. A high degree of authenticity in taste and texture as well as an optimal supply of alternative proteins are the key to successful meatless offerings. Regardless of whether you are an experienced producer, start-up or newcomer: Our machines form veggie products into any individually desired shape and coat, fry, cook and cool your vegan dishes. From schnitzel to sliced meat and nuggets to vegan cordon bleu, rib burgers or cevapcici.

Convenience technology from alco: Perfection in every process step.



mixing and forming

Our technology guarantees gentle, efficient mixing and a consistent mass for further processing. The forming machine also forms raw mass into any shape and portions products for further processing.



breading and marinating

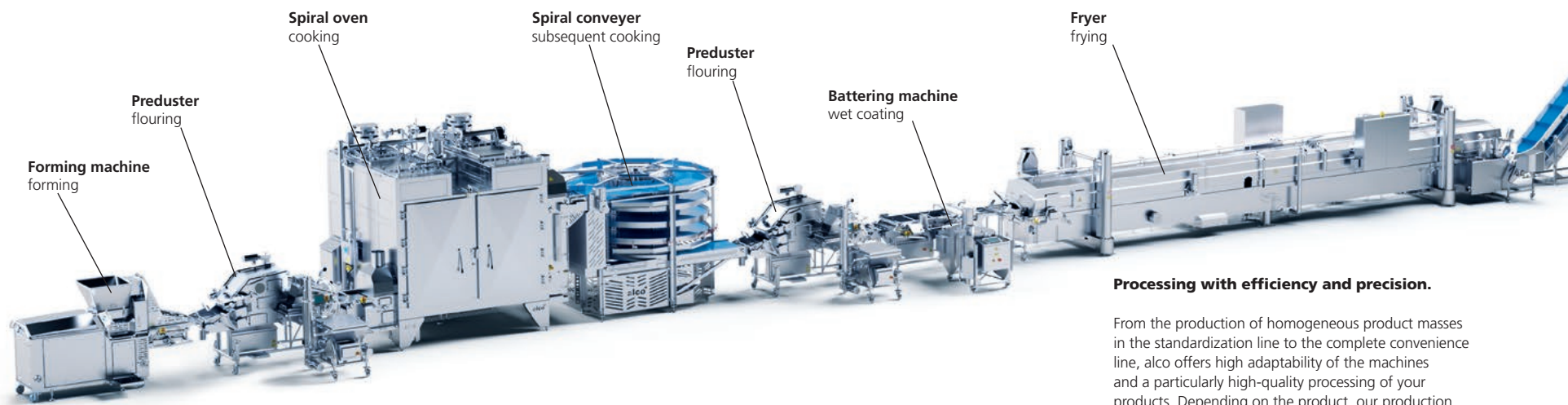
For breading and marinating, we adapt our machines optimally to the product that you want to coat. Our dipper evenly applies heavy batter and provides extra enjoyment.



frying and deep-frying

Uniformity and an optimal appearance are crucial when frying. Our machines deliver both. As a processing step, frying may be set highly variably: Everything is possible, from flash-frying to deep-frying.

Would you like to process your veggie product differently? No problem:
You can find many other processing options under
alco-food.com/en/plant_meat



Processing with efficiency and precision.

From the production of homogeneous product masses in the standardization line to the complete convenience line, alco offers high adaptability of the machines and a particularly high-quality processing of your products. Depending on the product, our production lines process from 500 to 3,000 kg per hour.

Make the most of megatrends. A question of technology.

Rapidly growing sales potential.

The high demand from flexitarians in particular is driving the market for vegan meat alternatives. The market in western Europe has doubled since 2012, and the plant-based food sector in Europe has grown by as much as 49% since 2018. In Germany, frozen meat alternatives are particularly popular (burger patties, nuggets, minced meat), followed by vegan cold cuts and sausage spread. Plant-based food as a generic term now includes not only plant-based meat, but also fish, cheese, milk, yogurt and ice cream.

It's all about the texture.

The majority of formed meat substitutes imitate red meat products. In addition to producing a stable, shapeable mass, there is a challenge in processing plant-based ingredients in terms of texture. From vegetable-protein-water mixtures, fibrous to spongy, meat-like structures must be created through targeted heating and mechanical processing at high pressure and subsequent cooling. Over the years, alco and the entire market have come to realize that end products based on legumes such as peas or beans are more likely to be associated with meat-like products than their counterparts with soy-based starting product. Also, the mixing of various alternative proteins ("blending proteins") is a suitable solution for an amazing meat-like taste with a corresponding texture.

Close cooperation with alco pays off.

Several well-known companies have trusted our expertise in the field of processing plant-based foodstuffs for years. We focus on energy-efficient and sustainable machines in order to pave the way for our customers to the gigantic global growth market of plant-based foods. Homogeneous mixing, meaty textures, efficient rehydration, careful coordination of the starting product and the subsequent process steps - are many things to consider when manufacturing and refining meat substitute products. Talk to our technologists and project managers. We advise you in detail on all phases of the product process in order to optimize product preparation, production output and careful cooking down to the last detail.

Learn more:
alco-food.com/en

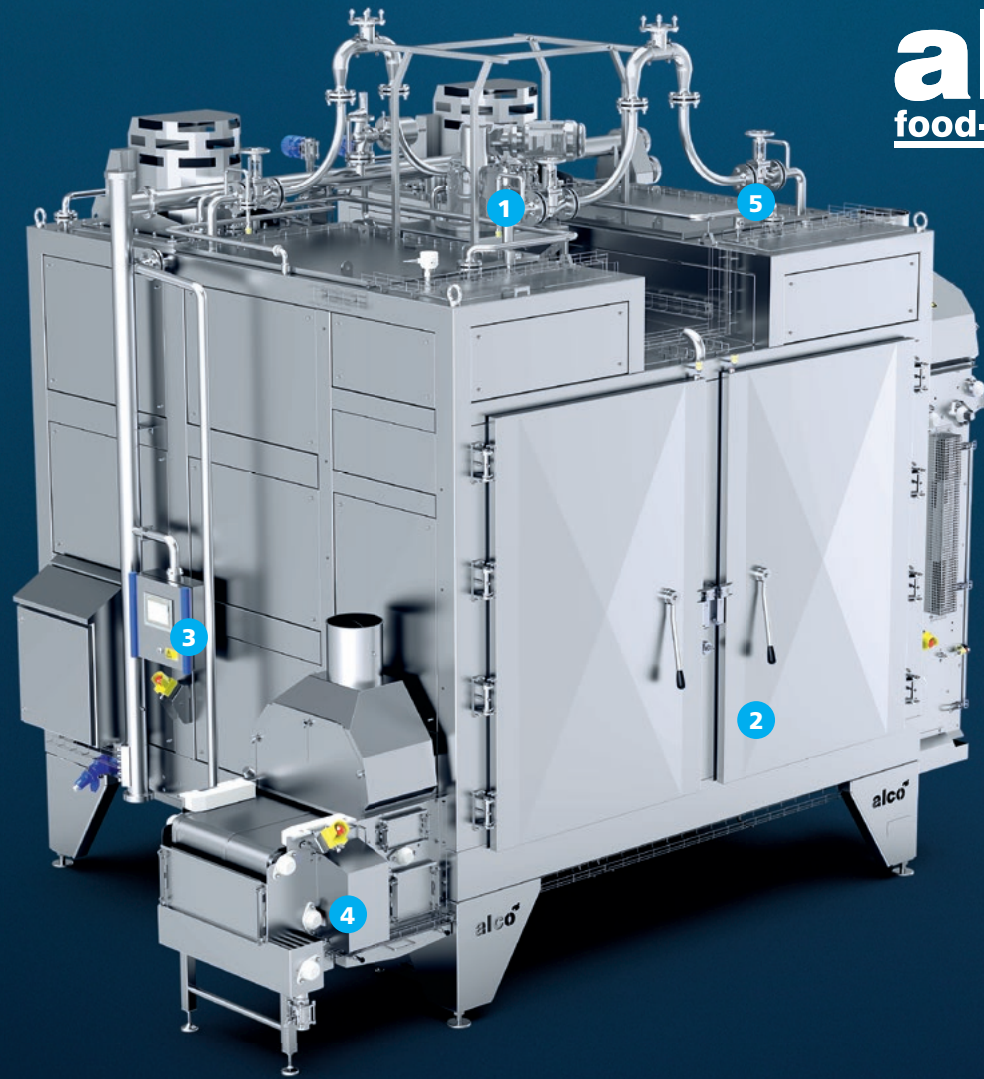


Regardless of the starting material – with alco, almost every imaginable processing is possible.



"In particular, king oyster mushrooms impress with their really good taste and great consistency."

Karsten Weitzel, Sales Manager Germany, has a weakness for mushroom-based substitutes. The right temperature and frying time in the alco fryer AGF are crucial factors for a firm and succulent product.



The spiral oven from alco

produces steam, hot air or both.

Our spiral oven ASH offers plenty of space for cooking, heating or browning products. Its spiral conveyor belt enables the production of large quantities over a small surface area. The two heater coils built into the oven, equipped with powerful fans, significantly improve the temperature distribution and air flow. This creates two air currents that reach the product from the front and the rear. The advantage: An even browning of the product is achieved on all sides. Authentic smoking via an external smoking system is also possible. alco spiral ovens are available as single-drum and twin-drum versions. The modular expandability by combining several towers offers optimal adaptation possibilities to your individual rooms.

1 Powerful heating elements

The powerful heating elements ensure efficient and even heat transfer as well as an ideal browning. There is a choice between electric, thermal oil and steam operated heating elements.

2 Variable level belt system

The variable level belt system allows the selection from between 5 to 10 levels. This offers optimal flexibility when using product quantities and sizes.

3 PLC control

The PLC controls the system in a smart and user-friendly manner via a touch panel with intelligent functions such as recipe management. It always keeps you firmly in control.

4 Belt washing system

The integrated belt washing system in combination with the CIP cleaning nozzles ensures the continuous and reliable cleaning of the conveyor belt using rotating brushes and water spray nozzles.

5 Steam nozzles (optional)

If necessary, steam nozzles also heat the product using a special direct steam injection.

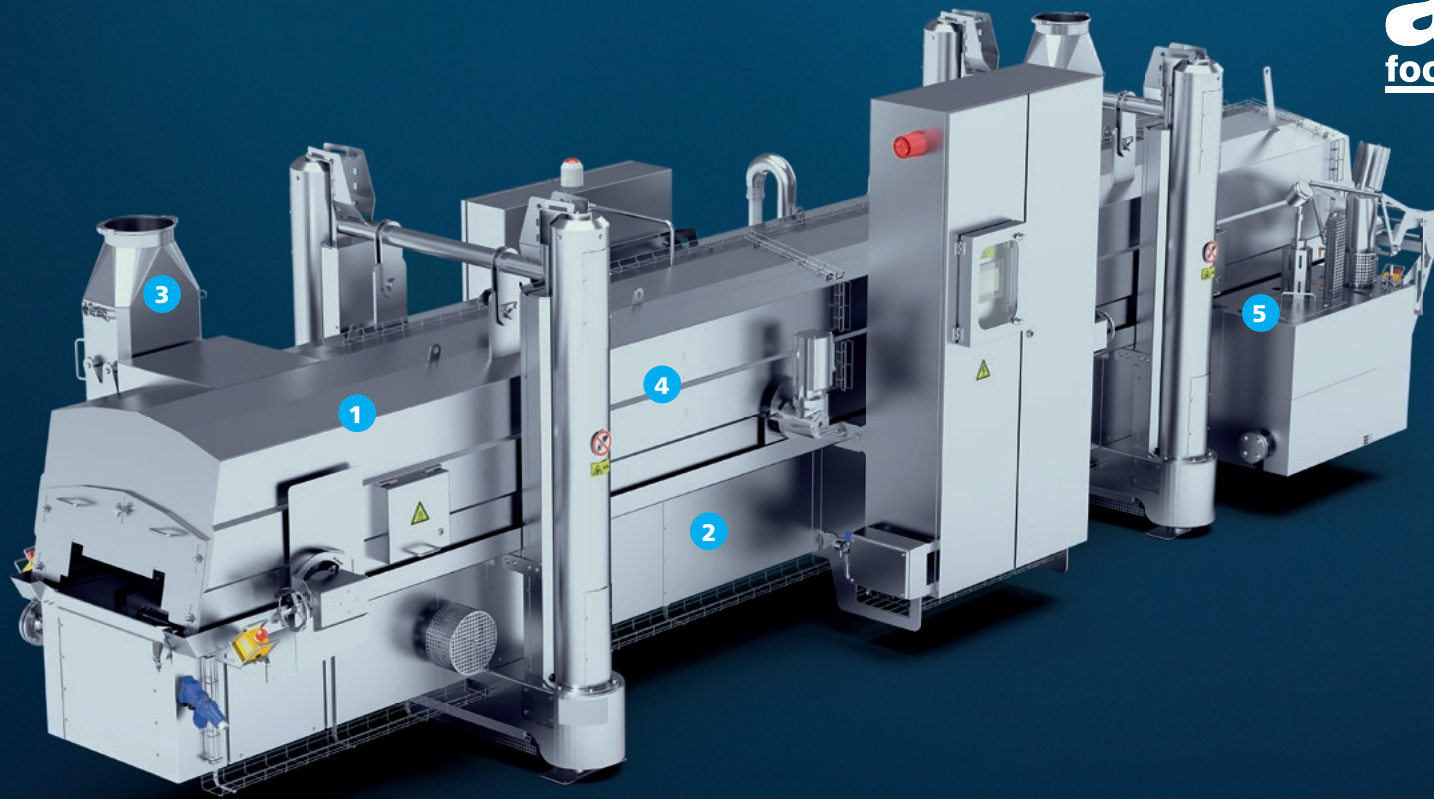


Vegetarian burgers, nuggets or mozzarella sticks? Via to the variable level belt system, the spiral oven offers a high degree of flexibility in the desired product selection.

Everything about the spiral oven at:
alco-food.com/en/machines/spiraloven

Suitable for





The fryer from alco

Flash frying or full cooking.

alco fryers are versatile, high-performance frying systems with which one may cook a wide range of products in fat or oil. Our frying systems may be used for both flash frying and full cooking. The cooking process is controlled by the cycle time and the oil temperature. This enables one to achieve the desired cooking effect, an optimally browned product color and an efficient result. Our fryers are also characterized by their ergonomic design and exceptional ease of use and cleaning. They also meet the highest safety and hygiene requirements.

1 Insulated hood

The insulated hood saves energy thanks to a double-walled hood system with internal insulation.

2 Powerful heating elements

Powerful heating elements ensure efficient heat transfer. You have the choice between electrical and thermal oil-operated heating elements. The process temperature is variably adjustable.

3 Exhaust chimney system with filter (optional)

The exhaust chimney system with filter guides the exhaust air through stainless steel chimney pipes from the suction nozzle of the fryer out of the production room. Optionally, the exhaust air from the fryer may also be effectively pre-filtered.

4 Lateral dirt transport (optional)

The lateral dirt transport removes dirt particles early on. By means of several scrapers in the front part of the machine and the direct removal of the accumulating sediments, the service life of the deep-frying oil is extended extremely.

5 CIP (optional)

The complete cleaning system for the interior of the deep fryer with cleaning nozzles and upstream, automatic emptying.



Soy medallions or soy chickens impress with their appetizing appearance. Thanks to the wide range of deep-frying options of alco, the desired consistency is always achieved.

Everything about the roasting system at:
alco-food.com/en/machines/fryer

Suitable for



“The success of plant-based meat stems from its authenticity. At alco, we ensure that veggie products leave nothing to be desired in terms of smell, appearance and taste. Our national and international customers benefit from the fact that we precisely coordinate the product properties and the technology used. This is why the number of machines manufactured in this segment is rapidly increasing.”



Uli Krümpelmann has been with alco since 2011 and works as an international sales manager. He supports the international salespersons and the worldwide agencies. He is responsible for customer advice, applications and sales, as well as market observations and market analyses.



Innovation Center

The alco Innovation Center is fueled by the ideas of our departments and is the interface between construction, project management, sales and management. Together we develop innovative concepts that provide answers to questions about the future of the food market. An important ingredient for our success of tomorrow is the direct exchange with our customers. Your requirements and wishes flow into the process work and form an important basis for our development steps.

Plant-based meat trends

In the first phases of development of vegan meat alternatives on the food market, many companies used soybeans as the main ingredient for meat alternatives. Today, manufacturers are aiming to replace as many allergenic substances as possible. Our experts have successfully developed solutions to optimize alco machines for the processing of soy alternatives such as hemp seeds, pumpkin seeds or various types of grain. This also applies to mung beans, which were previously mostly known in Asia.



Our latest product development

The improved alco forming machine AFM can now form and portion out the product mass 30% faster, which is clearly reflected in cost efficiency. Through the optimization of maintenance hatches, sealing systems and the relocation of individual component, the hygienic design is also optimized. This makes accessibility, cleaning and maintenance easier.

appetizer
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**We would also
be happy to
inform you**
about mixing vegan
raw materials with our
Twin-shaft mixer AMP.

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