



GEA Processing equipment

Flexibility in processing performance for meat,
poultry, fish and vegetables



Test your ideas before you invest

If you want to try creative ideas or new recipes either before or after you invest in a machine or marination line, we can help you explore the options at our Technology Centre. Together with our application specialists, you can test and fine-tune the brine-preparation, injection, tenderizing, tumbling, massaging and defrosting process steps for an optimum balance of cost and quality.

Creating new business opportunities

In a market where customer preferences, economic trends and global competition influence how you operate, you need to turn challenges into opportunities. GEA performance-focused solutions give you the flexibility to produce a variety of processed foods to quickly anticipate new market trends.

Lowering your operational costs

Optimizing your investment in GEA equipment for processing meat, poultry, fish or vegetables by focusing on the factors that affect your business, now and in the future. These are the foundations of Lifecycle Performance. Your products will be varied, appetizing, affordable and safe – at a lower cost per portion or per kilogram. And your processing lines will be flexible, cost-effective and lean.



With you all the way

To extend the operational life and optimize the efficiency of your GEA solutions, we can provide training, maintenance programs, equipment and software upgrades, performance benchmarking, diagnostics, applications expertise and factory integration services.

Single machines or complete lines

Whether you need individual machines to complement your existing equipment or a complete line to launch a new product or extend capacity, GEA is your ideal partner. Our machines use a standard operator interface to simplify training, and are easily integrated into your line and factory automation infrastructures.

Performance-focused processing

Variety	Cost effectively produce a wide range of appetizing foods by a combination of forming, coating, frying, cooking, grilling and freezing.
Efficiency	Combine flexibility with benchmark performance in terms of capacity, productivity, yield, automation and sustainability.
Safety	Meet and exceed haccp/ssop sanitation and food safety requirements and enjoy cleanability that saves time and costs.



One machine for varied particle sizes and presentations

To give you the flexibility to switch from handling fine particles to whole muscles, and to create varied presentations, the GEA MultiFormer is designed to grow with your business. You can start with a standard configuration, then add accessories like a stick insertion unit or paper interleaver as your needs grow.



Natural shape, good structure retention and low give away

Increase the 'quality perception' of your products, for example by whole muscle formed products with a natural shape and almost original look. Using GEA forming machines, you can quickly change over from emulsified products to whole muscle formed products as well as benefit from exact weight with very low give away, high yields and excellent retention of product structure.



Forming, the shape of satisfaction

Eye-catching, fun, convenient, appetizing or traditional – forming adds appeal to your food products. From mouth-watering burgers to meat replacement and trendy whole muscle products, GEA forming solutions give you extra ingredients for improving business results – variety, capacity, yield and versatility.

Consistent, hygienic results

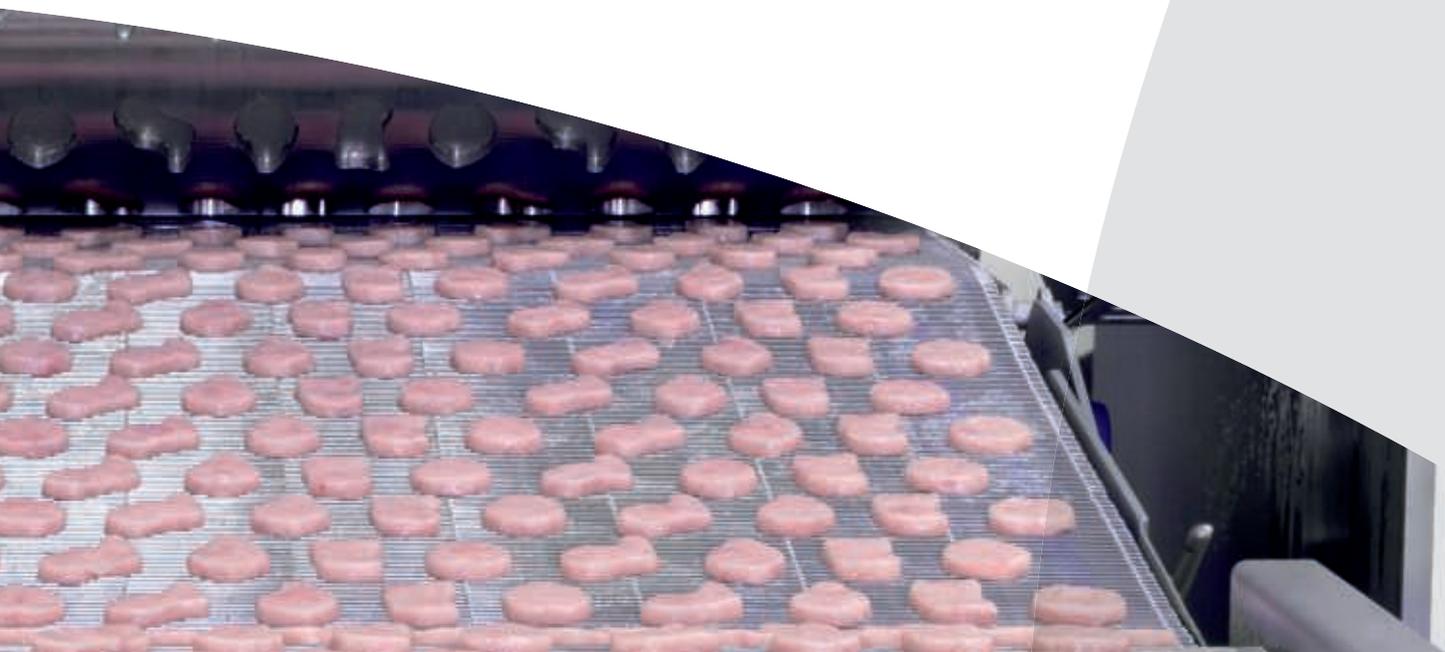
Designed around your production needs, our interchangeable forming plates deliver consistent quality results, and can even shape whole muscle pieces with a constant weight and size. To help increase your productivity and food safety, we have developed a maintenance-friendly approach to machine cleaning. You can also change tools and substrates in minutes rather than hours, facilitating non-stop production even with a mix of high volume and niche products.

Variety in form and presentation

You can choose from an extensive range forming machines and forming plates for meat, poultry, fish, vegetables and cheese. And if you need to stand out even more, we can also help create custom two- and three-dimensional forms. Whatever the ingredients, recipe or product size, a GEA solution can form it into a vast array of shapes and presentations.

Forming equipment

GEA FreshFormer	Easy-to-use, versatile, lowest cost per Kg, minimum product residue after product change-over, ideal for smaller batches of fresh meat with many product change-overs.
GEA MultiFormer	High capacity, extreme versatility, very wide choice of materials and shapes, wide range of accessories.
GEA MaxiFormer	High capacity drum former, with optimal beltloading, excellent shape retention and weight accuracy.
Accessories	Stick inserter, paper interleaver, ball rolling unit, tray transverse conveyor.





Innovation takes product quality to new levels

Imagine a tempura system that ensures very low shear for unbeatable fluffiness, or a crumb coating system with a unique circulation system that eliminates crumb damage. The GEA TempuMixer and GEA CrumbMaster® are just two examples of how our innovative technology developments enhance the quality and consistency of your products.



Dust-free work environment

In addition to the labor-saving and space saving aspects, the GEA MultiDrum also provides a very high degree of process control. It enables you to accurately control the pick-up percentage and creates a perfect homestyle appearance. To help keep your work floor dust-free – as well as reduce waste and assist cleaning – you can choose our unique GEA MultiDrum and GEA OptiAir combination.



Complete control over your coating processes

The right coating adds value to your products. And now, in line with the trend towards healthier eating and lower fat intake, you need more accurate control over coating parameters. The GEA battering, breading and pre-dusting solutions give you this control – plus the capability to cost-effectively produce an appetizing variety of products.

Total control over coating

To fine-tune the coating process, GEA solutions give you total control over the quantity of coating material used, optimizing the degree of pick-up. With this level of control, you can precisely balance quality, yield and costs. We offer innovative machines and configurations for all kind of wet and dry coatings.

Operational flexibility

Coating efficiency is enhanced by optimizing operational flexibility, providing accurate process control and ensuring ease of cleaning and maintenance. To cover the widest range of operational requirements, we offer a choice of simple, manually adjusted machines as well as fully automated solutions with very accurate process control and little need for operator intervention. The possibilities range from single pieces of equipment to complete coating lines.

Coating Solutions

GEA MultiDrum & GEA OptiAir	A coarse, high pick-up, golden coating on boneless and bone-in products. Perfect homestyle appearance, reduced labor, dust free production environment, flour cost savings.
GEA OptiFlour® & GEA OptiAir	Finely adjustable pre-dust, flour or breading pick-up, dust-free processing environment, flour cost savings, suitable for heavy duty 'seeded flour' applications.
GEA CrumbMaster®	Ideal for both fine and coarse crumbs ensures product consistency and quality, easy to clean, simple to operate.
GEA WetCoater & GEA TempuDipper	Efficient, even coverage of batter or tempura, easy to clean.
GEA OptiCoater & GEA OptiDipper	Versatile, even product coverage with batter or tempura, extra options to meet high product demands, extremely hygienic, recipe controllable.
GEA TempuMixer	Fully automatic tempura mixer - industry standard in product quality, fluffiness, consistency and savings on tempura mix ingredients, low product waste, easy and safe to operate, simple to clean.
GEA BatterMixer	Versatile batter mixer, suitable for milk wash, adhesion batters and high viscous batters, simple to operate, easy to clean. Manually supply of flour and water.





Lower energy and operating costs

Reducing energy consumption, simplifying cleaning and extending oil life will lead to considerable cost savings. The GEA EasyFry scores on all three fronts thanks to its superior insulation, hygienic heat exchanger and open sanitary design. It delivers the highest heating capacity in the industry, while its self-supportive sediment filtration system extends your oil lifetime.



Tripling the life of your oil

Extending the life of your oil and reducing sediment to a dry waste material is cost effective as well as environmentally responsible. The GEA Oberlin Filter is a high capacity continuously operating pressure filter that is especially suitable for tempura coated and breaded products as well as non-coated products like burgers and meat balls. It removes both sinking and suspended/floating sediment immediately before it starts to affect the oil, and therefore improves and stabilizes product quality and flavor. It extends oil life 3 to 5 times and the resulting sediment comes out as a dry cake containing no to minimum oil.



Perfect frying and oil management

Your deep-fried products need to be crisp, crunchy and golden-colored, and GEA helps you achieve perfect results with a range of frying solutions that guarantee attractive and tasty products – from chicken nuggets and fish fingers to non-coated fried pork and vegetarian products.

Enhancing taste and appearance

We ensure all our frying solutions provide you with efficient, cost-effective frying as well as safe, easy, low maintenance operation. The machines are designed for high capacity and reliability, and to help reduce your operational costs, we also focus on low oil consumption.

External oil management

As an option, you can add a centrally controlled external oil management system that is safe, flexible and includes storage. This ensures safe operation, minimizes the risk of oil mixing errors, extends oil lifetime and simplifies operation. Combined with the GEA Oberlin Filter or the GEA OilSaver oil filter, the total oil treatment system ensures the right color, flavor and reduces degradation of oil and product quality over time. This results in maximized oil usage and balanced quality against cost.

Frying Solutions

GEA EasyFry	The easy way to fry a wide range of products, for medium-high capacities, high heating capacity, safe and easy to use and clean, self-supportive oil filtration, recipe controllable.
GEA EasyFry XL	High capacity fryer, industry standard internal sediment removal system suitable for high contamination levels, ideal for flour coated and tempura coated applications, high belt speeds with no metal-to-metal contact, dual sediment removal system.
GEA OilSaver	Entry level oil filter, easy to use, runs with a filter media to collect the frying oil sediment.
GEA Oberlin Filter	High capacity continuously operating pressure filter, ideal for tempura coated and breaded products as well as non-coated products, improves oil lifetime 3 to 5 times, dry sediment easily disposable.
GEA Oil management systems	Software controlled, safe oil storage.





Three-phase cooking and roasting

Expand your possibilities. The GEA CookStar, 3rd Generation, has unique three-phase cooking in a two-section configuration so you can cook virtually any product at two different temperatures in steam as well as in hot air. And the new GEA CookStar Turbo adds impingement technology for even more possibilities, better efficiency, greater variety and yield performance!



Faster payback by increasing yield, capacity and efficiency

Shorten the payback time by using a GEA belt grill to coagulate products that are pre-calibrated in thickness before they're cooked in a controlled environment. The results are lower core temperature deviation, more efficient energy use, increased capacity, and higher yield due to better weight retention.



Creating a satisfying eating experience

Achieving the right appearance, flavor, texture and mouth feel for the most satisfying eating experience depends heavily on the cooking or grilling parameters. With GEA heat treatment solutions, you can control the process for the desired degree of juiciness, crispness and browning, as well as maximize yield and shorten cooking times.

Extend your process flexibility

In addition to providing you with the capability to cook, grill, roast and smoke a broad range of products to perfection, GEA also extends your operational flexibility. We do this, for example, by offering three-phase cooking solutions that combine cooking, roasting and smoking. You can even cook products with color and texture.

Cooking performance

Our section cooking systems with their unique airflow concept not only increases your yield and operational flexibility, they also guarantee food is thoroughly cooked for optimum safety.

And the short cooking times, high capacity, ease of cleaning and ease of operation mean you benefit from higher throughput and more uptime.

How efficient is your process?

To increase your operational effectiveness and optimize energy utilization, GEA heat treatment solutions are designed for efficient airflow and use energy-to-demand methodology. In addition, they enable continuous cleaning during production with efficient Clean-in-Place systems, and incorporate dewpoint control to manage steam supply. The overall design is energy efficient.

Cooking, roasting and grilling solutions

GEA CookStar 3rd Generation	Versatile two-section oven, high capacity and superb flexibility, hot air and steam, excellent for innovative new products.
GEA CookStar Turbo 3rd Generation	Three-phase cooking and roasting, designed for roasting, extreme versatility and improved yield, shorter cooking, very energy efficient.
GEA FlowCook	Dual-zone in-line oven, short cooking time, optimum yield, versatile (steam & hot air cook, and roasting).
GEA TwinGrill	Contact grilling for high performance, versatile, grills a wide range of products, high yield with excellent energy economy.



Freezing to protect and preserve your product's quality

Once you have formed, coated and heat-treated the product, you need to protect and preserve its quality, freshness, appearance and weight. Our range of chilling and freezing equipment combines performance, hygiene and safety with a flexibility approach to meet your specific business needs. The operational benefits include short freezing time, compact footprints and a choice of configurations and handling capacities.

Freeze more in less space

If you need tailored configurations in a small format freezer, the GEA spiral freezer series gives you this flexibility without compromising freezing performance. It delivers a very high yield too. For small capacities GEA E-Tec/P Compact package freezer delivers excellent freezing performance from a very small footprint.



Minimize weight loss, retain product quality

At all spiral levels in a GEA A-Tec, S-Tec or E-Tec/P spiral freezer your products are evenly surrounded by a horizontal air stream at a consistent temperature. This Individually Quick Frozen (IQF) technique first of all ensures that crust freezing occurs very quickly to close the product, minimize weight loss, optimizes food safety and preserve structure and flavor. It is also an efficient freezing process, reducing the freezing time as well as saving energy –contributing to a lower price per kilo.

Layout and capacity flexibility

Whatever the shape and size of your products, our freezers have configurations to suit your specific volume and floor space requirements. You can specify feed and discharge

configurations, including feeding from two separate lines on one machine. The sequential defrost option allows up to 14 days continuous running without stop for evaporator defrost. Adjustable air speed (option) facilitates freezing of very light products.

Streamline your operations

Like all GEA equipment, the stainless steel freezers are built for ‘cleanability’ and easy maintenance, so you can be sure of perfect hygiene. A comprehensive range of accessories adds to the flexibility and helps streamline your operations. With options such as PLC operation control with pre-programmed menus, you can achieve perfect results with minimal operator intervention.

Freezing solutions

GEA A-Tec & GEA S-Tec spiral freezer	For stringent hygienic requirements, fully welded floor and fully welded structure in product zone.
GEA E-Tec/P spiral freezer	Minimum freezing time, maximum yield, customizable configurations.
GEA E-Tec/P Compact package freezer	Freezer fully prefabricated prior to shipping. Plug-in solution.
Series of Tunnel & Carton freezers	Different solutions for every application.



Complete lines from a single source

Specifying a complete GEA line solution has advantages in terms of yield, flexibility and cost of ownership. Our machines are tuned and balanced to work with each other, and we can advise on the best configuration for your production requirements or type of product. We offer solutions ranging from simple dedicated lines to fully customized installations, including lines for sliced/diced products, coated products, roasted products, uncoated fried products and fryless fried products.

The flexibility to respond to trends

A line solution helps you maintain consistent product quality by offering more control over process- and recipe management. The balanced performance optimizes capacity, lowers energy costs. The flexibility of our lines and equipment helps you take advantage of product trends and consumer preferences – thanks to benefits like short change over times, and the possibility to process a range of different products by making small changes to the line set-up.



Performance guarantee

With the support of our Technology Center to test and refine solutions, you benefit from optimized yield and performance. Our equipment meets very high hygiene requirements, and is reliable, easy to clean and operator friendly – all contributing to a lower overall cost of ownership. When required, we also offer performance guarantees, and after installation at your site, a GEA application specialist fine-tunes the line so it runs according to the performance guarantee.

Synergy to deliver a 2% yield increase

By integrating the line control and by fine-tuning each single processing step for optimum performance in relation to all others in the line, one of our customers using a GEA total line concept for producing fully-cooked bread products enjoyed a 2% yield increase compared to a line comprising equipment from various manufacturers. You can also benefit from this synergy.



Your partner for food processing & packaging solutions

GEA performance-focused equipment and solutions for preparation, marination, processing, slicing and packaging are developed to help you reduce operational costs, increase processing efficiency, and respond quickly to new opportunities

A global heritage

To ensure you get the best out of your equipment, we provide comprehensive customer support through a global network of sales and service offices, so you get local knowledge in your native language. You also tap into the creative thinking and technical know-how of an international organization that comprises many specialized activities with long and successful track records in their respective fields.



Contributing to your success

The total GEA Food Processing & Packaging range - the most extensive available today - extends from stand-alone equipment to complete production lines. Depending on your requirements, we can plan, develop and build a complete new line, or simply enhance your existing capabilities. You can even try out new ideas, test recipes and refine processes at our Technology Center.



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 index.

GEA Food Solutions Bakel B.V.
Beekakker 11
5761 EN Bakel, Netherlands

Tel +31 492 349 349
Fax +31 492 349 416

info@gea.com
gea.com