



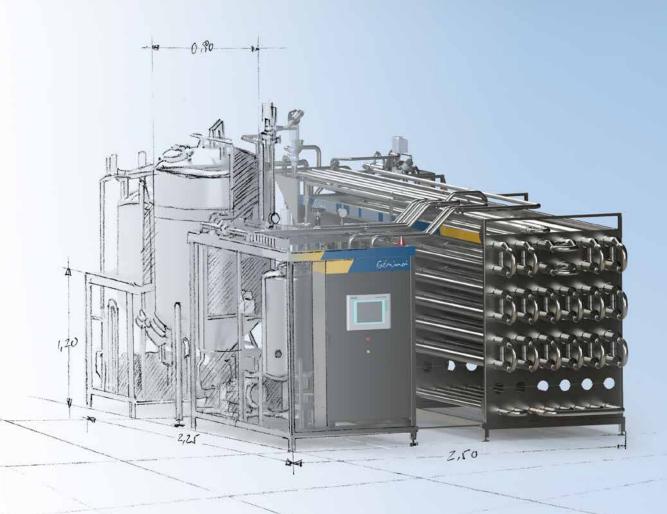








You imagine and we do it.



Genina SI

We are

ÉMINA Procesos Alimentarios, S.L. is located in Jumilla, Murcia, a spanish autonomous region which is a model in food production. Gémina is the leader spanish company in designing, making and integration of systems which offer innovative solutions for proccesing and aseptic packing in the food sector industry.

We have 25 years of experience in the food sector offering services of engineering, projects, design and execution of factories and industrial processes, turnkey projects and technical counselling. Gémina was founded in 1992 by Pedro J. Simón García and throughout the time our staff has acquired a know-how which makes our company unique in the development of food processes. This is also due to we are in a wide range of sectors and the wide variety of services we offer.

One of our main objectives is the food safety, therefore, our solutions are designed to fullfil all the requirements of the most demanding regulations. In the processing and packing lines of Gemina can be treated products of the sector of juices, tomato, citrics, drinks, vegetables, fruit, and other foods.

Our products are divided in different categories:

- Packing
- Proccesing
- Services

66 Producers of processing and aseptic packing machinnery and integrators of food industry projects"

Pedro Simón García

Manager and technical director



CORPORATIVE CATALOGUE 5



n Gémina, we carry out in our installations all the engineering, design and manufacture of the process and aseptic packaging equipment.

In our general catalogue, we display all our media to fullfil your demands, either standardised machinnery or those adapted to particular needs.

- Design, manufacture and integration of machinnery of process and food aseptic packing.
- All the manufacture is completely carried out in our facilities.
- All our machinery has CEE safety certificate and complies with the most demanding standards.
- I+D+i: We believe in technological innovation.

We adapt the machinnery and the installations to our costumers' needs, offering a personalized and exclusive treatment. In Gémina, we not only produce equipment but also add quality to the products of our costumers, optimising the processes and giving useful solutions.

Robotics

Robotic applications in proportion to palletized/ depalletized for the start and the end of processing and packing lines.

Aseptic fillings

Aseptic machine which fills metal drums with pre-sterilised bags which have pressurised cap. Besides, it also fills carton containers.

Bag in box

Aseptic filling with automatic feeding of presterilized bags which have pressurized cap and a low volume (1-20 liters).

Extractors

Processing of a wide variety of products to get a puree free of seeds and peels. Different methods of use: estractor or refiner.

Heat exchangers

We offer all kind of models and designs, from single-tube to partial ones or rough surface exchangers.

Forced circulation evaporators

Concentrators which have great capacity and performance for products having great viscosity and a high content in solid matter. They have multiple stages which are adapted to the process and needs.

Hot/Cold Break units

These units process tomato puree and tomato paste guaranteeing the total or partial deactivation of the pectolitic enzymes and allowing the preservation of the pectine.

Laboratory pilot plants

Pasteurization and aseptic packing in the laboratory of small product samples, such as juices, soda drinks, vegetable creams, soups, etc.

Tubular pasteurisers

Project and constructive development of pasteurization plants adapted to different needs.

UHT

Low- acid liquid products (pH>4.5 for milk pH>6.5) are treated at 135-150°C for a few seconds with indirect heating or direct steam injection.

Heaters and coolers

Heating of products before getting through treatments such as refining or mixing. Cooling previous pasteurization treatments.

Cream extraction plants
Cream extractions of all types of fruits and vegetables, in both cold and hot extraction processes.

Aseptic monoblock

Integration of an aseptic filling in a pasteurization plant, creating a compact, functional and versatile machine which is adaptable to a wide range of products.

Crusher

Defrosting of stored products such as fruit juices, fruit and vegetables pastes, creams, sauces and so on.

Piston pumps

It is conceived to pump viscous products, big particles of products (fruit in cubes or in pieces) or product which are sensible to shear stress.

Inverse osmosis equipment

Reduction of salinity of salty waters and sea waters.

Blending room / blending

Blending by recipes from database and transference of process parameters to pasteurizers.

Emptying of cans by aspiration

Unloading of metal cans and aseptic bags in blending rooms through emptying techniques in very few seconds.

CIP systems

Cip systems are used to carry out the chemical cleaning of food installations in a completely automatic way.

Processing tanks

Storage in aseptic packing tanks for high and low ph products, in liquid or viscous products

Blending tanks

We have a wide range of vertical and horizontal tanks with different types of shaking and volumes. They are adapted to process needs.

Storage tanks

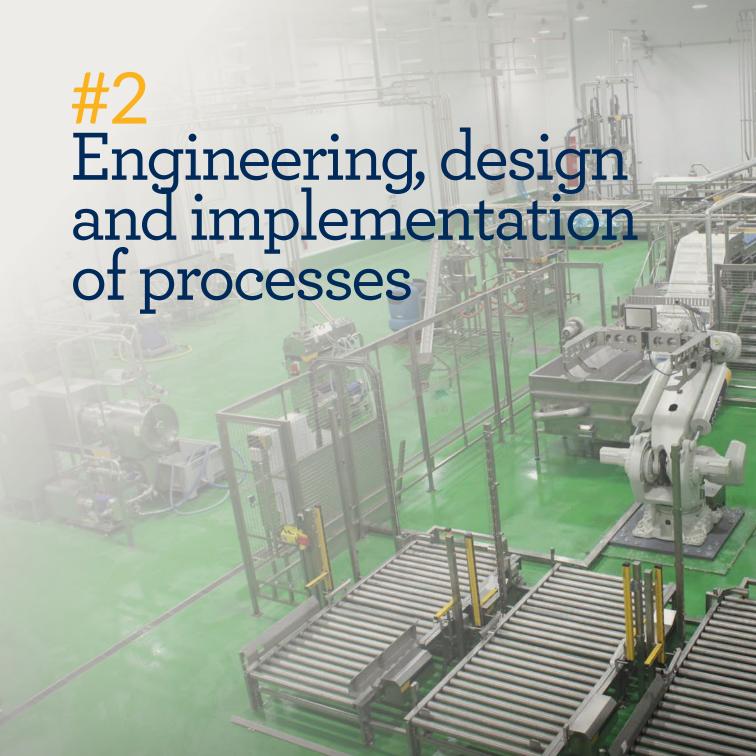
Storage rooms in stainless steel tanks having standard volumes or custom-made volumes.

Finisher or pulping machine

It refines crushed product to remove peels, stems and seeds.

Hammer mill

It is a grinder of pitted food (vegetables among others) for processing raw material.



CORPORATIVE CATALOGUE 9



n Gémina, we love our work and our engineering department carries out from the design and calculations to the manufacture, the assembly the automation and the start up of your equipments and installations. In conclusion, we are in charge of the total and integral management of the projects.

The turnkey work process is complemented with a personalised customer service which satisfies all the requirements and demands arised in the start up of the facilities.

We care of every detail of the process and advice you in the process optimisation to make the product. Gémina designs every process and adapts it to your requirements standing it out from the competition.

66 25 years of experience in the food sector giving services in the sector of engineering service, projects, design and executuion of factories and industrial processes, turnkey projects and technical counselling"

10 ENGINEERING, DESIGNING AND IMPLEMENTATION

Processes

Gémina is specialized in producing machinnery for controlling all the food treatment processes.

- STERILIZATION
- PASTEURIZED (LTLT, HTST, UP, UHT)
- CONCENTRATION
- RAW MATERIAL ENTRY AND WASHING
- GRINDING
- REFINING
- PITTING
- PEFLING
- ENZIMATIC DEACTIVATION
- CREAMS EXTRACTION
- PRODUCT EXTRACTION
- MIXING PROCESS BY
- "BLENDING" RECIPE
- ASEPTIC PACKING
- ASEPTIC STORAGE
- CIP SYSTEMS
- WATER TREATMENT
- POWDER DISOLUTION
- DOSIFYING





Versatility and flexibility: we can plan from a turnkey plant to a line expansion or a process equipment installation.

Adaption capacity to different environments and situations.

Great technical capacity and experience from our engineering equipment.

We guarantee your success thanks to we carry out the complete management of your project reducing risks, costs and deadlines.

Our work methods guarantee the development and implementation of your production line, detecting the strategic needs for the start up and facilitating all the operative means for the development, maintenance and optimisation of your production systems.

Industries

Gémina works in the following industrial sectors:

- DAIRY INDUSTRY
- TOMATO INDUSTRY
- JUICES AND DRINKS INDUSTRY
- FRUITS AND VEGETABLES INDUSTRY
- CITRICS INDUSTRY





TECHNICAL ASSISTANCE SERVICE

Alfa-Laval technical, distributor and integrator oficial service

Gémina develops a preventive maintenance plan personalized for each customer. This plan avoids stoppages and keeps the equipment in an optimal state through an on-line control of production and a hazard prevention plan of the production. Kits of updating, parts improvement and installed systems are offered.

Moreover, Gémina offers training plans for their equipments. Thus, Gémina staff is trained to solve problems and operate correctly during the industrial processes.

- **#1** Maintenance service.
- Installation service.
- Calibrations.
- #4 Replacement parts service.
- "Training" service.
- #6 Online control of production process and failure resolution.













We use digital tools of automation and informatics for controlling and supervising process data, remote support and maintenance tasks planification. The more responsabilities we assume the more guarantees we offer.

Automation and robotics

The products which have best quality and safety at the best prices dominate the market. Automation gives an optimization of production processes which revert to an adjustment of costs and a bigger control of quality parameters and food safety.

The automation of Industrial food processing is a reliable investment in the food industry. It consists on controlling, verifying, showing and registering the processing data provided by the equipment during its working, improving its performance.

- Personalized processes automation: integral solutions
- **Total control of the process:** SCADA systems, registration and data control.
- **Robotic applications made to measure:** a solution for each different necesity.

Food integral quality

One of our main aims is to guide our customers in the management and adaptation of their company and advicing them in the process of recoursing to the main food security standards such as BRC, IFS or FSS. We provide assistance in the implementation of the food safety management system, which is compounded by HACCP (APPCC),



pre-requistes and control of the main processes. We offer advise and integral management in the processed food quality area to small and medium-size companies just as to other major producers.

We have our own technological center which integrates a pilot plant and real process equipment to develop new food products and formulations. We also have a laboratory which we put at your service and is completely equiped with a high technology of analytic and control.

Besides, we give services of validation and processes control to help our customers to provide themselves with objetive and update evidences, for keeping their certifications in international quality standards successfully.

- Optimization, development and validation of processing and packing equipment, besides of food elaboration processes.
- Consultancy for implantation formula].of standars such as: BRC, IFS: ISO 22.000, FSSC...
- Product development [process + formula]

Customer service

Gémina is characterised by its exclusive and permanent customer service. Our vocation is to become part of the companies which we work in an operational way.

Our closeness to the customers, technical competence, wide experience and self-confident are some of the main features why our customers place their trust into our equipments and services.







Procesos Alimentarios, S.L.

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