



Marin *Giménez*  
*fruit solutions*





INDUSTRIAL  
AND  
SUSTAINABILITY  
**report**



# INDEX





COMPANY  
"1"

## *company*

*The Company's main objective is to produce the highest quality products with the maximum level of safety standards whilst maintaining competitiveness. Marín Giménez currently supplies its products to the dairy, beverage, marmalades, nutrition and baby food sectors.*



**Marín Giménez** is an own family fruit and vegetable company founded in 1957 which has always been based on **innovation and entrepreneurship**.

It has constantly evolved until becoming a reference in the processing and preservation of fruits for industrial use, thanks to the latest technology and an experienced and skilled human team. In that way, more than **300 employees** permanently work to achieve the company's objectives.

**Marín Giménez** actively works with its customers to the development of new tailored products that help to improve the quality and people's nutrition.

We are **committed to protect and improve the environment** and we manage a vertical integration system which allows us to effectively control the raw material's supply.

During these almost 60 years of activity, the values of a family company have continued prevailing in Marín Giménez, always concerned about its customers, its human team and the incorporation of **innovative technological processes**.



*Marín Giménez wants to grow in a sustainable way so that it not only carries the environmental legislation compliance through, but also it goes one step forward and commits itself to the minimization of energy resources consumption and their use optimization.*

This report tries to provide an overview of:

- The **value of strengthening integration mechanisms** from fruits growth to the consumer.
- Company's technical and industrial conditions and its **production capacity**.
- Our Company's **technical solvency**.
- **Development and innovation processes** to reach the greatest efficiency and food security.
- **Environmental Responsibility**.
- Our **collaboration proposal**.





AGRICULTURAL  
PRODUCTION  
INTEGRATION  
**'2**



## *agricultural production integration*

VERTICAL INTEGRATION MODEL

*Since 1957, Marín Giménez has been focused on choosing and selecting the most suitable fruit varieties for each of its products, bearing in mind the time of harvest, the treatments, the fertilisers and the most sustainable environmentally-friendly practices.*





Marín Giménez has adopted a vertical integration model of its suppliers so as to secure stability and safety when supplying, while maintaining the best quality conditions requested by the food industry.

Our working capacity widely exceeds the most extreme requirements in case of necessity. Over the years, we have designed a working programme where fruits varieties, geographical diversification or the control of the picking dates are joined together. These allow a working planning according to our production capacity.

**There are some essential keys in the vertical integration model**

**1. Geographical location: it is located in a leading fruit production region of Spain.**

The business model of Marín Giménez is based on the fact that its processes must be sustainable and responsible. In this sense, the value chain is characterized by the proximity of supply, which means that more than 50 % of the production is grown in areas no more than 80 Km far away from Marín Giménez’s facilities, specifically:

GEOGRAPHICAL LOCATION	
Apricot	100 % coming from less than 80 Km areas
Peach	39 % coming from less than 80 Km areas

Table x. 1. Geographical location

This proximity allows the fruit being processed within 12 hours of harvest, avoiding cool storage and possible risks of cross-contamination. The excellent location also represents an advantage

in the logistics chain. Own and outsourcing trucks meet the requirements of each fruit season by taking rounds of less than 9 hours from fruits loading to unloading.

2. Own production: apricot and peach

Securing part of the production with own fields is the response to the products' quality commitment. These own fields allow us to obtain products under special low pesticides conditions.

This commitment allows us to continue increasing own productions year after year, with an expected increase of 5 % for apricot and 8 % for peach of the total raw material consumption by 2015.

PRODUCT	% coming from own fields
Apricot	25 %
Peach	15 %

Table x. Own fields

3. Permanent suppliers: approved suppliers

The loyalty and commitment of the current suppliers is the result of the work carried out during years. The process for the approval of suppliers involves a strict control of the initial situation of the raw material.

Suppliers are subsequently evaluated with regards to the products' quality and the service offered.



Table x. Approval suppliers' process

#### 4. Supporting and advising the farmers

The almost 60 years of activity have provided Marín Giménez with the knowledge of the crops, developing an agronomy department which look after and improve the crops, the treatments, the pruning and the fruits' picking. The agronomy department, which is constantly involved in the manufacturing process, allows joining field and factory's necessities and covers every processes from the tree care, respect for the environment, phytosanitary treatments' control, fertilisers' control, fruit quality needs, the suitable conditions for picking, etc... all carried out by an excellent cooperation in order to satisfy our clients' needs.

- Treatments control
- Letter of recommendation of each season
- Agronomic advice
- Inspection upon receipt of raw material
- The agronomy department visits the fields before the crop.
- Control of the traceability consignment

These control measures allow annually evaluating all suppliers and launching actions focused to improve the supplies.

For the last two seasons 72 % of raw materials evaluated were suitable and 28 % were under control. No raw material's supplier was not suitable.

#### Control Measures

- Soil Preparation
- Active substances control with crop
- Multi-waste analysis

SEASON	N° SUPPLIERS AVERAGE 2011-2012	SUITABLE AVERAGE 2011-2012	UNDER CONTROL AVERAGE 2011-2012
Peach	82	60	22
Apricot	34	33	1
Strawberry	19	12	7
Orange	9	9	0
Pear	21	6	15
Total	165	120	45

Table x. Evaluation of raw material's suppliers

## 5. Geographical diversification: risk diversification

The other 50 % of the raw material come from other areas in order to:

- Cover all our raw material's needs, avoiding any possible reduction caused by plagues, pollution, weather incidents, etc.
- Ensure the quality of our raw material.
- Diversify the entrance of fruit in our facilities, avoiding massive inflows that may arrive at picking dates.
- Extend the production and picking schedule.

### RAW MATERIAL'S ORIGIN

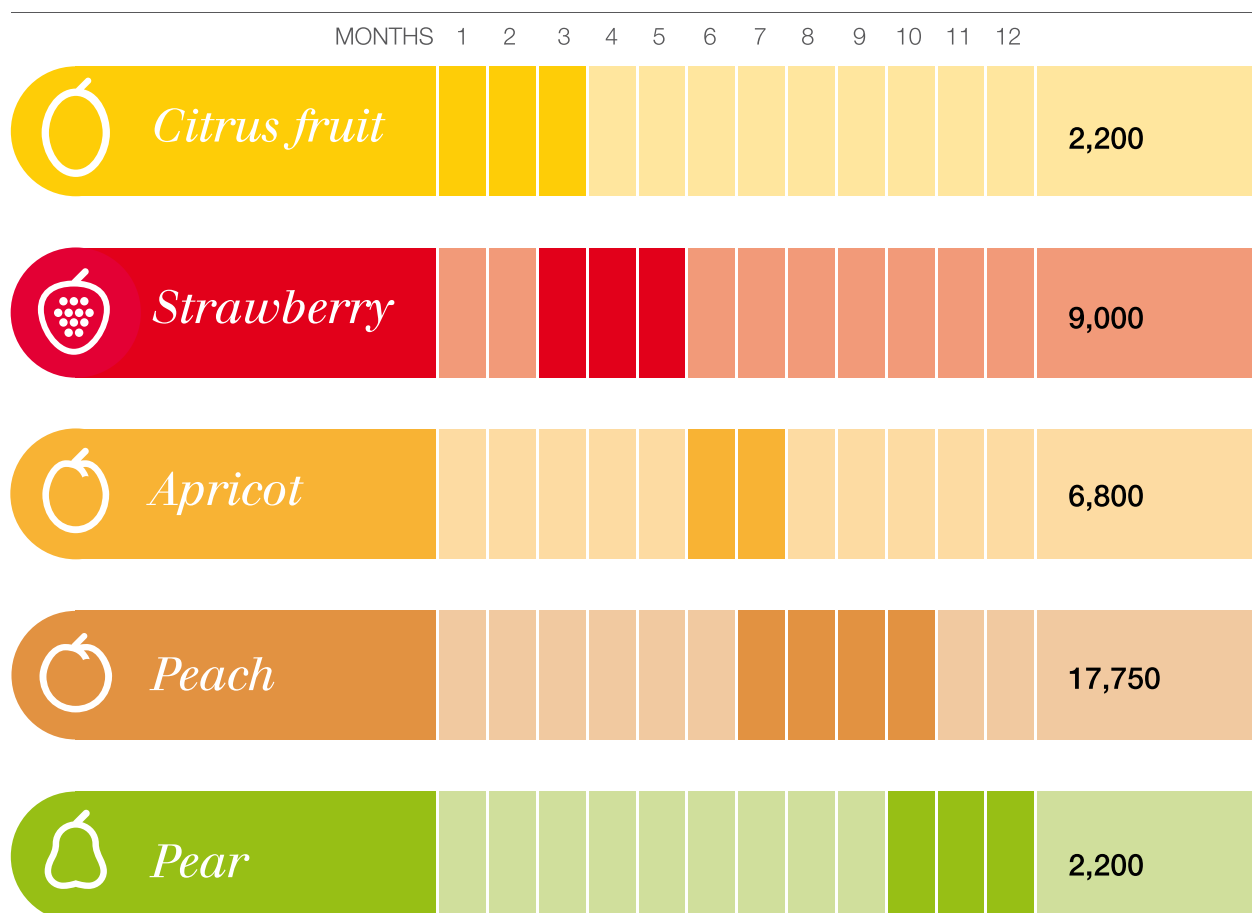
PRODUCT	KG. PROCESSED (*) (THOUSANDS KG.)	PLACE OF ORIGIN
Peach	17,750	Murcia Albacete Zaragoza Logroño Lérida Huesca
Apricot	6,800	Murcia Albacete
Strawberry	9,000	Huelva
Citrus fruits	2,200	Sevilla Murcia
Pear	2,200	Lérida Zaragoza Badajoz Logroño

Table x. Origin of the raw material and Kg. processed

(\*) Note: Average quantities of 2011, 2012 and 2013

The fruit supply of each season keep a constant inflow of products all year long avoiding overlapping between different products.

#### Average of raw material's Kg. processed in each season



(\*) Note: average of Kg. processed per month during the period 2011- 2013 in each season.



PRODUCTION  
CAPACITY  
**'3**



1T Capacity

The table below indicates the lines’ production capacity by product and type of process:

PRODUCT		MANUFACTURING PERIOD					
		JAN	FEB	MAR	APR	MAY	JUN
 <i>peach</i>	Diced peach						
	Triple concentrate						
	Puree						
	IQF Cubes 10x10						
 <i>apricot</i>	Pulp						
	Halves (70/80)						
	Puree						
	IQF halves						
 <i>strawberry</i>	Diced strawberry						
	IQF Strawberry						
	Puree						
	Double concentrate						
	Triple concentrate						
 <i>citrus fruits</i>	Orange pulp						
	Lemon pulp						
 <i>pear</i>	Cubes						
	IQF cubes						
	Puree						

						LINE CAPACITY PER HOUR (IN TONNES)	TOTAL PRODUCTION CAPACITY BY SEASON (IN TONNES)	
JUL	AUG	SEP	OCT	NOV	DEC			
peach						Diced peach	12	12,900
						Triple concentrate	1.4	1,900
						Puree	14	19,000
						IQF Cubes 10x10	2	1,100
	apricot					Pulp	14	10,000
						Halves (70/80)	5.5	4,000
						Puree	14	10,000
						IQF halves	2	500
	strawberry					Diced strawberry	10	10,000
					IQF strawberry	2	1,100	
					Puree	14	15,000	
					Double concentrate	2	2,100	
					Triple concentrate	1.4	1,900	
	citrus fruits					Orange pulp	8	6,000
							Lemon pulp	8
	pear					Cubes	2,5	2,700
						IQF Cubes	2	1,000
						Puree	7	7,500

**Productions**

In the last 3 years the total outputs show the importance of the peach and apricot in relation to the total 1T production.

**PEACH AND APRICOT**

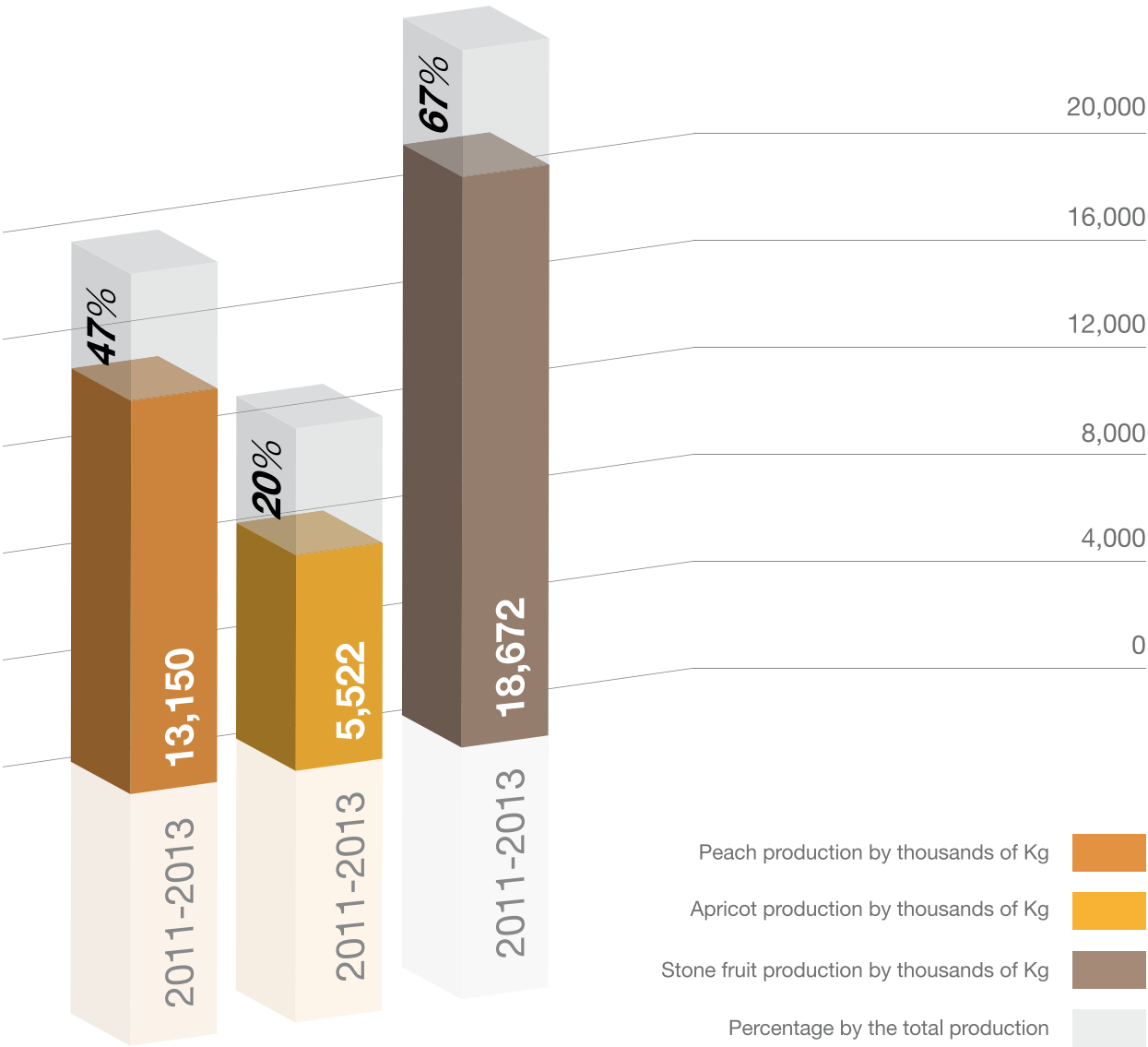


Chart x: 1T peach and apricot production

Note: the resulting data are the average of 2011, 2012 and 2013

The peach and the apricot represent two thirds of the total Marín Giménez’s production followed by the strawberry and the citrus fruits.

STRAWBERRY, CITRUS FRUITS AND PEAR

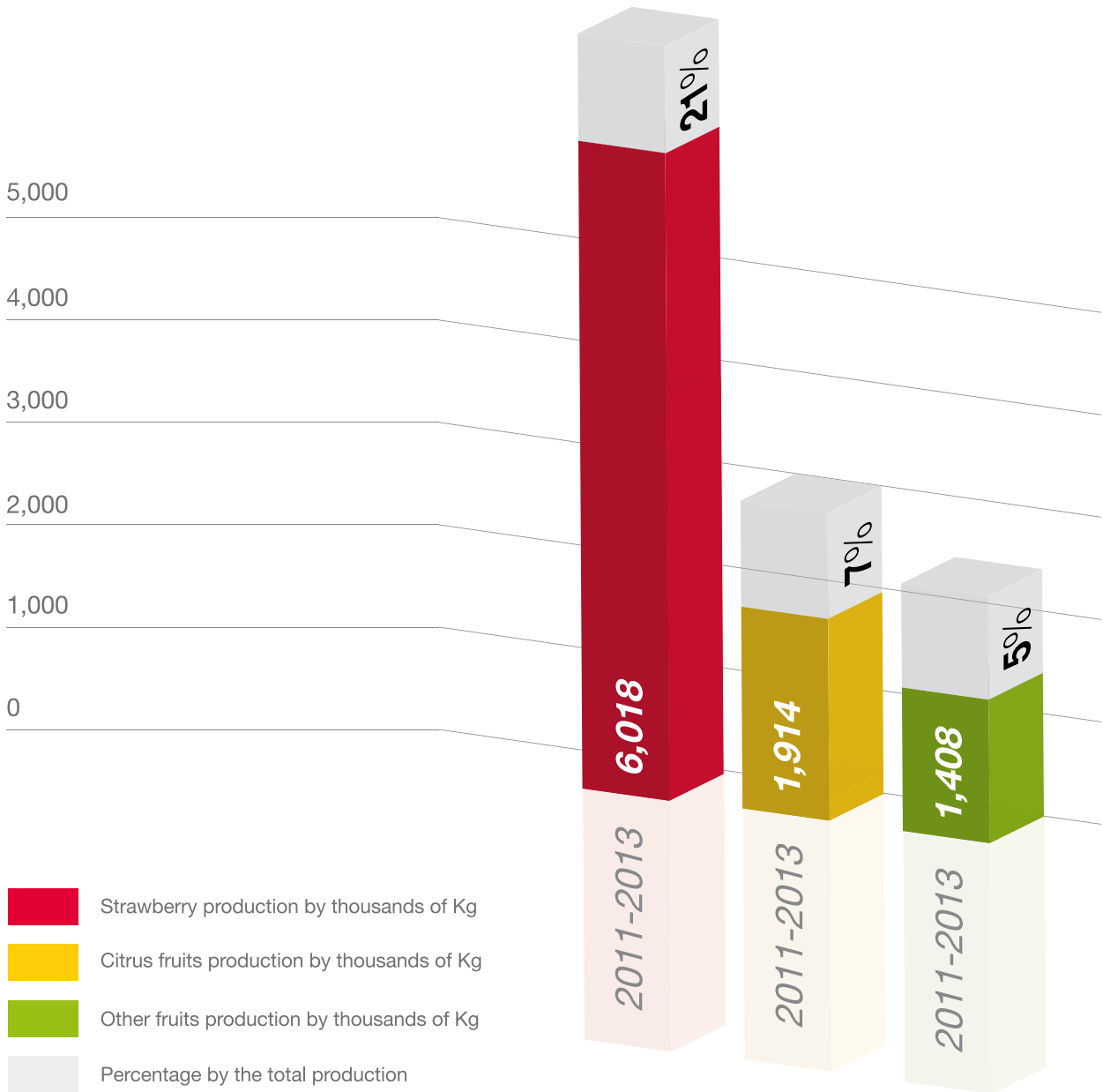


Chart x: 1T strawberry, citrus fruits and pear production  
Note: the resulting data are the average of 2011, 2012 and 2013.



The production capacity of the 2nd transformation plant is:

- **Standard fruit preparation** plant: 3,000 litres/hour.
- **Backup plant:** 800 litres/hour

Both plants are highly versatile due to the availability of manufacturing two types of products:

**Pieced products**

The process involves the complete plant operation, by using a heating tubular, a holding tubular and two cool exchangers. The total production capacity for pieced products is 11,500 tonnes/year.

**Liquid products**

These products are processed by a heating-holding tubular and a cooling tubular. The plant works up to a maximum of 1,800 litres/hour.

PLANT	PRODUCTS	LINE CAPACITY	MINIMUM PRODUCTION PER RECIPE
Standard fruit preparation	Pieced products	3,000 l/h	1,800 kg
	Puree	1,800 l/h	1,800 kg
Backup	Pieced and puree products	800 l/h	600 kg

Chart x. 2T plants' capacity



**Backup plant versatility**

On the one hand, this plant is focused to produce small quantities of products and smaller receipts in order to avoid putting into operation a higher

capacity line; and on the other hand, it works as a backup plant in case of any incidences or problems that may arise in the standard fruit preparation plant.

PLANT	PACKAGING	CAPACITY
Standard fruit preparation	Stain steel container	800 L
	Aseptic bag	
Backup plant	Aseptic bag (pieced and puree products)	From 10 to 20 kg
	Aseptic bag in metal drum	200 kg
	Stain steel container	800 L

Chart x. 2T packaging



TECHNICAL  
SOLVENCY

'4

### HUMAN CAPITAL

As a family-run business, Marín Giménez is totally aware of the importance of the company's staff as a basis for its success and continuity.

It is on this premise that the company has established a human resources policy based on improving employees' health and welfare, ensuring health and safety at work, supporting work stability, encouraging a continuous training and a good working atmosphere and promoting the personal development.

With an average of 300 employees, reaching up to 590 employees during peak seasons, the company supports and enhances all initiatives which help to strengthen its human resources policy.

Marín Giménez is therefore one of the main sources of wealth of the geographical area where the company is located.

#### STAFF INDICATORS 2013

Nº of employees (maximum reached)	590
Annual average of employees	280
% women / men (% total staff)	75 / 25
Average age of the staff (years)	48
Average seniority (years)	14.5
Women with reduction of working hours (%)	3%

Table x. Staff Indicators 2013





The chart below shows the evolution of worker's number during 2013.

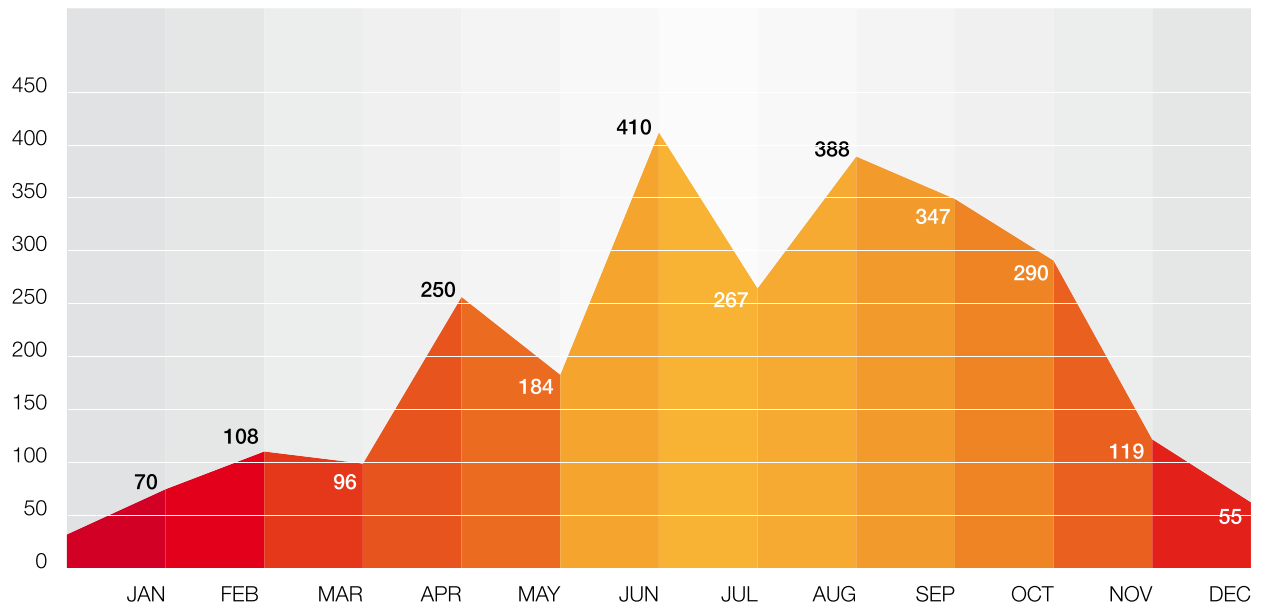


Chart x. Evolution of worker's number during 2013.



TRAINING

Marín Giménez’s training policy has gone in parallel with the important strategic changes that the company has carried out and continues to develop. Marín Giménez establishes an annual Training Plan which covers all company’s training needs. There are two different training lines clearly defined: production staff training (89% from the total workforce) and technical and administrative staff training.

Line staff qualification has become increasingly important, so employees in key positions (quality control of the product, pasteurizers, aseptic fillers, etc.) are trained internal and externally with the aim of ensuring the appropriate qualification and specialization. Food hygiene, HACCP, risks in the job position and good manufacture practices are just some examples of the training Marín Giménez gives to its production workers.

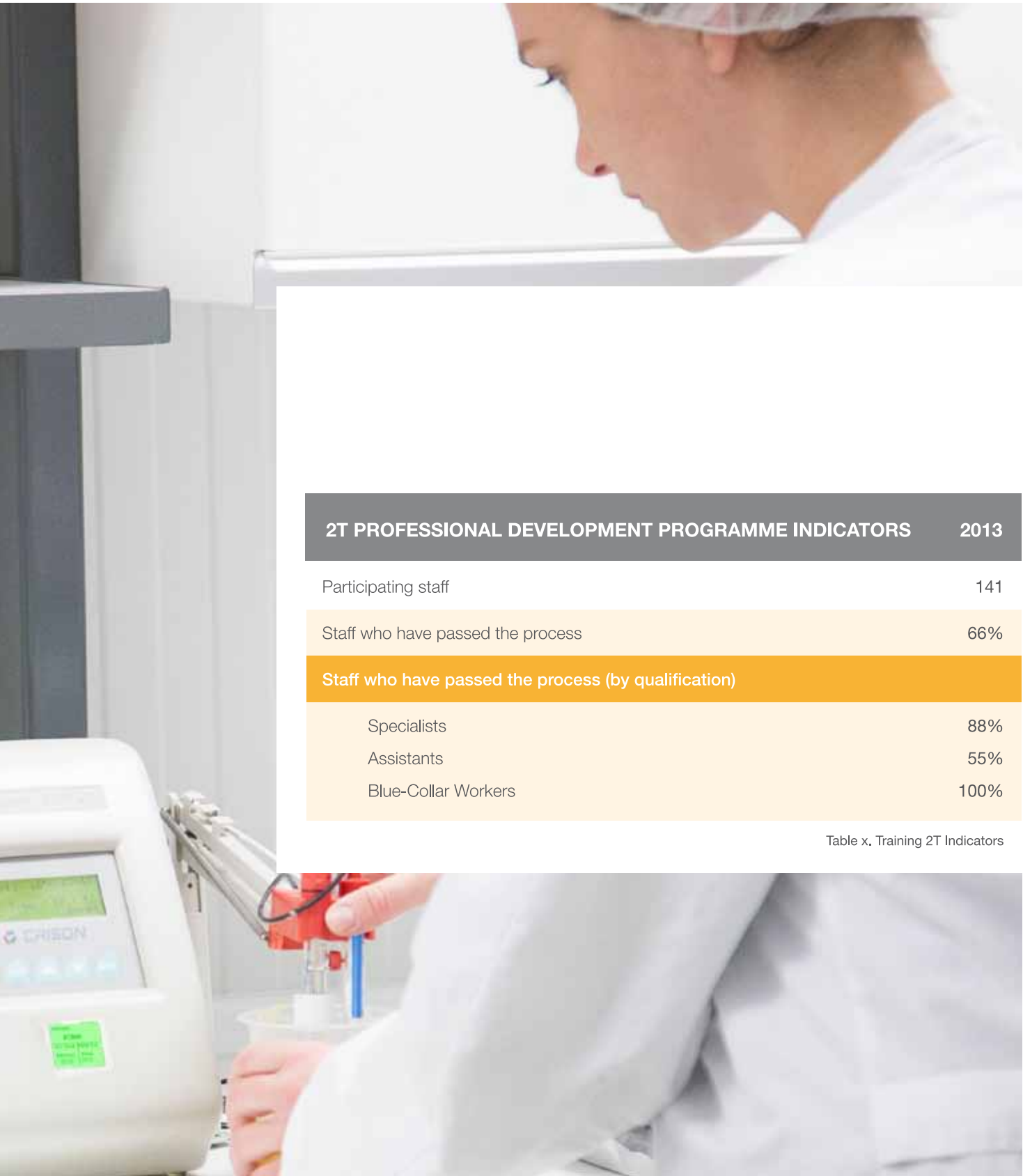
Marín Giménez is totally aware of the value of training, so in the last three years, the company has made a great effort to give its technical and administrative employees specialised training for their jobs.

Statistically, the most trained positions have been the ones related to research and development, engineering, production, environment and quality control which have been given by prestigious companies and technological centres.

The chart below shows the average training data of the last three years.

TRAINING INDICATORS	AVERAGE 2011-2013
Total training hours	3,765.3
Staff trained	713
Specialised training hours	464
Participants in specialised courses	48

Table x. Training Indicators



2T PROFESSIONAL DEVELOPMENT PROGRAMME INDICATORS	2013
Participating staff	141
Staff who have passed the process	66%
Staff who have passed the process (by qualification)	
Specialists	88%
Assistants	55%
Blue-Collar Workers	100%

Table x. Training 2T Indicators

*Over the last few years, the technological equipment investments have reached a policy focused on improving and promoting our facilities' innovation.*

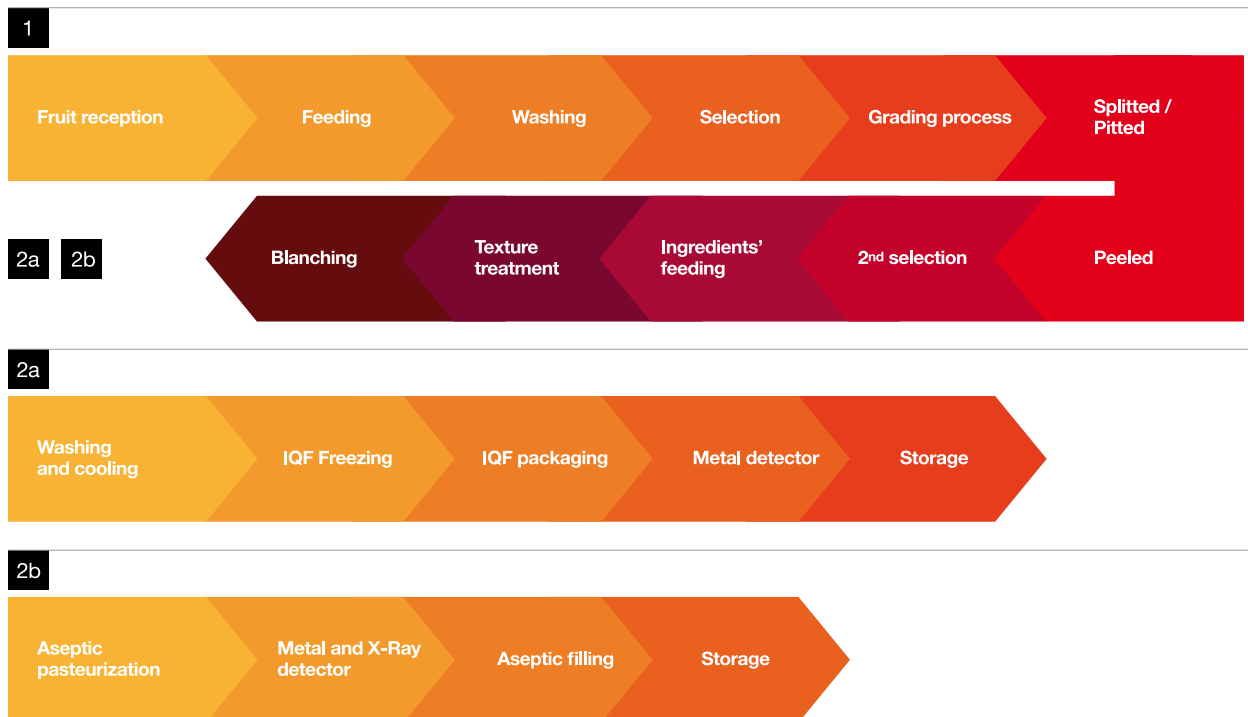


The technological evolution of Marín Giménez has taken into account the incorporation of industrial equipment according to the technological developments of the food industry.

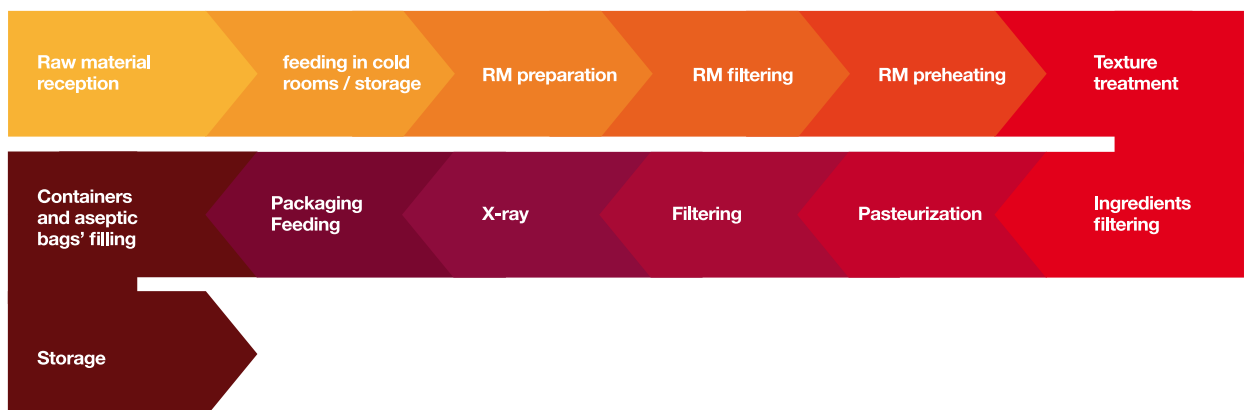
Every stage of the productive process has been incorporating tools for:

- Improving and guaranteeing the **food security**: x-ray, metal detectors, CIP cleaning stations, etc.
- Keeping and improving the **nutritional characteristics**: IQF freezing, 2T pasteurizers and VIT texture treatment.
- **Meeting the clients'** needs and requests: aseptic fillers adapted to different packaging systems.

## FIRST TRANSFORMATION PROCESS



## SECOND TRANSFORMATION PROCESS



### FACILITIES POLICIES

- Glass policy
- Hard plastic policy
- Cleaning in Place policy
- Storage rules control
- Filters control
- Maintenance control
- Allergens control

### PROCESS CONTROL

- Storage temperature control
- Weight control
- Mixing times control
- Magnets control
- Ph rinse water control
- Plant sterilisation control (Temp., time, valves)
- Metals detector
- X-Ray
- Infused control
- Pressure control of vacuum pumps
- Containers sterilisation control
- Filling pressure control
- Coding control
- Containers pressure control

Over the last few years, the technological equipment investments have reached a policy focused on improving and promoting our facilities' innovation.

Marín Gimenez's quality system is certified according to the standard ISO 9001 since 2000.

Since then, the system has been improving, developing and incorporating objectives and indicators which demonstrate the evolution of Marín Giménez in different areas.

In 2007, Marín Giménez got BRC and IFS Certification integrating such food safety protocols' documents into the company's quality management system.

## Audits

In the last 3 years, 28 audits have been carried out in Marín Giménez's facilities by different institutions and organizations.

These audits have allowed improving the failures and incidents detected by the different audit teams and implementing more than 300 actions which have corrected, prevented and improved important aspects of different company's areas.

AUDITS	2010	2011	2011	TOTAL
Internal audits	3	3	3	9
Certification bodies' audits	3	3	3	9
Customers' audits	4	3	3	10
Corrective actions	14	169	90	233
Preventive actions	10	22	18	40
Improvement actions	4	14	13	31

Table x. Audits and actions 2010-2012

## Customer satisfaction

Every year, Marín Giménez measures the customer satisfaction index according to product's quality, service, commercial criteria and facilities among others.

CUSTOMER SATISFACTION	Facilities	Service	Commercial criteria	Quality	Other criteria
LEVEL OF SATISFACTION (5 points maximum)	4.6	4.4	4.3	4.2	4

Chart x: Level of customer satisfaction by criteria 2012

Since the implementation of the HACCP system in the 90s, there has been an important progress in this area not only due to the establishment and management of BRC and IFS protocols, but by the investments carried out in order to minimize risks in products.

In Marín Giménez, the management of quality systems and protocols go beyond the application of international requirements and they continually allow improving and checking the working systems.

A team of four people is in charge of maintaining, revising and improving the quality management system and food safety.

The investments carried out such as X-ray, colour sorting, pilot plant, etc. make the food security be part of our work philosophy.

Laboratories' equipment and technical means of quality and food security support help to ensure the safety and the quality of the products:

- **Quality Control Laboratory**, in which online and finished products quality controls are carried out in a continuous way.
- **Microbiology Laboratory** where internal microbiological tests are made. A place where the traditional technology of sowing in plate and the most advanced ones of quick microbiology, based on colorimetry, are combined.
- **Waste Water Laboratory** with the necessary equipment to make control analytics of the water purification system.
- **R&D Laboratory**, equipped with the technology needed for the development of new products and processes.





## QUALITY CONTROL KEY POINTS

### **Water control**

The water consumed by the company comes from the municipal water supply network without any treatment before its consumption. The water is used for washing fruits and cleaning the facilities.

Legal requirements are very strict regarding authorised legal parameters, suitable water uses and inspections to be carried out. Since it is an essential prerequisite of the HACCP and it is daily used in our facilities, it requires a continuous and exhaustive control in order to prevent and minimize cross contamination.

### **Cleaning, disinfection and pest control**

Both prerequisites are especially important in the food sector since they minimize risks and avoid microbiological contamination of products.

The cleaning and disinfection meet the schedules established in all working sites:

- **Cleaning systems**
- **Frequency**
- **Products used and dosage**
- **People responsible**
- **Registration system**

Cleaning systems are established from general daily cleaning (sweeping the floor, cleaning the sorting belts, etc.) to intensive processes like CIP cleaning (Cleaning in Place).

There are several preventive measures and control systems established to ensure that the cleaning is properly carried out.



**Storage**

There are identification and storage rules that consider aspects such as:

- Raw materials' inflows and outflows in order to avoid any cross-contamination.
- FIFO policy.
- The need to identify products related to their traceability.
- The storage needs for each product and process.

**Traceability**

Traceability system is defined as a procedure of identification the whole process from “raw material to customer” and from “customer to raw material” and it allows to identify any raw material or ingredient used in the production process.

Traceability procedure includes the necessity of performing traceability drills to validate the proper operation of the system and to identify any possible failures or improvement actions.

Both the continued improvement of the traceability system and the regular drills carried out currently allow the development of complete traceability trials in approximately 4 hours.

### Supplier's control

The procedure for approving and evaluating suppliers establishes a two phase's control system:

- **Approval:** each new supplier or new product delivered by a regular supplier must undergo an approval process. Such process generally consists of filling out a form with important information, the request for all information needed to ensure compliance with legal requirements and ordering samples to validate its functionality for the requesting department.
- **Evaluation:** Once they are approved, all suppliers are submitted to an annual evaluation based on the number and gravity of incidents detected during the period analysed.

Regular suppliers do not generally present incidents which require exhaustive monitoring processes of their products or services. In the last few years, all suppliers have been SUITABLE and no important incidents have been registered.

### Staff training and qualification

Training the staff in charge of the production, manipulation, storage and products' dispatch is essential to meet products' requirements and to ensure the food safety of the manufactured products.

Due to the importance of this prerequisite, it is annually determined training plans, which the needed training courses to keep a suitable level of awareness and training are included in.



It should be annually carried out at least the following courses:

- **Welcome handbook** including information regarding hygiene, good practices, cleanliness and basic safety actions.
- **Specialised training** for specific jobs which are involved in important processes.
- **Specific training of HACCP**, risks of the industry, application protocols and legislation or requirements of destination countries.



## R&D

Over the past 25 years, Marín Giménez's main objective has been focused on new products innovation and development. That way, the company has changed from being a traditional fruit and vegetable canning company to becoming a specialised company in fruit processing for industrial use, aseptically and frozen packaged, both in preserved products and a new range of fruit preparations for dairy, ice cream and fruit beverage sectors.

For the development of this process, Marín Giménez has equipped itself with the most advanced and skilled technological and human equipments, as well as the permanent cooperation with public and private research and development centres.

In addition to having the best equipped facilities and experimental laboratories, Marín Giménez has an internal human team composed of 10 experienced people, who have a great knowledge about fruit manufacturing processes. The permanent proximity to development centres such as CTC (Centro Tecnológico de la Conserva y Alimentación de Murcia), AINIA, the Universities of Murcia and Valencia and other national and international research centres has also been essential for such development.

The main operating lines carried out by Marín Giménez have been the followings:

- **Texture and thickness** treatments after pasteurizing.
- **Development of a cryogenic** quick-freezing system by using inert fluids.
- **Process to formulate** and aseptically package fruit preparations from fresh fruits.

- **Improving organoleptic** characteristics by preserving molecules in the manufacturing process.

- **Development of products by CLEAN LABEL tendency:**

*Progress in the stabilisation* processes of fruit preparations by adding only fruit-based stabilisers.

*Optimization* of the typical fruit colour and aroma by reducing additives, getting in that way a simplified list of ingredients.







Marín Giménez is aware that dealing with future nutritional challenges based on healthy and safe food products and meeting clients' demand regarding functional, healthy and affordable food is the constant factor which Marín Giménez must follow to establish its future and its development lines.

#### R&D INVESTMENTS IN RELATION TO THE ANNUAL TURNOVER:

2010	2011	2012	2013
1%	2.65%	1.5%	1.3%



## FOOD DEFENSE

**Food Defense** is an international term which encompasses activities related to the **protection of food supply** from intentional or deliberate contamination.

The food protection is focused on an extensive and detailed programme that prevents, maintains, protects and responds to any contamination produced in the company's facilities.

Marín Giménez's Food Defense programme covers every area of the facilities with different tools and equipments.



- **Outside:**

- Perimeter fence.
- Entrance gates and doors.
- Lighting.

- **Inside:**

- Warehouse.
- Visitors entrance.
- Lighting.
- CCTV cameras.

- **Services provision:**

- Review of water supplies.
- Self-control of water consumption.
- Protected gas plant.
- Controlled handling of steam generation.
- Visual inspection of the supply line.

- **Transportation and reception:**

- Safety of goods in vehicles and when sealing the containers.
- Approval and monitoring of both transport companies and drivers.
- Investigation of transport incidents.
- Authorised staff is present when loading and unloading.
- Inspection of the vehicles when loading and unloading.

- **Staff:**

- Staff selection and recruitment.
- Food Defense training and awareness.
- Investigation of staff sick leaves.
- Inspection of personal belongings in specific areas.

- **Information safety:**

- Access protected by employees.
- Protection of computer systems against external attacks.
- Protection and conservation of information.
- Information security policy.

- **Production and storage:**

- Attendance system control.
- Consumption control.
- Foreign bodies inspection (filters, metal detectors, X-ray, etc.)

All measures implemented are regularly evaluated in order to determine the level of vulnerability and to establish the necessary control measures.



SOCIAL  
AND  
ENVIRONMENTAL  
RESPONSIBILITY  
**'5**



# Social and environmental responsibility

STAFF PROTECTION

Marín Giménez guarantees the maximum safety conditions and makes easier the employees' health care by carrying out different actions:

ACTIONS	RESULTS
Promotion of safe behaviours in security and health systems.	More than 5,800 training hours
Permanent monitoring and investigation to remove any possible risk	
Periodical staff health checks	590 medical checkups to the staff
Minimising the risk of accidents, injuries and exposure to health risks	Eliminating extreme temperatures by ventilating the working areas
Active participation of staff in health and safety policies	An active Health and Safety Committee composed by 3 company representatives and 3 workers elected by all staff members

Table x. Health care by carrying

Marín Giménez conducts communication campaigns to all its employees in order to encourage risk prevention and it works hard to make staff aware about the incorporation of the best risk prevention practices to their good habits.

PREVENTION TRAINING INDICATORS	2011-2013
Training hours	5,875
Participating staff	1,202
Hours/participant	4.88

Table x. Prevention training indicators



## ENVIRONMENT

Marín Giménez's main objective is to maintain the facilities and the services according to the legal requirements at local, regional, national and community levels.

For that reason, Marín Giménez has worked to identify the environmental aspects which have negative impact on the environment, by developing an operational control and monitoring the most significant aspects.

This commitment to the environment protection seeks to preserve natural resources by focusing on the rational use of energy, water use optimization and the reuse and recycling of materials.

Over the last few years, the below lines of action followed by Marín Giménez prove that the company works in an environmentally friendly way:

### **Energy and water audit**

The energy audit carried out in 2013 has allowed Marín Giménez to know the energy consumption distribution and costs and it has identified and quantified the possible energy saving measures.

The audit result has allowed the company to detect the matters that need to be improved in order to carry out an efficient management of energy demand.

The water audit has allowed Marín Giménez to know the water used in each production stage and to improve the use of such resource by implementing good practices and improvement measures of water management.

The water consumption indicator in accordance with the raw material processed has been reduced by 26% in the last three years, which proves that Marín Giménez is responsibly and efficiently using water, considered it as a scarce resource in the Region of Murcia.

### Lighting system improvement

The replacement of traditional lighting composed of metal halide and fluorescent lamps by the use of LED lighting.

In that way, a decrease between 35,000 and 40,000 KW/h in energy consumption has been estimated by 2014.

### Photovoltaic power generation

Solar energy is an excellent alternative energy source that Marín Giménez has incorporated in its

facilities. Its flexible system has allowed it to place solar panels on the roof of the company premises. There is a total surface of 20,000 m<sup>2</sup> covered by photovoltaic panels, which represents an energy generation capacity corresponding to 30%-35% of the total energy consumed by Marín Giménez.



### The use of Natural Gas

Natural gas is the fossil fuel with the least environmental impact at the extraction, production, shipment or use stages.

Using Natural Gas causes less atmospheric effects than burning other fossil fuels, such as fuel oil, as per the following reasons:

**A) Burning Natural Gas** releases fewer pollutants to the atmosphere, what enables it to be used as direct energy source in the production processes, avoiding crude oil processing in refinery plants.

**B) The purity of Natural Gas** makes it suitable for its use with the most efficient technologies: electricity generation by combined cycles, simultaneous production of heat and electricity by using cogeneration systems and air conditioning by compression and absorption devices.

**C) Less emissions of polluting gases** (SO<sub>2</sub>, CO<sub>2</sub>, NO<sub>x</sub> and CH<sub>4</sub>) per unit of energy produced.

### Continuous improvement of the water treatment system

Since the waste water treatment system was built in 1999, it has undergone different extensions and changes which have lead Marín Giménez to achieve output parameters which comply with waste legal requirements.

The current water treatment system is based on an activated sludge process and it is designed to be able to treat an approximate flow of 3,000 m<sup>3</sup> /day.

### Recent actions

2012: The construction of a homogenization tank with a neutralisation system by adding CO<sub>2</sub> and the installation of a second flotation system.

2013: Software installation to automatically control the whole plant.



ENVIRONMENTAL INDICATORS	2012	2013
Production volume (Kg)	26,668,963	28,826,172
Raw materials used (Kg)	32,888,719	31,876,012
Packaging material (Kg)	1,833,306	2,226,591
Packaging per Kg of finished product	0.068	0.077
Water used (m <sup>3</sup> )	250,550	237,664
Water used (l) per Kg of finished product	9.39	8.24
Apricot carbon footprint (Kg of CO <sub>2</sub> / Kg of finished product) (1)	0.55068	( * )
Peach carbon footprint (Kg of CO <sub>2</sub> / Kg of finished product) (1)	0.61027	( * )
Total waste (Kg)	2,689,446	3,117,306
Waste per Kg of finished product	0.10	0.11
By-products to evaluate	1,066,758	1,088,050
By-products to evaluate per Kg of finished product.	0.04	0.04

( \* ) Note: Collecting data    ( 1 ) According to PAS 2050 protocol

Chart x. Environmental indicators



## CARBON FOOTPRINT

### CARBON FOOTPRINT

Climate change, caused by greenhouse gas emissions (GHG), especially CO<sub>2</sub>, is nowadays the main scourge and it is considerably clear that most of the global warming has been caused by human activities. In such context, carbon footprint calculation represents a measure which allows Marín Giménez to be socially responsible and an awareness act to work with more sustainable practices.

The calculation of the product's carbon footprint has required a detailed analysis:

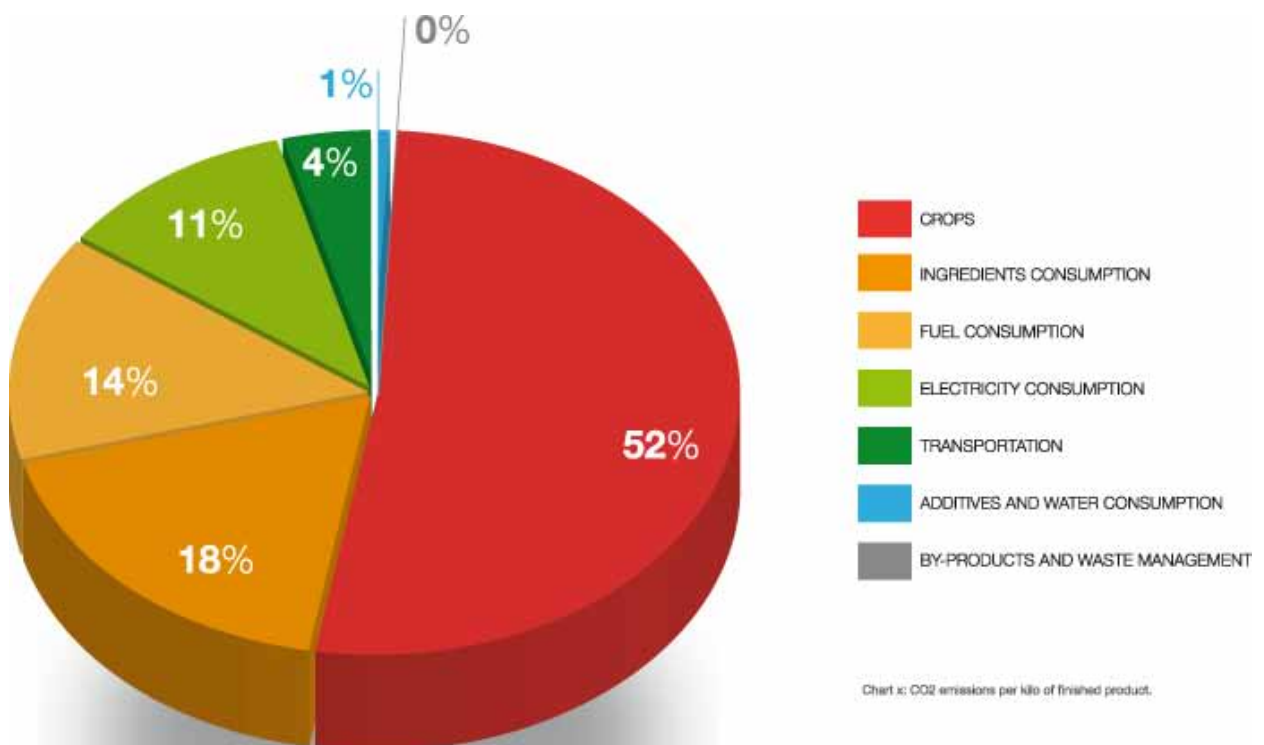
- **Main products consumed:** both direct (raw materials, fuels, etc.) and indirect (emissions from the production of the electricity consumed), as well as other consumption (company cars).

- **Products' origin:** geographical area of the raw material, electricity from renewable or non renewable sources, etc.

- **Measuring system** and control of each product.

The result of such analysis has allowed Marín Giménez to know the impact of each production stage, as well as the emissions generated from all manufacture processes (waste management and transportation, by-products management and transportation, etc.).

The percentage of CO<sub>2</sub> emissions per kilo of finished product is graphically represented in the below chart:





*Climate change is nowadays the main scourge and it is considerably clear that most of the global warming has been caused by human activities.*

From the company's point of view, the calculation of carbon footprint has supposed:

- **A commitment** to the global warming.
- **Anticipating** to legal regulations.
- **An additional criterion** for approving suppliers.
- **A difference compared** to other companies in the sector.
- **A continuous control system** of the impact caused by the manufacturing of the products.
- **An indicator to detect energy** inefficiencies and a control system to establish improvements, more effective policies for reducing emissions and better cost savings initiatives.
- **The possibility to develop future projects** to reduce or compensate GHG emissions.

Other action lines that are being carried out to reduce the environmental impact of the products are:

- **Increasing** the number of reused packaging and improving the control of reuse systems.
- **Training** staff in good environmental practices.
- **Encouraging** suppliers to provide data about their greenhouse gases emissions.
- **Improving** the reliability of data registered by dividing the most critical areas, modifying the records, training people responsible for data collection, etc.



**Marín Giménez** as an industrial partner proposes to establish a stable and long-term collaboration framework with its clients for the development of new projects which can be extended to new productions' activities.

As a family company, Marín Giménez is always growing in parallel with the current situation and needs of the food industry, where the technological cooperation aspects are widely associated to the successful business relations.







**Marín Giménez** is willing to reach agreements going beyond the commercial partnership for the production of goods. The strengths of Marín Giménez due to its location in an agricultural region, its experience, as well as the satisfactory long-term business relationships with its clients are valuable characteristics for the parties in the collaboration of any project and the establishment of a win win business model.

This suggestion is proposed based on a commitment to transparency and confidence with its clients, being convinced that the partnerships will benefit the parties and will offer new opportunities for a more demanding future.

