

PRODUCTION LINES

COMPLETE SOLUTIONS FOR THE CONTROL
AND MANAGEMENT OF THE WEIGHING
PROCESS



**INDUSTRIAL WEIGHING
SOLUTIONS
DESIGN**

MAXIMAL QUALITY AND RELIABILITY

www.giropes.com | giropes@giropes.com | [Linkedin:giropes-si](https://www.linkedin.com/company/giropes-si)
Pol. Empordà Internacional, C/Molló, 3 | 17469 VILAMALLA- (Girona) SPAIN
T(34) 972 527 212

SOLUTIONS

PRODUCTION LINES

MANUAL OR SEMI-AUTOMATIC PRODUCTION LINES

“Optimise resources and running of your production processes”



MANAGEMENT & OPTIMISATION

> Giropes offers complete production line solutions thanks to its wide range of weighing systems and GISCALE software that allows better monitoring and management of weighing processes.



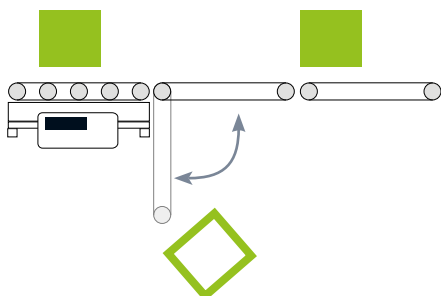
RFID SYSTEM

Giropes has developed firmware to control RFID readers ideal for recording weights and for controlling operations carried out. Ideal for recording weights in production lines.

**BY OPERATOR
BY PRODUCT**

Quick identification and activation per operator or product:

- » With card swipe
- » With card present
- » Locking sy



QUALITY CONTROL

The weighing process is a key quality control step at different stages of the production process. Over recent years, Giropes has committed to developing different systems that allow a high degree of automation of production lines in an optimal and efficient way, improving

**BY TAKE-OUT
BY DOSAGE**

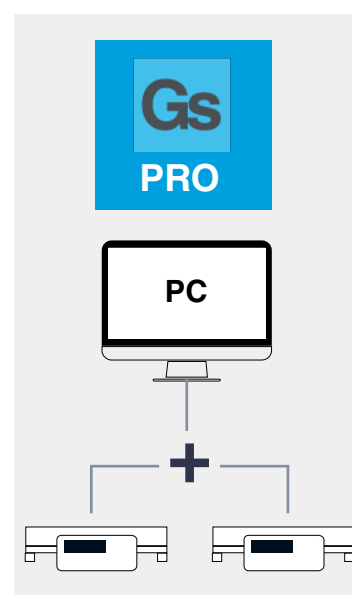
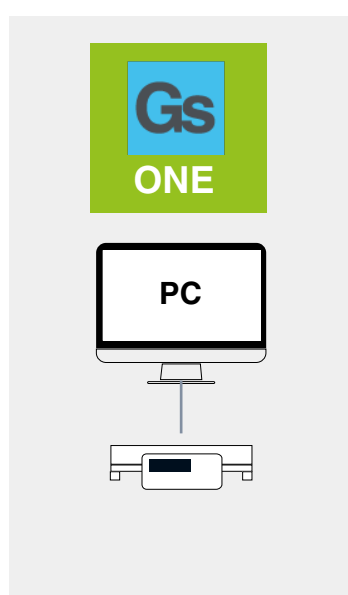
product management and making it easier for quality control teams to carry out their tasks.



GISCALE SOFTWARE

To complement a weighing system in a production line, Giropes has designed and continually improves the management software GISCALE, which is available in two versions, ONE and PRO, with different features according to the needs of the system.

The GISCALE software is a production line control and management software that, thanks to a fast and intuitive interface, allows the user to easily operate the program and manage their production lines.



SOLUTIONS *INDUSTRY 4.0*

PRODUCTION LINES

Automatization and connectivity in industrial processes





CONNECTION AND INTEGRATION
[SCALE] [MES] [ERP]



INDUSTRY 4.0

We help to improve processes

The global solution offered by Giropès lets you obtain weighing data at the weighbridge in a fast, centralised and reliable way, providing objective data in real time, reducing the cost of decision-making in company or departmental meetings and increasing the capacity to react to unexpected incidents.

We are ready for continuous improvement

Having objective data is the first step to be able to enter into the Lean Management philosophy and use the DMAIC cycle for continuous improvement. You can only improve what you measure.

Centralisation of data onto a single platform

Giscale has the ability to integrate with ERP's and MES, centralising data onto a single platform.



- » Quick and intuitive interface.
- » Simple installation.

GISCALE

Management of production lines by:

PRODUCT - OPERATOR - SCALE

Thanks to a fast and intuitive interface, the user will find it easy to use the Giropes program.

CONNECTION AND LICENSES

Connection to indicators via TCP/IP (Ethernet) and RS232 (Serial Port)
License ONE and PRO are managed via USB key or online via serial number.



CONFIGURABLE
TICKET



ETHERNET
CONNECTION



RS232
CONNECTION



MULTI
LANGUAGE



QUICK AND INTUITIVE
INTERFACE



CONNECTION
WITH INDICATORS
GI400 SERIES

(Up to 255 devices)



GISCALE ONE

PC SOFTWARE for Management and control of 1 indicator

** Consult for limited specifications of the GISCALE ONE*

INDICATORS SOFTWARE

SERIE GI4xx

“The INDICATORS of the GI4XX Series include GISCALE software for the control and management of production lines. When coupled with the GIAPP app, you can view data on any mobile device.”



MAIN FEATURES

- » Multi-license (allows it to be managed from multiple computers)
- » Multi-language.
- » Support for SQL Server databases.
- » It enables multiple working seasons connected to the same data base.
- » It enables to register, manage and set up multiple indicators simultaneously.



FUNCTIONS AND APPLICATIONS

- » Start up:
 - » Automatic detection of displays on the network.
 - » Reconfiguration of indicator network
 - » Duplication of display configuration
- » Register of weighing with product detail.
- » Edition of products, packaging and operators.
- » Editing of weighing information (product, operator, etc.)
- » Connection to multiple indicators.
- » Printing of weighing tickets.
- » Consultation of historical records.
- » Exporting reports (PDF, XLS, CSV).
- » Register of fields like: Customer, Product and Lot number
- » Perform weighs with the different modes of the GI400 (control of weigh, production counter...)
- » Configuration of the different weighing modes (checkweigher, negative checkweigher, etc.)
- » Weigh in mode semi-unattended with the transmission modes (every X time, stable, manual: press PRINT from the indicator, zero crossing and zero crossing when unloading).
- » Consult and graphic analysis in real time. (module Giscale Statistics):
 - » Real Time
 - » Histogram.
 - » Management of graphic.
- » Personalization of tickets and report
- » Without user name authentication.
- » Monitoring and management of lines of production.
- » Configuration of the indicators' PLUs.

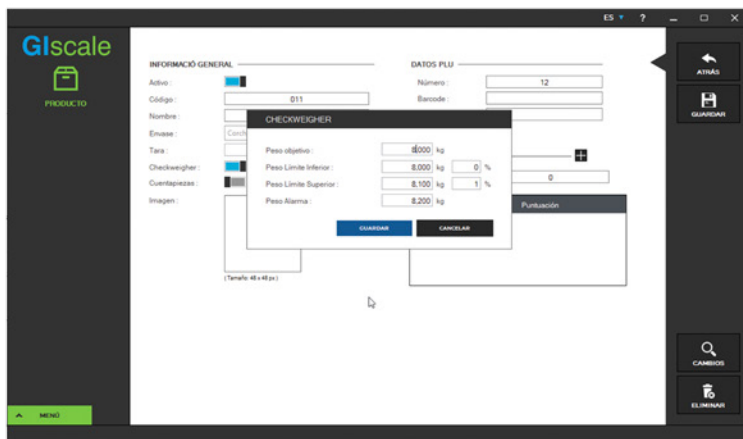
**See required indicator version*



ACTUAL PACKAGING

FOR PRODUCTION LINES

GISCALE software allows the control of the actual packaging of products in production lines to comply with the current regulations decreed by the European Economic Commission.

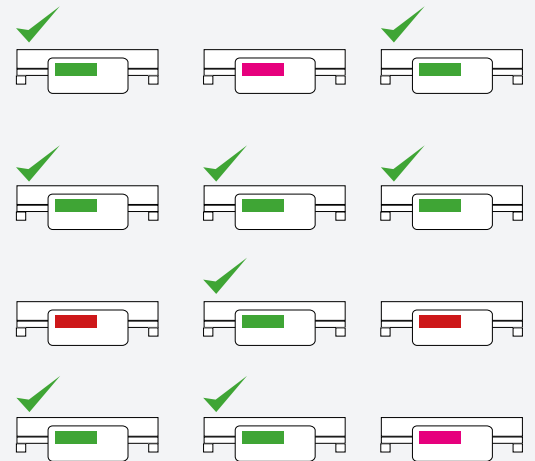


How does the GISCALE software guarantee the accreditation of the **ACTUAL PACKAGING**?

- It ensures the correct weight of batches at the time of packaging of products through the checkweigher function.
- Eliminates shrinkage due to unsuitable products as per the regulations.
- Avoids human error through manual checks of product weight.
- It generates reports automatically for companies' internal quality controls and conformity controls of superior organisations.



effectiveness *IN PRODUCTION LINES*



Real time control of the product weight by the operator using the checkweigher of the GI400 indicator and by the supervisor using the GISCALE software.

RFID SYSTEM

Production Firmware

Manage and control
all your heavy tasks

RFID

RFID

RFID

RFID

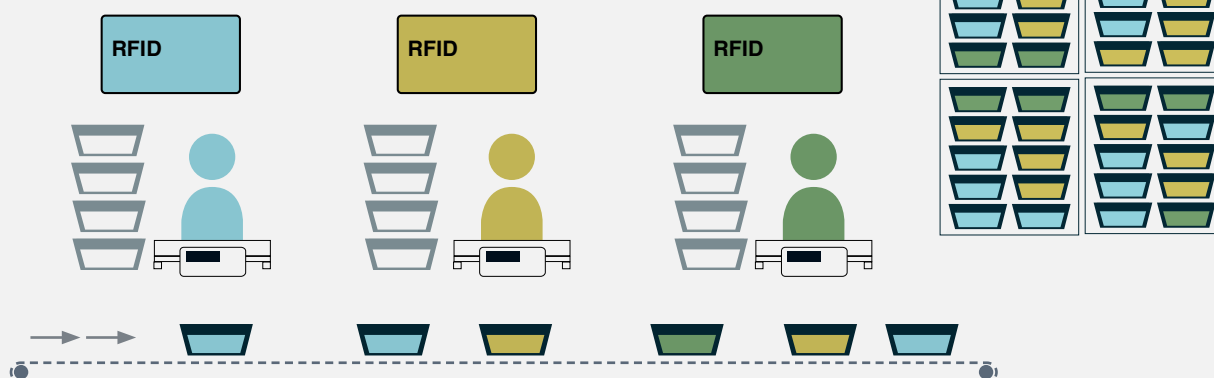


2 working systems



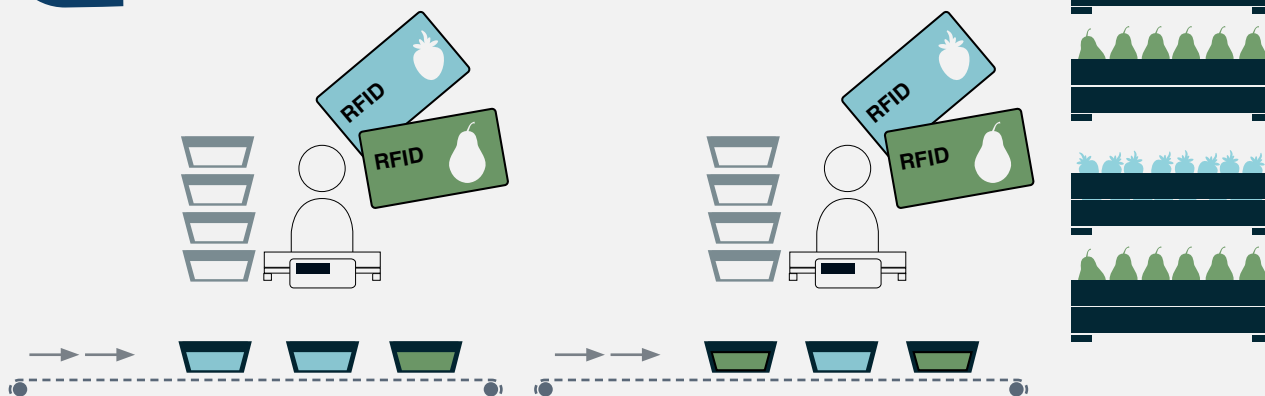
OPERATOR IDENTIFICATION

Operator registration on production lines



PRODUCT IDENTIFICATION

Product registration on production lines



Who stores the data?

WITH DATA DOWNLOADED ON THE INDICATOR

- » Option to operate without a network
- » Needs data synchronisation with the Giscale
- » The downloadable data is limited (2 types of PLUs)
- » Amount of data limited

NO DATA DOWNLOADED ON THE INDICATOR

- » Option to operate without network, but the data associated with the weighing (recognised during normal operation by GISCALE) will be lost on restarts
- » No synchronisation required (faster system)
- » No limit on data or PLUs

GI400i PROD LCD RFID

**Also with numeric indicator option*

EXTERNAL RFID READER

Giropes has developed firmware to control RFID readers ideal for recording weights and for controlling operations carried out.

Along with the software, GISCALE allows greater control of the weighing system and makes it easier to use.

EXTERNAL RFID READER

ABS IP67

Internal registration of up to 1,000 weights.

10 RFID card included.

**See supported protocols in the technical sheet*

GENERAL FEATURES

- » GI400 Weight-Tara Indicator.
- » GI410 Numeric indicator option.
- » Operating temperature: -10°C to 40°C.
- » IP65 protection
- » Stainless steel housing.
- » Reclining wall support (optional).
- » Units: kg.
- » Display:
 - » LCD with 6 digits of 40mm.
 - » Backlight function: On/off/auto.
 - » Screen colour indication with checkweigher function.



COMMON SPECIFICATIONS

Main functions

- » **Piece counting**
- » **Totalisation**
- » **Checkweigher**
- » **Negative checkweigher**
- » With the 4 most used protocols on the market.
- » GiCoNF protocol (for configuration with the software).
- » RFID and EAN protocols.
- » 8 format of predefined tickets and 1 customizable (associated software).
- » Printing configurable menu: number of copies, cutter on/off, line feed.
- » Watchdog system to reset automatically if the indicator gets blocked.

Communications

- » RS232
- » Ethernet*
- » Wifi optional
- » Alibi memory optional
- » RS485 optional

** Standard Ethernet in GI400 PROD RFID version, optional for GI410i RFID.*

*** Choosing any optional will override one of the serial ports.*

GI410i LCD RFID

INTEGRATED RFID READER

The GI410i RFID indicator is specially designed for managing and controlling the registration of weights per product or operator.

Complementing the indicator with the GISCALE software allows greater control of the weighing system and facilitates its use.

INTEGRATED RFID READER

Internal registration of up to 1,000 weights.

10 RFID card included.



**See supported protocols in the technical sheet*



GENERAL FEATURES

- » Operating temperature: -10°C to 40°C.
- » IP54 protection
- » Stainless steel housing.
- » Reclining wall support (optional).
- » Telephone keypad.
- » Units: kg.
- » Display:
 - » LCD with 6 digits of 40mm.
 - » Backlight function: On/off/auto.
 - » Screen colour indication with checkweigher function.

Metrological Specifications

- » III & IIII Classes.
- » Max. number of verification steps 6000.
- » Monorange, multirange or multiinterval ($n \leq 3000$, per partial range of weighing).

Excitation

- » Power supply: 110-230V AC, 50/60 Hz.
- » Minimum entrance tension for step of verification: $1\mu V$.
- » Tension of supply of the load cell: 5 VDC.
- » Maximum tension of range of measure: 20 mV.
- » Minimum tension of range of measure: 0,01 mV.
- » Minimum load cell impedance: 25 Ω .
- » Maximum load cell impedance: 1100 Ω .
- » Load cell cable of 4 or 6 threads.
- » 2 RS232 output included.

#a perfect indicator for batches and product management

Giropes has developed a compact indicator with extensive standard and optional functions perfect for batches and product management on production lines.

VERSATILE

High precision weigh indicator with compact design. Ideal for applications which require an autonomous indicator, with the possibility to include communication interfaces with connections to remote control weight repeater, PC, PLC, external or internal printer, among other possible accessories.

PROTECTION AND FINISHES

This series include a high resistance and uniformity in its finishes, which provide a greater durability and resistance to temperatures and the passing of time. It includes three grades of protection available in two houses to comply with the standards of quality and indicator of protection.

It is made in shock-resistant material. It also includes two types of finishing of IP protection to choose according to the user's necessities. Its house is black and includes subsection in reversible stainless steel for column, wall or table.



SERIE LED GI400 - GI410

IP54-65-68 protection.

Operating temperature: -10°C to 40°C.

Stainless steel and ABS housing.

Reclining wall support.

Display: red LED with 7 segments and 6 digits of 25 mm.

RS232 output (included x2).



SERIE LCD GI400 - GI410

IP54-65-68 protection.

Operating temperature: -10°C to 40°C.

Stainless steel and ABS housing.

Reclining wall support.

Display: LCD with 6 digits of 40 mm.

Backlight function: On/off/auto.

Screen colour indication with checkweigher function.

RS232 output (included x2).

SOLUTIONS

WITH OUR GI400-410 SERIES INDICATORS

"Dosage, relais, take out, checkweigher..."



GI400-GI410



CHECKWEIGHER FUNCTION

It can manage automatically up to 4 zones using weight limits for each one of them. By selecting the desired weight, the indicator allows the user to choose superior or inferior limits through value or percentage.



DOUBLE CHECKWEIGHER FUNCTION

This function allows us to use the checkweigher mode with two non-overlapping 'OK' zones, in order to check two products without changing the PLU (Product Look-Up) on the indicator.



INITIAL AUTO-TARE + CHECKWEIGHER

This function allows us to perform the checkweigher function if it is being assumed that the containers may have different weights. This may be the case with pallets or wooden crates. With this function activated the weight of these containers will be tared without any action on the operator's indicator.

The main difference compared to the standard checkweigher is that the first stable weight will be automatically tared and then the weighing procedure will start, once the target weight is reached ('OK' zone).



TAKE OUT FUNCTION

Allows monitoring of weight removed from the weighing equipment. The GI400 weight indicator shows you whether you are removing the required amount of weight from the scale or more or less than the required amount of weight. When you select the required weight you can set upper and lower limits by percentage or value.



LIMITS WITH RELAIS FUNCTION (optional)

The weight indicator GI400 has been designed to manage automatically a starter weight and 3 limits that activate 4 relays by means of weight registers for each one of them.



DOSAGE WITH RELAIS FUNCTION (optional)

The equipment has been designed to dosing automatically one product at two speeds or two products at one speed, with unload. The equipment can also program a unloading zone where the user can define the ending of the dosing.

Successful projects

"Our background supports us"

PACKAGING LINE WITH WIFI DEVICES

Giropes installs production line with platforms, indicators with WIFI and GISCALE PRO software



Giropes has installed an automatic production line managed via WIFI in Callol Serrats, an anchovy processing and preserving business.

Callol Serrats is a business with more than 170 years of craft tradition of processing L'Escala anchovies. The enduring dedication and long history of the family in the production of anchovies has allowed them to become the oldest business now active in the industry. The business is currently managed by the sixth generation of the family, thanks to the handing down of the age-old tradition of anchovy salting from generation to generation.

To continue to develop and refine traditional anchovy salting, without losing the distinctive essence that has marked it out for over 150 years, Callol Serrats has replaced its manual weighing and packaging line with an automated line that uses weighing systems designed and manufactured by Giropes.

The new line replaces a manual production line, optimising resources and facilitating the work of the company's staff and brings greater accuracy and reliability in the canning process.

The production line has a total of 9 weighing units consisting of a GRP platform, a stainless steel column and a GI410i LCD indicator with IP65 protection, ideal for an environment with extreme humidity and salt water exposure like an anchovy processing plant.

This installation is notable for its use of WIFI to allow cable-free control and management via the GiScale PRO software.

The 9 weighing units are controlled and managed by the GiScale PRO software, designed and implemented by the Giropes Solutions engineering team.

GiScale PRO software allows the user to connect an almost unlimited number of indicators to the program and provides greater freedom to customise tickets and reports, record specific fields, create a semi-unattended weighing system and even to monitor and manage production lines.

Thanks to the weighing log kept by the Giropes software, Callol Serrats can readily prove the correct packaging of its product without having to keep a manual log of the weights for each unit produced.

FOOD AND PACKAGING

Installation of an automated line of production



Giropes has done the installation of an automated line of production in Domaine des Loveresses, a company of cultivation and packaging of agricultural products.

Domaine des Loveresses, with more than 50 years of experience in agricultural cultivation, is a company placed in Yens (Swiss), and it has more than 60 hectares of crops of root of endive, their star product. Moreover, they also cultivate and distribute other products such as tomatoes, strawberries, raspberries or cabbage, among others, which are distributed around 10 hectares more of crops used by the company.

The weighing systems which have been installed are formed by single-cells platforms from the GRP model and GI410i indicators with IP68 protection, managed by the software GiScale PRO.

Thanks to this new line of production installed by Giropes, the company can optimize their time and their resources in the classification and

“The weighing systems which have been installed are formed by single-cells platforms from the GRP model and GI410i indicators with IP68 protection, managed by the software GiScale PRO”

packaging of the products, speeding the work of the operators.

The software GiScale PRO has been designed for the management and control of the lines of production. It can control an unlimited number of weight indicators and also allows more control in the production thanks to its customized reports that their own program can manage.

REPLACING A MANUAL PRODUCTION LINE

Giropes installs production line with platforms and Gyscale Pro software



Giropes has done the installation of an automated production line in Anxoves de L'Escala, a treatment and conservation company of anchovies.

Anxoves de L'Escala is a company with more than 75 years of experience in the anchovy production process. The technological advancement, together with the use of traditional methods and knowledge, which has been passed down from one generation to the next, since the arrival of the Greeks in Empúries in the VI century a. C. All this knowledge has made it possible to Anxoves de l'Escala to produce a high quality product, together with a high level of preservation.

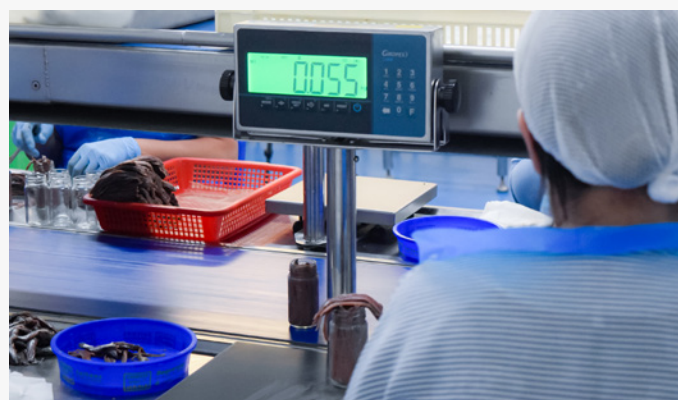
The renewal has been a fundamental pillar in this company of the food industry which has achieved a modern factory, equipped with the latest technology and finally completed with the improvement in their production line. These changes have resulted in an optimization of resources to meet the challenges of an increasing demand.

This installation substitutes a manual production line, optimizing the resources and making the work easier to the operators of the company. Moreover, the new automated production line results in a greater accuracy and reliability when carrying out the anchovy jars.

The production line has a total of 20 weigh sets. These sets are formed by a GRP platform, a stainless steel platform with a GI410i indicator, an LCD with IP65 protection, ideal for an environment of extreme humidity and exposed to salt water such as the one you can find in an anchovies treatment plant.

The 20 weighing sets are controlled and managed by the GiScale PRO software, designed and implemented by our team of engineers in Giropes Solutions.

The software GiScale PRO enables the user to connect an almost unlimited number of indicators to the programme. Besides, it also adds more freedom to customize tickets and reports, register specific areas. It also enables the user to perform a weighing system in a semi unattended mode and even monitor and manage lines of production.



COLLECTION AND DISTRIBUTION OF FRUIT AND VEGETABLES

Installation of different weighing stations with GISCALE software in six production lines



Through one of our trusted distributors, Giropes has carried out the installation of various weighing systems managed by GISCALE software in six production lines at the Grupo Lucas facilities in Murcia.

Grupo Lucas with more than 50 years of experience at the fruits and vegetables market, is considered one of the top companies in the sector, both in Spain and internationally. Its facilities have more than 25,000 m² handling centres and more than 2,500 hectares of crops.

To improve the efficiency of its fruit and vegetable handling process the company decided to incorporate weighing systems, consisting of a weighing platform and a GI400 LCD indicator, into its six production lines, all managed through GISCALE PRO software, designed and manufactured by Giropes and installed by our partner in the area.

According to the IT manager, the incorporation of this new weighing system "makes the operators' job easier, enabling the weight of the products to be controlled using the colour provided on the indicator display, without being aware of the exact weight shown by the equipment and reducing the risk of human error".

"The new weighing system in the production lines makes the operator's job easier and reduces the risk of human error"

He also added that, "Thanks to GISCALE PRO software, we can statistically track the efficiency of each production line and the different weighing stations that make it up".

Regarding the quality processes, Grupo Lucas can now have much more rigorous control over the selected products, providing safety that complies with the current regulations for actual packaging.

The real time and statistical weight registration provided by GISCALE software has proved to be a step forward in the traceability of the weighing, making it possible "to control the weight of the product during the whole handling process and to have a record of time and operator at any given time". As the quality manager of Grupo Lucas confirms, "This provides much more efficiency when detecting problems and enables them to be resolved much more effectively".



GIROPES
WEIGHING SOLUTIONS



www.giropes.com | [Linkedin:giropes-sl](https://www.linkedin.com/company/giropes-sl) | giropes@giropes.com
Pol. Empordà Internacional, C/Molló 3 | 17469 VILAMALLA- (Girona) ESPAÑA | T(34) 972 527 212