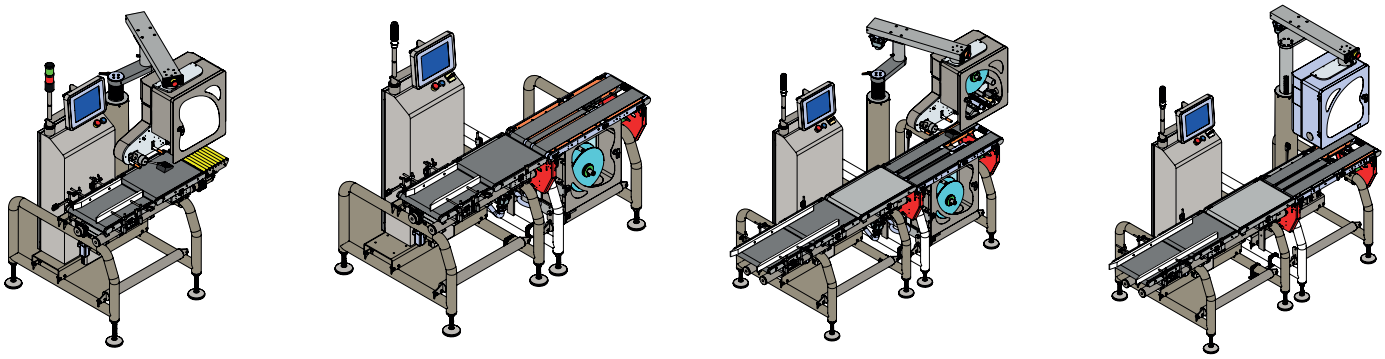
SOCIETA' COOPERATIVA
BILANCIAI
Strumenti e Tecnologie per Pesare



GALAXI

Use and Warning Instructions

Translation of the Original Instructions

Serial number	-
Client	-
Year of manufacture	-



81320639
Revision 07
Edition 08/2025

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INTRODUCTION

All rights reserved. No part of this publication may be reproduced, distributed, translated into other languages, or transmitted by any electronic or mechanical means, including photocopying, recording, or any other storage and retrieval systems, for purposes other than the purchaser's exclusive personal use, without the manufacturer's express written approval.
The Manufacturer shall not be held liable under any circumstances for the consequences resulting from any incorrect operations by the user.

PUBLISHER'S NOTE

This documentation is expressly intended for technicians; therefore, some information that can be easily drawn from reading the texts and examining the drawings may not have been specified further.
The Publisher shall not be held liable under any circumstances for the information and data contained in this manual, all of which was provided, checked and approved by the Manufacturer during verification.
The Publisher shall not be held liable under any circumstances for the consequences resulting from any incorrect operations by the user.

GENERAL REMARKS

All operating and maintenance instructions, as well as recommendations described in this manual, must be complied with. For best results, the manufacturer recommends that cleaning and maintenance be performed regularly to keep the system in the best working order.
Training the personnel in charge of the machine to properly use and service it, as well as checking compliance with the operating procedures and all the safety standards set forth in this manual is particularly important.

REVISION INDEX

REV.	NOTES TO PUBLICATION	FINAL PAGE NO.	DATE
00	-	110	06/2021
01	-	110	02/2022
02	-	110	02/2022
03	-	112	05/2023
04	-	112	08/2023
05	-	116	08/2024
06	-	116	06/2025
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1. IDENTIFICATION

1.1 Manufacturer identification

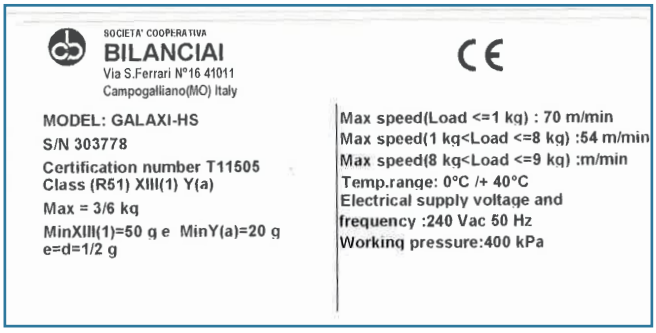
Manufacturer	**SOCIETÀ COOPERATIVA BILANCIAI**
Address	Via S.Ferrari, 16 Campogalliano (MO) - Italy Tel. +39 059.893611 info@coopbilanciai.it - www.coopbilanciai.com

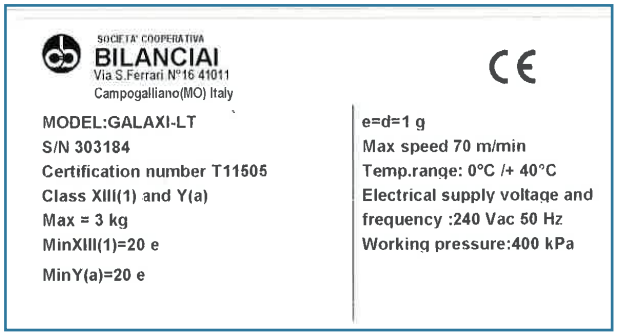
1.2 Machine identification

Machine	Automatic weighing machine GALAXI
Serial number	81320610
Client	-
Year of manufacture	2021

1.3 Identification plate

The nameplate contains the identification details of the machine to be quoted in case of need at **SOCIETÀ COOPERATIVA BILANCIAI**; contains the metrological data and the CE marking in accordance with the machine directive.
The nameplate can also be displayed on the operator panel.





BEWARE!
<u>REMOVING THE EC NAMEPLATE</u> and/or replacing it with other plates is strictly forbidden.
Should the plate be accidentally damaged or removed, the Customer must inform the Manufacturer.

1.4 EU Declaration of Conformity

SOCIETA' COOPERATIVA BILANCIAI
INSTRUMENTOS Y TECNOLOGÍAS PARA PESAR

EU Declaration of Conformity

(pursuant to Annex XIII of European Directive 2014/32/EU)

1. AUTOMATIC WEIGHING INSTRUMENT

TYPE	**GALAXI-LT**
Serial number	**XXXXXX**
Capacity (Max)	**6 kg**
Division (e)	**0.001 kg**
Accuracy class	**R51 Y(a) XIII(1)**
No. of EC/EU type Approval Certificate	**T11505 Rev. 2 of 09062020**

2. MANUFACTURER:	SOCIETÀ COOPERATIVA BILANCIAI CAMPOGALLIANO Via S. Ferrari, 16 - 41011 Campogalliano MO (ITALY)

3. This declaration of conformity is issued under the sole responsibility of the manufacturer.

4. Subject of the declaration: see 1.

5. The subject of the declaration referred to above complies with the relevant harmonisation standards of the European Union:

- 2014/32/EU (MID): OIML Recommendation R51-1:2006
- 2014/35/EU (LVD): Standard EN 60204-1:2018 , EN 61439-1:2011
- 2014/30/EU (EMC): Standard EN 61000-6-4:2007/A1 :2011
- 2006/42/EC (MD): EN 12100:2010

7. The Notified Body Kiwa Cermet Italia No.0476 carried out the conformity assessment of the Quality assurance of the production and issued the certificate: MID_7_D_1.

8. Additional information:
The machine must be used in compliance with all instructions contained in this handbook, as well with the standards relating to safety and accident prevention in force in the country in which it is used.
The product bears the CE marking and the additional metrological marking consisting of the capital letter “M”.
The instrument is suitable for implementing a weighing system as part of a complex system, the overall design and manufacture of which is the ultimate responsibility of the manufacturer.
In the event that the tool is incorporated into a system, commissioning and placing it on the market is NOT ALLOWED before the said system is secured and declared, based on the required conformity assessments to be carried out under the system manufacturer’s responsibility, in compliance with the safety requirements and essential requirements provided for by the relevant legislative and regulatory provisions, applicable at a Community level in particular, and in force in the countries of destination
It is also declared that the person authorised to compile the technical file of the machine is: SOCIETÀ COOPERATIVA BILANCIAI CAMPOGALLIANO

Signed in the name and on behalf of the manufacturer:

SOCIETA' COOPERATIVA
BILANCIAI CAMPOGALLIANO
The Director General in charge
Dr Enrico Messori

Place and Date:

Campogalliano, 27/07/2023

1.5 Reference directives

The machine supplied by **SOCIETÀ COOPERATIVA BILANCIAI** does not fall into any of the machinery categories listed in Annex IV of the Directive; therefore, with a view to proving its compliance with the provisions of this directive, **SOCIETÀ COOPERATIVA BILANCIAI** applies the conformity assessment procedure with internal checks on the manufacture of machinery, provided for in Annex VIII.
To certify machine compliance with the Machinery Directive provisions, before placing the machine on the market, **SOCIETÀ COOPERATIVA BILANCIAI** carried out a risk assessment in order to check compliance with the essential health and safety requirements of the Directive, as well as the tests and checks set out in the applied reference standards.
The technical construction file was drawn up in accordance with the provisions of Annex VII of **Directive 2006/42/EC** and can be checked by supervisory bodies upon reasoned request, as provided for by current relevant legislation.

SOCIETÀ COOPERATIVA BILANCIAI provides for placing the machine on the market equipping and accompanying it with:

CE Marking	
EC Declaration of Conformity	
Instruction and warning manual	(Documentation drawn up as provided for under 1.7.4 of the Machinery Directive 2006/42/EC)

please also note that the machine was designed in accordance with the following Directives:

2006/42/EC	Machinery Directive
2014/30/EU	Electromagnetic Compatibility (EMC) Directive
2014/35/EU	Low Voltage Directive
2014/32/EU	OIML R51-1:2006 (specific OIML R51)

And that the following harmonised standards have been applied:

UNI EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 61000-4-11:2004	Electromagnetic compatibility (EMC) - Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests
EN 61000-4-6:2014	Electromagnetic compatibility (EMC) - Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
EN 61000-4-5:2014	Electromagnetic compatibility (EMC) - Testing and measurement techniques - Surge immunity test
EN 61000-4-4:2014	
EN 61000-4-3:2006	Electromagnetic compatibility (EMC) - Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-6-4:2007	Electromagnetic compatibility (EMC) - Emission standard for industrial environments
EN 61000-6-2:2006	Electromagnetic compatibility (EMC) - Immunity for industrial environments
EN 60204-1:2006	Safety of machinery
EN 61439-1:2010	Low-voltage switchgear and control gear assemblies



BEWARE!
The operating conditions of the electronic terminal for weighing instruments are regulated by the standards in force in the country of use. Any use which does not comply with these standards is prohibited.

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Chapter 2
PRELIMINARY INFORMATION

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2. PRELIMINARY INFORMATION

2.1 Recipients

The manual is intended for operators in charge of using and managing the machine throughout its service life.
It deals with any subjects related to proper use of the machine, in order to keep its operating and quality features unchanged over time. All information and warnings about how to properly and safely use the machine are also provided.
The manual, like the EC certificate of conformity, is an integral part of the product and must always accompany it whenever it is transferred or resold. The user is required to keep the documentation intact so that it can be referred to throughout the service life of the machine.

2.2 Supply and storage

The manual is provided in both **hard and soft copies.**
All additional documentation (pneumatic and electrical diagrams, sub-supplier manuals) is attached to this manual.
Keep this manual with the machine, so that it can be easily referred to by the operator.
The manual is an integral part for safety purposes, therefore:

- **it must be kept intact** (in all its parts). If it is lost or damaged, a copy must be requested immediately.
- **must follow the machine until demolition** (even in the case of transfer, sale, leasing, rental, etc.);
- **The attached manuals are an integral part of this documentation,** and the same recommendations/requirements set out in this manual apply to them.

The **Manufacturer** shall not be held liable for any misuse of the machine and/or damage caused as a result of operations not provided for in the technical documentation.



IMPORTANT!

- **All the technical information contained in this manual is the exclusive property of the Manufacturer and must be considered as being of a reserved nature.**
- **The reproduction and disclosure, even partial, of this manual on paper, digital support or on the WEB without written consent from the Manufacturer is prohibited.**

2.3 Updates

If the machine requires functional changes or replacements, the revision or updating of the manual shall be the Manufacturer's responsibility. The Manufacturer undertakes to deliver any manual update.
If any changes are made to this document by the Manufacturer, the user shall ensure that only the updated versions of the manual are actually available at the points of use.

2.4 Language

The original manual was drawn up in **Italian.**
Any translations into additional languages shall be done from the original instructions.
The Manufacturer is responsible for the information contained in the original instructions; translations into different languages cannot be fully verified, therefore if any inconsistencies are found, please refer to the original text, or contact our Technical Documentation Department.

2.5 Operators

In order to establish with certainty what the skills and qualifications of the operators assigned to the various tasks (start-up, cleaning, routine maintenance) are, please refer to the following table:

Job description	Definition
Machine operator	Personnel entrusted with the operational management of the machine - switch-on, start-up, shutdown, proper product feeding. **Note:** not allowed to perform any maintenance.
Machine programmer	Personnel entrusted with machine programming, a task that does not entail any hazards for persons or property. Special carefulness is required from the person performing this task, as some programming operations can damage previously memorised data. The person must also be familiar with the company's productive organisation so as to enter the appropriate information.
Lifting and handling equipment operator	operator authorised to use equipment for lifting and handling materials and machines (strictly following the Manufacturer's instructions) in accordance with the laws in force in the machine user's country.
Maintenance technician Mechanic	Qualified technician who is entrusted with checking mechanical components for cleanliness and proper preservation as well as adjustment and maintenance conditions. **Note:** he/she is not authorised to operate on live electrical systems (if any).
Maintenance technician Electricity	Qualified technician who is entrusted with managing maintenance work and any electrical malfunctions, in addition to being able to conduct work in the control panel if needed.
After-sales service	Skilled technician who deals with all complex adjustments, maintenance, repairs, or other operations to be carried out in particular conditions.

The qualifications shown in the table on this page necessarily fall within the **"trained person"** category.

Type	Definition
Trained person	One who has been informed, instructed and trained in the job, and is acquainted with any dangers resulting from misuse. The person is also aware of the importance of safety devices, accident-prevention regulations and safe working conditions.

2.6 Symbols used within the manual

In order to establish with certainty what the skills and qualifications of the operators assigned to the various tasks (start-up, cleaning, routine maintenance) are, please refer to the following table:

Symbol	Term	Definition
	**CAUTION!**	Identifies situations that could lead to product damage if not adhered to.
	**BEWARE!**	Identifies situations that could result in personal injury or adversely affect machine performance if not properly adhered to.
	**DANGER!**	Identifies situations that could result in severe injury or death if not adhered to.
	**IMPORTANT!**	Identifies particularly important information in the manual that is not related to safety.
	**PROHIBITION!**	Identifies prohibited situations.
	**RESPECT THE ENVIRON-MENT!**	Identifies information and precautions on how to dispose of contaminated waste and respect the environment.

2.7 Glossary

Technical terms or with a meaning other than the common are used in the manuals.
The used terms and abbreviations are explained below:

Term	Definition
Up-down	Function that allows an automatic device to be activated in order to mechanically isolate the scale plate - product system when this is in the weighing position for the time that weighing lasts (static), thus enabling it to weigh products that are longer than the scale belt.
Autoreset	The scale's automatic periodical resetting system. It can only be enabled during an automatic weighing phase. The scale is automatically reset at established intervals, and only when the plate is unloaded, guaranteeing that it will not be loaded automatically with a weight during the resetting procedure. The autozero managing logic is described in the domain rules.
Resetting	Process with which the weight indication is returned to zero, annulling the load bearing on the cell, within the preset limits.
Barcode	Data structure formed by fixed and variable fields of the process able to be printed on the label. Each barcode must therefore be able to indicate the data of the process in relation to which it is created
BcRead	Indicates the format of a barcode that the system can read during the process (by means of a scanner) in order to automatically modify a sub-group of data pertaining to the current process. Each bcread must be described by the sequence of fields it contains and unambiguously identified within the sequence of characters of the barcode itself.
Scale	Component that processes the data from the load cell and that provides weighing functions (obtainment of a gross weight value and calculation of the relative entities derived). It also memorises a group of information representing the calibration data and which is the result of the calibration processes.
Braid	Component that processes the data from the load cell and that provides weighing functions (obtainment of a gross weight value and calculation of the relative entities derived). It also memorises a group of information representing the calibration data and which is the result of the calibration processes.
Sampling (1) (also calibration)	Process with which a bond is established between the intensity of the signal leaving the load cell and the weight bearing on it. Sampling can be: • linear: the bond between the signal and weight is considered to be linear and thus described by means of the equation of a straight line; • non-linear: the bond between the signal and weight is considered to be describable by means of a second-degree equation.
Sampling (2)	Group of information that describes the bond obtained during calibration.
Zero sampling	Process by which the load bearing on the cell is annulled the moment in which it is activated, thus modifying the sampling data.
Center Zero	Defines a weight range around the zero mark between ± 1/4 of a division.
Connector	Plug or socket for connecting the terminal to the external equipment.

Term	Definition
Counters	They are global consecutives associated with the equipment. Some express information which, although global, are modified during the process and therefore need to be handled according to the pipeline logic of the process itself (namely, information that must be stored so that it can be recovered according to the instant in which it was produced). Some pertain to the actual system and cannot be reset during the life of the machine. Others, as they pertain to parts that are liable to be replaced, must include a resetting mechanism.
Default	Value provided by the data memory in the absence of an entry via the keyboard. The data entered by the manufacturer are retrieved as default values.
Key-in	Press the command that needs to be activated or the character to be retrieved on the display, using the keyboard.
Display	Lit screen on which the numeric data and symbols transmitted by the system appear, so that they can be immediately consulted.
Division	Appreciable minimum weight variation.
Zero division	this is the division (1/2 before and 1/2 after) spanning the scale resetting value.
Multiple divisions	Automatic system for changing the division depending on the weighed load. It works when the scale is either loading or unloading.
Multiple extensions	Automatic system for changing the weighing range in systems with several ranges and different maximum capacities. Once the scale has been loaded, return to zero occurs within the last range switched.
Label	Group of graphic elements that express the forms and data of the process in a printable form. The following elements can be included in a label: • fixed texts • variable texts • barcodes • images • lines • rectangles The sequence in which the elements are transmitted to the printer is significant, since, in the case of overlapping, each element overwrites the previously transmitted one which partially or totally occupies the same area.
Labelling	Process whereby the label is applied to the product and totalising of the same within the process is performed. If the product label (or printer) is not present, the process will deal with totalising alone. If the piece is not to be totalized (namely rejected), the process is annulled.
Full scale	this is the maximum weighing capacity of the instrument, which does not necessarily coincide with the max. structural capacity of the weighing platform.
Host	Remote system that connects to the Weighing-pricing system in order to handle and program it.
Image	graphic element that must be able to be stored in the system so that it can be displayed and printed.
Interface	Group of circuits and channels that connect the terminal with the external devices to which it is linked.
IP xx	Protection degree for casings and enclosures containing electrical or electronic components. The IP rating indicates the protection class of electronic equipment against solid matters (the first number) and liquid (the second number).
Process (1)	Status of the system in which, if appropriately stimulated (cell loading, photocell obscuring, command from the interface), it is able to process the individual products.

Term	Definition
Process (2)	Weighing, labelling, weight /price data calculation, totalising and possible handling process, the subject of which is a group of products pertaining to a specific PLU.
Process (3)	Group of information that characterises the process of a specific PLU. It consists of the group of data of the PLU in question with the addition of the following elements: • the weighing-pricing data of the last product weighed; • the consecutives linked to the totals.
Traceability lot	Group of information that identifies and describes a production lot (typically refers to the livestock market) used to obtain different products to process. The information that identifies and describes the traceability lot can be configured as described in the relative section of the Supplementary Specifications.
Mask	Graphic representation of data, characters or symbols on the display, according to the modes established by the manufacturer.
Multi-division	See "Multiple divisions".
Multi-extension	See "Multiple extensions".
Operator	Person who uses the system. This is therefore the person who must have read this manual and who is fully familiar with the operating controls.
Option	The equipment that is not part of the standard supply.
Minimum weighing operation	Corresponds to the interval between 0 (zero) and a pre-established number of divisions. A high relative error can occur in this zone.
Weighing	Process by which the weight bearing on the load cell during the actual process is measured.
Automatic weighing	Automatic weight measuring process that does not require the intervention of an operator
Dynamic weighing	Automatic weighing process in which weight measurement occurs without stopping the product on the scale plate.
Manual weighing	Weight measuring process that requires the intervention of an operator. It can activate in automatic mode as soon as the operator loads a product on the scale plate or in manual mode, when the operator starts up the process itself.
Static weighing	Automatic weighing process in which the product handling system that regulates the way the product is loaded onto the scale, stops the piece on the scale plate so that the weight can be measured.
Platform weighing	Part of the set-up on which the goods are placed for weighing.
PIN	Pin, rheophore or pole to which the cable connects.
PLC	Freely programmable electronic component containing the program that controls the machine on which it is installed.
PLU	Acronym of PRICE LOOK UP, or search (identification) unit of the product. It collects all the specific information about every product that can be processed, or supplies the group of data required to guide the transport, handling, weighing, labelling and totalising process. Additional information expressing the PLUs relation with other elements in the system can be associated with each PLU.
Pole	See PIN.

Term	Definition
Maximum capacity	Maximum weighing capacity.
Protocol transmission	Data encoding and sorting system in a transmission towards an external device.
Stopping position by a belt	A position (target) must be identified on each belt on a level with which the products stop in order to be subjected to the process pertaining to that particular belt (stopping while waiting for events, enabling, confirmation from the user, weighing, labelling).
Weighing range	Weighing range between the minimum weight and maximum capacity.
Load receiver	Part of the instrument where the load is positioned for weighing.
Scanner	Barcode reader
Serialisation	Data transmission, character by character.
Slot	Position or housing for the board in the terminal.
Stopped status	Machine condition in which all the belts are at a standstill or being stopped, and in which they stop as soon as the pieces in the machine reach the stopped position on the individual belts.
Belt consent status	A belt "is enabled" if the next belt (or the next machine relative to the last belt in the line) is able to accept pieces. This means that if a belt has not been enabled,a piece in transit on it must stop at the relative stopping position, or that it cannot start again until its processing status in that position has been completed.
Processing status	Condition in which the line is to be found that allows the conveying system to accept pieces, move them, weigh them, label and totalize them. The opposite situation is called "off process".
Running status	Machine condition in which the pieces must be able to be moved continuously, in compliance with the downstream enabling conditions.
Store	Reservoir of information, which can contain: • the code of a process; • information that guides the process of the specified code (if present) in relation to weighing, handling, characteristics associated with the process.
String	Sequence of alphanumerical characters exchanged during a serial transmission between the terminal and external equipment.
Tool weighing	Measuring instrument that determines the "weight" entity of a body.
Preset tare	Tare value associated with a product (PLU), the origin of which is a known value that is entered in the system. It is used for calculating the net weight at the time the weight data of a PLU being processed are calculated. Since the scale that measures the gross weight can have a different capacity and division each time, the value of the tare associated with the PLU must not be rounded-off in any way.
Percentage tare (also weight drop)	Percentage value that expresses an additional tare element equal to the actual percentage value of the net weight, which is consequently decreased to a further extent by the tare value thus obtained.
Printhead (single head, double head)	The printhead consists of a printer and an applicator that can be the air-jet, arm or piston type. An Automatic weighing-pricing system can have one or two printheads (double head). If there are two heads, they are either positioned in line or above and below.
Fixed text	Text element filed in the system and unambiguously identified by a numeric code. Each text must belong to a category (ingredients, products, label texts)

Term	Definition
Variable text (or Variable field)	Data item of each process which can be included in labels, barcodes, reports. The variable texts include: • fields of the actual process; • information bound to the traceability lot currently set in the system; • general totals.
General total	Totalising element that sums the values created by processing the individual pieces across the actual process itself.
Data transmission	Exchange of information between two or more devices via electric cables.
Zero tracking	Automatic zero tracking system. It can only be enabled during a manual weighing phase and corrects the zero value progressively when the weight value recorded in the cell has been subjected to a smaller variation than a settable value (generically 0.5 g) within a preset period of time (generically 0.5 s). The correction is made by resetting the scale again. It is used in a practical way in applications where progressive accumulations of liquid or dirt tend to shift the scale from its zero position.

2.8 Personal protective equipment

When performing assembly and maintenance work and/or adjustments near the machine, strictly comply with general accident prevention rules; to do so, it is important to use the personal protective equipment (PPE) required for each operation.
Below is the complete list of **personal protective equipment (P.P.E.)** that may be required for various procedures:

Symbol	Description
	**Obligation to use protective or insulating gloves.** Indicates a requirement for personnel to use protective or insulating gloves.
	**Obligation to use safety goggles.** Requires personnel to use safety goggles.
	**Obligation to use safety shoes.** Requires personnel to use safety shoes to protect their feet.
	**Obligation to use noise protection devices.** Requires personnel to use earmuffs or earplugs.
	**Obligation to use protective clothing.** Requires personnel to wear adequate protective clothing.

Those performing maintenance work on the line must wear clothes complying with the essential safety requirements provided for under **Reg. EU 2016/425** and the laws in force in the countries where the machine is installed.

2.9 User safety area

The **areas around the machine** are divided as follows:

Term	Description
Control areas	These are areas where the user and other operators can perform command and control operations on the cyclical functions of the machine (**"driving position"**), both automatically and semi-automatically, through the appropriate control panels, or to perform manual operations.
Zones of maintenance/ adjustment	These are areas where mechanical maintenance technicians can perform maintenance or adjustment operations. These areas are considered at risk and may not be accessed during normal machine operation. Operators must be fully aware of the safety-related warnings and of those about the personal protective equipment to be worn.
Hazardous areas	All machine areas that can cause personal injury are considered hazardous.

To protect against the dangers and risks existing in these areas, as far as possible, **guards** (casings, doors) and **safety devices** (sensors, microswitches, light curtains) are installed, which, if activated, can fully stop the machine.
However, **when the machine is running, operating in hazardous areas IS STRICTLY FORBIDDEN, as some risks may not have been totally eliminated.**

2.10 Warranty

The full warranty clauses are incorporated in the sales contract.

The conditions set out in the commercial contract (if different) shall take priority over the provisions in this section.

The warranty **is subject** to the following general conditions:

- **package opening and installation** must be supervised by technicians authorised by the Manufacturer;
- the **first start-up and successful test** of the installed machine must be monitored and supervised by the manufacturer's technicians; the installation/testing sheet must be completed.
- **the machine must be used within the** limits stated in the contract and the technical documentation.
- **maintenance** must be performed in the times and ways provided for in the manual, using **SOCIETÀ COOPERATIVA BILANCIAI** original spare parts and having qualified personnel conduct the work.

The **warranty shall lapse** in the event of:

- failure to **comply with the safety standards**;
- **removal of, or tampering** with the control and safety devices (guards, photocells, sensors, micro switches, etc.);
- **changes to the safety** conditions established by the Manufacturer in the machine management software;
- **misuse** of the machine;
- use of the machine by untrained and/or unauthorised personnel, or failure to adhere to the various operators' skills, as indicated in the manual;
- **modifications or repairs** made by the user without the Manufacturer's written approval;
- partial or total non-compliance with the instructions;
- energy supply defects (electricity, compressed air, etc.);
- poor maintenance;
- use of non-original spare parts;
- exceptional events such as floods, fires (if not caused by machines).



IMPORTANT!
Further details can be found in the commercial contract.
The conditions set out in the commercial contract (if different) shall take priority over the provisions in this section.

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Chapter 3
SAFETY FEATURES

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3. SAFETY FEATURES

3.1 Safety warnings

This section is aimed at informing operators about any particularly significant risks and dangers that may occur on the machine, and about the general and specific precautions to be taken to eliminate or neutralise them.



IMPORTANT!
Before operating on the machine, the operator must be perfectly familiar with:
- **the operating and safety instructions in this manual;**
- **the position, function, and use of all the controls on the machine.**



IMPORTANT!
The managers of the company departments where this machine is to be installed are required to carefully read the contents of this document and to have it read by all operators and maintenance technicians, in accordance with current regulations.



BEWARE!
The appliance must only be installed by specialist personnel after having read and understood this manual.



BEWARE!
Contact your nearest Service Centre if problems occur.



PROHIBITION!
The user or any unauthorised personnel MAY IN NO WAY attempt to disassemble or modify the system, nor tamper with it; this would make the warranty immediately null and void, and the Manufacturer would not be held liable for any resulting personal harm or property damage.



PROHIBITION!
Changing or deleting details on the nameplates, as well as removing the terminal's closing seals or official stamps IS NOT ALLOWED; therefore, make sure that all the nameplates are in place and legible, or else contact the After-Sales Service.



IMPORTANT!
The Manufacturer will not be held liable for damage resulting from careless handling of the machine.



PROHIBITION!
Using the machine without safety guards IS NOT ALLOWED. Remove the safety guards after switching off the machine and disabling the electrical disconnector, only for the time strictly necessary to perform the required repairs or maintenance, then restore them immediately.



IMPORTANT!
If changes are made to this document by the Manufacturer, the Customer shall make sure that only the updated versions of the manual are actually available at the points of use.



PROHIBITION!

- **IT IS FORBIDDEN to wear loose-fitting garments that may get caught up in parts of the machine;**
- **it is forbidden to wear ties or other items that hang loosely;**
- **do not wear bulky rings that could get your hands caught in machine parts.**



PROHIBITION!

- **IT IS FORBIDDEN to run the machine in automatic mode with its fixed and/or movable guards removed;**
- **It is forbidden to disable the safety devices installed on the machine;**
- **It is forbidden to perform any operation with the safety devices deactivated.**



BEWARE!

Perform cleaning after disabling the electrical or pneumatic separating devices.



BEWARE!

Never modify any part of the machine for any reason whatsoever. In the event of malfunctioning due to failure to adhere to the above, the manufacturer cannot be held liable for any consequences. We recommend requesting any changes directly from the manufacturer.



IMPORTANT!

Clean the machine casings, panels and controls using soft dry cloths or cloths dampened with a non-toxic mild detergent; do not use any type of solvents such as alcohol or petrol since it may damage the surfaces.



PROHIBITION!

No unauthorised personnelARE ALLOWED to conduct any work on the machine.



BEWARE!

Before using the machine, make sure that:

- **any dangerous conditions for safety has been appropriately eliminated;**
- **all guards and other protective and safety devices are in place and in working order;**
- **make sure there are no foreign objects in the operator control area.**



BEWARE!

ELECTRICAL EQUIPMENT

Connection work, commissioning, maintenance, measurements or adjustments of the electrical equipment and its components must be performed by qualified electricians only.

Remember that, frequency converters (also known as 'inverters') generate voltage levels that are dangerous for the life of operators. Before working on these devices, if present, read the relative documentation provided by the manufacturer of the device itself. When working on live electrical components, strictly observe the provisions in force



PROHIBITION!

IT IS FORBIDDEN TO approach or insert parts of the body into the labelling area while the machine is running.

3.2 Safety devices

To ensure total operator safety and prevent access to the inside of the machine when it is running, the machine has been equipped with a series of **safety devices** that can stop it, if enabled.
The machine has been designed and equipped with safety systems to minimise operator risks.

The machine is equipped with the safety devices described in the table below. For the positions of these devices, refer to the drawing on the following pages.

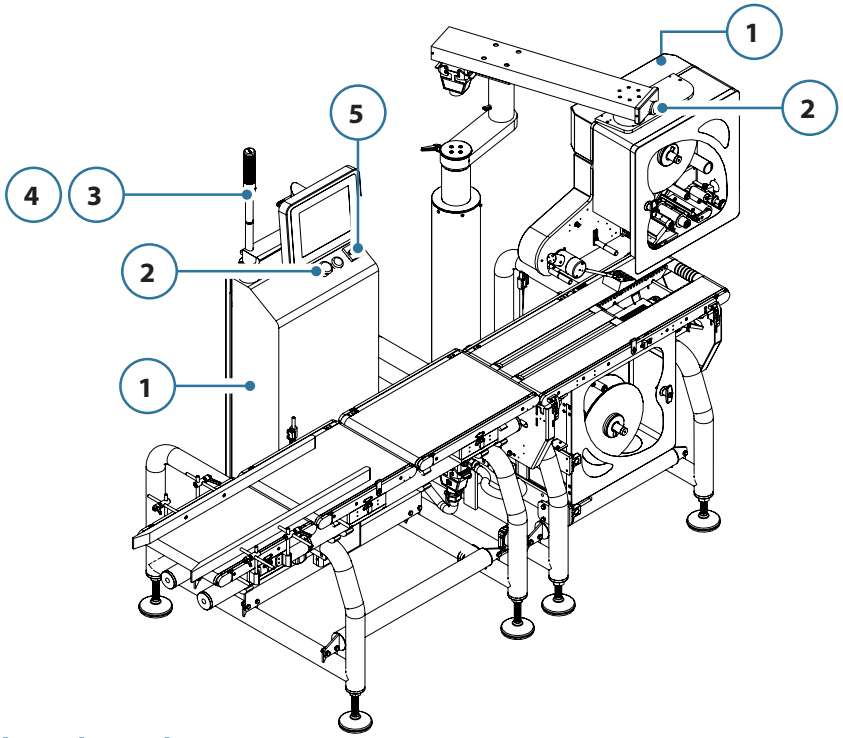
Pos.	Term	Description
1	**Metal casing**	These are fixed perimeter guards used to prevent access to the drives of various parts of the machine and its units during the operating cycle. The machine is equipped with fixed guards located in the areas with exclusive access for maintenance purposes; these require specific tools for their removal.
2	**Emergency pushbutton**	The red mushroom button must be pressed to interrupt the operation of the machine in case of: • danger to the safety of the operator; • dangers for the machine itself.
3	**Stack lights column**	It is located in the control areas of the machine; it identifies the following conditions: • red light = dangerous condition, machine stopped in emergency condition; • yellow light = abnormal condition; • flashing yellow light = printing unit handling; • green light = normal condition, machine in automatic cycle.
4	**Acoustic signalling device**	Intermittent acoustic signal during printing unit handling.
5	**Electrical main switch**	Located outside the electrical cabinet, it manages the power supply to the machine. The switch is lockable with a padlock in the open position.



IMPORTANT!
The rear of the labelling machine is always protected by a fixed protective casing, firmly fixed to the support structure of the labelling machine itself, while the front casing where the operator periodically intervenes to replace the paper roll is OPTIONAL.



IMPORTANT!
There is no danger of a mechanical nature requiring the casing to be installed on the front of the labelling machine, as all movements take place slowly.



3.2.1 Fixed and shaped guards

These are protective casings that can be disassembled and disabled by means of special mechanical tools. These do not feature safety devices for checking that they are closed since they must always be fitted before and during machine operation.

Here below is a list of the guards:

- stainless steel casing;
- plexiglass guards.



IMPORTANT!
The rear of the labelling machine is always protected by a fixed protective casing, firmly fixed to the support structure of the labelling machine itself, while the front casing where the operator periodically intervenes to replace the paper roll is OPTIONAL.



BEWARE!
Before starting the machine, check all fixed panels for proper installation. Ignoring this may result in severe consequences for the operator and/or third parties.



PROHIBITION!
Never remove the fixed casings when the machine is running. Always refit fixed casings after performing any maintenance work.
Stop the machine completely before removing these guards.



BEWARE!
The casings that can be opened only with tools are not protected by micro switches. Opening them, therefore, will not stop machine operation. Before opening these casings, always stop the machine by pressing an emergency stop button and cutting off power from it.



PROHIBITION!
Tampering with or electrically disconnecting the safety devices installed on the mobile guards IS STRICTLY FORBIDDEN. Ignoring this may result in severe consequences for the operator and/or third parties.

BEWARE!
Whenever disassembling them to perform any checks or maintenance work, it is essential to cut off power through the main electrical switch.

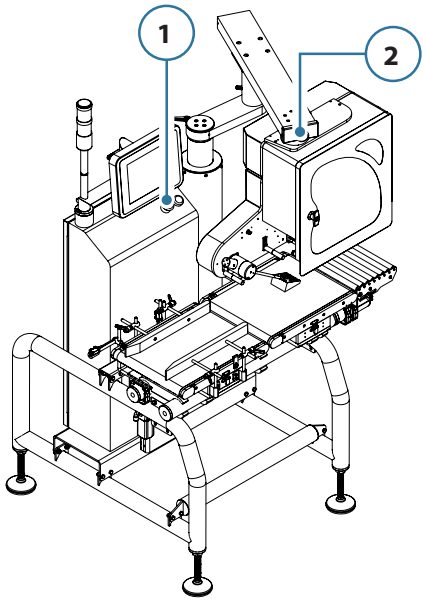
BEWARE!
During all maintenance operations, repair work or adjustments, it is MANDATORY to lock the interlocked switch IN POSITION "0" by means of the padlock provided for this purpose. It is advisable to affix a sign to the control panel on the machine or to the main power supply switch.

3.2.2 Emergency button

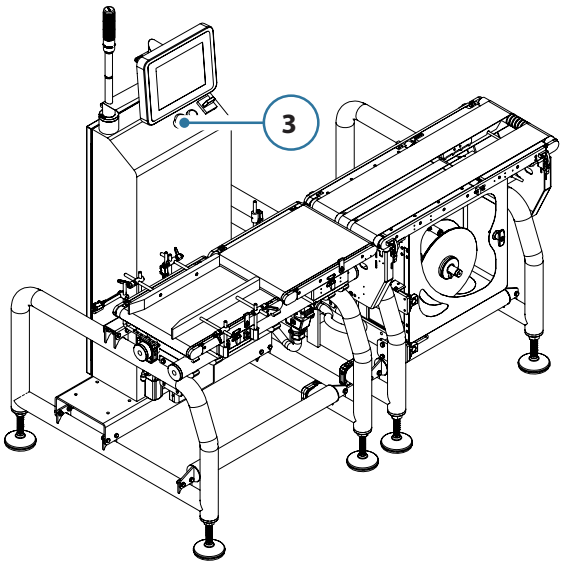
Red mushroom button (1-7) on a yellow background with detent located at the front of the machine's electrical panel;

- Press the emergency button at any time to stop the machine instantly;
- Press the emergency button on each upper printing unit;
- Press the emergency button on the machine's electrical panel.

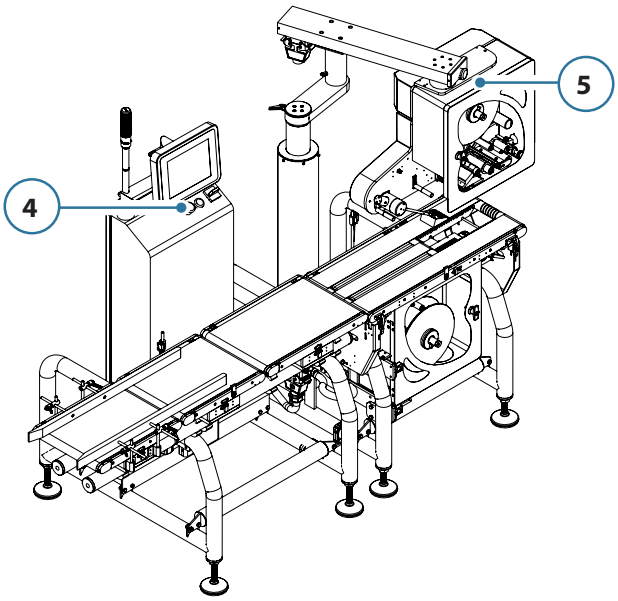
BEWARE!
The button must only be pressed to stop the machine during an actual emergency situation; the constant improper use of the button can cause unforeseeable damage to the mechanical and electronic system.



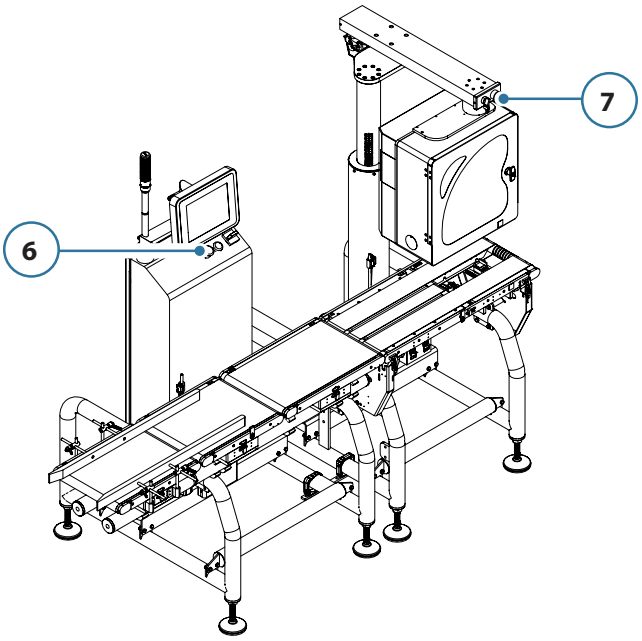
GALAXI LT (TOP PRINT)



GALAXI LT (BOTTOM PRINT)



GALAXI HS/LT-TB/TT



GALAXI A C LABELING

3.2.3 Tower stack lights

A light signalling device is located on the electrical cabinet which, depending on the type of signalling, informs the operator of the following machine conditions:

- red light = dangerous condition, machine stopped in emergency condition;
- yellow light = abnormal condition;
- flashing yellow light = printing unit handling;
- green light = normal condition, machine in automatic cycle.

3.2.4 Acoustic signalling device

An acoustic signalling device is connected to the flashing device to signal anomalies in line operation or emergency situations

3.2.5 Power switch (with padlock)

The machine must be connected to a main electrical panel and equipped with a power supply switch (pos1.) installed on the outer side of the cabinet's mobile guard to cut off power from it.

The main switch must be set to **"0-OFF"** in the event of:

- electrical hazard;
- electrical or mechanical maintenance on the machine (padlock the switch);
- impending danger of mechanical accident;
- fires;
- machine inactivity.

By setting the main switch to "**1-ON**":

- power is supplied to the downstream electrical system;
- the doors of the electrical cabinet remain locked in a closed position to prevent access to the live system.



IMPORTANT!

The main switch is mounted in the following positions:

- **GALAXI LT (pos.1): electrical cabinet door (door locked if machine is powered);**
- **GALAXI HS/LT-TB/TT (pos.2): control panel, control panel door locked with special key;**
- **GALAXY HS C Labelling (pos.3): control panel, control panel door locked with special key.**

3.3 Noise

The noise level was measured in accordance with the provisions of the **UNI EN 11200** and UNI EN ISO 3746 standards..
During operating cycles, staff **noise exposure is less than 70 dB.**

The actual noise level of the machine running on-site during a production process is different from that detected since noise is affected by some factors such as:

- type and features of the site;
- other adjacent running machines.

It is the user's responsibility to apply any resulting preventive and protective measures, in accordance with the legislation applicable in the country where the line is installed and used.

3.4 Vibrations

The vibrations produced by the machine, depending on its operating mode, **are not dangerous** for the operators' health.



BEWARE!
Excessive vibration can only be caused by a mechanical failure that must be immediately reported and rectified, so as not to endanger the operators and the line.

3.5 Electromagnetic compatibility

The supplied machine contains electronic components that are affected by conducted and radiated emissions and subject to Electromagnetic Compatibility regulations.
The emission values comply with regulatory requirements as a result of components in line with the Electromagnetic Compatibility Directive, suitable connections and installation of filters as required.
Therefore, the machine complies with the Electromagnetic Compatibility Directive (EMC).



BEWARE!
Non-compliant maintenance carried out on the electrical equipment or improperly replacing components may undermine the effectiveness of the adopted solutions.

3.6 Residual risks

The machine was designed in such a way as to guarantee the essential safety requirements for the operator.

Safety has been as far as possible integrated into the design and construction of the machine; however, risks persist from which operators must be protected, especially during:

- transport and installation;
- normal operation;
- adjustment and fine-tuning,
- maintenance and cleaning;
- disassembly and dismantling.

For each residual risk, a description of the risk and the area or part of the machine subject to the residual risk is provided (unless it is a risk affecting the whole machine). Procedural information is also provided on how to avoid the risk and properly use the personal protective equipment provided and required by the Manufacturer.

Risk	Description and procedural information
Unexpected/accidental machine starting	• isolate the electricity supply by acting on the power switch and by applying a padlock on it; • in the event of any maintenance work, inform the person in charge so as to prevent any accidental starting of the machine.
Danger moving parts	Keep at a safe distance from the work area of the belt and from its drive motor to prevent any contact.
Unexpected/accidental machine starting	• isolate the electricity supply by acting on the power switch and by applying a padlock on it; • in the event of any maintenance work, inform the person in charge so as to prevent any accidental starting of the machine.
Danger of electrocution	The machine is live during operation: switch the main switch to the "0-OFF" position before each intervention. Only authorised personnel (electrician) are allowed to work on the machine when it is live.
Danger of collision	If the (optional) ejector starts operating, keep at a safe distance from its work area to prevent any contact.
Organ hazard furniture/ entanglement/ hot surfaces	Keep a distance from the work area at the motor protection casing of the tangential belts (optional) to avoid contact



BEWARE!
Do not carry out any maintenance work unless you have previously de-energised any power sources.

The user will take care of:

- **assessing the risks that could occur during handling and installation at its premises** (handling was analysed only by taking the machine characteristics into account);
- **delimit the path of the forklifts** and/or laser vehicles used with signs on the floor;
- **sensitise and train the personnel in charge of performing operations at the workstations,** and of running the machine;
- **apply visual safety signs in the workplace** after assessing the risks in transit or control areas.

3.7 Safety pictograms applied to the machine

The machine features a series of pictograms warning the operator of the existing residual risks.

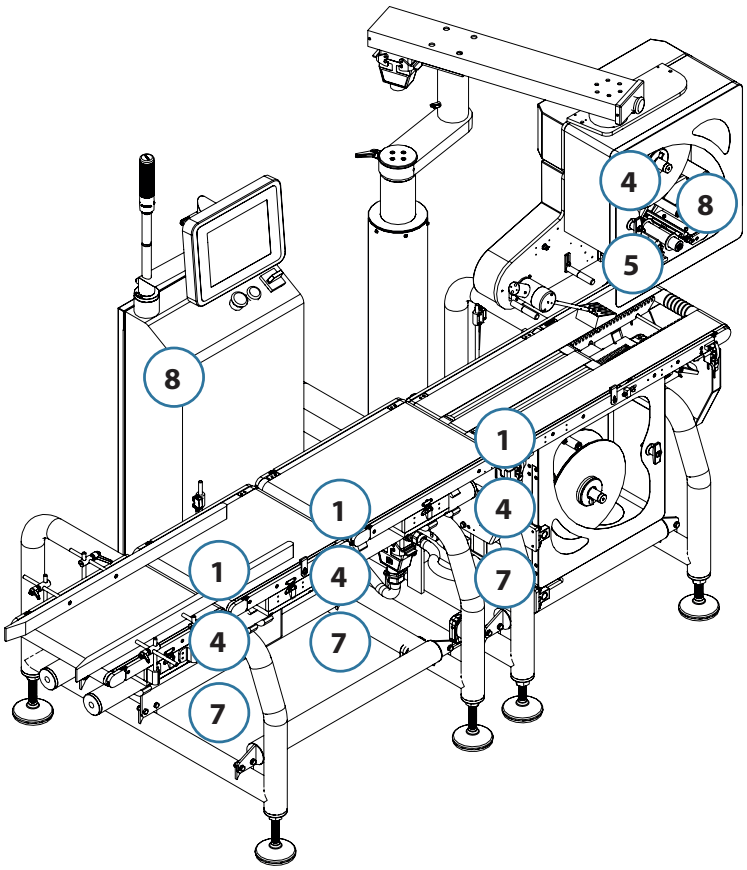
BEWARE!
Removing the warning signs on the machine is strictly forbidden.
SOCIETÀ COOPERATIVA BILANCIAI shall not be held liable whatsoever for the safety of the machine if this prohibition is not complied with.

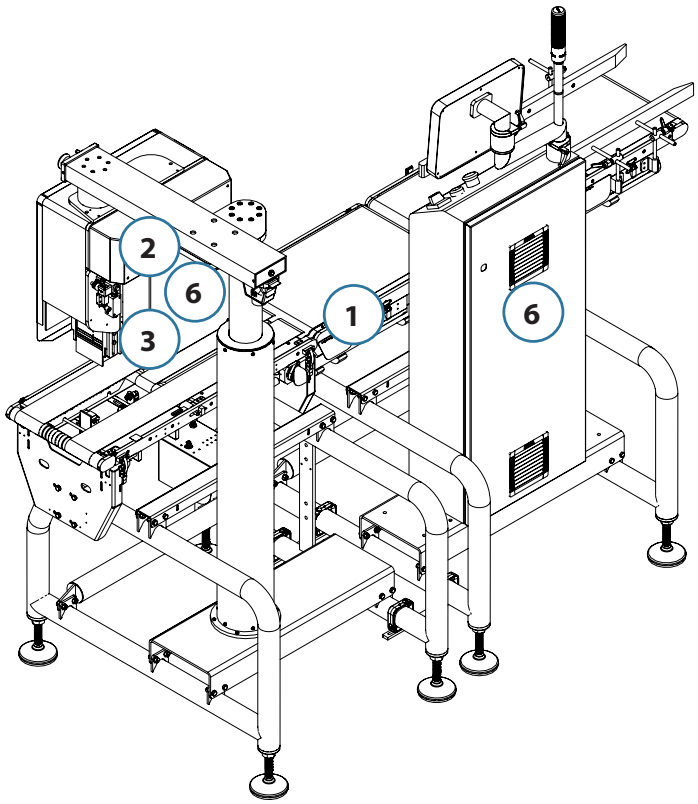
BEWARE!
The user is required to replace the warning signs if they are illegible due to wear.

The table below shows the pictograms on the machine.

For their positions, please refer to the picture below.

Pos.	Pictogram	Description
1		**DANGER OF MOVING PARTS** Removing any guards and/or safety devices is not allowed.
2		**DO NOT EXTINGUISH WITH WATER** Do not use water to extinguish fires on electrical equipment.
3		**IT IS FORBIDDEN TO CLEAN, OIL, GREASE OR ADJUST MOVING PARTS BY HAND** It is forbidden to repair, oil, adjust or clean moving parts
4		**HAND CRUSHING DANGER!** Refers to the presence of components that may be dangerous for your hands and fingers.
5		**DANGEROUS TEMPERATURE** Indicates the presence of components that may be at high temperature.
6		**DANGER OF ELECTROCUTION** This is affixed to enclosures containing cables and electrical equipment to warn operators that these components are live.
7		**DANGER OF CRUSHING BY ROTATING PARTS** This warns of the danger of drawing-in/crushing in the event of contact with these parts.
8		**READ THE MANUAL** Indicates the need of reading the manual to be able to operate in safety.


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Chapter 4
DESCRIPTION OF THE MACHINE

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4. DESCRIPTION OF THE MACHINE

4.1 Proper intended use

The machine referred to here is intended for industrial use for:

Operation	Allowed	Not allowed	Processing environment
Product weighing	Weight check within a set range - weight check in transit	Any use other than that described as intended	Food industry

The machine was created to:

- meet the specific needs mentioned in the sales contract;
- be used according to the instructions and limits of use given in this manual.

The machine is designed and manufactured to work safely if:

- it is used within the limits stated in the contract and in this manual;
- the user manual procedures are adhered to;
- routine maintenance is performed as recommended;
- extraordinary maintenance is promptly performed in case of need;
- safety devices are not removed and/or bypassed.

4.2 Reasonably foreseeable misuse

Reasonably foreseeable misuse is listed below:

- handling and weighing of persons;
- using the machine as a foothold;
- use for direct sales to the public or in the presence of the purchaser;
- using the machine to obtain production values higher than the prescribed limits;
- using the machine to convey unpacked food products;
- using the machine other than envisaged under **"Proper intended use".**

Any other use of the machine other than that intended must be previously authorised in writing by the Manufacturer. Lacking that written authorisation, the use shall be considered **"misuse";** therefore, the manufacturer shall not be held liable for any harm to people or damage property, and any type of warranty on the machine shall be deemed to be invalid.



IMPORTANT!
Improperly using the machine rules out any liability of the Manufacturer.



BEWARE!
It is prohibited to use the terminal in a potentially explosive atmosphere or in places with a risk of fire.



IMPORTANT!
The conditions of use of the machine are governed by the metric and safety standards in force in the country of use. Any use which does not comply with these standards is prohibited.

4.3 Obligations and prohibitions

4.3.1 Users' obligations

The user (contractor or employer) must:

- take the operators' skills and conditions into account in relation to their health and safety;
- provide suitable personal protective equipment for each procedure;
- provide standard lifting equipment and procedures;
- require each worker to comply with company rules and regulations regarding safety and how to use the collective and personal protective equipment made available to them;
- instruct staff on accident procedures;
- instruct staff on the devices designed for operator safety;
- instruct staff on the risks of noise emissions in the workplace;
- instruct staff on the general accident prevention rules set forth by the European directives and the legislation in the country of destination of the machine.

Only have staff operating the machine who have read this manual and are properly trained.

4.3.2 Operators' obligations

The operator **must**:

- Always perform maintenance work with the machines off. Not lubricate moving parts.
- When the machine is running, do not operate near it wearing chains, bracelets, ties, or other clothing that can get caught in the mechanisms.
- Operators with long hair shall tie it up to prevent it from getting caught.
- Always perform work on the electrical panel, junction boxes, cables and all electrical system components with the main switch turned off.
- When starting the machine, make sure that there is no one inside the hazardous areas.
- During operation, be extremely careful to check that no one can directly access the moving parts.
- Properly use the protective equipment made available by the employer.
- Immediately report any deficiencies of the safety devices to the employer, manager or supervisor.

4.3.3 Operators' prohibitions

In particolar, operators **must not**:

- use the machine improperly, i.e. for uses other than referred to under "Intended Use";
- remove or tamper with the safety or warning devices without authorisation;
- perform, on their own initiative, operations or activities that do not fall within their competence or may jeopardise their own and other people's safety;
- wear dangling bracelets, rings or chains that can be dragged by moving parts, thus endangering the operator;
- replace machine components or change their speed without being allowed by a manager;
- change the machine cycle;
- change the electrical connections to disable the internal safety devices;
- use the machine if it has not been installed according to current regulations;
- use the machine as a foothold even if it is not running (under risk of falling and/or damaging the very machines);
- use the machine outside the permitted environmental conditions (refer to "chapter 5").



BEWARE!
SOCIETÀ COOPERATIVA BILANCIAIshall not be held liable for any damage to people or things, should it be ascertained that the machine has been used in one of the forbidden areas.

4.4 Technical data

Power supply data	
Voltage	230 VAC single-phase with earth (PE)
Absorption	10A, 2KW
Frequency	50 / 60 Hz
Totaliser (optional)	170 VA
Compressor (optional)	0.42 kW
Printing unit	170 VA

4.4.1 Printing system technical data

Printing system data	
Printing method	Direct thermal printing method (Thermal transfer with normal paper and foil on demand)
Printing resolution	8 dots/mm
Printing width	102 mm
Paper routing width	110 mm
Printing speed	up to 200 mm/s
Graphics	bit image mode
Types of barcodes available	2/5 Family • EAN and EAN + add-on family • 3/9 Family • CODABAR Family • UPC Family • Code/EAN 128 Family • PDF417 • GS1 Family • QR CODE • Data matrix
Check Digit	automatic calculation
Wide/ Narrow Ratio	programmable
Height	programmable
Suppression of legible characters	
Adjustable printing intensity	

Printing system data	
Key for repeating the last label printed	
Automatic monitoring of the temperature of the thermal head	
Character size	With 8 dot/mm head minimum 0.62 x 0.66 mm maximum 99.00 x 105.30 mm
Minimum label dimension	Width 30 mm, pitch 10 mm
Maximum label dimension	Width 110 mm, pitch 315 mm
Maximum dimension of label + silicone-coated paper	Width 120 mm
Space between labels	Pitch 2 mm, min. depth from int. margin 7 mm

4.4.2 Recommended types of paper

Print backings	Labels
Paper specifications	Pigmented white paper without wood and with a glossy finish weight: 65-90g/m2 (ISO536) thickness: 0.075-0.083mm (ISO534)
Adhesive specifications	adhesiveness on detachment (90°C): 430N/m operating temperature: -20°C - +70°C
Silicone-coated paper specifications	BG 40 BROWN (supercalendered glossy paper) weight: 65g/m2 (ISO536) thickness: 0.057mm (ISO534) transparency: 45%
Recommended models	Fasson Fasthermal NT Kanzaki KPT 86-H Fasson Fastransfer MP - S470 (TT models) Fasson Fastransfer Extra - S470 (TT models)

4.4.3 Recommended types of foil

Thermal belt specifications	film thickness: 4.5-6 microns internal diameter: 25mm external diameter: 58mm max. width: 70mm min.-110mm max. length: approx. 220m outer inked surface
Recommended models	Armor AWR 406 (for mat paper) Armor AWR 470 (for mat paper) Armor APR (for coated or polypropylene paper) Armor AXR7 Plus (for plastic backings) Ricoh B110 a NCR S 1

4.4.4 Label roll size

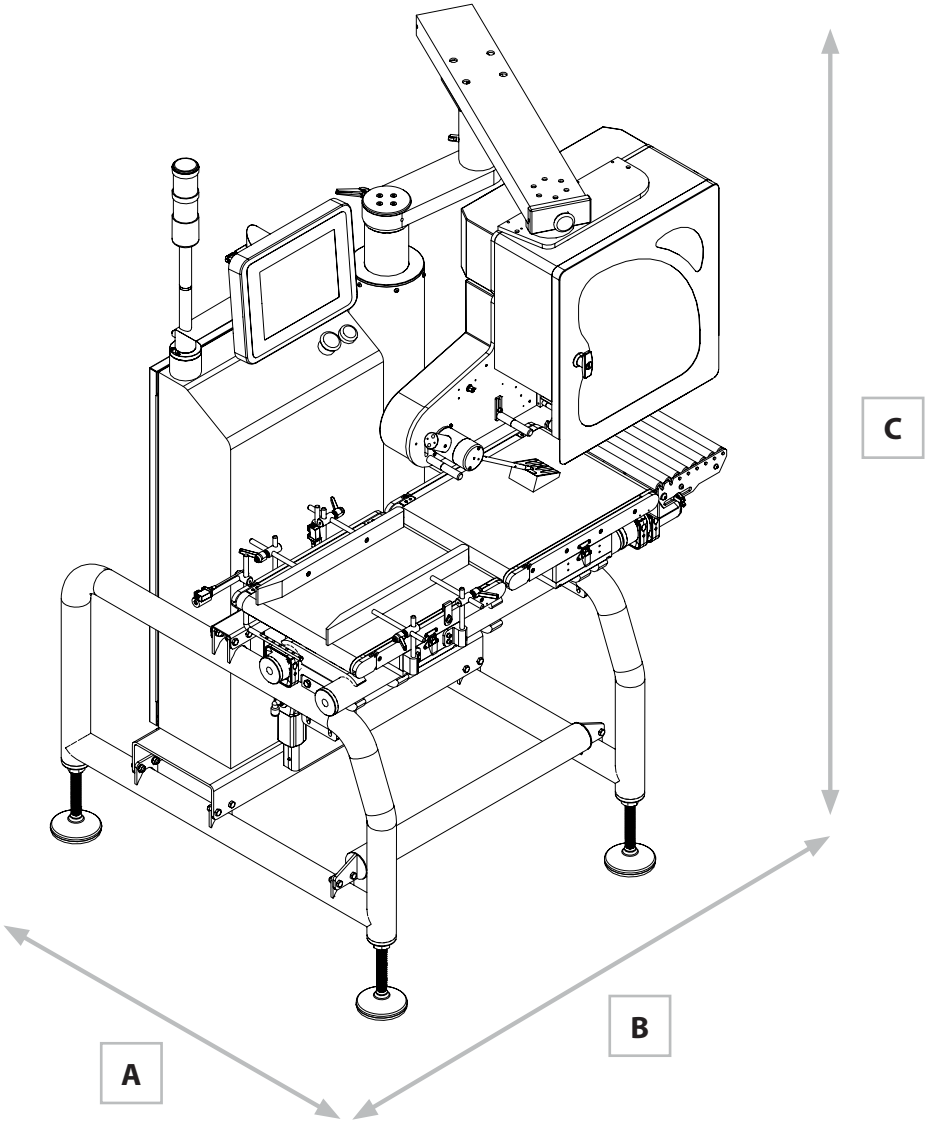
Maximum reel diameter	280 mm
Inner reel diameter	76 mm (recommended) NOTE: MINIMUM 40 mm internal diameters can be used, with consequently inferior performance

4.4.5 Storage

Keep the belts and labels in a dry, sheltered place at a temperature of less than 40°C and do not expose them to sunlight.

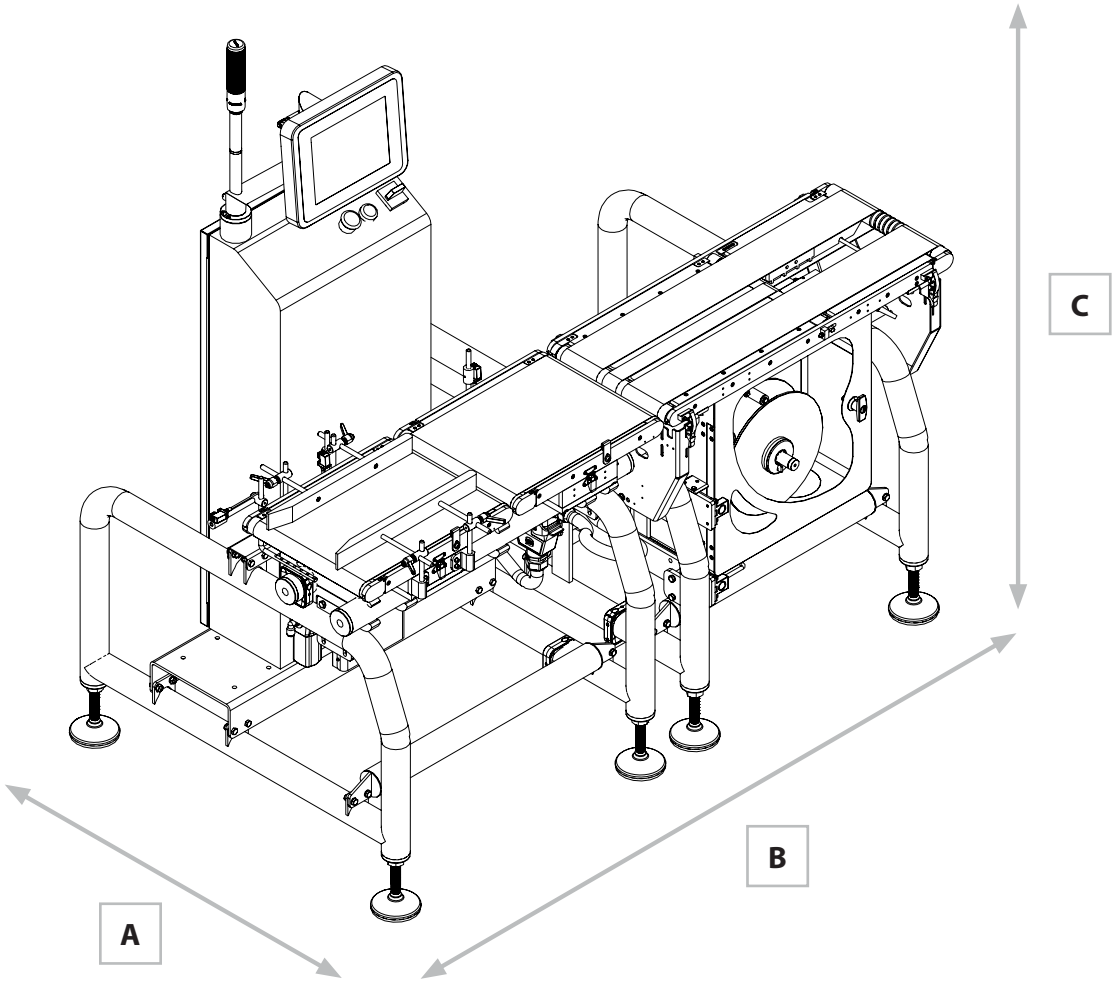
4.5 Layout measurements

4.5.1 GALAXI LT size layout (top print)



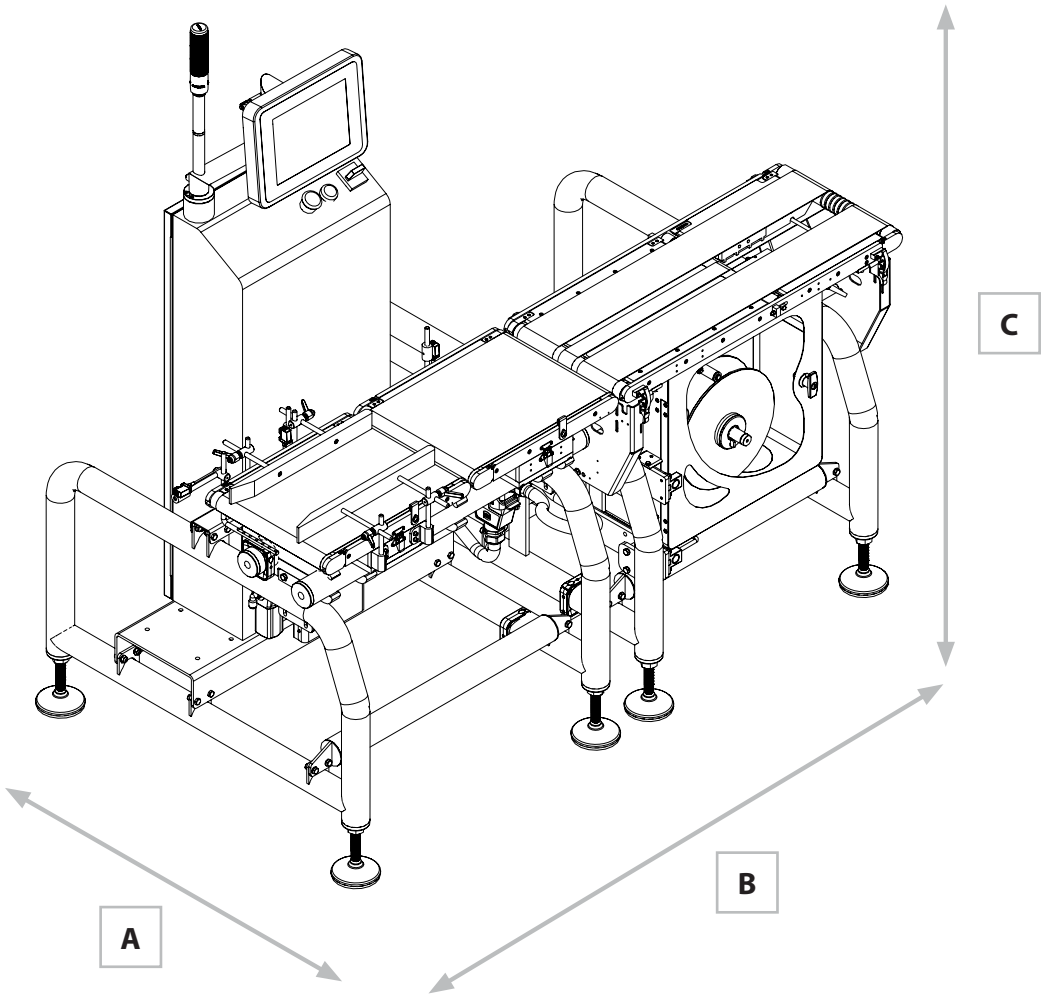
Overall dimensions	
Length (A)	985 mm
Width (B)	1078 mm
Height (C)	1835 ± 80 mm
Weight	-

4.5.2 GALAXI LT size layout (bottom print)



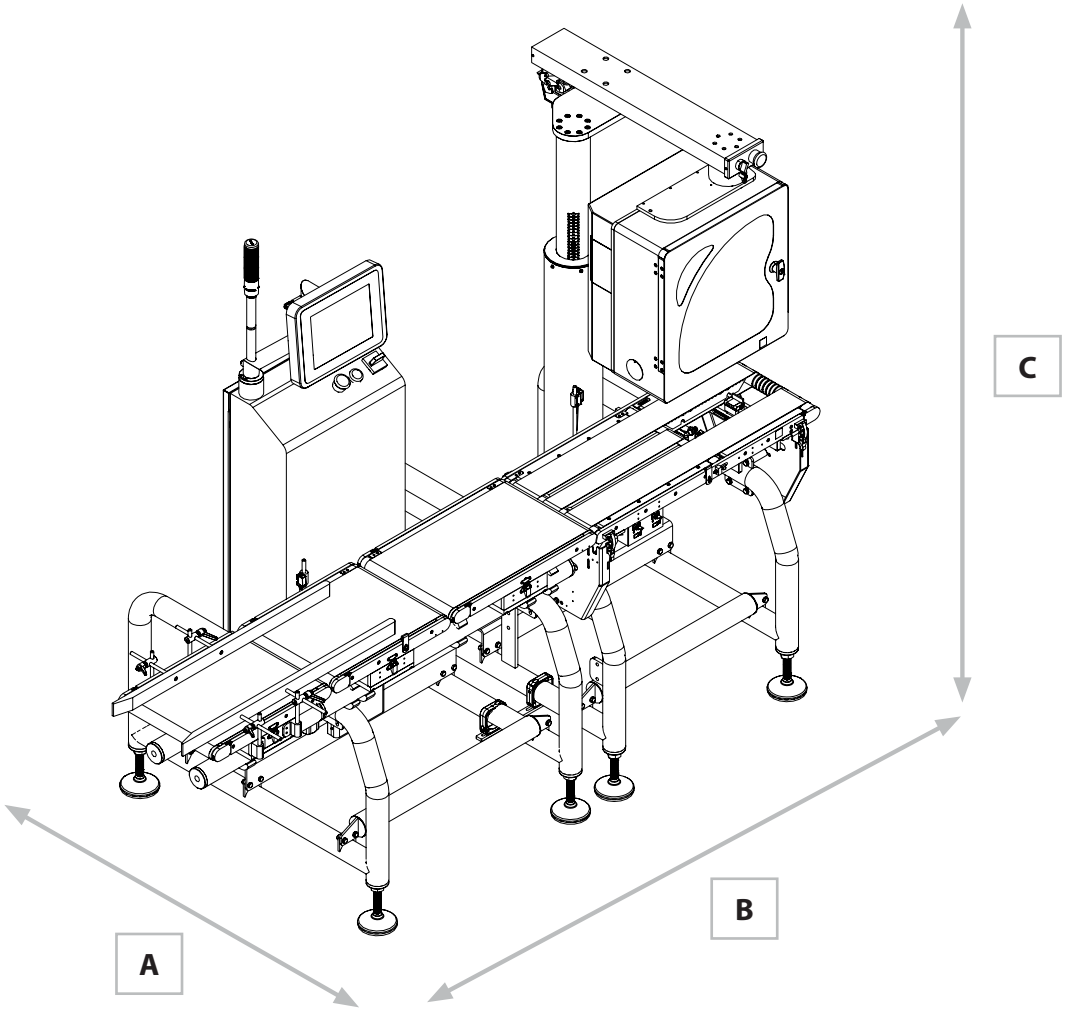
Overall dimensions	
Length (A)	985 mm
Width (B)	1724 mm
Height (C)	1835 ± 80 mm
Weight	-

4.5.3 GALAXI HS / LT-TB/TT size layout



Overall dimensions	
Length (A)	985 mm
Width (B)	2256 mm
Height (C)	1835 ± 80 mm
Weight	-

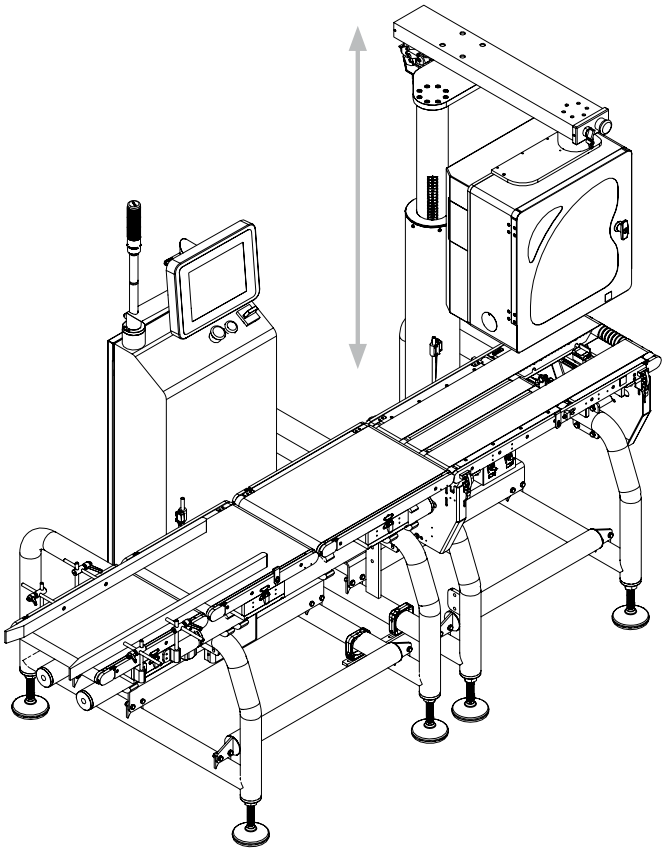
4.5.4 GALAXI HS A C-LABELLING measurement layout



Overall dimensions	
Length (A)	985 mm
Width (B)	2256 mm
Height (C)	1835 ± 80 mm
Weight	-

4.5.5 Transverse movement

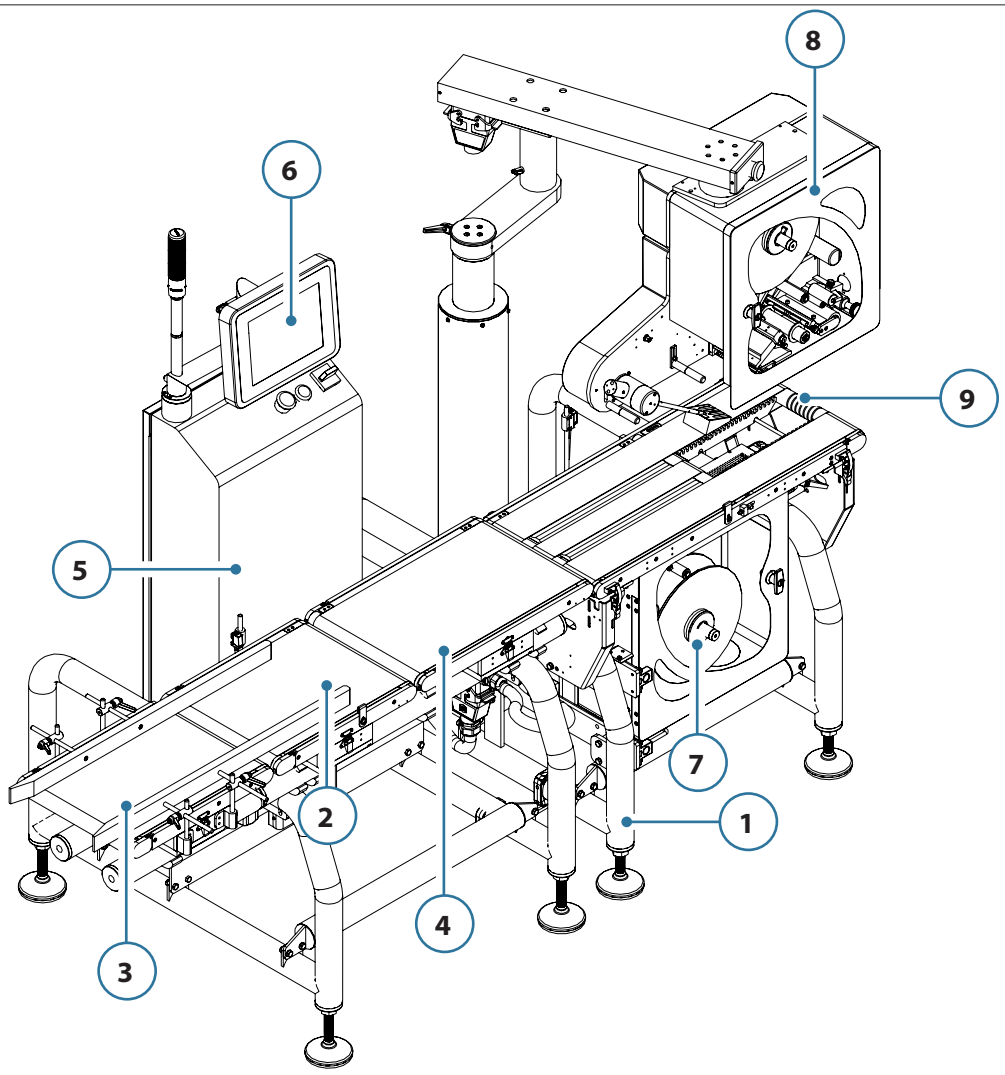
The Galaxi HS C-labelling model allows transverse movement of the label printing unit.



4.6 Main components

The machine consists of the following main parts:

Pos.	Description
1	Frame
2	Scale module
	Weighing belt
3	Separator belt
4	Label belt
5	Electrical panel
6	Operator interface
7	Bottom print module
8	Upper print module
9	C labelling module



4.6.1 Frame

Made of micro-bead blasted AISI 304 stainless steel, it is the mounting base for the following units:

- transport unit (pos.2-3)
- electric panel (pos. 4).

4.6.2 Scale Module

The scale module (pos. 2) is installed on the scale belt.
The following basic scale versions are available:

- 3kg – div. 1g;
- 6kg – div. 2g;
- 12kg - div 2g;
- 15kg - div 5g.

4.6.3 Transport modules

The conveyor module has the purpose of conveying the pieces to weigh and, if necessary, label.
Maximum speed of the conveyor module is approximately **70 m/min.**

Type	Position	Description
Spacer belt	Machine input	It separates products that are too close together at the machine inlet.
Separator belt	Upstream of the scale (pos.3)	Product dosing before the scale to avoid false weighing.
Weighing belt	On the scales (pos.2)	It is installed on the scale. It has the purpose of transporting the product to the scale, so that it may be weighed, and then to the subsequent belt or to the exit of the machine.
Label belt	Downstream of the scale (pos.4)	Take the weighed product to the labelling area.
Ejector belt	Downstream of the machine	By means of an ejector (air or piston), out-of-range or non-conforming products are ejected.

4.6.4 Print module

The printing system is direct thermal and uses thermal labels.
NOTE: Thermal transfer printing using plain paper labels with transfer foil can optionally be requested.

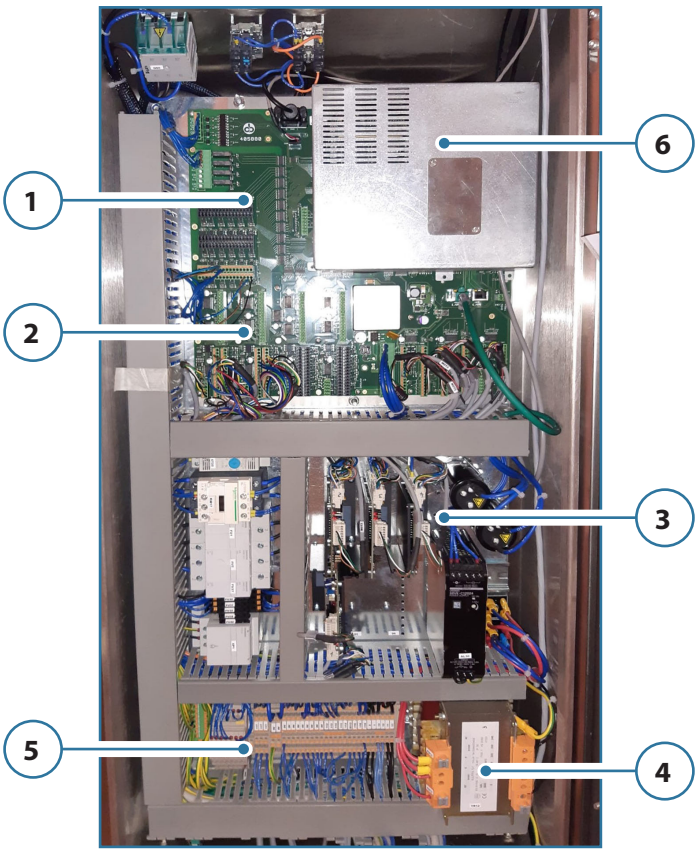
4.6.5 Optional functions or devices

Requirements of product weight and shape may make it necessary to complete the machine with the following components:

- Input / output belts;
- Ejectors or diverters;
- Height-adjustable benches.

4.6.6 Electrical panelGALAXIHS / LT-TB/TT / HS A C LABELLING

The electric panel contains the power management, CPU board, I/O remote boards, load cell converter and terminal boards for connecting the external utilities.



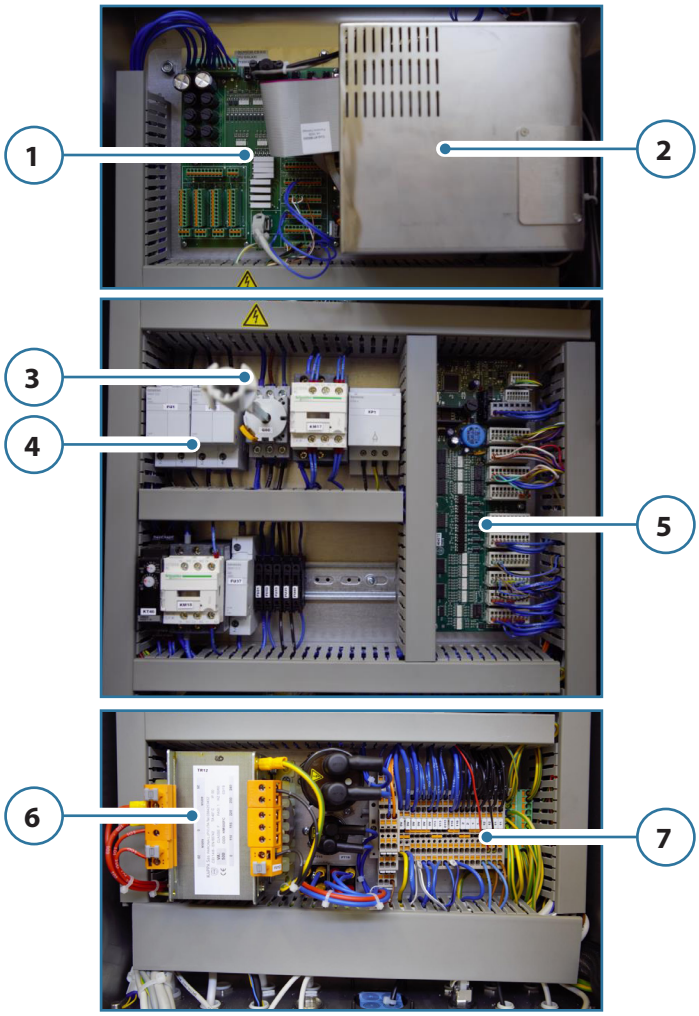
Pos.	Description
1	Carrier card (405881)
2	CPU Board
3	Motor drivers
4	Main power supply
5	Service signal terminals
6	Metrological framework

BEWARE!
Operations that require the removal and restoration of legal stamps and the opening of the instrument must be carried out by the Manufacturer's personnel.

PROHIBITION!
IT IS FORBIDDEN to operate the machine with the electrical panel open. Remove the safety guards after switching off the machine and disabling the electrical disconnector, only for the time strictly necessary to perform the required repairs or maintenance, then restore them immediately.

4.6.7 Electrical panel GALAXI LT

The electric panel contains the power management, CPU board, I/O remote boards, load cell converter and terminal boards for connecting the external utilities.



Pos.	Description
1	CPU Board
	Expansions
	Input-output card
2	Converter and metrological coverage
3	Main switch
4	Fuses
5	I/O expansion board and contactors
6	Transformer with rectifier bridge
7	Utility terminal block, cable outlet



BEWARE!
Operations that require the removal and restoration of legal stamps and the opening of the instrument must be carried out by the Manufacturer's personnel.



PROHIBITION!
IT IS FORBIDDEN to operate the machine with the electrical panel open. Remove the safety guards after switching off the machine and disabling the electrical disconnector, only for the time strictly necessary to perform the required repairs or maintenance, then restore them immediately.

4.7 Operating cycle

The machine is able to operate in different modes, carrying out different types of weighing:

Weighing type	Speed	Printers
Static weighing	Low cadences	Upper or lower printer
Dynamic weighing	High cadences	Upper or lower printer or both at the same time

The processing cycle is described in a simplified way below.

The cycle is divided into the following steps:

Step	Description
1	Product entry into the machine
2	Transit to belt scale
3	Product weighing on the scale belt
4	Transit to labelling belt
5	Label printing and application
6	Product output

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Chapter 5
TRANSPORT AND INSTALLATION

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5. TRANSPORT AND INSTALLATION



IMPORTANT!
Lifting and handling must be performed by skilled, trained personnel only, who are qualified to carry out these tasks.

During installation, **SOCIETÀ COOPERATIVA BILANCIAI** technicians must be assisted by the operators assigned to service and operate the machine in the future.
The machine was designed in such a way that using a forklift truck is required during packaging, transport and assembly.

5.1 Packaging

The machine is shipped by **SOCIETÀ COOPERATIVA BILANCIAI** from the manufacturing plant to the customer's premises. Depending on the transport distance, the Customer's specific requests, and the time the load remains packaged, the machine is shipped as follows:

- machine delivered by the manufacturer's personnel (without packaging);
- machine packed in a wooden crate on a pallet.

The machine must be shipped on protected vehicles or covered with a tarpaulin, depending on the type of load.

Upon receipt of the machine, the customer must check it for any damage due to transport or caused by the personnel in charge of specific operations.

- **If any damage** is ascertained, leave the packaging untouched and immediately request that the damage be ascertained by the responsible shipping company, then complete a surveyor's report and notify the competent transport insurance and the point of sale of any damage found.
- I**f the machine is delivered in a crate on a pallet or wooden** brackets in any heat-shrink cellophane wrap, first remove the packaging or any cover. To completely unpack the machine, remove any packaging fixing parts (screws, nails, metal strapping). Then use a crane or forklift truck to lift the machine, as described in the specific table, and remove the pallet used for transport.

When the line is transported in a wooden crate, it is duly fixed and protected with some of the more sensitive parts being locked in place (terminal, display and printer).

5.1.1 Packaging removal

To **remove the packaging**, proceed as described:

Step	Action
1	Position the machine in the place intended for it.
2	Unpack the machine parts delivered in a **crate**, as follows: • remove the heat-shrink cellophane; • remove the strapping; • remove the crate; • remove any fastening systems to the wooden pallet.
3	Unpack the machine parts delivered **on a pallet**, as follows: • remove the strapping; • remove the heat-shrink cellophane; • remove any fastening systems to the wooden pallet.



IMPORTANT!
Check the "Unit and weight division table" to see which and how many separate parts of the machine will be transported.

To handle the machine and/or its parts, refer to the **"Transport and handling"** section.

5.1.2 Disposal of packaging

The packaging is an integral part of the supply and is not collected as normal waste, so disposing of it is the purchaser's responsibility. Waste must be disposed of or destroyed in compliance with the regulations in force in the user's country, taking the type of materials into account:

- crate timber;
- plastic films for machine protection and adhesive belts for fixing them;
- moisture absorbing bags.
- etc.

5.2 Transport and handling

Depending on the type of transport, **SOCIETÀ COOPERATIVA BILANCIAI** uses suitable packaging and fixings to guarantee intactness and proper storage during transport.

Upon receipt of the machine, check that no part has been damaged during transport and/or handling.

If damage is found, it must be immediately notified to the Manufacturer.

The handling activities described in this section must be carried out by personnel qualified for these operations: personnel specially trained to safely load, unload and handle using lifting equipment, and aware of accident prevention rules.



BEWARE!
SOCIETÀ COOPERATIVA BILANCIAI shall not be held liable for any harm to people or damage to property caused by accidents resulting from failure to comply with the instructions given in this manual.

5.2.1 Unit and weight division table

Check the following table to see which and how many separate parts of the machine will be transported.

Unit	Weight	Size
WEIGHING SYSTEM	see transport documents	see transport documents

5.2.2 Transport operations



BEWARE!
SOCIETÀ COOPERATIVA BILANCIAI shall not be held liable for any damage to the machine resulting from failure to comply with the instructions provided.



IMPORTANT!
Lifting personnel must be authorised and trained to use the lifting equipment, and comply with the provisions in force for personal protection.

Transport with a forklift truck	
Operator qualification	Lifting and handling equipment operator
Required PPE	
Lifting equipment	Forklift truck
Weight	Based on the component to be handled

BEWARE!
Only use suitable, approved lifting equipment, complying with the size and weight of the machine.

BEWARE!
Make sure that no one is standing below the operating range of the lifting device.

BEWARE!
Remove any covers or casings that may be damaged during installation and handling.

To properly **transport the machine with a forklift truck**, follow the procedure below:

Step	Action
1	Position the forks of the forklift under the part of the machine to be carried.
2	Make sure that the forks protrude enough from the front of the load to eliminate any risk of overturning the transported part.
3	Lift slowly, making sure that the centre of gravity of the section being carried is in the middle of the lifting forks.



5.3 Installation

5.3.1 Set-ups to be provided by the customer

As a general rule, without prejudice to any other contractual agreements, the Customer shall be responsible for setting up:

- **premises** (including masonry, such as foundations, or any required ducts, lighting);
- **electrical systems** up to the machine power supply points, in compliance with the standards in force in the country of installation and/or as required by the machine Manufacturer. All the technical specifications required by the manufacturer are provided in the sales contract. The Manufacturer shall not be held liable under any circumstances if the customer fails to guarantee the technical features of the electrical system required in the sales contract.
- **the power supply for the machine,** including the earthing conductor, according to the characteristics and tolerances required and specified in this manual.
- auxiliary services in line with the machine requirements;
- **tools and consumables** needed for assembly and installation;
- **lubricants** necessary for starting the machine;
- **the pneumatic supply** suitable for the machine as specified under **"Technical data";**
- **the hydraulic power** supply suitable for the machine as specified under "Technical data";
- appropriate lifting and handling equipment.

5.3.2 Permitted environmental conditions

The machine is installed indoors, protected from atmospheric agents such as rain, hail, snow, fog, suspended and combustible dust, as well as aggressive agents such as corrosive vapours or sources of excessive heat, but not in a classified environment.
Using the machine, the associated control systems and the drive equipment under conditions other than those listed, is not allowed.
In particular, the installation and use environment must not be exposed to:

- corrosive fumes;
- excessive humidity (above 85%) and rapid changes in relative humidity (above 0.005 p.u./h);
- excessive dust;
- Exposure to abrasive dust;
- oily vapours;
- dust or gas mixtures;
- brackish air;
- vibrations, impacts or abnormal shocks;
- bad weather outside the allowed limits or dripping;
- unusual transport or storage conditions;
- high or rapid thermal changes (above 5K/h);
- nuclear radiation.

The machine is designed and built to operate safely in the following environmental conditions:

Permitted environmental conditions	
Room temperature	0 - 40°C
Maximum relative humidity	from 10 to 85% non-condensing
Installation place	the machine must be positioned away from vibration sources
Ambient lighting	Neon light
Standing surface	Concrete industrial floor

BEWARE!
Environmental conditions other than those specified may cause severe damage to the machine.
Installing the machine in environments other than those recommended will void the warranty for the parts to be replaced.

IMPORTANT!
The work surface must be sufficiently illuminated. Should there be any shaded areas or level differences in the workplace, the user will be responsible for setting up suitable lighting devices.

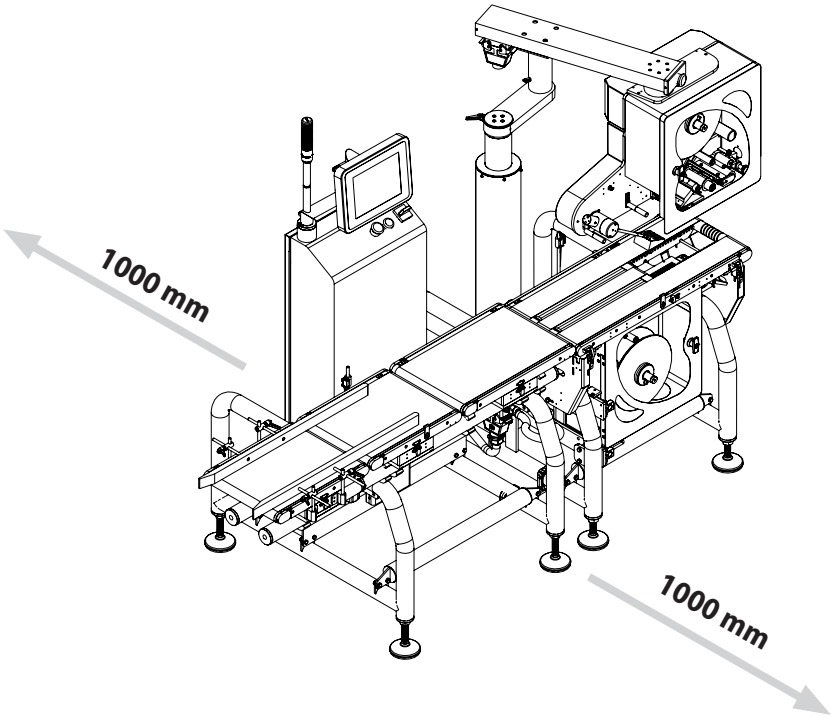
If these instructions are not adhered to, the Manufacturer shall not be held liable under any circumstances.

5.3.3 Installation place

For installation, an area suitable for the size of the machine and the lifting equipment used must be provided, paying attention to any obstacles (other machines, walls or the like) along the path to be covered by the handling equipment.

The machine must be installed according to the layout agreed with the Manufacturer.

The picture below shows the minimum side distance needed to conduct normal maintenance and repair work.



BEWARE!
Make sure that the clearance around the machine is enough to allow for easy and comfortable maintenance operations.

5.3.4 Positioning

Before removing the packaging, place the machine in its intended place.

BEWARE!
The customer who manages the line and/or machine is responsible for making sure that the other pieces of equipment installed near the line comply with the standard requirements for electromagnetic emissions, so as to prevent pollution sources with values higher than normal from causing malfunctions or damaging the machine.

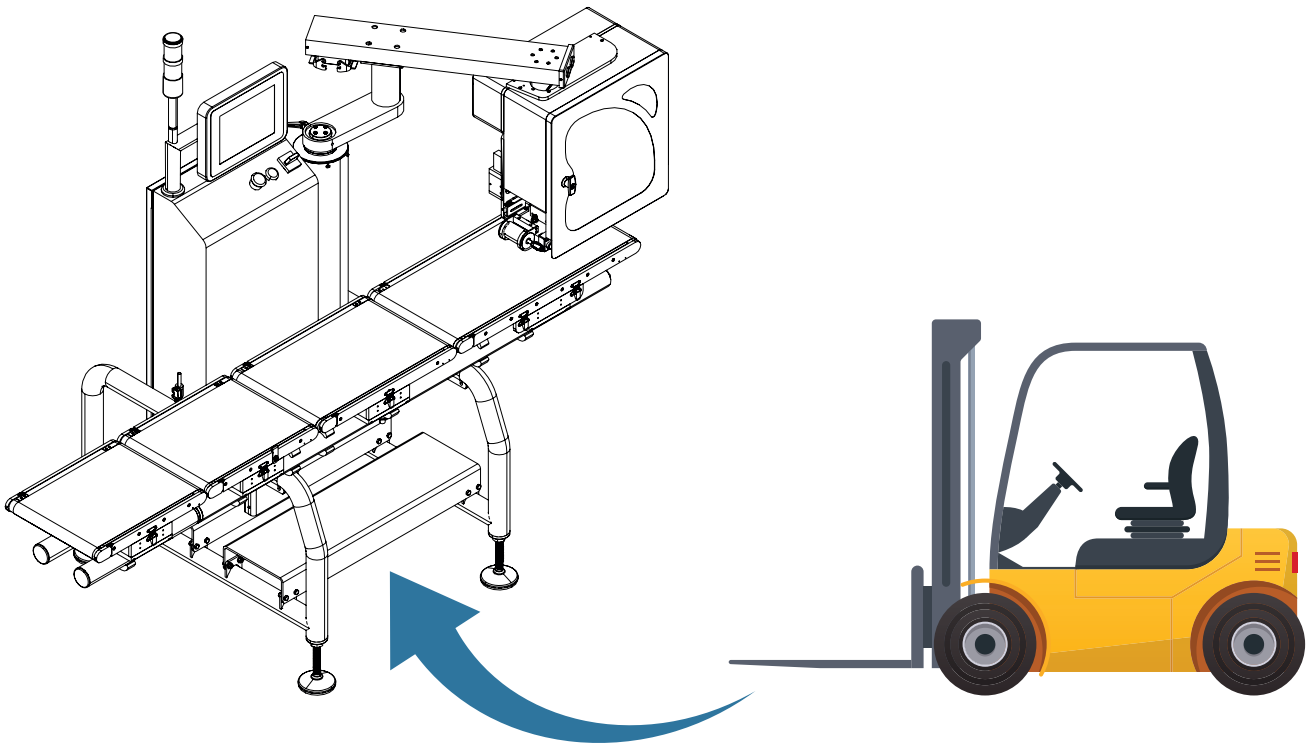
To properly perform the procedure, proceed as described below:

Step	Action
1	The machine is lifted by positioning the forks at the front.

BEWARE!
During handling, the printer must be kept above the labelling belt, preventing it from moving.

BEWARE!
Take care when lifting the machine to avoid damaging the cover of the electrical cabinet.

BEWARE!
Always check that the cell retaining bolt is tight to avoid any damage due to impacts or oscillations.



5.3.5 Installation

To properly perform the procedure, proceed as described below:

Step	Action
1	Level the machine (if required).
2	Make the electrical connection (if required).
3	Make the pneumatic connection (if required).
4	Adjust the positions of the adjustment handwheels (if any).
5	Adjust the photocells (they are set to 3 positions) using the respective screws.
6	Make sure that safety pictograms and the plate with the line's identification data are affixed and in a perfect condition.
7	Make sure that the supply voltage corresponds to the value given on the identification plate of the line.
8	Make sure that the front panel and the casing housing the electronic components are in good conditions.
9	Conduct a functional test to check that all the components inside the line operate correctly and that the display functions in the right way
10	Connect the machine to the other machines both downstream and upstream (if arranged along a line).



IMPORTANT!
All parts are calibrated and checked by the manufacturer at the time of installation.



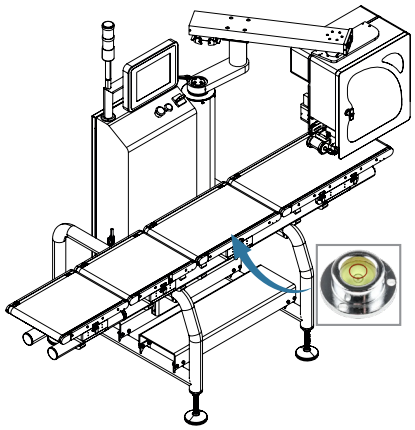
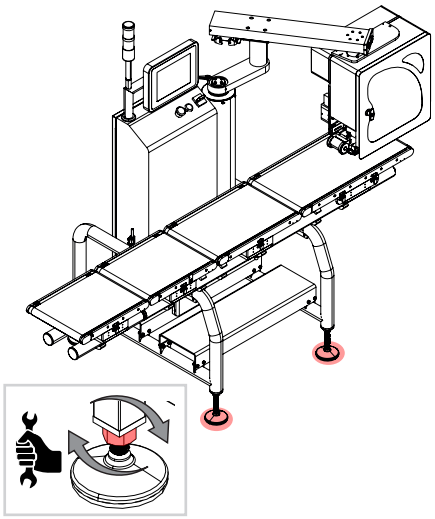
BEWARE!
Operations that require the removal and restoration of legal stamps and the opening of the instrument must be carried out by the Manufacturer's personnel.



BEWARE!
Every disassembly and opening of the instrument by the user or, in any case, unauthorised personnel, causes an immediate loss of warranty and relieves the Manufacturer from any liability for damage caused to property or people.

5.3.6 Levelling

To properly perform the procedure, proceed as described below:

Step	Action	Image
1	Check the spirit level on the external plane of the machine.	
2	Adjust the height of the support feet by loosening the safety nut.	
3	Do/undo the screw using a wrench.	
4	Re-tighten the safety nut once the machine has been properly levelled.	

IMPORTANT!
DO NOT act on the adjustable feet of the scale support

5.4 Connections

To start the machine, the necessary connections to the local mains must be ensured:

- electrical connection (including earthing connection);
- Pneumatic connection;

in compliance with the regulations in force in the country of installation.

Guaranteeing the required connection characteristics is the user's responsibility.



BEWARE!
The required connections must be made by qualified and authorised personnel.

5.4.1 Electrical connection

BEWARE!
Before performing any electrical connection, make sure that the machine is turned off. Then set the main switch on the electrical panel to "0" - "OFF".

BEWARE!
Make sure that the customer's power supply line has been previously disconnected.

The compliance of the connection between the machine and the earthing system is the purchaser's responsibility.

BEWARE!
This operation must be carried out by specialised and authorised personnel (electrical maintenance technician) only.

Before proceeding with the **electrical connection**, check that:

- the maintenance technician is aware of the regulations in force in the country of installation;
- the frequency and voltage values of the machine match those of the power supply
- network;
- the section of the electrical cables used is suitable for the power consumption;
- the power supply line is suitable for withstanding the machine's maximum consumption;
- the circuit earthing complies with the **EN 60204-1 standards;**
- the materials used in the earthing system are sturdy enough or have suitable mechanical protection.

BEWARE!
Do not work with wet hands and objects. In case of fire, do not use water on electrical components.

Electrical connection	
Operator qualification	Electrical maintenance technician
Required PPE	
Tools to be used	-

To make **connections to the electrical network**, proceed as described below:

Step	Action
1	Connect the plug to the mains.

5.4.2 Pneumatic connection

The machine is equipped with pneumatic drives.

Before making **a pneumatic connection,** check that:

- the available compressed air supply system guarantees the machine the needed air quantity at the right pressure;
- the compressed air tank provided is properly sized.

The pneumatic connection must be made by connecting the main line to the machine circuit.

The customer must also guarantee that the air supply has the characteristics listed under **"Machine description"** in this manual.

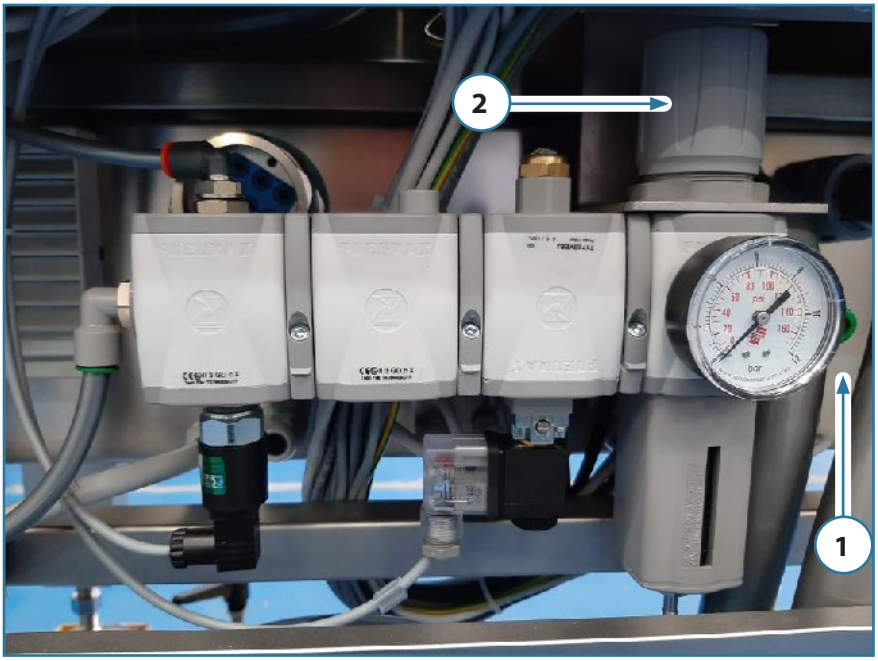
BEWARE!
Never exceed a 6 bar pressure in the pneumatic system of the machine.

BEWARE!
Ensuring proper connection to the main air handling unit with rigid pipes, firmly secured to avoid any whip effect, or protected with other guards preventing or retaining any "jet flow" leakage is the user's/customer's specific responsibility.

Pneumatic connection	
Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	-

To make connections to the pneumatic network, proceed as described below:

Step	Action
1	Connect the system air supply hose to the quick coupling (pos.1)
2	Check the correct inlet air pressure (see CHAP.4 - Description of the machine)



5.4.2.1 Air Consumption rate

	Nl/min at 70 pcs/min
Double air-jet label 80x100	475
Single air-jet label 60x80	250
Single air-jet label 80x100	275
Single pivoting arm	42
Double jet ejector (350 ms)	670
Single jet ejector (350 ms)	360
Single nozzle (350 ms)	169
Venus Piston	158
Selecta Piston	198
Selecta Inox Piston	107

5.4.2.2 Maximum Air Consumption

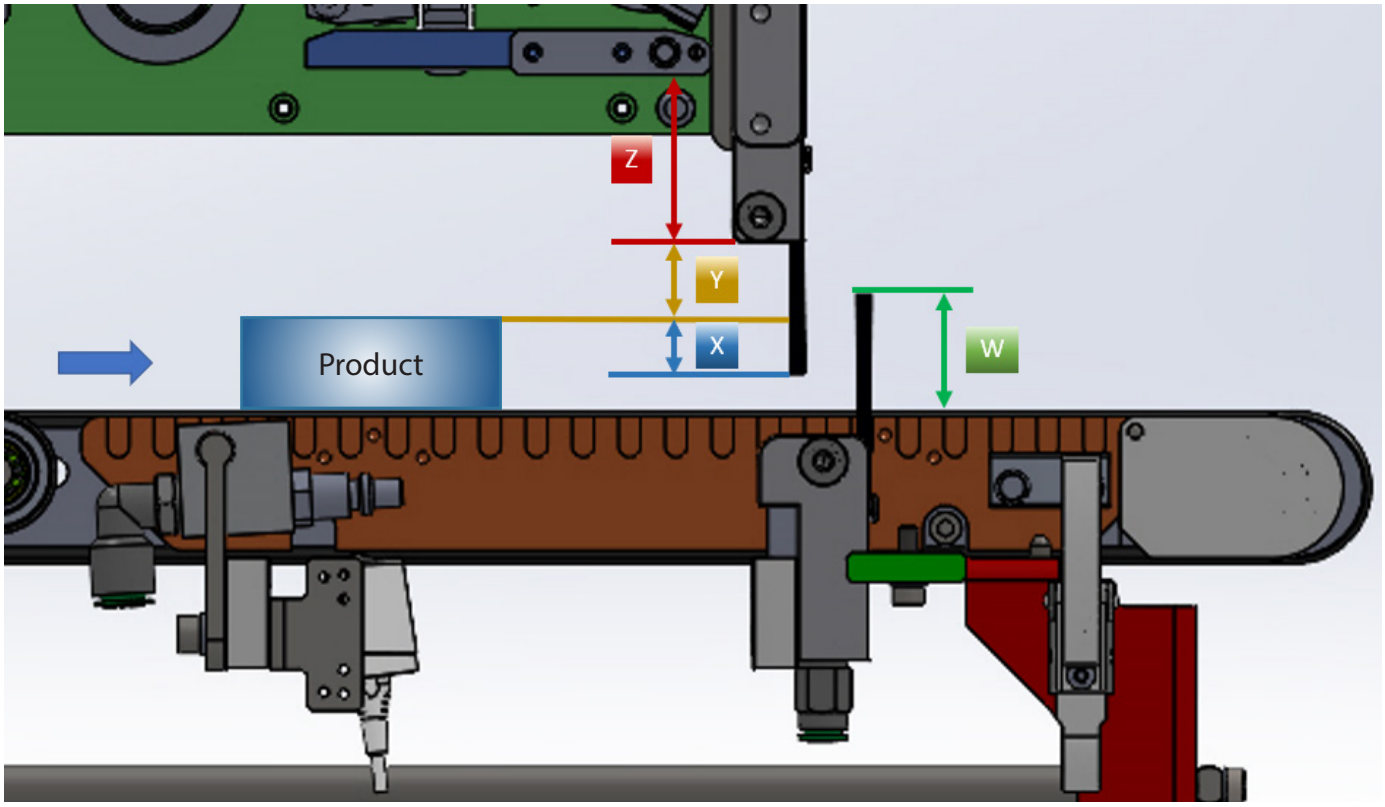
	Nm^3/h	Nl/min
Single air-jet label 80x100	50	833
Double jet ejector	57	950

5.5 Adjustments

5.5.1 C-labelling format change

To change the format act on the parameters:

- X: (5-20mm) is defined by the conformation of the product tank. Adjust until the label adheres properly and the piece passes smoothly.
- Y: (5-30 mm) to avoid getting too far away and spreading the label poorly, this is the distance between the height of the piece and the lower point of the upper suction block.
- Z: (30 - 50 mm) distance lower edge of upper applicator block, label exit point
- Z+Y: length of the label applied to the top of the piece
- W: interference of the lower brush to be adjusted according to the effectiveness of application of the label on the piece without impacting the handling of the piece.



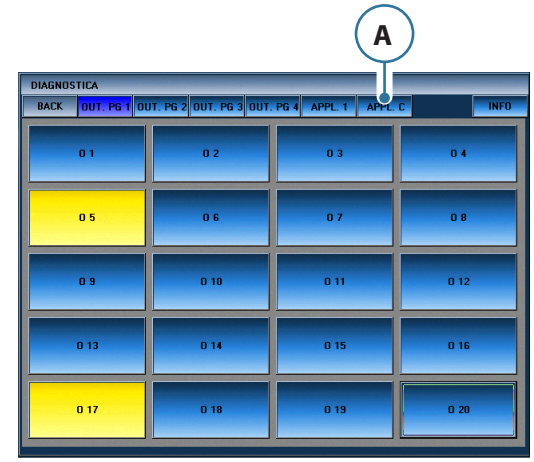
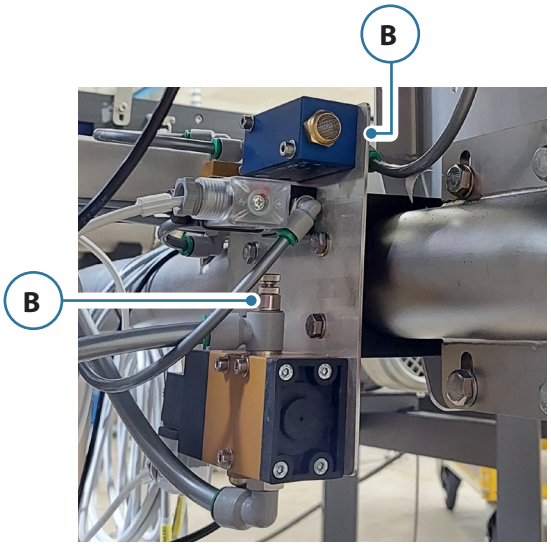
5.5.2 C-labelling pneumatic adjustment

Adjust the air intensity to ensure that the label holds until it is applied.

The suction intensity must not interfere with workpiece feed.

Set the system parameters to ensure that the label is applied without interfering with the workpiece feed.

To properly perform the procedure, proceed as described below:

Step	Action	Image
1	On the diagnostics page in the Output section, press the APPL button. C **(A)** to perform a complete printing cycle of a label at 300mm/s and activate the various outputs of the C-applicator. **Note**: The outputs will remain on until the APPL button is pressed again. C.	
2	Adjust the suction intensity by adjusting the screws **(B)**so as not to create disturbances that affect the positioning of the label. **Note**: The label will be held in place by the 2 suction blocks above and below. In the label output cycle, the suction below will remain enabled for a few milliseconds.	
3	Pass a piece manually to check that the suction intensity is the minimum necessary to keep the label adhered to the suction blocks, but not enough to change product handling. **Note**: If you notice difficulties in workpiece feed, adjust the parameters: • X • W • Suction intensity	
4	Repeat the adjustment procedure until satisfactory product handling and labelling is achieved.	

Step	Action	Image
5	Press APPL.C to switch off all outputs.	
6	Run an automatic application cycle with a production PLU in process. If the result is not satisfactory repeat the procedure.	



IMPORTANT!
The physical characteristics of the label affect the C application cycle.
Repeat the pneumatic adjustment cycle as the label characteristics change.



IMPORTANT!
The shape of the product affects the C-cycle.
Repeat the pneumatic adjustment cycle each time the product changes shape.

Chapter 6
CONTROLS AND OPERATION

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6. CONTROLS AND OPERATION

During operation, the machine requires to be manned continuously by an operator.

For all the control procedures and on/off modes, see the use and maintenance manual for the main machine.



BEWARE!
Using the machine for a purpose other than that envisaged by the Manufacturer could cause severe damage to people and/or things and/or animals.
SOCIETA COOPERATIVA BILANCIAIshall not be held liable for any damage caused by improper use of the machine.



IMPORTANT!
Do not exceed the recommended weights. The scale could be damaged. If you are in doubt about the carrying capacity, check the data plate on the weighing terminal.



BEWARE!
The information and instructions given in this chapter are intended for machine programmers and electrical maintenance technicians with electrical, electronic and programming skills.



BEWARE!
Every disassembly and opening of the instrument by the user or, in any case, unauthorised personnel, causes an immediate loss of warranty and relieves the Manufacturer from any liability for damage caused to property or people.

6.1 Operator workstation

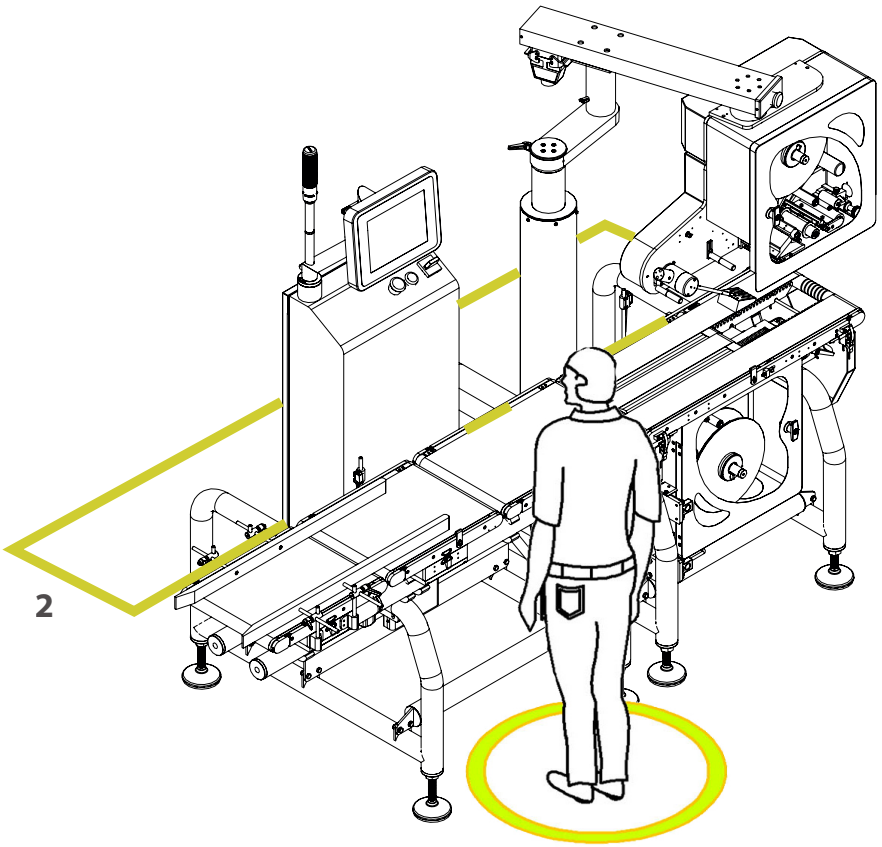
The locations of the workstations near and in close proximity to the machine (A) connected to the system's main machine are shown below:

Area	Activity
1	Switch on / Switch off - Adjustment - Cleaning
2	Adjustment - Cleaning - Maintenance - Repairs

PROHIBITION!
IT IS FORBIDDEN to approach or insert any part of your body into the labelling area of the printer while the machine is running.

PROHIBITION!
IT IS FORBIDDEN work at the rear of the machine even if the display can be rotated.

IMPORTANT!
The only permitted working position is the front one as shown in the figure (although the display can be rotated backwards)

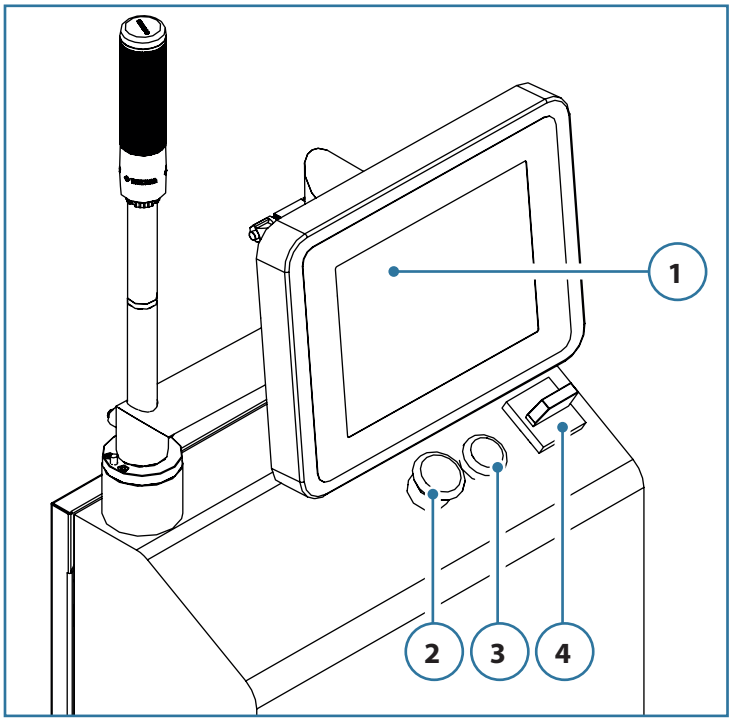


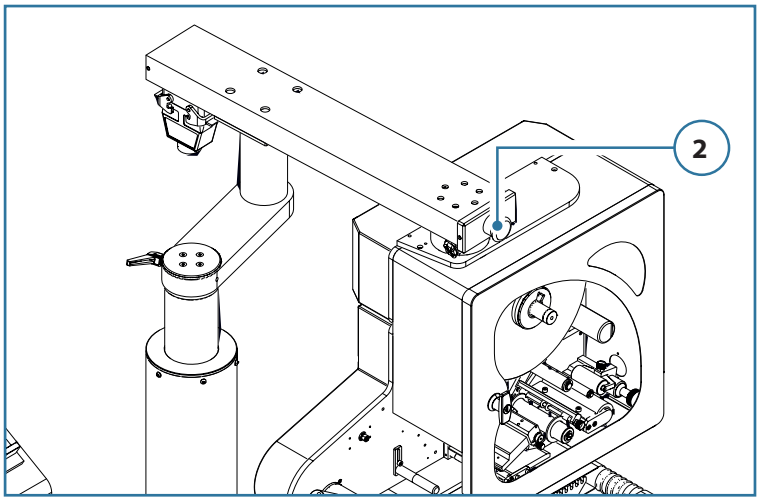
1-2

6.2 Command pushbutton panel

The buttons of the pushbutton panel are described below.

Pos.	Element	Description
1	Operator panel	(See paragraph 6.3)
2	Emergency button	Red mushroom button with detent to be triggered in case of need to stop the machine.
3	RESET button	Resetting the machine after a stoppage.
4	Main switch	(see CHAPTER 3 - Safety)





6.3 Operator panel

The machine is intended to be controlled by an operator through an operator interface with all the controls required to run and control the machine.
For information on the operation of the operator panel, please refer to the attached documentation.

6.4 Operational procedures

6.4.1 Preliminary checks

The following checks must be carried out before commissioning the machine.

- Check that the machine is standing on a surface that can support its weight.
- Check the operation of the safety devices.
- Check that the emergency mushrooms are not pressed.
- Make sure that no one is standing in the danger area.
- Check that the clearance around the machine is free from obstructions and/or gaps.
- Check that the machine has been connected to the mains.
- Check that the power supply phases are correct.
- Check that the machine is not in **"Maintenance"** status.

6.4.2 Machine setup operations

For machine setup operations, please refer to the attached documentation.

6.4.3 Start up

Proceed as described to **start up the machine:**

Step	Action
1	Press the START button on the terminal or the Button on the electric panel.
2	The message "running" appears on the terminal.
3	Have the product move on the belt, engaging the saving photocell.
4	The machine is ready to weigh and select the product.

6.4.4 Restart after an emergency stop

Follow the procedure below to **restart the machine after an emergency stop:**

Step	Action
1	Find and eliminate the cause of the machine emergency stop.
2	Check to make sure that there is no one inside the dangerous area of the machine.
3	Reset the emergency pushbutton that has been pressed.
4	Press the **"reset"** button from the command pushbutton panel to reset all the other safety devices and reset alarm logs stored by the PLC.

6.4.5 Restart after alarm intervention

Follow the procedure below to **restart the machine after an alarm** intervention:

Step	Action
1	Solve the cause of the alarm.
2	Reset the alarm from the operator panel.
3	Press the START button to restart the work cycle.

6.4.6 Shutdown

Proceed as described to **shut down the machine**:

Step	Action
1	After the machine working or programming stages, exit the archives menu and go to the main menu.
2	Turn the master switch to "0".
3	Disengage the disconnector upstream of the machine.



BEWARE!
Do not use emergency pushbuttons for normal machine shutdown.

Chapter 7
MAINTENANCE

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7. MAINTENANCE



BEWARE!
Perform maintenance work when the machine is off (main switch set to "0"- "OFF").



BEWARE!
Maintenance work must be performed by qualified, authorised personnel.

Servicing the machine includes performing the operations (inspections, examinations, checks, adjustments and replacements) that are required after normal use.

For proper maintenance:

- use only original spare parts as well as tools suitable for the purpose and in good working order.
- comply with the frequency intervals recommended in the manual for scheduled maintenance (preventive and periodic). The distance (indicated in time or work cycles) between one maintenance job and another is to be understood as an acceptable maximum; therefore, it must not be exceeded; it can instead be shortened.
- proper preventive maintenance requires constant attention and continuous surveillance of the machine. Promptly check the causes of any anomalies such as excessive noise, overheating, leakage of fluids, etc. ... and rectify them.
- timely removing any causes of anomaly or malfunction prevents further damage to the equipment and ensures operator safety.

The staff in charge of machine maintenance must be properly trained and have thorough knowledge of accident prevention regulations; unauthorised personnel must remain outside the work area during operations.
The machine/system is also cleaned and adjusted only and exclusively during maintenance. It must be stopped and de-energised, with the electrical panel disconnected, as specified in the use and maintenance manual.



IMPORTANT!
If in doubt, do not conduct any work. Contact the Manufacturer for the necessary clarifications.



BEWARE!
Any repair or maintenance work that is not described in this manual may only be carried out with the authorisation of SOCIETA COOPERATIVA BILANCIAI.

SOCIETA COOPERATIVA BILANCIAIshall not be held liable for any harm to people or damage to property due to operations other than those described or performed in ways other than those specified.

Machine maintenance work is divided, from an operational point of view, into two main categories:

Maintenance ordinary	All those operations that the operator must preventively perform to ensure the machine's proper operation over time; routine maintenance includes inspections, checks, adjustments, cleaning and lubrication.
Maintenance extraordinary	All those operations to be performed by the operator when the machine needs them. Extraordinary maintenance includes overhauls, repairs as well as restoring nominal operating conditions or replacing a faulty, defective or worn unit.

7.1 Safety warnings



BEWARE!
Before starting any maintenance work on the machine, disconnect and padlock all energy sources, and put the moving units that comprise it in a safe lock condition. Place a "Machine under maintenance - do not switch on" sign close to the main switch.



BEWARE!
When the machine is being serviced, to prevent it from being accidentally started, press the mushroom-head emergency button and place signs reading:
"BEWARE! MACHINE UNDER MAINTENANCE".

- Maintenance technicians must wear all the necessary personal protective equipment (gloves, goggles, all other items) for the operation to be performed.
- During maintenance work, unauthorised personnel must remain outside the operating area.
- If the operation involves removing guards, block access to the operating area and place prohibition signs to prevent any people who are not related to maintenance work from getting into the area.

The need to put the machine in operating conditions and/or with disabled guards requires adequate skills and experience, as well as special attention by the maintenance technician, who must be properly trained to tackle any risks.

The accident prevention precautions referred to in this section must be always strictly adhered to while maintenance work is conducted on the machine/system, for personal injury and equipment damage to be prevented.

Before carrying out any maintenance work, make sure all energy sources (electricity, compressed air, hydraulic energy, etc.) have been disconnected.

- Conduct work only and exclusively with the machine/system off and de-energised.
- Padlock the electrical panels and the pneumatic supply valve.
- Display specific warning signs such as: **EQUIPMENT UNDER MAINTENANCE - DO NOT SWITCH ON, WORK IN PROGRESS - DO NOT OPERATE** or **DO NOT START** close to the main switch and the access areas to the machine.
- After disconnecting the electrical panel, fence it off whenever you need to perform work on it with open doors.
- Conduct the work falling within your skill range (Mechanical, Electrical, Fluidic), and which you are authorised to perform.
- Being able to use the most suitable tools for troubleshooting, and being familiar with the most appropriate equipment for maintenance work is required.

7.2 Adjustments

IMPORTANT!
It is required for correct weighing that the piece is completely on the weighing belt. It is recommended to centre the piece to be weighed as much as possible with respect to the conveyor belt.

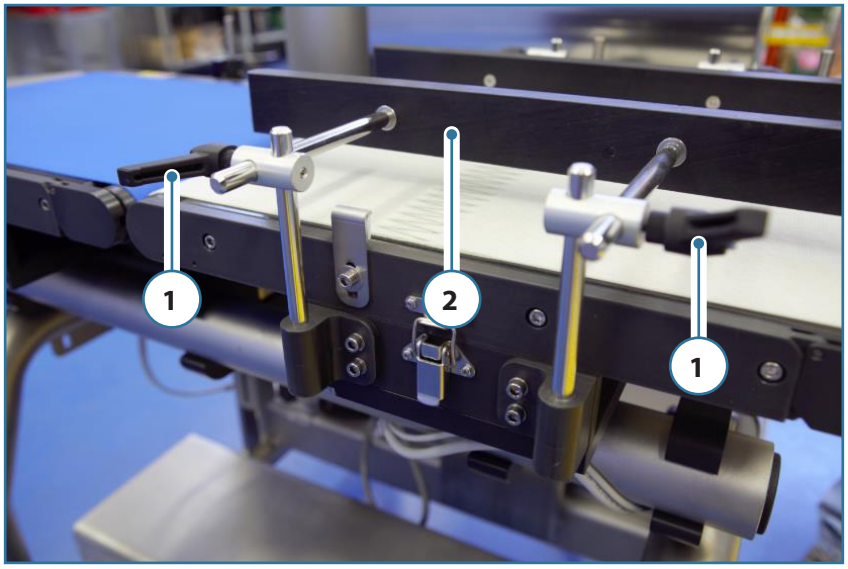
IMPORTANT!
Please refer to the enclosed documentation for software adjustments.

7.2.1 Infeed belt guides

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out the **adjustment of the guides**, proceed as follows:

Step	Action
1	Loosen the knobs (item 1) on the guides (item 2)
2	Adjust position of guides.
3	Secure guides in place by wrenching the knobs

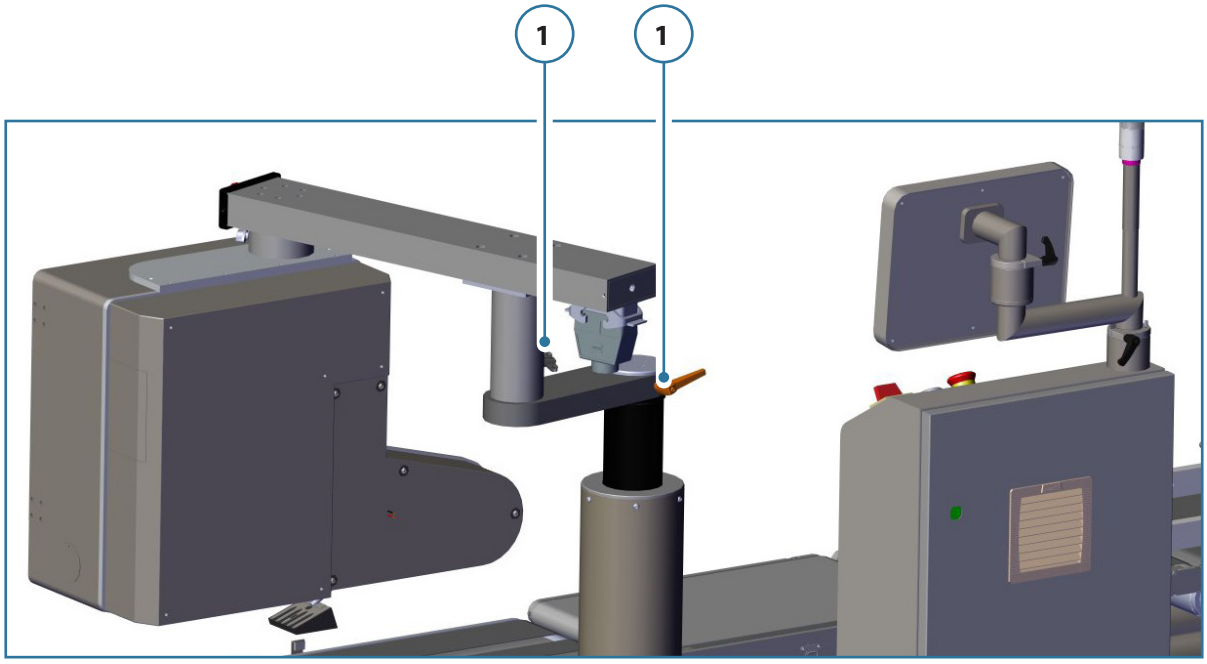


7.2.2 Adjusting position of the printer (if installed)

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out the **position adjustment,** proceed as follows:

Step	Action
1	Act on the tightening knobs (pos.1) to allow the lower and upper support of the printing unit to rotate.
2	Move the printing unit to the desired position, considering the label application target.
3	Secure the printing unit position by tightening the tightening knobs again (pos. 1).
4	There is a command in the machine software for the vertical positioning of the printing unit. A specific function allows the movement of the printhead along its vertical axis (see attached documentation).



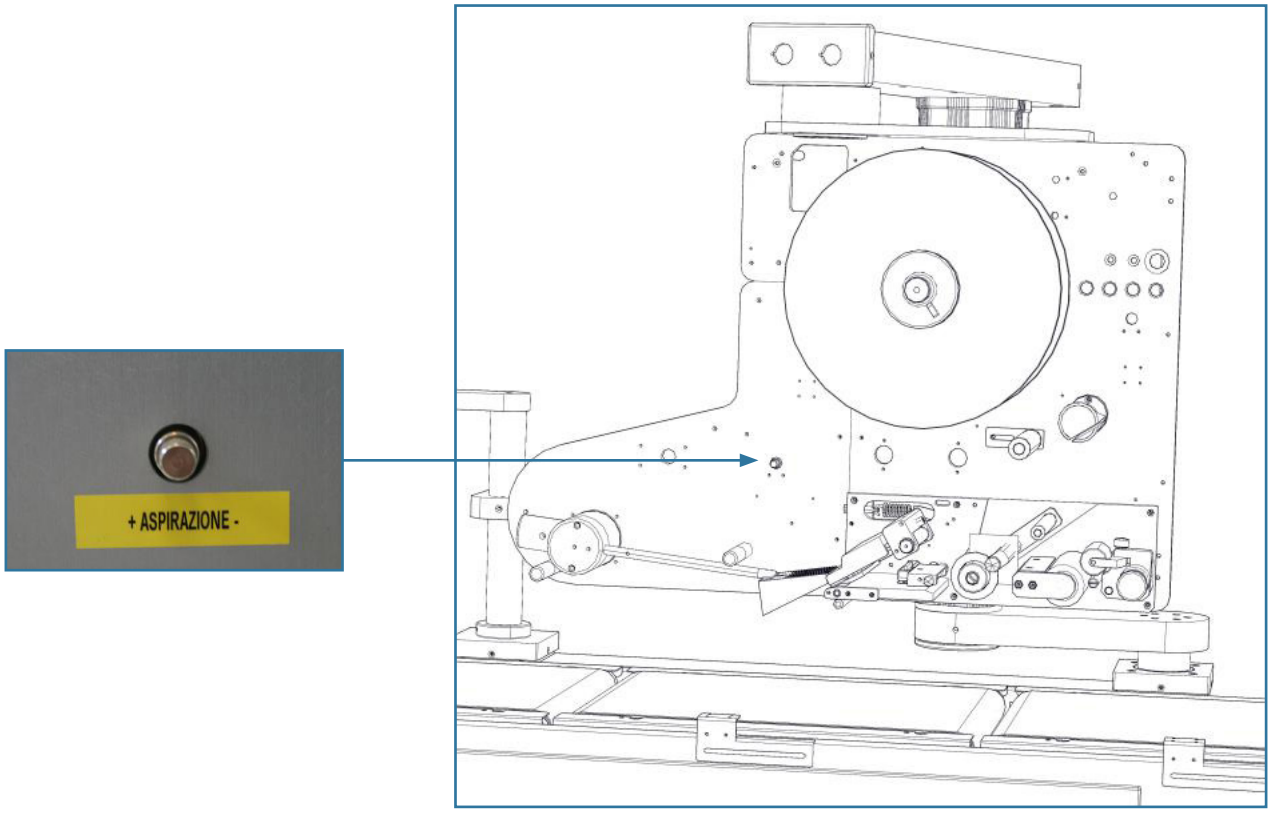
7.2.3 Adjusting label suction inlet (if installed)

This adjustment makes it possible to increase or reduce suction intensity of the label pick-up unit.

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out the **suction adjustment**, proceed as follows:

Step	Action
1	Turn the knob anti-clockwise to increase suction; turn clockwise to decrease.



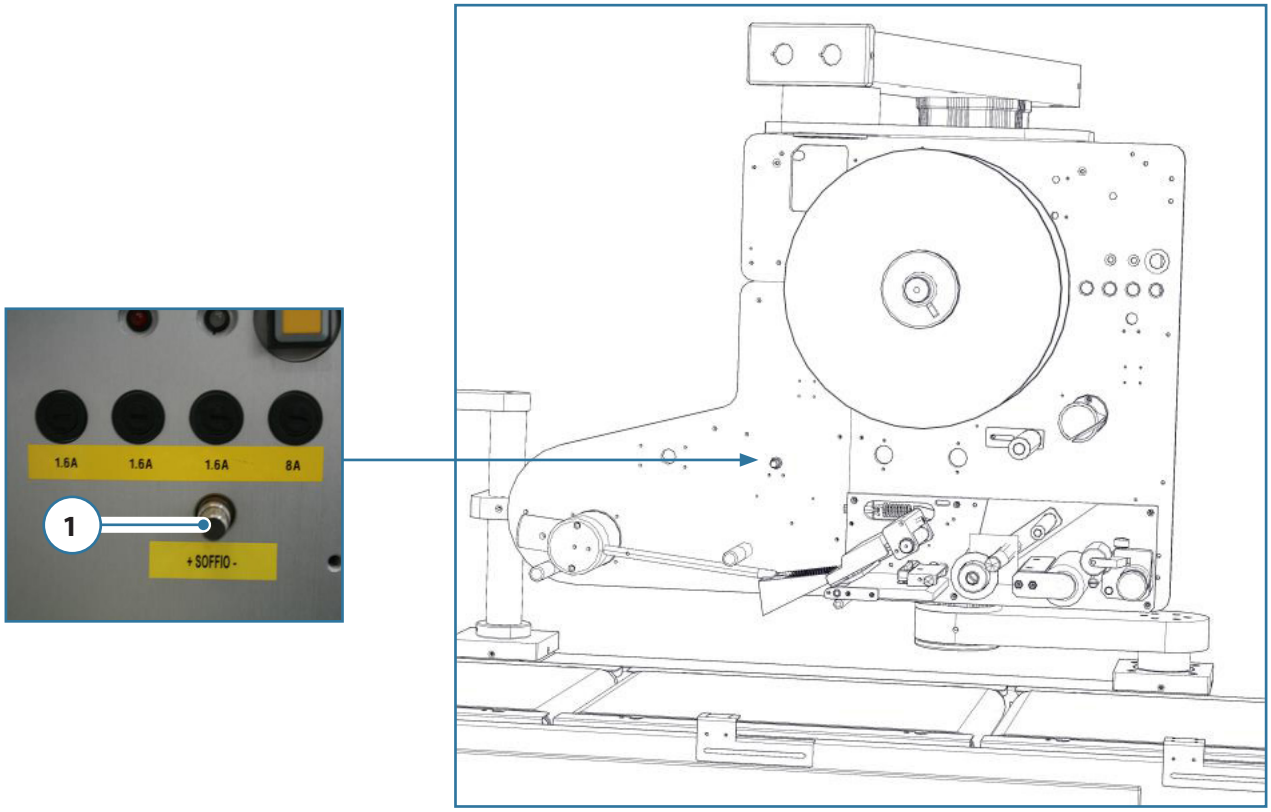
7.2.4 Adjusting label blowing (if installed)

This adjustment allows the intensity of the firing air to be increased or decreased

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out **the air adjustment**, proceed as follows:

Step	Action
1	Turn the knob (pos.1) anticlockwise to increase suction; turn clockwise to decrease.

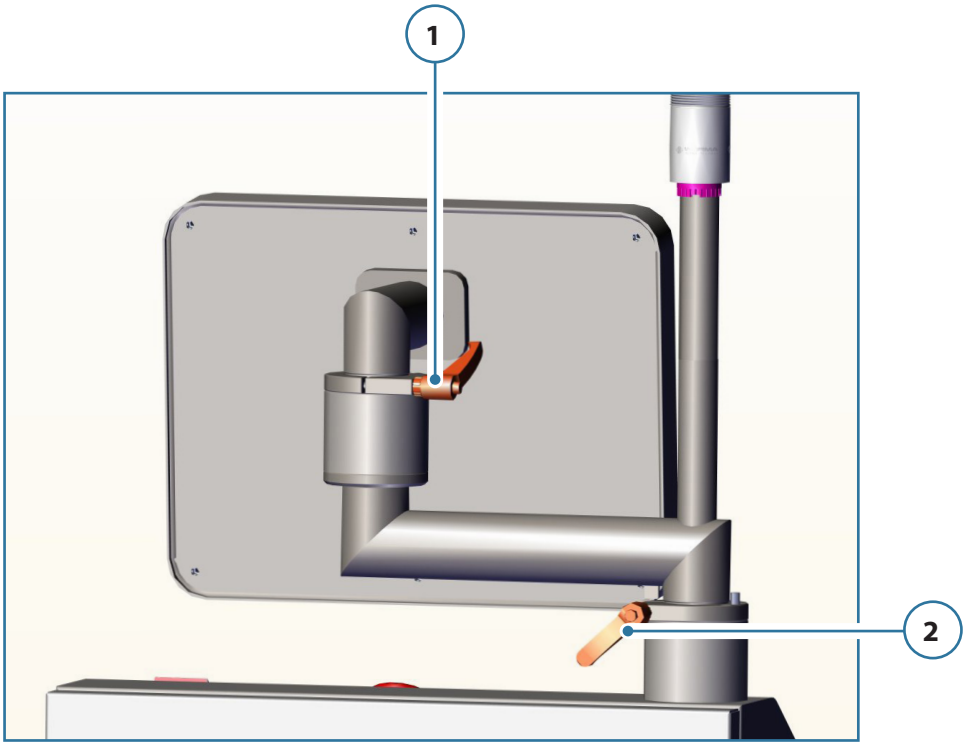


7.2.5 Operator panel position adjustment

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out the **position adjustment,** proceed as follows:

Step	Action
1	Loosen the tightening knob (pos.1) located on the back of the display.
2	Adjust the display inclination.
3	Loosen the tightening knob (pos.2) located on the display movement arm.
4	Adjust the display position.
5	Tighten the tightening knobs at the end of adjustment.

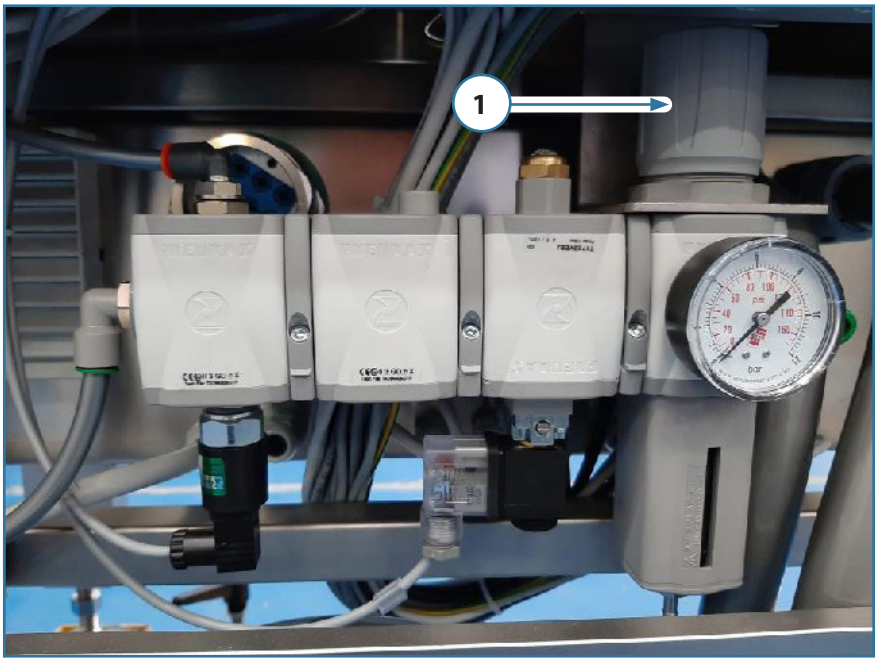


7.2.6 Adjusting pressure

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To carry out the **pressure adjustment,** proceed as follows:

Step	Action
1	Turn the regulator (pos.1) to increase or decrease the pressure (operating pressure 6 bar).



7.3 Routine maintenance

When the machine is delivered to the user, it is already adjusted to work properly; however, to ensure its proper operation over time, periodic and preventive checks as well as maintenance work must be carried out.

Routine maintenance includes inspections, checks and operations which, to prevent failures, keep the following under control:

- machine mechanical conditions,
- machine lubrication,
- machine cleanliness.

The tables below list a number of checks and operations to be performed following a recommended schedule. The frequency intervals specified for routine maintenance refer to normal operating conditions, i.e. meeting the expected conditions of use.
The following table lists a number of routine maintenance procedures applicable to all types of machines manufactured by **SOCIETA COOPERATIVA BILANCIAI**.

The operator must only consider the procedures relating to the machine covered by this manual.



PROHIBITION!
IT IS FORBIDDEN to remove or alter the nameplate, sealing and legalisation stamps of the line. The warranty becomes void in the event of tampering or removal and the manufacturer is relieved from all liability concerning any material or economic damage caused by such action.



PROHIBITION!
IT IS FORBIDDEN to work on the machine in the part sealed with legal seals.

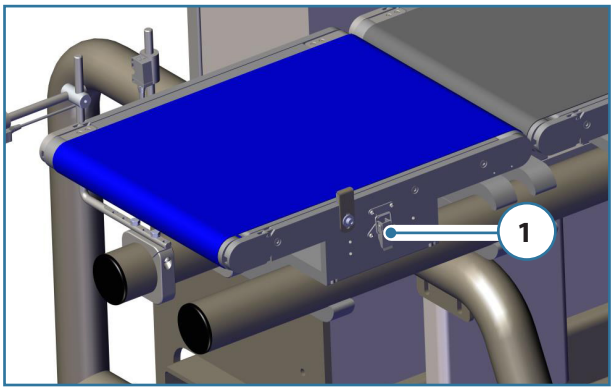
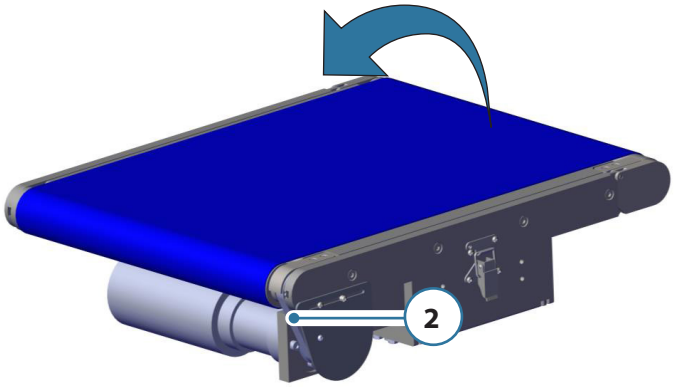
7.3.1 Checks and inspections

Operation	Frequency				
	Daily	Weekly	Monthly	Half-yearly	Yearly
Replacing conveyor belts				◈	
Tensioning conveyor belts		◈			
How to check the weighing system		◈			
Checking the efficiency of safety devices		◈			
Cleaning				◈	

7.3.1.1 Replacing the conveyor belt

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To replace **the conveyor belt,** proceed as described below:

Step	Action
1	Unlock the clips on the sides of the belt (pos.1).
	
2	Move the drive belt (pos.2) by tilting the belt to release the tension.
	
3	Remove and replace with new carpet, also taking care to realign on the rollers.
4	Reposition the drive belt correctly.
5	Place the belt on the machine frame.
6	Lock the previously unlocked side clips.

7.3.1.2 Conveyor belt tensioning

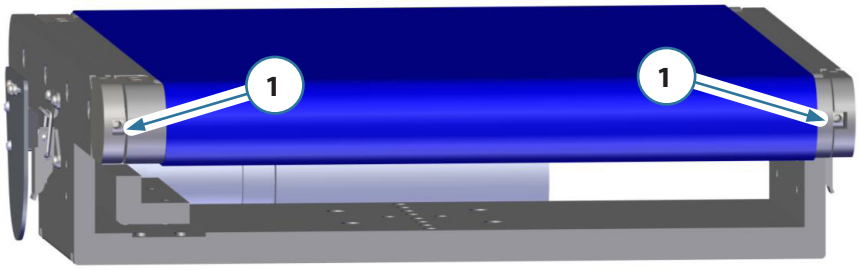
Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

BEWARE!
Do not tension the belts more than necessary since it reduces its service life and increases wearing of the driving system.

IMPORTANT!
Always adjust the tensioning screws in a balanced way to prevent the belt from moving sideways, touching the metal sheets.

The elastic belts of the conveyors require tensioning after assembly or after a period of use.

To tension **the belt,** proceed as described below:

Step	Action
1	Loosen the screws on the side of the belt (pos.1), acting alternately on both screws.
	

The belts must convey the load without slipping and/or uncertain movements.

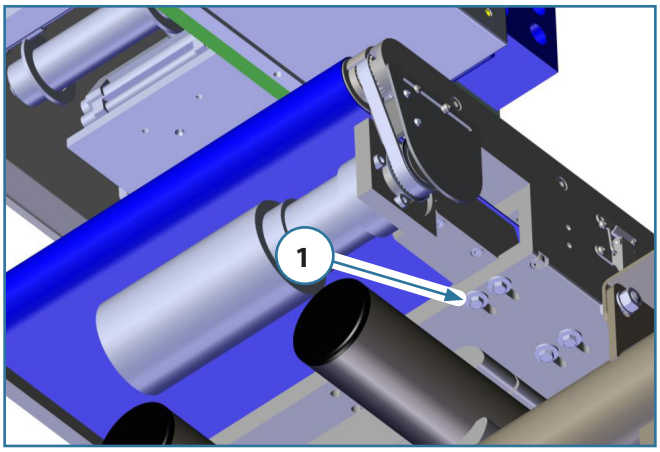
Proceed in the following way if these faults occur:

Step	Action
1	Set the conveyor belt operation on the start page to a low speed (20/30%).
2	Increase tightness of the belt by alternately working on the two screws at the end of the belt itself (pos.1).
3	Turn first one screw and then the other by half a turn each time clockwise.

7.3.1.3 Transmission belt tensioning/replacement

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To tension **the belt**, proceed as described below:

Step	Action
1	Loosen the screws (pos. 1), correctly tighten the belt and tighten the screws again.
	

7.3.1.4 How to check the weighing system



IMPORTANT!
Contact the Manufacturer's After-sales Service if the tests are beyond the tolerated error margin.



IMPORTANT!
Never attempt to tamper with the weighing system or its parts.



IMPORTANT!
Removal of the seals will immediately void the approval of the system and the warranty provided by the manufacturer.

7.3.1.5 How to calibrate the weighing system

The weighing system is consigned perfectly calibrated and conforming to the metric standards in force in the country of use.

Calibration of the weighing system using certified SIT equipment can be requested, by means of the Manufacturer's After-Sales Service.

Once calibration has terminated, a "Calibration Report" is issued to certify the results obtained.

7.3.1.6 Checking the efficiency of safety devices

At the end of maintenance work, format change, or after prolonged machine stoppage, it is necessary to check the efficiency of the following devices:

- Emergency stop devices;
- interlocking devices of movable guards;
- opening and/or mechanical release devices of movable guards;
- safety seals on the flow regulators of pneumatic actuators are intact.

7.3.2 Cleaning



BEWARE!
Cleaning operations must be performed by qualified, authorised personnel only.



BEWARE!
Adhere to the wash water treatment regulations in force in the country of installation.



BEWARE!
Turn off the machine and disable the disconnector (padlockable) upstream. Carefully clean the conveyor belts by manually turning them. Prevent water from dripping onto the parts underneath.



IMPORTANT!
At the end of each machine cleaning operation, it is necessary to rinse with fresh water and dry the surfaces.

Operation	Frequency				
	Daily	Weekly	Monthly	Half-yearly	Yearly
Cleaning conveyor belts	◈				
Cleaning photocells	◈				
Cleaning the compressed air filter			◈		
Cleaning of printer accessories		◈			
Thermal head cleaning		◈			

7.3.2.1 Substances NOT SUITABLE for cleaning stainless steel (AISI 304)

The following is a list of substances **NOT TO BE USED** for cleaning metal parts (STAINLESS STEEL and ALUMINIUM):

Substance	Concentration
Hydrochloric acid	**All concentrations**
Hydrofluoric acid	**All concentrations**
Muriatic acid	**Commercial**
Sulphuric acid	**Smoking 50°C**
Sulphur dioxide	**All concentrations**
Sodium bisulphate	**15% a 85°**
Saturated bleach	**All concentrations**
Calcium hypochlorite	**100%**
Sodium hypochlorite	**100%**

7.3.2.2 Cleaning conveyor belts

To clean **conveyor belts**, proceed as described below:

Step	Action
1	Disconnect the machine from the electricity mains.
2	Dampen a clean cloth with water and a detergent solution, dosing the detergent as recommended by its manufacturer.
3	Thoroughly clean all the belt parts.



IMPORTANT!
Only use neutral based detergents that need not be rinsed (non-foaming).

7.3.2.3 Cleaning photocells

To clean **photocells,** proceed as described below:

Step	Action
1	Disconnect the machine from the electricity mains.
2	Use a cotton cloth moistened with alcohol.
3	Carefully clean the photocell lenses.
4	Also clean the reflector in front of the photocell.
5	Dry with a dry cloth.



BEWARE!
Never ever use metal or pointed tools for cleaning purposes, as they can irreparably damage the sensor. Never use petrol or solvents.

7.3.2.4 Cleaning the compressed air filter (main machine)

To clean **the compressed air filter,** proceed as described below:

Step	Action
1	Disconnect the machine from the electricity mains.
2	Get a container to collect condensate liquids.
3	Place the container under the filter's transparent bulb.
4	Press the small button under the transparent bulb with a finger until all the liquid inside has flowed out.

BEWARE!
The condensate liquid can spurt out violently. Therefore, move the edges of the container as near as possible. Keep your face and eyes away and always use suitable clothing and personal protective equipment.

7.3.2.5 How to clean the accessory parts of the printer

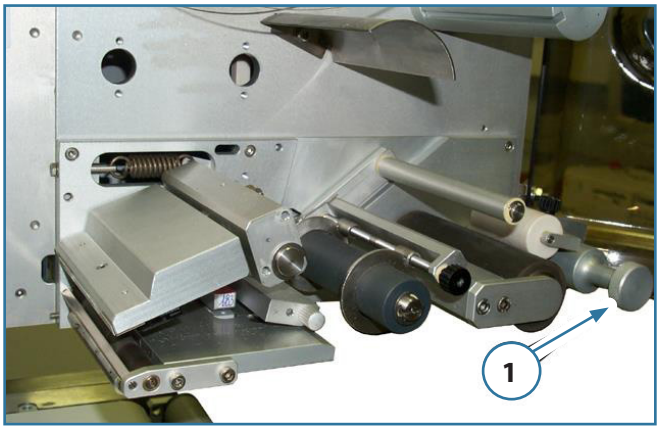
To clean, proceed as described below:

Step	Action
1	Use a soft cloth moistened with a detergent
2	Traces of adhesive or bits of labels can be removed with denatured alcohol.

7.3.2.6 How to clean the thermal head

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To clean **the thermal head,** proceed as follows:

Step	Action
1	Switch off the machine and wait a few minutes for the head to cool down.
2	Lift the printing unit by means of the relative lever (pos.1).
	
3	Remove the existing labels.
4	Dampen a soft cotton cloth with denatured alcohol and wipe the underside of the head to remove belt or label residue.
5	Make sure that the cleaned parts have dried before powering and using the machine again.

BEWARE!
Never use metal or pointed tools for cleaning purposes as they can cause irreparable damage to the thermal head.

BEWARE!
Do not use petrol or solvents on any of the devices or mechanisms.

BEWARE!
When cleaning, make sure that drops of fluid do not drip on to electrical parts.

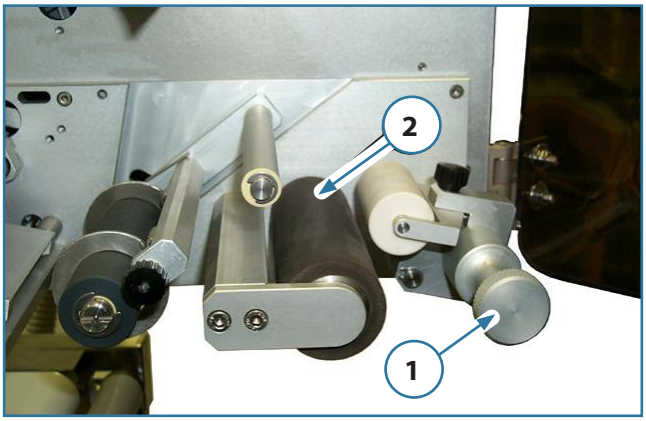
IMPORTANT!
Traces of adhesive or bits of labels can be removed with denatured alcohol.

7.3.2.7 How to clean the paper tractor roller

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To clean the **roller,** proceed as follows:

Step	Action
1	Turn the machine off.
2	Remove the labels.
3	Lift the printing unit by means of the relative lever (pos.1).
4	Dampen a soft cotton cloth with denatured alcohol, and rub the rubber roller (pos.2) while rotating it manually.
5	Make sure that the cleaned parts have dried before powering and using the machine again.





BEWARE!
Never use metal or pointed tools for cleaning purposes as they can cause irreparable damage to the sensor.



BEWARE!
When cleaning, make sure that drops of fluid do not drip on to electrical parts.



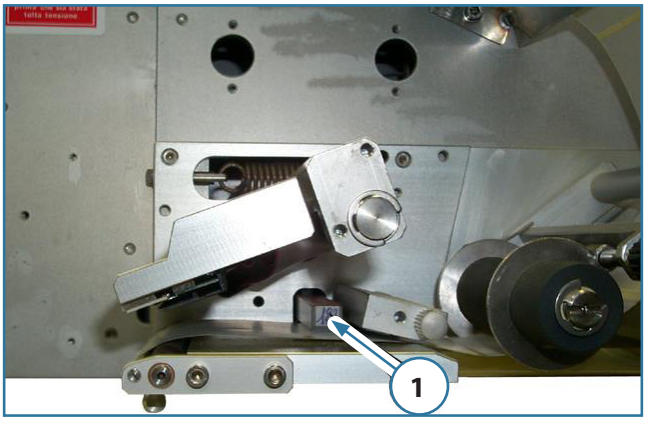
IMPORTANT!
Traces of adhesive or bits of labels can be removed with denatured alcohol.

7.3.2.8 How to clean the paper photosensor

Operator qualification	Mechanical/electrical maintenance
Required PPE	
Tools to be used	Manual tools

To clean the photosensor, proceed as described below:

Step	Action
1	Turn the machine off.
2	Remove the labels.
3	Use a soft brush to clean under the sensor (pos.1).



BEWARE!
Never use metal or pointed tools for cleaning purposes as they can cause irreparable damage to the sensor.

BEWARE!
When cleaning, make sure that drops of fluid do not drip on to electrical parts.

IMPORTANT!
Traces of adhesive or bits of labels can be removed with denatured alcohol.

7.4 Extraordinary maintenance



BEWARE!
Extraordinary maintenance and repair work may be performed on the machine by qualified, instructed and authorised technicians only, employed by the Manufacturer or an authorised service centre.
This type of work requires in-depth, specific knowledge of the machines, necessary operations, associated risks and proper procedures to operate safely.

If exceptional events occur, which require extraordinary maintenance, the user's routine maintenance personnel must follow these procedures:

- check the condition of damaged or out-of-phase units;
- perform the operations described in this section;
- if the operations to be performed are not covered in this manual, please send the Manufacturer a report of the events that have occurred, the result of the inspection and any remarks.

The Manufacturer or the authorised service centre will assess the situation on a case-by-case basis. Then they will agree on the type of work to be conducted with the routine maintenance technicians, choosing the most suitable solution between those listed below:

- the Manufacturer sends an authorised, trained and qualified technician to carry out the necessary operations;
- or the Manufacturer authorises the user's routine maintenance personnel to carry out the operations needed, sending any additional instructions.



BEWARE!
The spare parts to be replaced must be ordered from SOCIETA COOPERATIVA BILANCIAI.
If the customer does not use original spare parts or those approved in writing by the Manufacturer, the latter shall not be held liable for the operation of the machine and the safety of the operators.
Any approval and/or instructions must always be provided in writing. If no written approval is granted, no work may be conducted on the machine and the Manufacturer declines all responsibility.



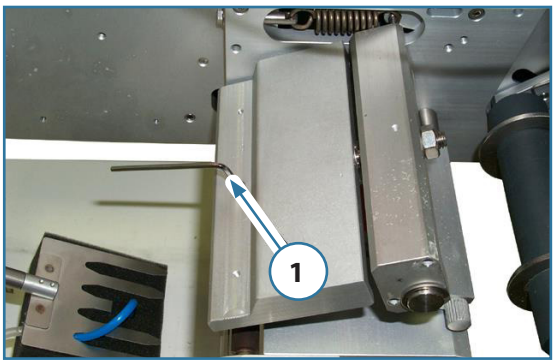
BEWARE!
Maintenance work must be performed by qualified, authorised personnel only.

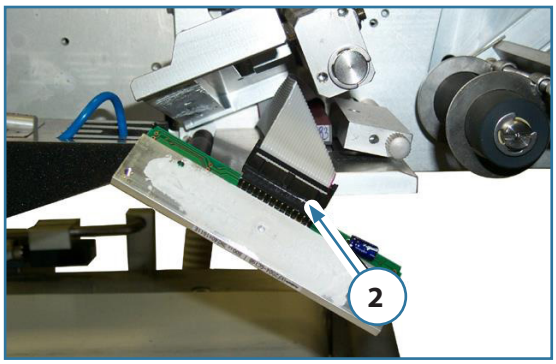
7.4.2.1 How to replace the thermal head

Operator qualification	Mechanical maintenance technician
Required PPE	
Tools to be used	Manual tools

To replace the **thermal head,** proceed as described below:

Step	Action
1	Turn off the printer.
2	Raise the thermal head.
3	Unscrew the clamping screw (item 1) of the head to the heatsink.
4	Carefully remove the head from the bottom of the heatsink and disconnect the connector (item 2).
5	To fit the new head, carry out the steps described above in reverse order.





IMPORTANT!
To dissipate heat, use silicone grease to coat the metal part of the head that comes into contact with the heat sink.

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Chapter 8
DECOMMISSIONING AND DISPOSAL

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8. DECOMMISSIONING AND DISPOSAL



BEWARE!

Decommissioning and dismantling must be entrusted to personnel specialised in performing these activities. In particular, only the person in charge of dismantling and end-of-life disposal may:

- **mechanically and electrically disconnect parts according to disassembly instructions and project plans.**
- **carry parts from their location at the plant to the disposal centre where they will be sorted out.**

The machine essentially consists of the following materials:

- painted, plasticised or galvanised ferritic steel;
- 300/400 series stainless steel;
- polyethylene plastic material;
- elastomers, PTFE, graphite;
- gear oil;
- lubrication grease;
- electric motors;
- electrical cables with their sheaths;
- Electronic control and actuation devices.
- etc.



BEWARE!

The machine does not contain any dangerous components or substances that require special removal procedures.

8.1 Temporary decommissioning

If the line is to remain unused for a long period of time, it is still advisable to carry out the routine maintenance operations at least once every six months.

- Protect the line from dust and store it in a dry, sheltered place;
- lift the printer's thermal head (of all printers, if there is more than one);
- remove the thermal paper and thermal film (if used) and store it well away from the sources of light and heat.



IMPORTANT!

If the machine must be moved in any way, it is essential to place it in its original packing materials, in compliance with the instructions provided in the HANDLING chapter. If the original packing is not available, place the machine on a pallet and secure it in a safe and stable manner.

8.2 Disposal

The machine **must** be secured before being disposed of.



BEWARE!
For the disassembly of commercial parts or sub-supply material which are part of the machine supplied by SOCIETA COOPERATIVA BILANCIAI, please refer to the relative manual of the supplier.

Pursuant to the **"WEEE" Directive 2012/19/EU,** if the purchased component/equipment is marked with the following crossed-out wheeled bin symbol, it means that the product must be collected separately from other waste at the end of its service life.



BEWARE!
Remember to comply with the disposal laws in force in the country where the machine is installed.

Chapter 9
ANNEXES

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9. ANNEXES

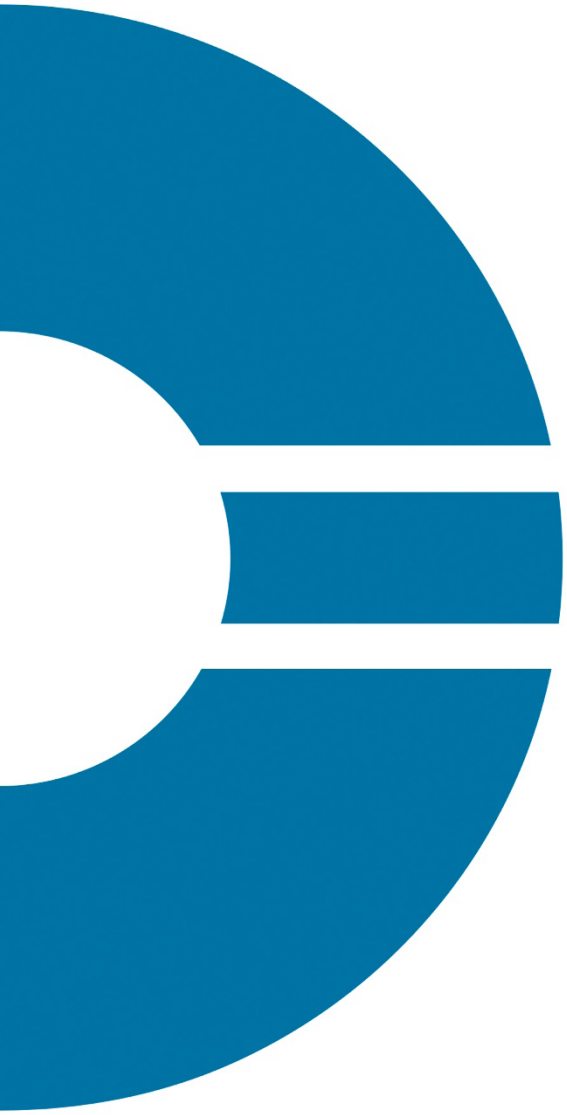
This chapter contains the documentation annexed to the machine.

The annexed documentation is an integral part of the "INSTRUCTION, USE AND MAINTENANCE MANUAL" of the machine supplied by **SOCIETA COOPERATIVA BILANCIAI** and must be referred to when using, operating and servicing the equipment and its components.

Below please find the list of annexes:

Code	Description
	Wiring diagram
	Printer manual
	Operator panel manual
	Technical data sheet

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SOCIETA' COOPERATIVA
BILANCIAI
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