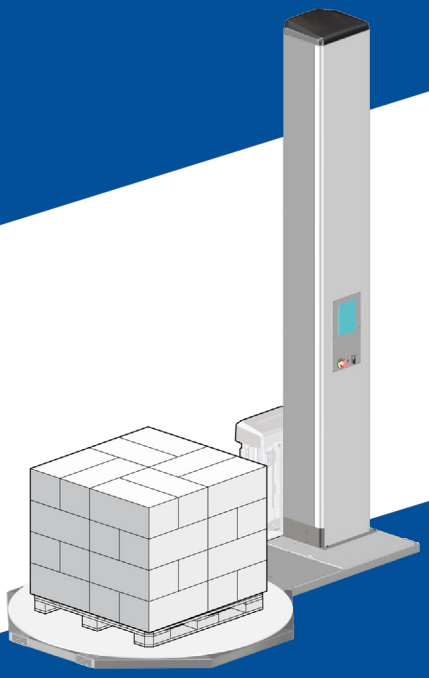
SIAT MAILLIS

Semi-automatic pallet wrapper



ProWrap

Operation and maintenance manual

Translation of the "ORIGINAL INSTRUCTIONS"

Code **SBC0035151** ed. 05-2018 - rev. 1

SIAT MAILLIS

Summary

Reel holding carriage (FM)

Reel holding carriage (PW)

Control system

1Disposal and scrapping

Purpose of the manual

- The purpose of the manual is to inform and train operators so that they can interact with the machine in SAFE CONDITIONS.
- Its aim is also to prevent risks, to reduce the social costs resulting from accidents and damage to the health of people, property and to the environment.
- **In some cases, accidents may be due to the Operator using the machine carelessly.**
- **Caution is always necessary. Safety is also the responsibility of all the persons interacting with the machine throughout its operating life.**
- **Remember that it is too late to think about safety issues when the accident has already occurred.**
- **It is important to dedicate enough time to read the "Instruction Manual" in order to minimise the risks and to avoid any unpleasant accidents.**
- The content of this manual was originally edited by the Manufacturer in the mother tongue (ITALIAN), in compliance with the professional writing standards and the regulations in force.
- Any translation of the manuals shall be carried out directly and without alterations from the texts of the ORIGINAL INSTRUCTIONS.
- This applies also to the translations carried out by the agent or by the person who is in charge of delivering the equipment in the specific linguistic area.
- The Manufacturer reserves the right to update the documentation, should this prove necessary.
- All information supplied by the recipients represents an important contribution to the improvement of the after-sales service that the manufacturer will offer to his/her customers.
- All supplied information is organised into an index and a table of contents, so as to easily track specific topics of interest.
- **The SAFETY WARNINGS and the INSTALLATION MANUAL are supplied as hard-copy publications.**
- **The USE AND MAINTENANCE MANUAL, operation diagrams and all other post-sale documents can be downloaded from the INTERNET.**
- Keep the manual and the attached documents in a place known and easily traceable, so that you may refer to them whenever necessary.

Glossary of the terms

The glossary includes some terms used when processing information, with their definition, in order to facilitate understanding.

- **Training:** A process aiming at transferring the knowledge, skills and behaviours required to work in an autonomous, correct and hazard-free manner.
- **Assistant:** person chosen, trained and coordinated in an appropriate manner to minimize the risks in carrying out their tasks.
- **Emergency stop:** voluntary activation of the special control that stops the dangerous elements of the work unit in the case of imminent risk.
- **Stop in alarm conditions:** this state causes the components to stop and is activated when the control system detects a problem in the machine operation.
- **General shut down:** In addition to the normal stop this state also causes the interruption of all the power sources (electrical, pneumatic, etc.).

- **Operating Stop:** state that does not cut off power supply to the actuators, but ensures control system monitoring in safe conditions.
- **Size change:** a set of interventions to be carried out before beginning to work with specifications different with respect to the ones previously in use.
- **Test-run:** a series of operations required to ensure compliance to the design specifications, and to commission the machine under safety conditions.
- **Installer:** a technician chosen and authorized by the manufacturer or his authorized representative, among those who fulfil the requirements for installation and testing of the machine or plant in question.
- **Maintenance Operator:** a technician chosen and authorized, among those who fulfil the requirements, to carry out routine and extraordinary maintenance operations on the machine. Therefore, the maintenance operator shall possess precise knowledge and skills, with particular skills in the relevant field.
- **Routine Maintenance:** all the operations necessary to maintain the functionality and efficiency of the machine. Normally, these operations are scheduled by the manufacturer, who defines the necessary skills and methods of action.
- **Operator:** a person chosen and authorized, among those who fulfil the requirements, having the knowledge and skills necessary to operate the machine and carry out routine maintenance interventions.
- **Production Manager:** technician with expertise and knowledge on the use of packaging machines and similar equipment, who is authorised to supervise the production activity.
- **Person in charge of the installation:** a technical expert who must carry out the installation in compliance with the laws applicable to the workplace and, at the end, assess its compliance.
- **Residual risks:** all the risks remain even if all the safety solutions have been adopted and integrated when the machine has been designed.
- Expert Technician: A person authorised by the Manufacturer and/or his representative to carry out services that require specific technical skills and abilities.
- **Forwarder and Handler:** Authorized persons with recognized expertise in the use of means of transport and lifting devices, in safety conditions.
- **Foreseeable improper use:** reasonably foreseeable use other than that recommended in the instruction manual, which may result from human behaviour.

Attached documentation

The SAFETY WARNINGS and the INSTALLATION MANUAL are supplied as hard-copy publications.

- The USE AND MAINTENANCE MANUAL, operation diagrams and all other post-sale documents can be downloaded from the INTERNET.
- The list shows the documentation supplied with the machine.
- CE Declaration of conformity
- Operation and maintenance manual
- Installation manual
- Wiring diagrams
- Pneumatic system diagrams
- Specific Manuals for installed components or sub-assemblies available commercially

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General safety warnings

- The machine has been designed and built with all the precautionary measures aimed at minimising the possible risks over its expected life cycle.
- Tampering with and bypassing the safety devices may lead to severe risks for the Operators.
- Before interacting with the machine, and in particular, before its first use, read the SAFETY WARNINGS contained in the manual.
- Spend some of your time reading this information to avoid any risk for people's health and safety as well as economic damage.
- Respect the SAFETY WARNINGS. Avoid any IMPROPER USE of the machine and assess the RESIDUAL RISKS.
- When operating the machine, DO NOT wear clothes and/or accessories that could become caught in the moving or protruding parts.
- Before machine use and/or maintenance, read the information contained in the reference documents and accurately implement the described procedures.
- Carry out the interventions ONLY according to the modes recommended by the Manufacturer in the "Instructions for use".
- The personnel in charge of carrying out interventions on the machine must have suitable and proven experience in this specific field.
- Please keep safety signs and information legible and follow the instructions.
- The information signals may be of different shapes and colours, to indicate dangers, obligations, prohibitions and indications.
- Signals which are no longer legible must be replaced and repositioned in the same place of origin.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

Safety Warnings for Handling and Installation

- The manufacturer has attached special attention to the packaging of the machine, to minimise the risks associated with the shipping, handling and transport phases.
- The personnel authorised to handle the machine (loading and unloading) must have acknowledged technical skills and professional ability.
- Before handling, please read the instructions, in particular those on safety, contained in the installation manual, on the packages and/or on the removed parts.
- In order to make transport easier, the equipment can be shipped with a few disassembled and properly protected and packaged components.
- Loading and transport must be carried out with equipment of adequate capacity by anchoring it to specific points indicated on the packages.
- DO NOT attempt to by-pass the instructions concerning the lifting requirements and special points provided for lifting and handling each item and/or disassembled part.
- Slowly lift the pack to the minimum necessary height and move it very carefully in order to avoid dangerous vibrations.

- The packs being shipped must be properly fastened to the means of transport in order to ensure safe conditions during transfer and the integrity of their contents.
- During some handling phases, the support of one or more operators may be required; these operators must be trained and informed about the tasks assigned to them.
- Download packages in the immediate vicinity of the machine setting, which must be sheltered from bad weather.
- Do not stack the packs onto each other in order to avoid any damage and to avoid the risk of sudden and dangerous movements.
- In case of prolonged storage, regularly check that the component stocking conditions do not change.
- The installation area is to be prepared so as to be able to carry out the operations as specified in the manuals and in conditions of safety.
- Ensure that the installation environment is protected against atmospheric agents, free of corrosive substances and free of any risk of explosion and/or fire.
- Signal and delimit the installation area in a proper way in order to prevent non authorised personnel from accessing the installation area.
- The connections to the power sources (electric, pneumatic, etc.) must be performed correctly, as shown in the diagrams and in compliance with the regulatory and legal requirements in force.
- ONLY qualified and experienced personnel are allowed to carry out the electrical connections.
- After completing the connections, perform a general check to ensure that all the interventions have been carried out properly and that the requirements have been met.
- The installation manager, before commissioning, must check that all the safety devices are properly installed and functioning.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- Dispose of all packing in accordance with the laws in force in the country of installation.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

Safety Warnings for Operation and Use

- The machine must be used by one single operator ONLY, who must be trained and capable of performing the work and be in suitable conditions.
- Consult the user manual, in particular during the first use, and make sure that you fully understand its content.
- Find out the position and function of the controls and simulate some operations (in particular start and stop) in order to acquire familiarity.
- The machine shall be used ONLY for the purposes and complying with the procedures specified by the Manufacturer.
- Make sure that all the safety devices are properly installed and efficient.
- The machine should be used ONLY with the original safety devices installed by the Manufacturer.

– Ensure the area around the machine, especially the control post, is ALWAYS unobstructed and in good condition to minimize the risks for the Operator.
– According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.
– **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

■ Safety Manager Obligations

– The safety manager must train the operator and help him or her familiarise and interact with the machine in an independent, adequate and risk-free manner.
– The operator must be informed about the PROPER USE of the machine and about the remaining RESIDUAL RISKS.
– The operator must demonstrate that he has acquired the relevant skills and has understood the “User Instructions” in such a way as to carry out his activities safely.
– The operator must be able to recognise the safety signals and demonstrate that he is in suitable condition to carry out his assigned duties.
– The safety manager must release educational material to trainees and document the delivered training, so as to be able to produce such documentation in case of litigation.

Safety Warnings on Misuse

– ONLY trained, documented and authorized Operators are allowed to use the machine.
– DO NOT use or allow other persons to use the machine if the safety devices are faulty, disabled and/or incorrectly installed.
– DO NOT use or allow other persons to use the machine for purposes and in ways different from what specified by the Manufacturer.
– DO NOT use the machine in home environments.
– DO NOT wear clothes and/or accessories that could become caught in the moving or protruding parts.
– When operating the machine, ALWAYS wear the Personal Protective Equipment specified by the Manufacturer and by the current regulations on safety at work.
– If troubles arise, do NOT continue to use the machine. Stop it immediately and restart only after restoring the normal operating condition.
– DO NOT use the machine if the scheduled routine maintenance interventions have not been carried out.
– DO NOT tamper with, override, bypass or eliminate the safety devices installed on the machine.
– DO NOT modify the manufacturing and functional characteristics of the machine in any manner whatsoever.
– DO NOT perform any interventions other than those specified in the Operation Manual without the explicit authorization of the Manufacturer.
– DO NOT carry out any intervention when the machine is being operated. Stop the machine and put it in safety condition before carrying out any intervention.
– DO NOT clean or wash the machine with water, steam or aggressive products that might irreversibly damage the components.

- DO NOT replace the components with non-genuine spare parts or other components with different design and manufacturing specifications.
- DO NOT dump in the environment any materials, polluting liquids and maintenance waste generated during the operations. Dispose of them according to the regulations in force.
- DO NOT leave the machine unattended during operation and DO NOT leave it at the end of the work without stopping it to safety conditions.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

Safety Warnings on Residual Risks

Residual risks: all the risks remain even if all the safety solutions have been adopted and integrated when the machine has been designed.

- Upon designing and building the machine, the Manufacturer has paid particular attention to the RESIDUAL RISKS that may affect the safety and health of the Operators.
- For specific information about residual risks, please refer to the machine user manual.

Safety Warnings for Maintenance and Adjustments

- Always keep the machine in optimum operating condition and carry out the routine maintenance according to the intervals and procedures specified by the Manufacturer.
- **A good maintenance will ensure a stable performance over time, longer working life and constant compliance with the safety requirements.**
- The personnel authorized to carry out the ordinary maintenance must have qualified expertise and specific skills in the field of intervention.
- Any work on the electrical system must ONLY be performed by technicians with acknowledged, field-specific skills.
- Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
- According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.
- Respect the SAFETY WARNINGS. Avoid any IMPROPER USE of the machine and assess the RESIDUAL RISKS.
- Before carrying out any intervention, activate all the safety measures, and assess any residual energy which may still be present.
- Carry out the operations in areas which are difficult to access or hazardous ONLY after disconnecting all power sources.
  This operating mode is necessary in order to work under safe conditions.
- Carry out the operations according to the procedures and modes shown by the Manufacturer in the “Instruction Manual”.
- All operations must be carried out ONLY with suitable tools which shall be in good condition, in order to avoid damaging any components and parts of the machine.
- Replace the components and/or safety devices ONLY with original spare parts in order not to alter the required safety level.

– The use of similar but not genuine spare parts can lead to non-compliant repairs, impaired performance and economic damage.
– Use the lubricants (oils and greases) recommended by the Manufacturer or lubricants of equivalent chemical and physical characteristics.
– At work completion, restore all the security conditions aimed to prevent and minimize the risks during the human-machine interaction.
– At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
– Refer to the Technical Assistance Service of the Manufacturer, in case interventions not described in the “Instructions for use” are needed.
– All EXTRAORDINARY MAINTENANCE interventions shall be performed only by authorized Technicians with proven and gained experience in the field.
– Some operations may require the use of support devices and/or equipment that shall be used properly in order to avoid any safety risks.
– **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

Safety warnings for the electrical equipment

The electrical equipment has been built in accordance with the applicable standards and its efficiency is ensured if the listed conditions are met.

– Ambient temperature and relative humidity between maximum and minimum permitted limits.
– Absence of environmental electromagnetic noise and radiation (X-rays, laser, etc.).
– Absence of environment areas with gas and dust concentration levels potentially explosive and/or at risk of fire.
– Use of products and materials free from contaminants and corrosive agents.
Products containing chemicals, acids, salts, etc. can come into contact with the electrical components and cause irreversible damage.
– Transport and storage temperatures between minimum and maximum permitted limits.
– Altitude not exceeding the maximum permitted limits.
Do not carry out the installation under conditions that are different from those allowed.
– Power Cable with section suitable for the current power and intensity values indicated in the data plate.
– Protection class in accordance with data plate indications.
– The power supply line to which the machine must be connected must have identical characteristics to those mentioned in the data plate.

Important

All the listed requirement values are contained in the technical specifications table.

– **If one or more of the listed requirements cannot be met, alternative solutions should be agreed at the ordering stage.**

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Safety warnings for the environmental impact

Each organization is responsible for implementing procedures aimed at identifying, evaluating and controlling the environmental impact of its own activities (products, services, etc.).

– Procedures for identifying significant environmental impact must take account of the factors listed.
  - Discharges for liquids and lubricants
  - Waste disposal
  - Soil contamination

– In order to minimize the environmental risks during the man-machine interaction follow the recommended instructions.
  - Dispose of all packing in accordance with the laws in force in the country of installation.
  - Keep noise level to the minimum to reduce noise pollution.
  - Select materials on the basis of their composition and provide for differentiated disposal in accordance with the laws in force.
  - Avoid dumping polluting materials and products in the environment (oils, greases, electrical and electronic apparatus etc.).
  - All the components of Electrical and Electronic Apparatus contain dangerous substances and are appropriately marked.
  - Dispose of Electrical and Electronic Apparatus Waste properly, at authorised collection centres, to avoid harmful and damaging effects.
  - Incorrect disposal of dangerous waste is punishable with sanctions regulated by the laws in force on the territory in question.

– **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

Safety and information symbols

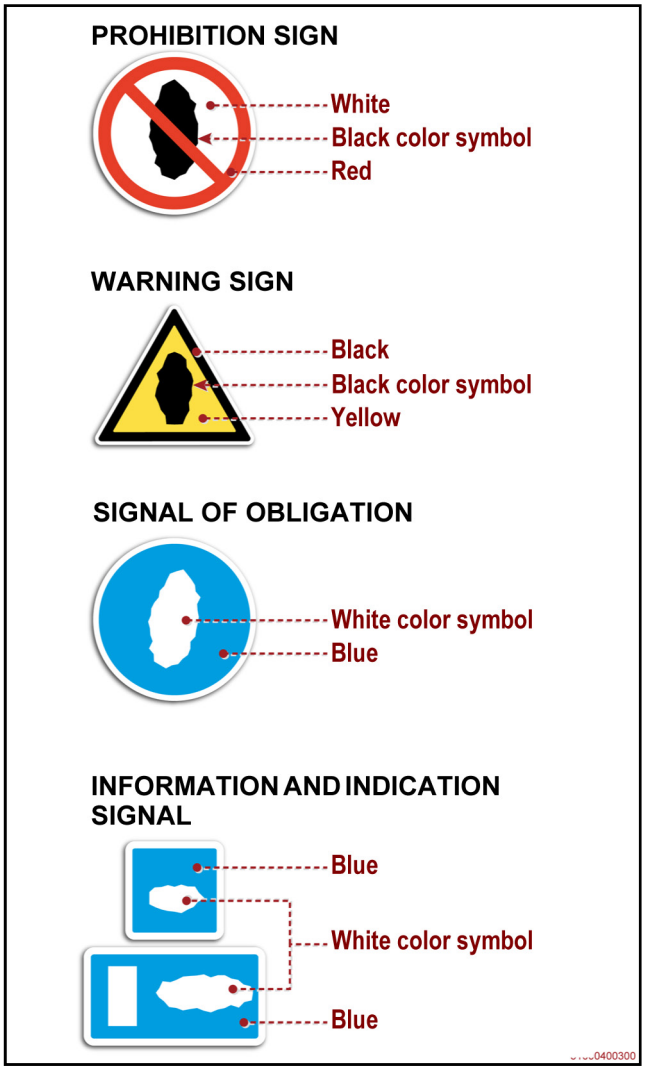
– The information signals may be of different shapes and colours, to indicate dangers, obligations, prohibitions and indications.

– The illustrations show the shapes of the signals that can be applied, with the function indicated

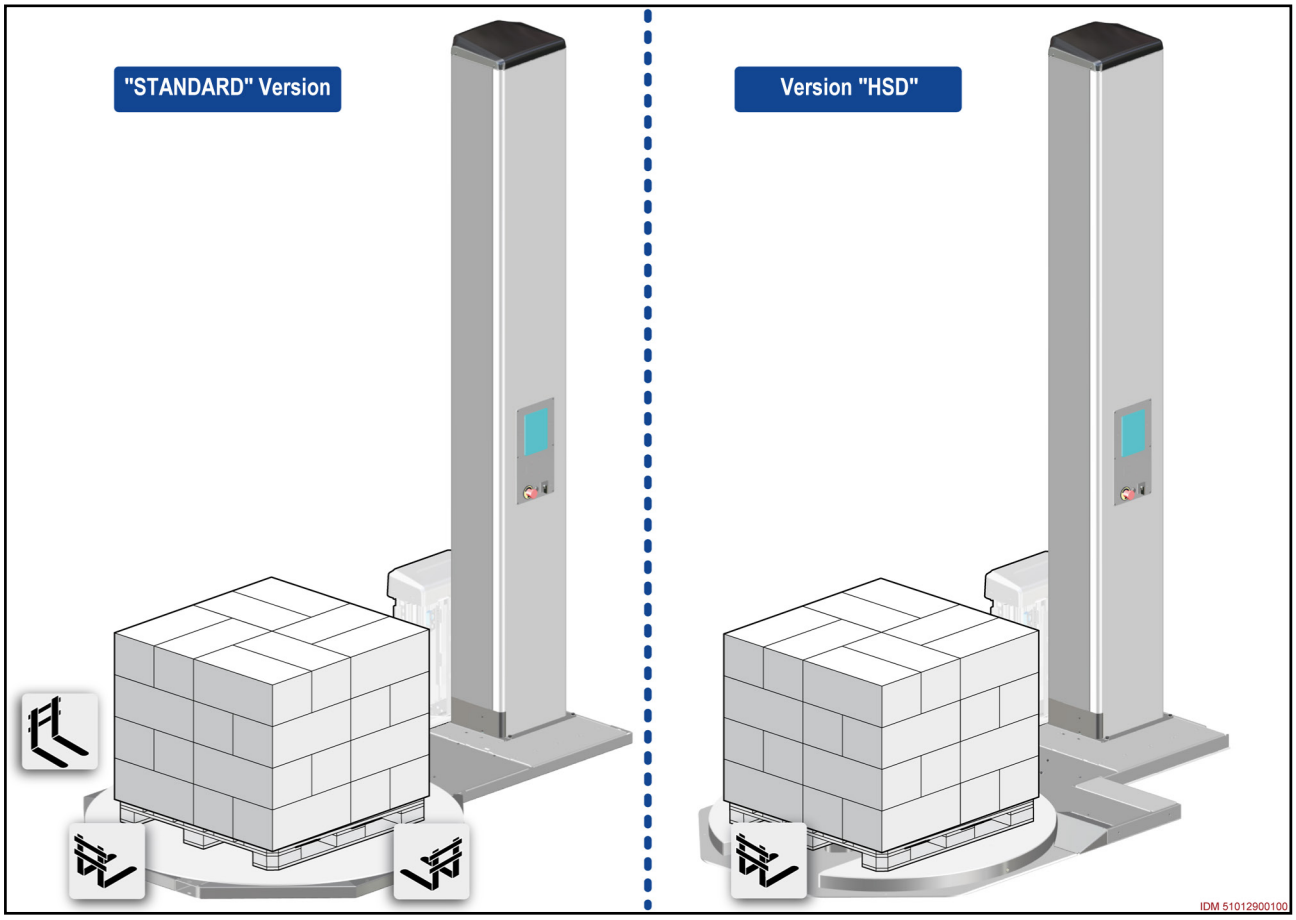
– For more details on the type and position of the signals applied, refer to the paragraph “Position of safety signals and information”.

– Please keep safety signs and information legible and follow the instructions.

– Signals which are no longer legible must be replaced and repositioned in the same place of origin.

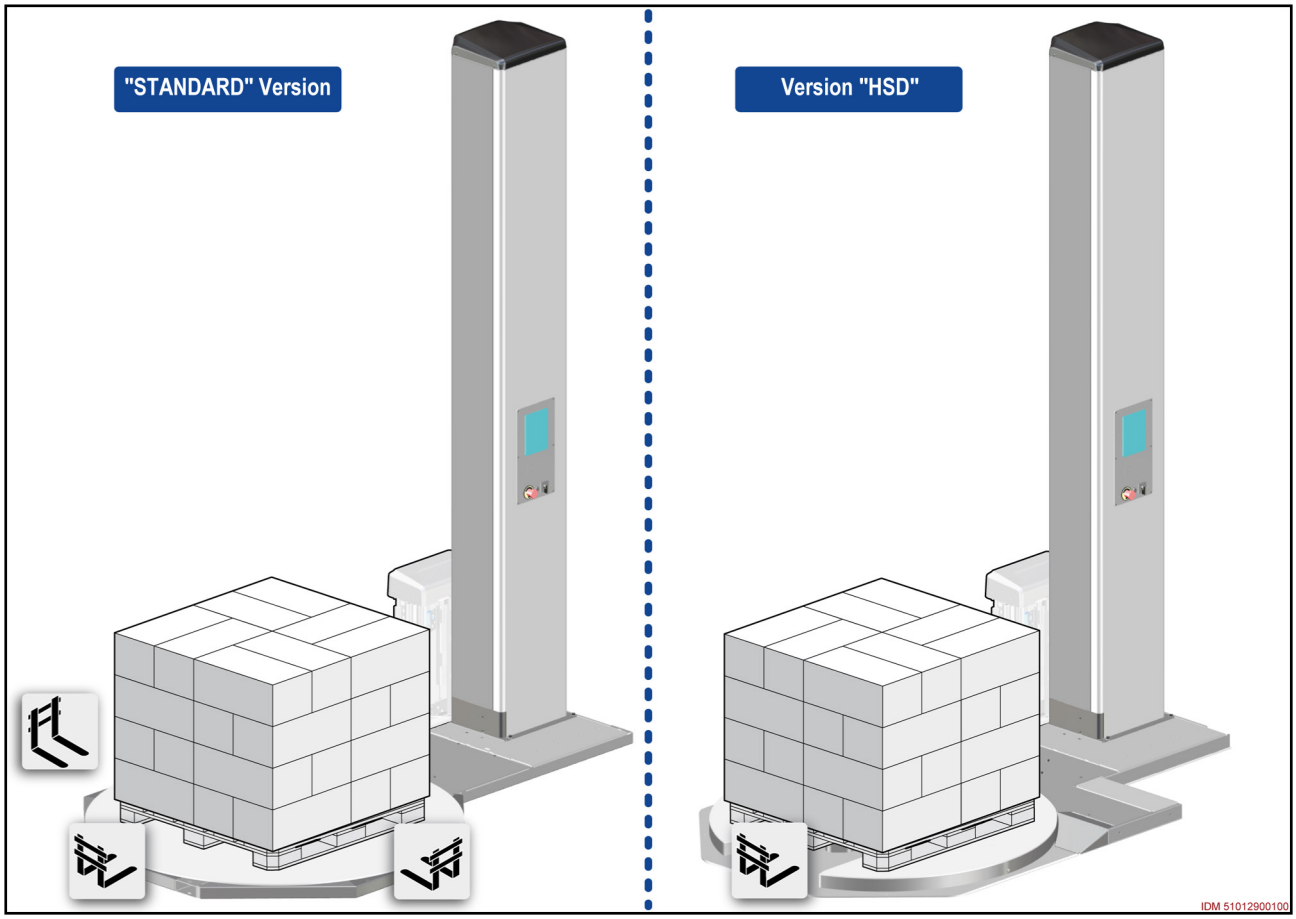


general description of the machine



The semi-automatic wrapper series “ProWrap” is designed to secure products loaded on pallets using stretch film.

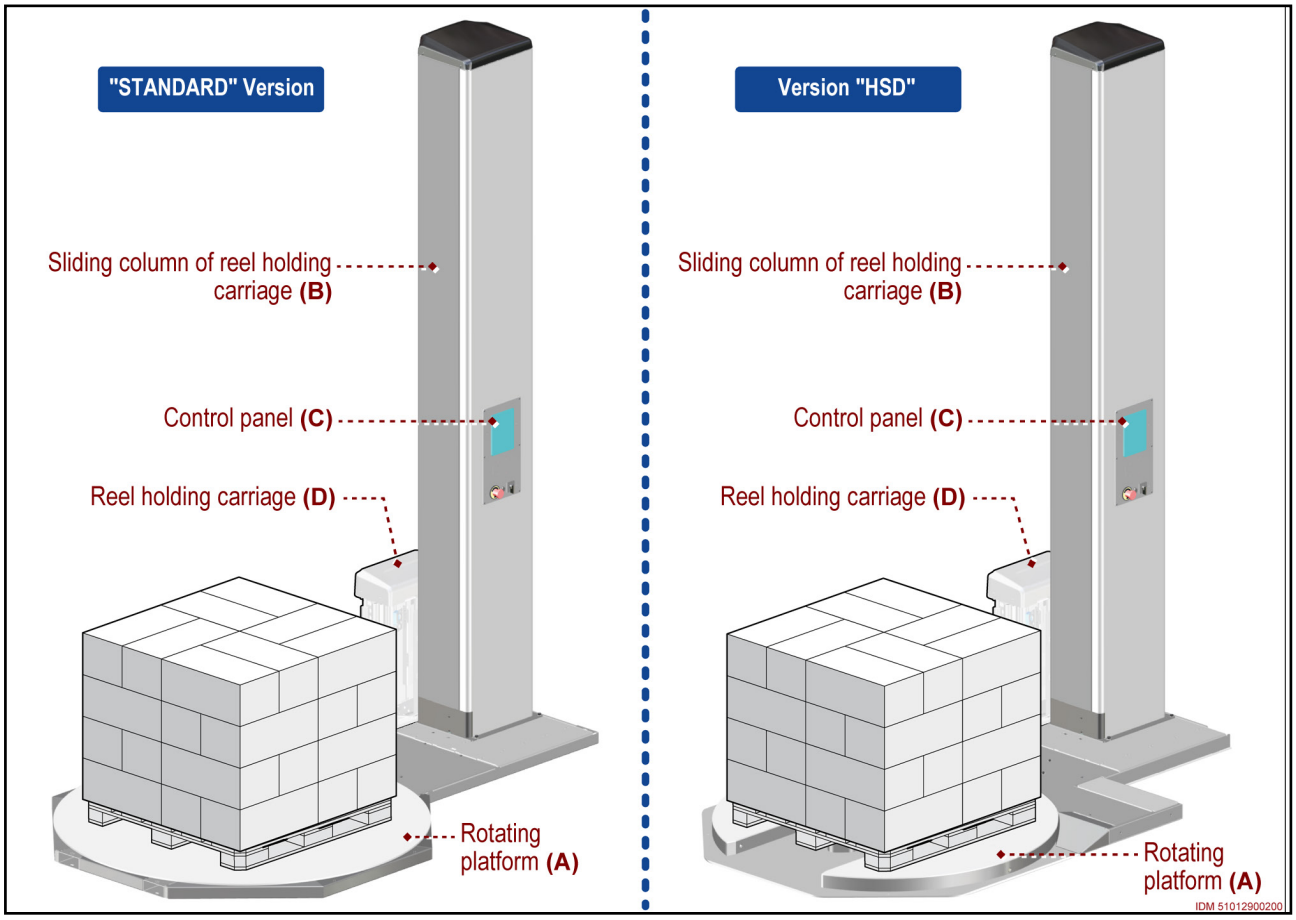
– To wrap loads, commercially available reels of stretch film are used.
– The products to be wrapped must be contained in packages (cases, containers for liquids, etc.) having a regular shape or in any case, such as to allow for stable palletising.
– The containers of liquids or fluids should be hermetically sealed and with suitable characteristics to avoid spilling any content.
– The products to be wrapped have ALWAYS to be positioned in the middle and must NOT protrude from the rotating platform in order to avoid the risk of collision.
– The wrapping surface shall be uniform and smooth (without projections or recesses) in order to prevent the risk of film breaking.
– The products are loaded and unloaded using forklift trucks of suitable capacity.
– Loading should ONLY be carried out from the orthogonal sides of the support base (see figure).
– The machine has been designed, built and equipped by applying integrated safety principles.
– The machine is for professional use only and must be installed in industrial-type settings - factories or workshops.
– The premises must have no areas with gas and dust concentration levels that are potentially explosive and/or at risk of fire.



– On request, the machine may be equipped with accessories, either when it is ordered or later.
  See “Optional Accessories” for further details.
– The machine must be used by one single operator ONLY, who must be trained and capable of performing the work and be in suitable conditions.
– The operator is in charge of programming and controlling the production cycle, perform the refilling and the scheduled maintenance.

Description of the main components

The image shows the main components and the list reports their description and function.



A) Rotating platform: area on which are loaded the products to be wrapped.

– The rotating platform is driven by a gear-motor with a chain drive.

B) Column: it is used for vertical movement of reel holding carriage **D**.

C) Control panel: it contains the devices to start and control all the operation functions.

D) Reel holding carriage

– According to production requirements, in the ordering phase the machine can be equipped with one of the listed carriages.

– **Reel holder carriage (type M):** suitable for wrapping, allows the operator to adjust the film tension manually using the ring nut of the mechanical brake.

– **Reel-holder carriage (type FM):** suitable for wrapping, allows the operator to adjust the film tension from the control panel.

– **Reel holding carriage (type PW):** specific for wrapping with motorised film pre-stretching and transmission gear ratio adjustment (replacement of the pulleys).

Manufacturer and machine identification

The identification plate (pictured) is affixed directly to the machine.

– In addition to the references for identification provided by the Manufacturer, they also list all the essential information for a safe operation.

A) Manufacturer identification

B) Space reserved for CE compliance marking

C) Machine model

D) Machine type

E) Serial number

F) Serial number

G) Year of fabrication

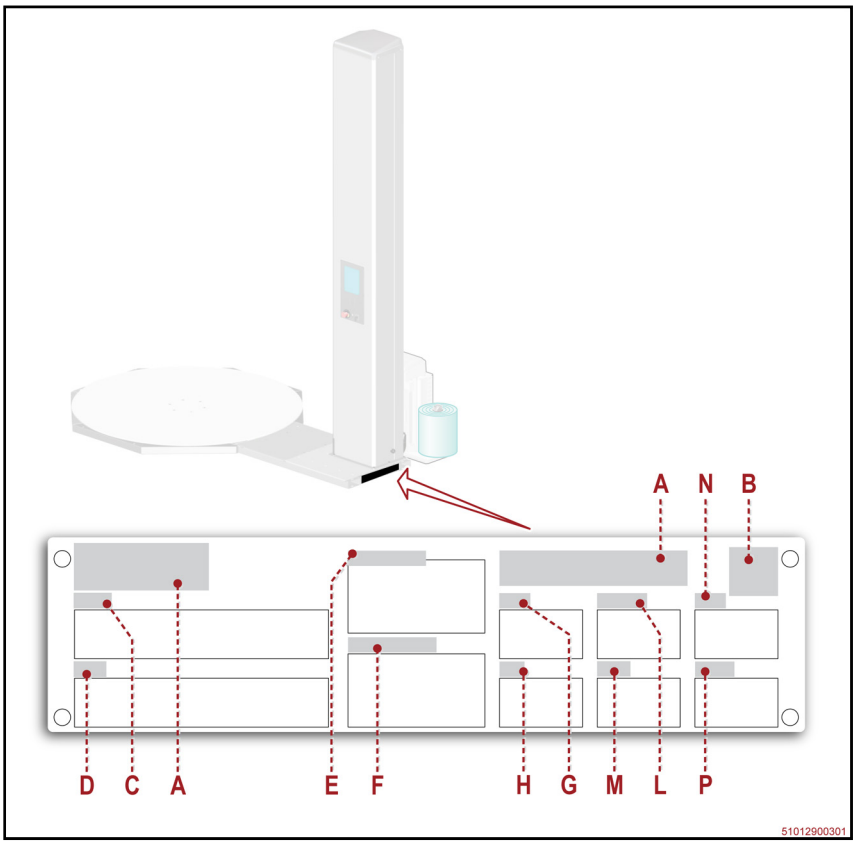
H) Power supply voltage

L) Electrical power consumption

M) Power supply frequency

N) Absorbed power

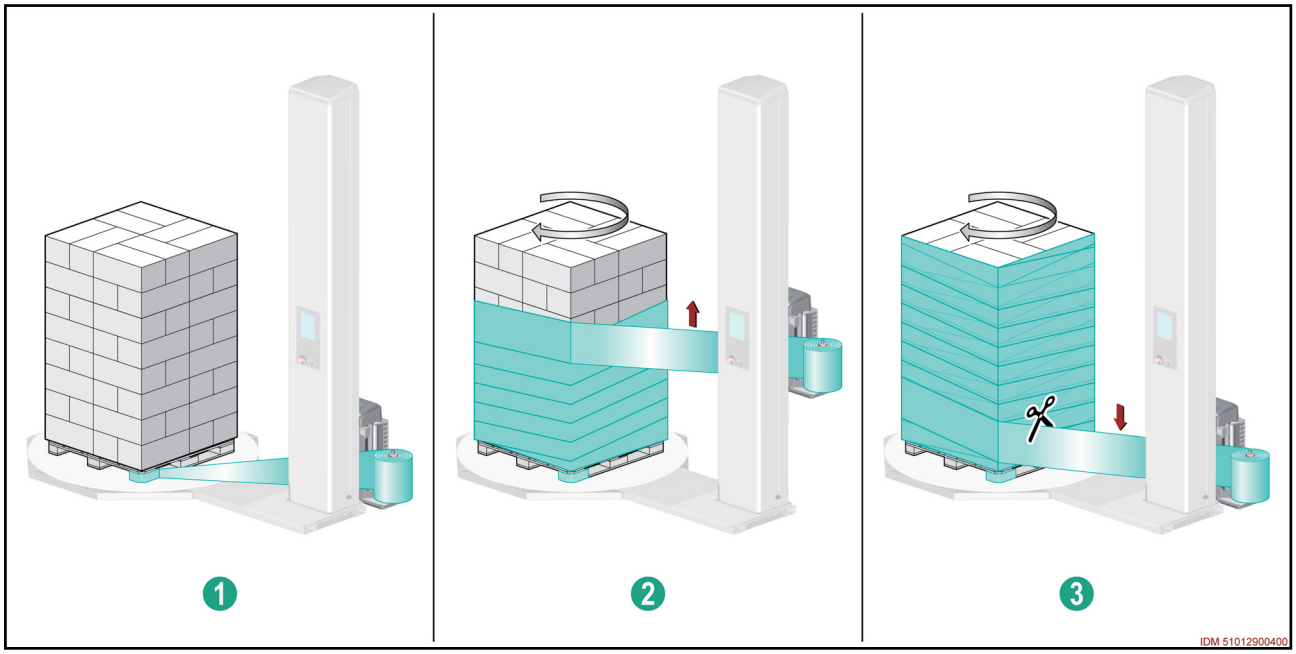
P) Power supply phases



Cycle

The figure shows the operating cycle and indicates the main operating areas.

Stage ❶



– Correctly load the new product to be wrapped in the middle of rotating platform.
– Tie the trailing end of the film to the base of the product to be wrapped.

Stage ❷

– Start the wrapping cycle that will be performed based on the previously set parameters.
– **Manual wrapping:** start the platform and keep the special control pressed to start the wrapping process.
– Release control when wrapping has reached the desired height.
– **Automatic wrapping:** set up the desired parameters and press the special control to start the cycle.
– The machine carries out wrapping and at the end of the set-up cycle it stops automatically.

Stage ❸

– Manually cut the film and cause it to adhere to the wrapped product.
– Remove the wrapped product to be able to load the next one to wrap.
– The machine is ready for a new wrapping cycle.

Types of wrapping

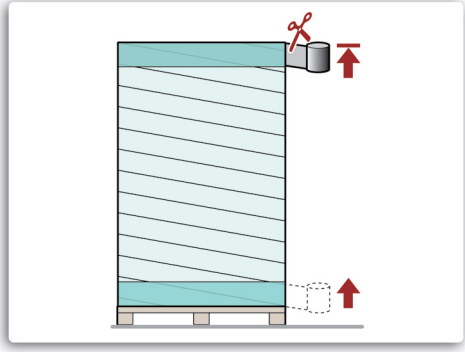
The wrapping can be made in manual or automatic mode.

– With the manual mode, platform rotates at a reduced speed, while reel holding carriage is activated by a non-release control.
This mode allows for the wrapping to be made on an occasional basis, according to the specifications of the load to be wrapped (See “Control system.”).

– With the manual mode the wrapping can be programmed according to the specifications of the load batch to be wrapped.

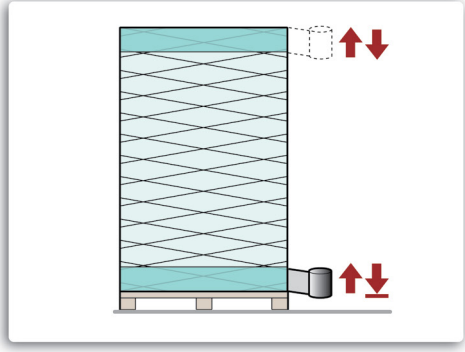
– The figures show the types of wrapping that can be programmed with the automatic mode operation.

– **Single wrapping:** it starts at the base of the load to be wrapped (with stabilisation wraps) and ends at the top of the load, after completing the closing wrapping.
– Move the reel carriage to fully lowered position from the control panel to start a new wrapping.

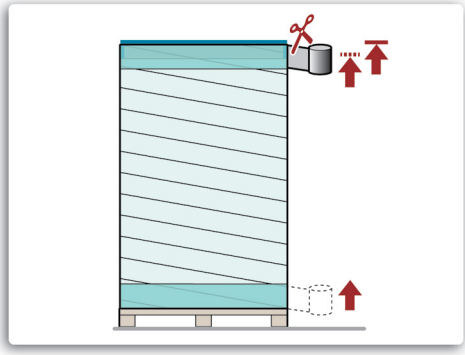


NOTE
The operator can decide whether to cut the film when the carriage is in the high position or in the low position.

– **Double wrapping:** it starts at the base of the load to be wrapped (with stabilisation wraps) and ends at the top of the load.
– After completing the reinforcement at the top of the load, the wrapping continues downwards and stops after the closing wrapping.



– **Single wrapping with sheet feeder:** it starts at the base of the load to be wrapped (with stabilisation wraps) and stops temporarily at the top of the load.
– After inserting the covering sheet the operator must enable the control to restart the wrapping.
– After completing the upper reinforcement, the wrapping stops.
– Move the reel carriage to fully lowered position from the control panel to start a new wrapping.



NOTE
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– **Double wrapping with sheet feeder:** it starts at the base of the load to be wrapped (with stabilisation wraps) and stops temporarily at the top of the load.
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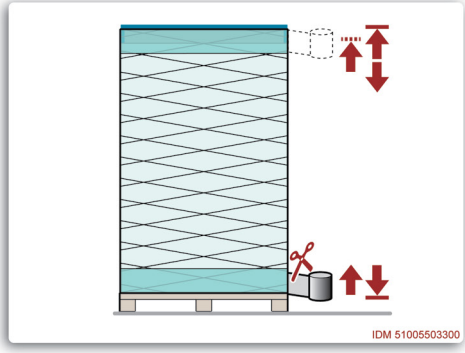


Residual risks

Residual risks are defined as: **"Any risk that remains notwithstanding the safety solutions adopted and integrated during the design phase"**.

- Each residual risk is signalled with a special sign. Some of them are applied close to the areas where the risk is present, others are placed in an easily visible position.
- The list includes the residual risks that may persist on this type of machine.
- **Risk of projection of objects:** during operation there may be a risk linked with wrapping product stability characteristics in the event of excessive operation speed.
- The operator must adjust the wrapping speed according to the product features and during operation he/she shall not halt near the machine.
- **Risk of slipping:** do not climb onto or approach the platform during operation.
- Do not climb on the platform using the lifting equipment during operation.
- **Risk of body part crushing:** do not stand near and/or approach the area between the column and the product to be wrapped during operation.
- **Risk of crushing upper limbs:** do not introduce or place upper limbs in/next to any machine moving parts during operation.
- **Risk of crushing or shearing lower limbs:** keep lower limbs away from the platform during operation (fork inserting points version HSD).
- In addition to the precautions for the signalled risks, the following measures must be implemented.
  - Do NOT approach or allow people to approach the moving parts of the machine in order to avoid dangerous collisions.
  - When the film is inserted, pay special attention in order to prevent collisions, abrasion and crushing of the upper limbs.

Incorrect uses that are reasonably expected

Improper use: reasonably foreseeable use different from what is specified in the use manual, that may be caused by human behaviour.

– ONLY trained, documented and authorized Operators are allowed to use the machine.
– DO NOT use or allow other persons to use the machine for purposes and in ways different from what specified by the Manufacturer.
– NEVER use the tool if the scheduled maintenance interventions have not been carried out accordingly
– DO NOT use the machine in places that are at risk of fire and / or explosion.
– When the products are wrapped, the radius of action of the machine must be kept free from people.
– DO NOT carry out any intervention when the machine is being operated. Stop the machine and put it in safety condition before carrying out any intervention.
– DO NOT clean or wash the machine using aggressive products that may damage its components.
– DO NOT leave the machine unattended during operation and DO NOT leave it at the end of the work without stopping it to safety conditions.

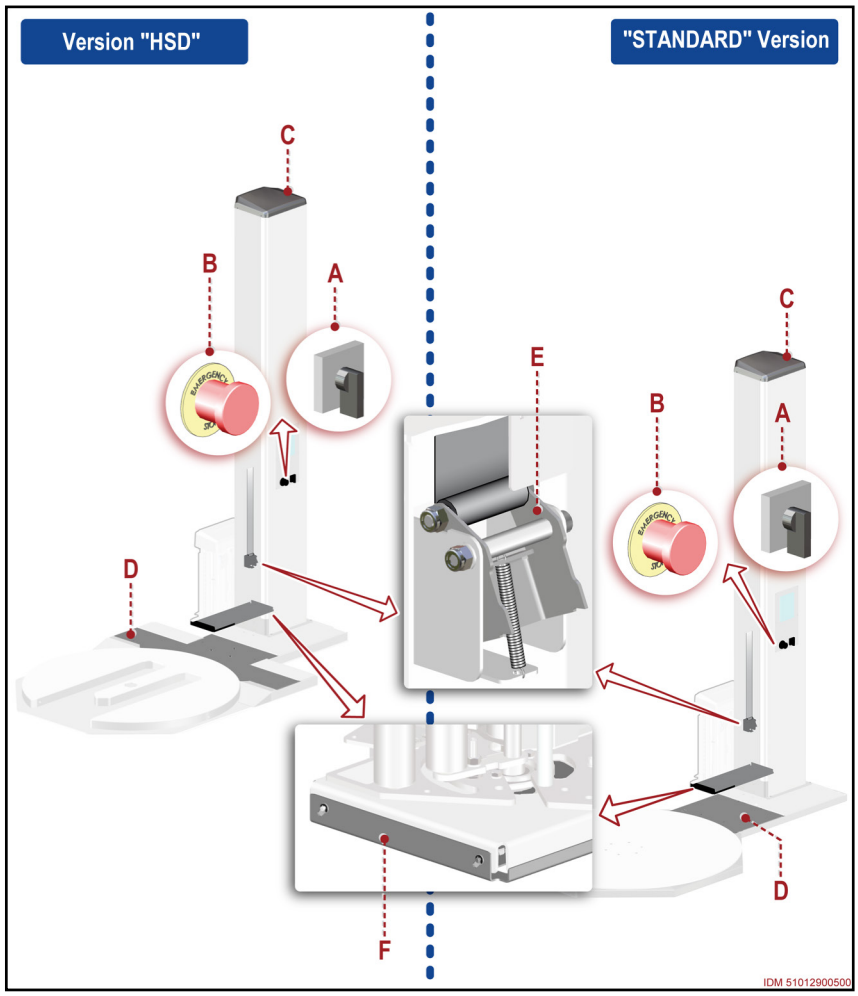
Optional Accessories

Some accessories designed to improve the performance and versatility of the machine are available from the manufacturer. This list contains a description of the main ones.

– **Ramp:** it makes product loading and unloading easier when a pallet truck driven by a ground-level operator is used.
– **Lifting frame:** structure under the support base, used to load/unload the products to be wrapped by means of a “stackers”pallet truck.
– **Burying frame:** structure used to bury the support base of the machine.
– **Weighing Unit:** device used to weigh the palletised product located on the rotating platform.
– **Pressing roller:** this device keeps the product stabilised during wrapping.

Description of the safety devices

The machine is equipped with safety devices that reduce the risks during the man-machine interaction.



A) Isolator switch: safety control to disconnect electric power supply.

B) Emergency stop button: safety control that, in case of an imminent risk, stops all parts whose function might constitute a risk.
For further details on devices **A-B**, refer to paragraph “Description of the controls.”

C) Fixed guard: safety device that prevents access to the parts whose operation may be dangerous.

– The device is secured and it can be opened only by means of tools.

– Guard can be removed only when the machine is stopped under safe conditions and must be installed before starting it.

D) Fixed guard: safety device that prevents access to the parts whose operation may be dangerous.

– The device is secured and it can be opened only by means of tools.

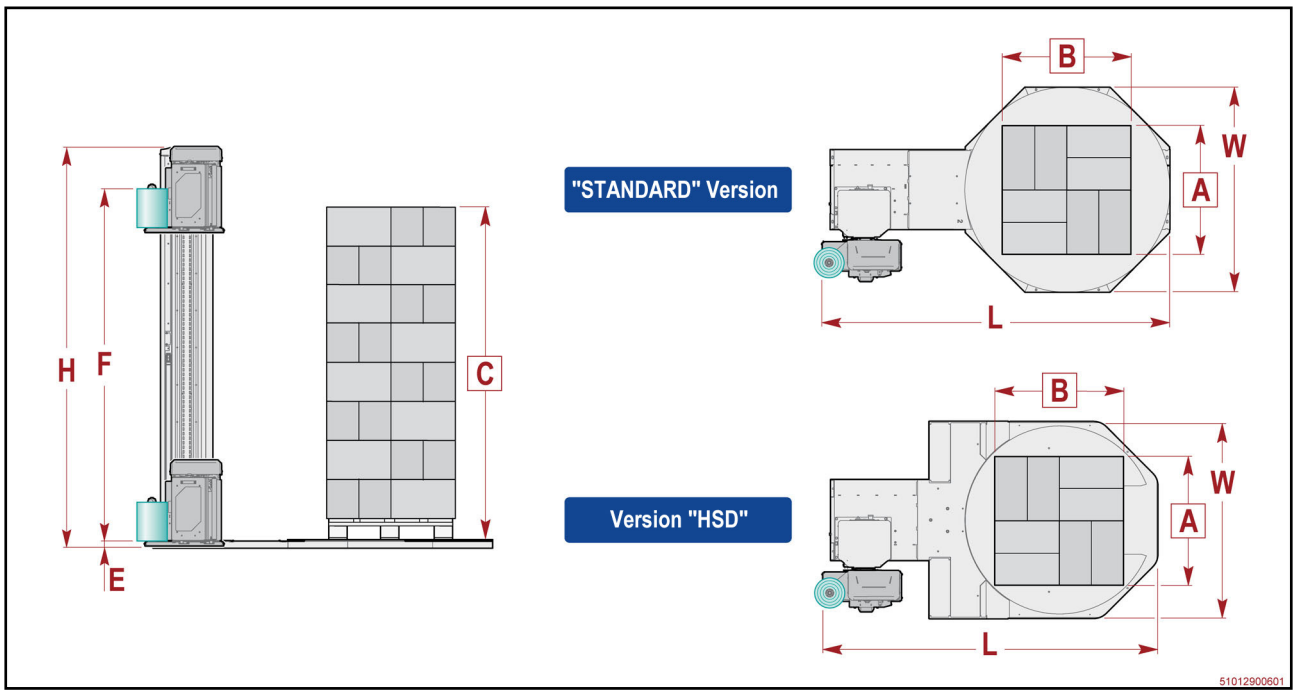
– Guard can be removed only when the machine is stopped under safe conditions and must be installed before starting it.

E) Fall arrest system: safety device that prevents the risk of a fall of the carriage in the event of lifting strap breaking.

– System is equipped with a spring device that locks the reel holding carriage after a fall of 10 mm.

F) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

Technical data of machine



■ Dimensions and weights (Standard version)

ProWrap Model	*Size of the load to be wrapped AxBxC (mm)*	*Weight of the load to be wrapped (kg)*	*Diameter of the platform (mm)*	*Dimensions of the machine LxWxH (mm)*	*Max weight of the machine (kg)*
16_L_FM	Min 600x600x700 Max 1000x1200x2200	xx ÷ 2400	1650	2831x1650x2714	526
16_L_M					526
16_L_PW					549
16_M_FM	Min 600x600x700 Max 1000x1200x2600	xx ÷ 2400	1650	2831x1650x3114	541
16_M_M					541
16_M_PW					564
16_H_FM	Min 600x600x700 Max 1000x1200x3000	xx ÷ 2400	1650	2831x1650x3514	545
16_H_M					545
16_H_PW					568
18_L_FM	Min 600x600x700 Max 1200x1200x2200	xx ÷ 2400	1800	2982x1800x2714	552
18_L_M					552
18_L_PW					575
18_M_FM	Min 600x600x700 Max 1200x1200x2600	xx ÷ 2400	1800	2982x1800x3114	567
18_M_M					567
18_M_PW					590
18_H_FM	Min 600x600x700 Max 1200x1200x3000	xx ÷ 2400	1800	2982x1800x3514	571
18_H_M					571
18_H_PW					594
22_L_FM	Min 600x600x700 Max 1500x1500x2200	xx ÷ 2400	2200	3382x2200x2714	660
22_L_M					660
22_L_PW					683
22_M_FM	Min 600x600x700 Max 1500x1500x2600	xx ÷ 2400	2200	3382x2200x3114	675
22_M_M					675
22_M_PW					698
22_H_FM	Min 600x600x700 Max 1500x1500x3000	xx ÷ 2400	2200	3382x2200x3514	679
22_H_M					679
22_H_PW					702
Height above ground of the platform 75 mm					

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Dimensions and weights (version HSD)

ProWrap Model	Maximum size of the load to be wrapped AxBxC (mm)	Max weight of the load to be wrapped (kg)	Diameter of the platform (mm)	Dimensions of the machine LxWxH (mm)	Max weight of the machine (kg)
HS_L_FM	Min 600x600x700 Max 800x1200x2200	xx ÷ 1200	1650	2874x1736x2732	718
HS_L_M					718
HS_L_PW					741
HS_M_FM	Min 600x600x700 Max 800x1200x2600	xx ÷ 1200	1650	2874x1736x3132	733
HS_M_M					733
HS_M_PW					756
16_M_FM	Min 600x600x700 Max 800x1200x3000	xx ÷ 1200	1650	2874x1736x3532	737
16_M_M					737
16_M_PW					760
Height above ground of the platform 83 mm					

Technical specifications

	Unit of measurement	Value
OPERATING PROPERTIES		
Height of wrapping start **E**	mm	20 ÷ 120
Height of wrapping end **F**		
- Model **L**	mm	2400
- Model **M**	mm	2800
- Model **H**	mm	3200
Rotation speed of the platform	rpm	6 ÷ 12
Maximum level of noise	dB(A)	72.0
Electric supply		
The power supply specifications are those shown in the identification plate applied to the machine.	-	-
- With single-phase power supply: install a circuit breaker “A” in the line.	-	-
- With three-phase power supply: install a circuit breaker “B” in the line.	-	-
Electric protection class	-	IP 54
Environmental conditions		
Maximum operating height (asl)	m	1000
Relative humidity (detected at a temperature included between 20°C and 40°C)	-	80%
Ambient functioning temperature	°C	+5 ÷ 40
Environmental brightness	LUX	150

Technical specifications of pressing roller

	Unit of measurement	Value
Weight	kg	-
Operating pressure	bar	6
Air consumption at the working pressure		
- Model **L**	Nl/cycle	9,32
- Model **M**	Nl/cycle	11,77
- Model **H**	Nl/cycle	13,73
Height of the load to be wrapped		
- Model **L**	mm	1500 ÷ 2200
- Model **M**	mm	1600 ÷ 2600
- Model **H**	mm	1800 ÷ 3000
Height of the load to be wrapped (with optional extension)		
- Model **L**	mm	750 ÷ 2200
- Model **M**	mm	850 ÷ 2600
- Model **H**	mm	1050 ÷ 3000

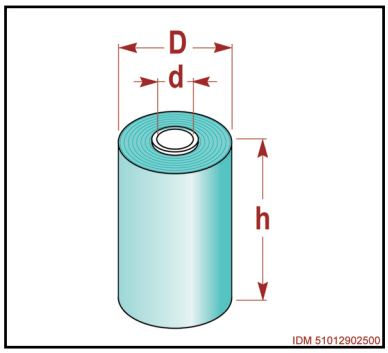
■ Specifications of the accessories available on request

	Unit of measurement	*Weight*	*Capacity*
Ramp	kg	58	1000
Weighing unit	kg	260	2000
Floating weighing unit	kg	270	2000
Lifting frame	kg	260	2000
Burying frame	kg	150	-

Technical data of reel

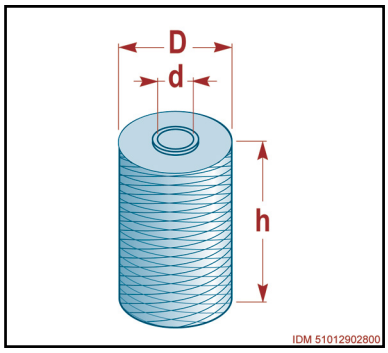
■ Dimensions of film reel

	Unit of measurement	*Value*
Maximum external diameter **D**	mm	250
Inside Diameter **d**	mm	76
Maximum height **h**	mm	500
Maximum height **h** (Machine with reel holding carriage of type PW750).	mm	750
Film thickness (Machine with reel holding carriage of type EM - M - FM).	µm	9-12-17-23
Film thickness (Machine with reel holding carriage of type PW - DM).	µm	17 ÷ 23
Max Weight	kg	17



■ Net reel dimensions

	Unit of measurement	*Value*
Maximum external diameter **D**	mm	250
Inside Diameter **d**	mm	76
Maximum height **h**	mm	500
Maximum height **h** (Machine with reel holding carriage of type PW750).	mm	750
Max Weight	kg	17



Description of outer areas

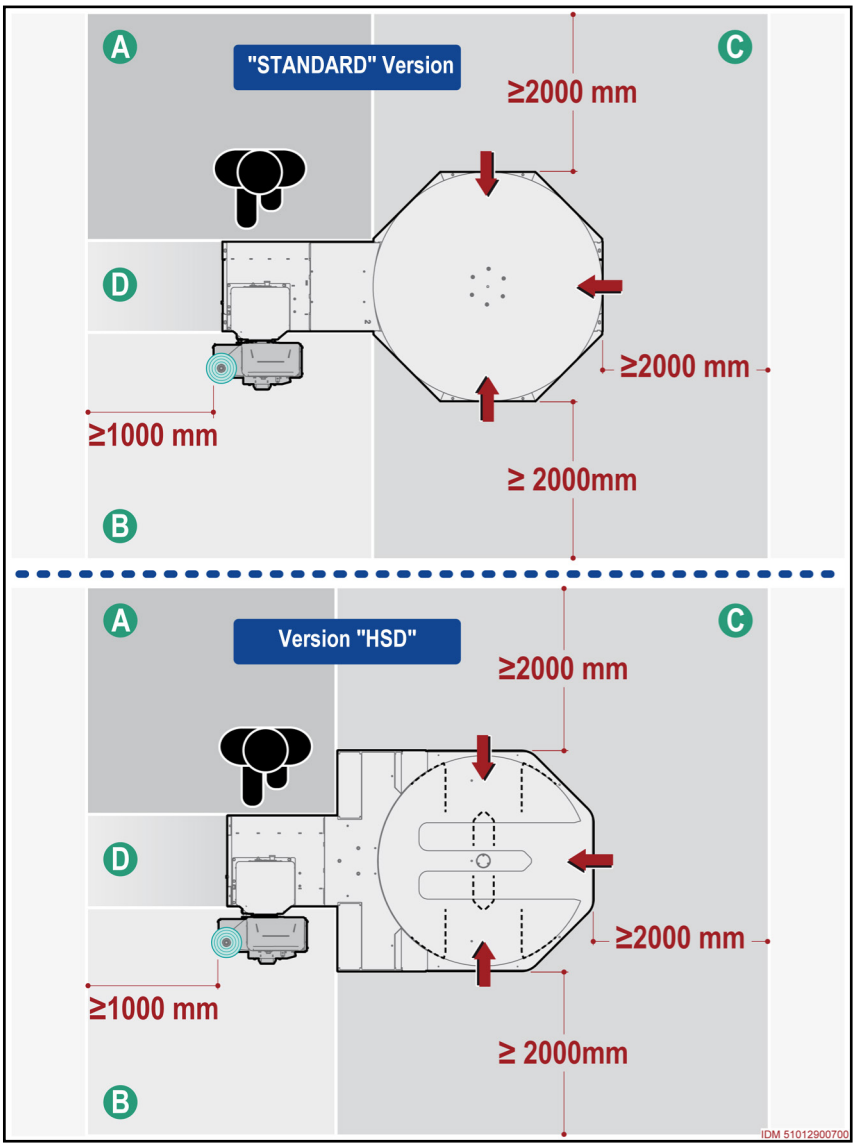
The figure shows different areas to be considered in the planning of the installation area.

A) Operator control and standing area

B) Refill area for reel

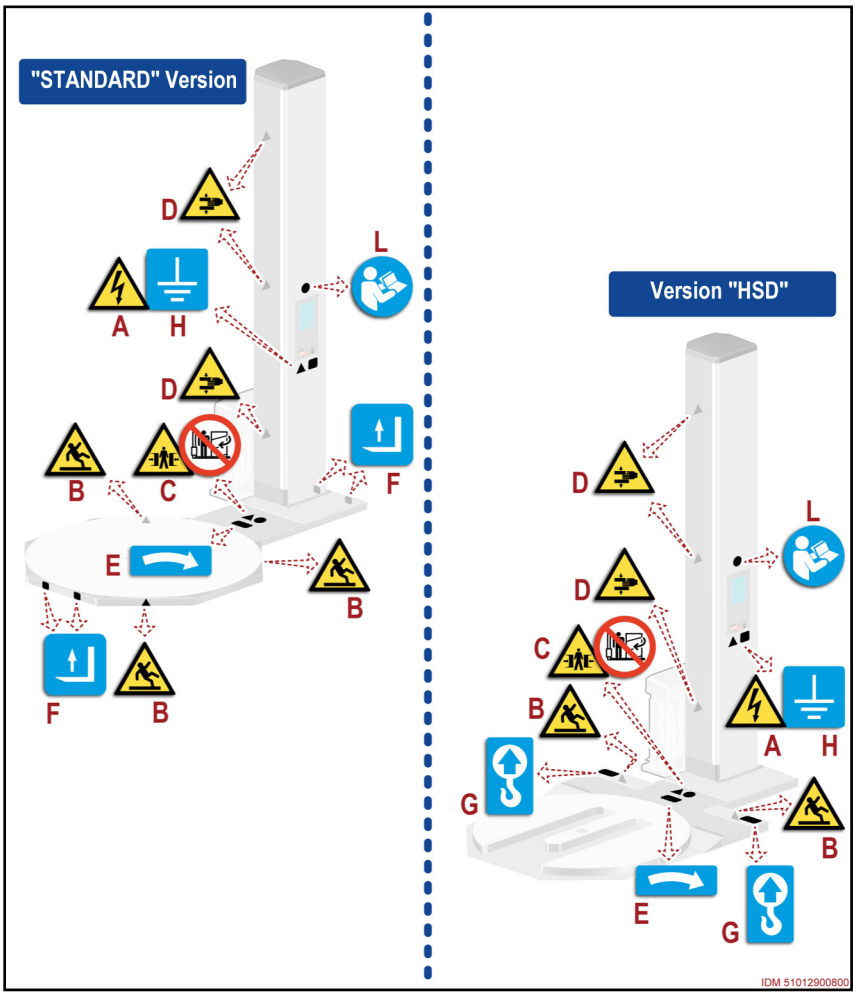
C) Loading/unloading area for the products to be wrapped

D) Perimeter area



Safety and information symbols

The figure shows the applied signals and the list includes the description of the shown residual risk.



A) Electrical shock or electrocution hazard: hazard signal that warns the operator from accessing the areas under voltage in order to avoid risks.

B) Risk of slipping: danger signal indicating that attention should be paid during transfers on flat surfaces.

C) Risk of crushing body parts: danger signal warning to stay out of the active machine work range.

D) Risk of crushing upper limbs: danger signal warning to keep upper limbs out of the active machine work range.

E) Information Signal: indicates the required direction of rotation for operation.

F) Information Signal: indicates the lifting points for fork-type devices.

G) Information sign: it indicates the points where to attach the hooks of the lifting device.

H) Information Signal: indicates the earthing point.

L) Information warning sign: read the operation and maintenance manual carefully before performing any operations.

– Please keep safety signs and information legible and follow the instructions.

– Signals which are no longer legible must be replaced and repositioned in the same place of origin.

Important

At the time of ordering provide the code of each signal to be replaced that is specified in the spare parts catalogue.

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Recommendations for maintenance interventions

– The recommendations represent a summary of those shown in the SAFETY WARNINGS section.

– The personnel authorized to carry out the ordinary maintenance must have qualified expertise and specific skills in the field of intervention.

– Any work on the electrical system must ONLY be performed by technicians with acknowledged, field-specific skills.

– Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

– According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.

– Before carrying out any intervention, activate all the safety measures, and assess any residual energy which may still be present.

– Carry out the interventions ONLY according to the modes recommended by the Manufacturer in the “Instructions for use”.

– All operations must be carried out ONLY with suitable tools which shall be in good condition, in order to avoid damaging any components and parts of the machine.

– At work completion, restore all the security conditions aimed to prevent and minimize the risks during the human-machine interaction.

– At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.

– Refer to the Technical Assistance Service of the Manufacturer, in case interventions not described in the “Instructions for use” are needed.

– **In order to avoid safety hazards for the operators and financial losses, follow not only the recommendations but also the information in the SAFETY WARNINGS section.**

Scheduled maintenance intervals

Always keep the machine in optimum operating condition and carry out the routine maintenance according to the intervals and procedures specified by the Manufacturer.

– In case of prolonged inactivity, carry out some maintenance operations in order to preserve functionality and prevent further damages.

– After prolonged inactivity, carefully check that the operating functionality has remained unaltered.

– A good maintenance will ensure a stable performance over time, longer working life and constant compliance with the safety requirements.

Maintenance schedule

Every working day

Component	*Operation required*	*Procedures to implement*
Safety devices	Checking	- Make sure that the listed devices are efficient. - Emergency stop button. - Main electric disconnector

Every 40 work hours (max 1 week)

Component	*Operation required*	*Procedures to implement*
Lifting belt for the reel holding carriage	Checking	- Check this component for wear. - Replace the belt in case it is excessively worn. (See “Replacing the lifting belt of the carriage”).
Reel holding carriage sliding guides	Cleaning	- Remove any impurities with a plastic scraper. - Clean with a soft cloth soaked in a non-flammable and non-corrosive detergent. - Properly dry the surfaces. **Attention Warning** **Do not use water jets.**
Load to be wrapped detection photocell	Cleaning	- Clean the detection area of the photocell. - Use a clean, dry (not abrasive) cloth.

Every 2000 work hours (max 6 months)

Component	*Operation required*	*Procedures to implement*
Air filter (if any)	Cleaning	- Clean the filter or replace it with an original spare part, if necessary (See “Cleaning and replacement of the air filter”).
Rotating platform rotation chain	Checking	- Check the tension of component. - Adjust tension as required - if necessary (See “Adjustment of chain controlling the rotation of platform”).
	Lubrication	- Lubricate all the greasing points (See “Diagram of the points of lubrication”).
Film pre-stretch belt (Only for reel holding carriages of type PW).	Checking	- Check the tension of component. - Adjust tension as required - if necessary (See “Adjustment of drive chain tensioning”). - Replace the belt in case it is excessively worn.
Film drawing-in rollers (Only for reel holding carriages of type PW).	Cleaning	- Clean with a soft cloth soaked in a non-flammable and non-corrosive detergent. - Properly dry the surfaces. **Attention Warning** **Do not use water jets.**

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Every 5000 work hours (max 12 months)		
Component	*Operation required*	*Procedures to implement*
Vertical movement wheels of the reel holding carriage	Checking	- Check this component for wear. - Replace the component, if it is worn out
Rotation wheels of rotating platform	Checking	- Check this component for wear. - Replace the component, if it is worn out

Diagram of the points of lubrication

Lubricate the parts indicated according to the frequency and methods shown.

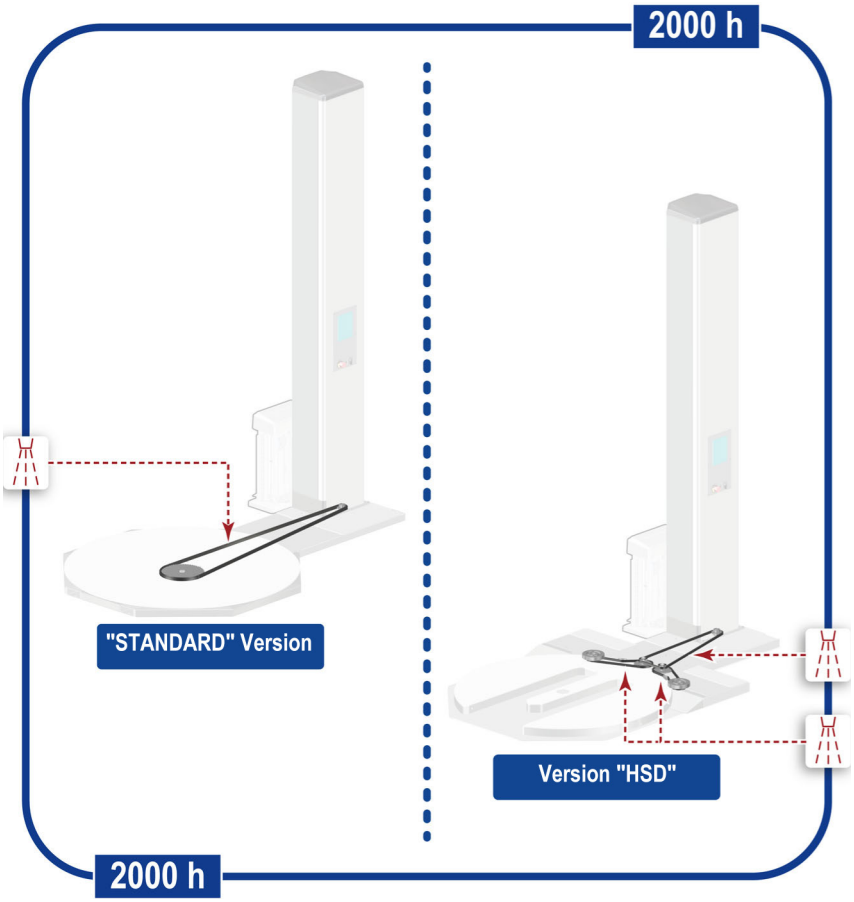
– Use the lubricants (oils and greases) recommended by the Manufacturer or lubricants of equivalent chemical and physical characteristics.

– Some components (reducers, bearings, etc.) do not request lubrication because they are self-lubricating or life lubricated.

– If the ambient temperature is included between -10°C and +35°C, use lubricants with SAE 20 ISO VG50 or SAE 50 ISO VG 300 viscosity grade.

NOTE

If the ambient temperature is not included in the indicated range, contact the Manufacturer for more information on the type of lubricant to be used.



Problems, causes, remedies

The table shows the list of faults that can occur during the standard operation and it highlights possible remedies.

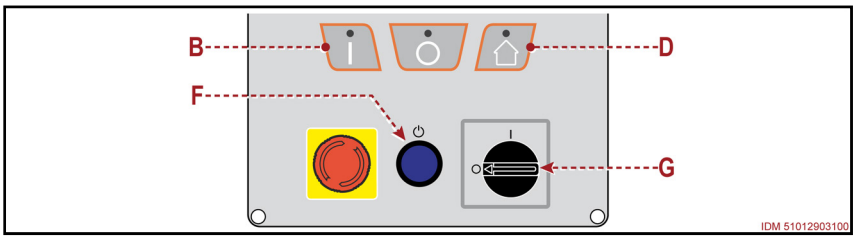
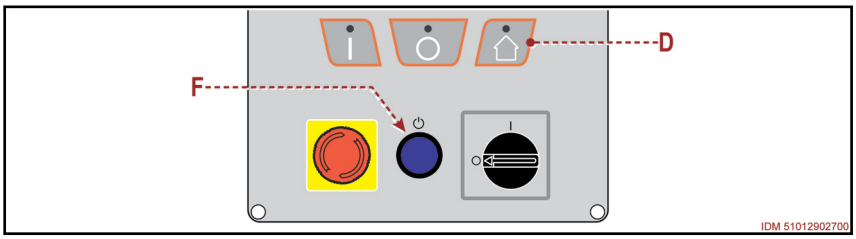


Table: Operation failures

Problem	*Cause*	*Remedy*
With isolator switch **G** on ON, pilot light does not turn off when button **F** is pressed.	Emergency stop button pressed	- Identify the causes that have caused the stop. - Restore normal running conditions - Unlock the emergency stop button with a voluntary action.
When button Start **B** is pressed, the rotating platform does not start.	The photocell did not detect the load to be wrapped	- Check the functionality of the component. - The component must be adjusted (See “Sensitivity adjustment for the product to be wrapped detection photocell”).
	Rotating platform not correctly timed.	- Press key **D**.
The reel holding carriage will not go up.	The photocell did not detect the load to be wrapped	- Check the functionality of the component. - The component must be adjusted (See “Sensitivity adjustment for the product to be wrapped detection photocell”).
	Reel holding carriage not correctly timed.	- Press key **D**.
	Top limit stop detecting microswitch failure	- Check the functionality of the component. - The component must be adjusted.
	Failure of the inverter of the reel holding carriage	- Check the error code.
The reel holder carriage raises but does not stop at the top of the load to be wrapped.	The photocell did not detect the load to be wrapped	- Check the functionality of the component. - The component must be adjusted (See “Sensitivity adjustment for the product to be wrapped detection photocell”).
The ends of the load are wrapped with an excessive amount of reinforcing bands.	Top reinforcing band quantity not correctly set	- Modify the programming.
	Bottom reinforcing band quantity not correctly set	- Modify the programming.
The film is too tightly stretched or too loose.	Tension of film not properly adjusted	- Adjust the tension of film.

Problem	*Cause*	*Remedy*
The machine stops with the reel holding carriage not correctly positioned.	Presence of residues or dust on the reel holding carriage sliding guides	- Remove any residues. Use brushed with soft plastic bristles. Press key **D**.
	There is an obstacle under the reel holder carriage.	- Remove the obstacle. Press key **D**.
	Braking or excessive wear of the reel holder carriage lifting belt	- Replace belt (See “Replacing the lifting belt of the carriage”).
Rotating platform jogging motion.	Rotating platform rotation chain not properly tensioned	- The component must be adjusted (See “Adjustment of chain controlling the rotation of platform”).
	Presence of residues or dust on the wheels	- Remove any residues. Use brushed with soft plastic bristles.
The noise level is too high.	Rotating platform rotation chain not properly tensioned	- The component must be adjusted (See “Adjustment of chain controlling the rotation of platform”).
	Wheels of rotating platform worn out or damaged	- Replace the component.
	Failure of gearmotor driving the rotating platform	- Check the functionality of the component.
Reel holding carriage jogging motion.	Presence of residues or dust on the reel holding carriage sliding guides	- Remove any residues. Use brushed with soft plastic bristles.

Alarm message table



no.	Type of failure	Remedy
		Machine alarms
01	Sensor does not detect the rotation of platform.	- Check the connections and/or the position of sensor. - Press control **F** to silence the alarm.
02	(Lower and upper) sensors do not detect the end of stroke of the reel holding carriage.	- Check the connections and/or the position of sensors. - Press control **F** to silence the alarm.
03	Failure of the relays that power the inverter power circuit.	- Press control **F** or turn the power of the electronic board off and on to silence the alarm. - If the problem persists, disconnect the electric power and contact the Manufacturer's Technical Assistance Service.
05	The carriage drive chain is not correctly tensioned.	- Make sure that the reel holding carriage can move freely and without obstacles. - Check the connections and/or the position of the photocells. - Press control **F** to silence the alarm. - Control **D** lights up. - Press control **D**. Reel holding carriage moves upwards and then it moves downwards again in order to phase the operating units.
06	The photocell does not detect any load to be wrapped.	- Make sure that the load to be wrapped is properly positioned. - Check the connections and/or the position of the photocell.
07	Elements that prevent the correct detection are between sensors of the rotating platform (version HSD).	- Remove the obstacles. - Make sure that the load to be wrapped is positioned on the rotating platform. - Check the connections and/or the position of the photocells.
08	The film reel is exhausted.	- Replace reel (See "Film Coil Feeding").
		Rotating platform inverter alarms
10	The inverter parameters are not properly set up.	- Contact the Manufacturer's Technical Assistance Service.
11	The activation of the inverter electric power is not correctly enabled.	- Contact the Manufacturer's Technical Assistance Service.
12	The electric motor is damaged due to a short circuit.	- Contact the Manufacturer's Technical Assistance Service.
13	The heat protection is damaged because of the overheating of the electric motor.	- Let the motor cool down. - Press control **F** or deactivate and re-activate power (even more than once) to silence the alarm. - If the problem persists, disconnect the electric power and contact the Manufacturer's Technical Assistance Service.
14	Inverter bis power circuit failure.	- Contact the Manufacturer's Technical Assistance Service.
15	Inverter module failure due to overheating.	- Check if the fan system works properly and if there are obstacles in the air flow. - If the problem persists, disconnect the electric power and contact the Manufacturer's Technical Assistance Service.
16	Overvoltage of the hardware electric power supply (higher than 4 A).	- Contact the Manufacturer's Technical Assistance Service.
17	Communication was interrupted because of an internal error.	- Contact the Manufacturer's Technical Assistance Service.

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no.	Type of failure	Remedy
	Reel holder carriage inverter alarms	
20	The inverter parameters are not properly set up.	- Contact the Manufacturer's Technical Assistance Service.
21	The activation of the inverter electric power is not correctly enabled.	- Contact the Manufacturer's Technical Assistance Service.
22	The electric motor is damaged due to a short circuit.	- Contact the Manufacturer's Technical Assistance Service.
23	The heat protection is damaged because of the overheating of the electric motor.	- Let the motor cool down. - Press control **F** or deactivate and re-activate power (even more than once) to silence the alarm. - If the problem persists, disconnect the electric power and contact the Manufacturer's Technical Assistance Service.
24	Inverter bis power circuit failure.	- Contact the Manufacturer's Technical Assistance Service.
25	Inverter module failure due to overheating.	- Check if the fan system works properly and if there are obstacles in the air flow. - If the problem persists, disconnect the electric power and contact the Manufacturer's Technical Assistance Service.
26	Overvoltage of the hardware electric power supply (higher than 4 A).	- Contact the Manufacturer's Technical Assistance Service.
27	Communication was interrupted because of an internal error.	- Contact the Manufacturer's Technical Assistance Service.

Cleaning and replacement of the air filter

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– The intervention must be carried out with the machine stopped in safety conditions.

– The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

Attention Warning

Always wear suitable personal protective equipment in order to avoid safety and health hazards.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.

3. Unhook the grid **A**.

4. Remove the filter **B**.

5. Clean the filter with dry compressed air.

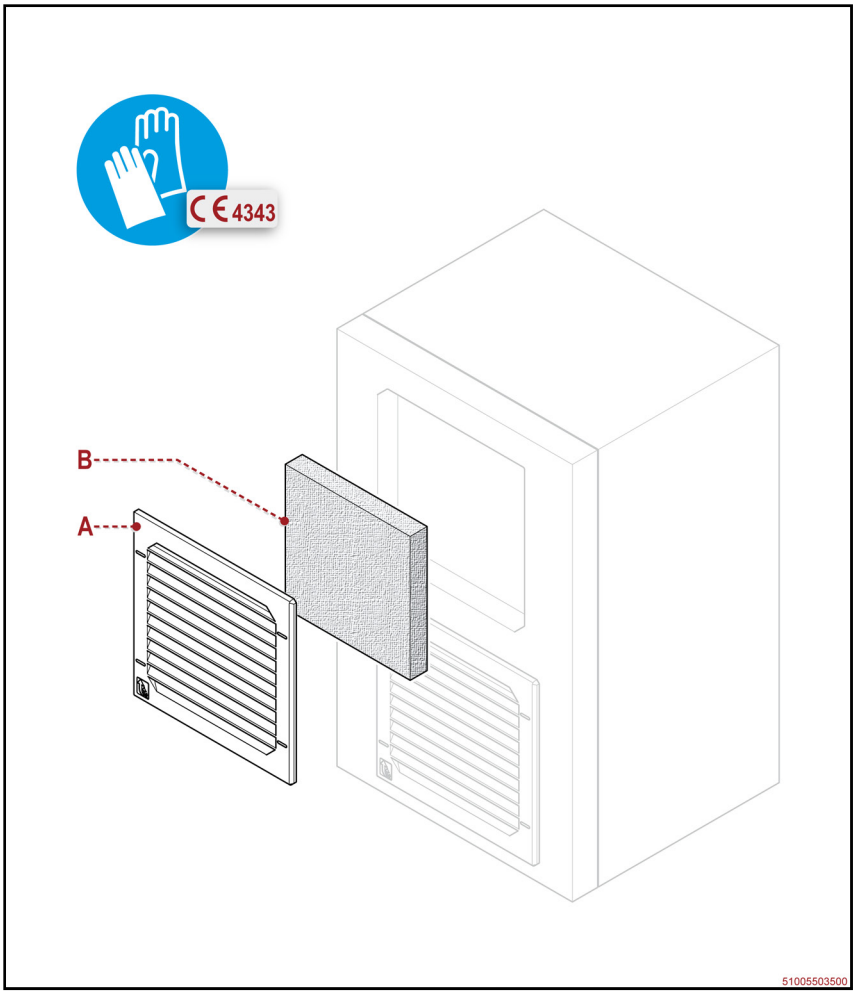
NOTE

Replace the filter with an original spare part, if it is damaged.

6. Re-install the filter **B**.

7. Attach the grid **A**.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**



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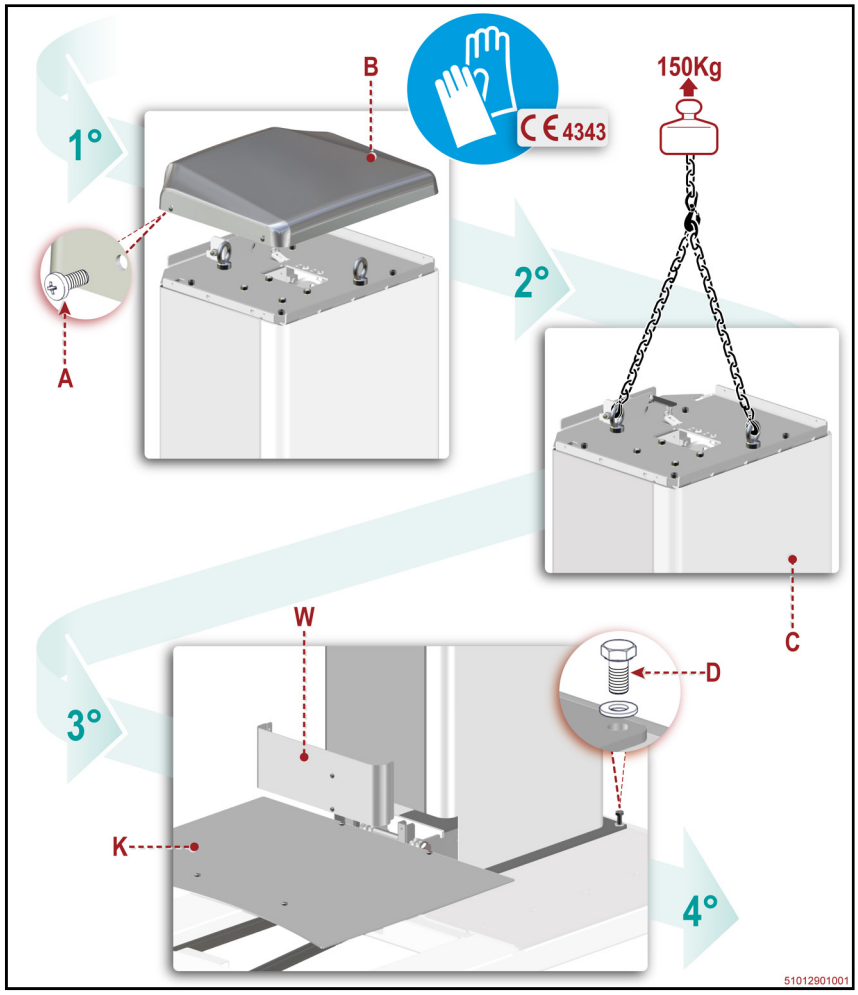
Adjustment of chain controlling the rotation of platform

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.

– The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

Attention Warning

Always wear suitable personal protective equipment in order to avoid safety and health hazards.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.
3. To reach high, not easily accessible or otherwise hazardous areas, implement adequate safety measures to avoid risks.
4. Disassemble the pressing roller (See "Disassembly and re-assembly of the Pressing Roller").
5. Disassemble the reel holding carriage (See "Disassembly and re-assembly of the reel holding carriage").

Important

Only for reel holding carriages of type PW

1°

6. Remove the fastening elements **A** and remove the component **B**.

2°

7. Attach the column **C** to a lifting device.

3°

8. Disassemble the guards **K-W**.
9. Loosen the screws **D**.

4°

10. Bring the column to a horizontal position.

– **Insert the shim E under the column to keep it horizontal.**

5°

11. Slightly loosen the nuts **F**.

12. Adjust the tension of chain **G** by means of the adjusting system **H**.

Important

Do not overtighten so as not to cause any malfunctioning.

13. Tighten the nuts **F**.

6°

14. Lift the column to its vertical position.

15. Introduce and tighten the screws **D**.

16. Remove the lifting device.

17. Re-install the guards **K-W**.

7°

18. Install the component **B** and lock it in place with the fastening elements **A**.

19. Install the reel holding carriage (See “Disassembly and re-assembly of the reel holding carriage”).

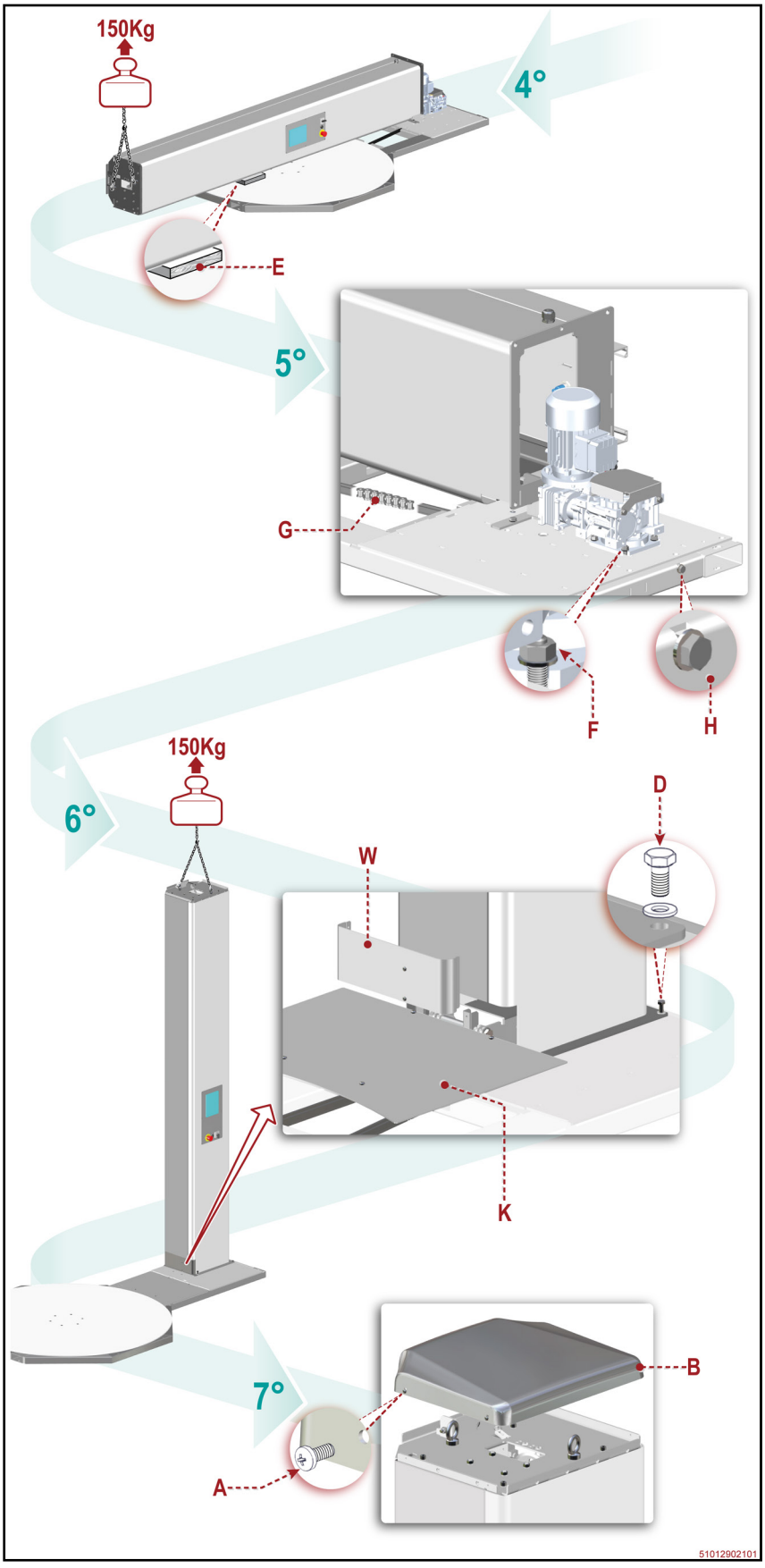
Important

Only for reel holding carriages of type PW

20. Install the pressing roller (See “Disassembly and re-assembly of the Pressing Roller”).

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

21. Start the machine and make sure that the operation has been carried out properly.



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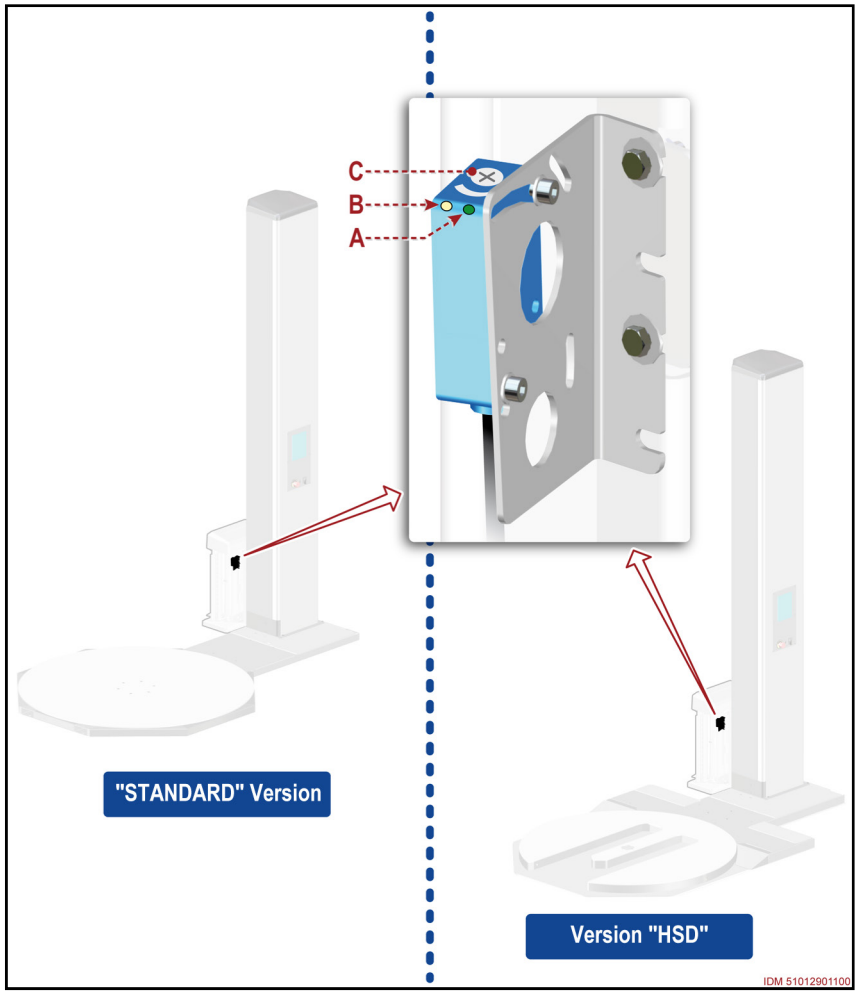
Sensitivity adjustment for the product to be wrapped detection photocell

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– The sensitivity adjustment is required when the photocell does not detect the presence of the load to be wrapped.

– The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Correctly load the new product to be wrapped in the middle of rotating platform.
3. Move the reel holder carriage to match the load to be wrapped.
4. Check if the photocell detects the load to be wrapped.

– The light **A** lighting up (green light) indicates that the photocell is powered.

– When pilot light **B** turns on (yellow light), it means that the load to be wrapped has been detected.

– When the light **B** is off, slowly rotate the control **C** until the indicator light illuminates.

NOTE

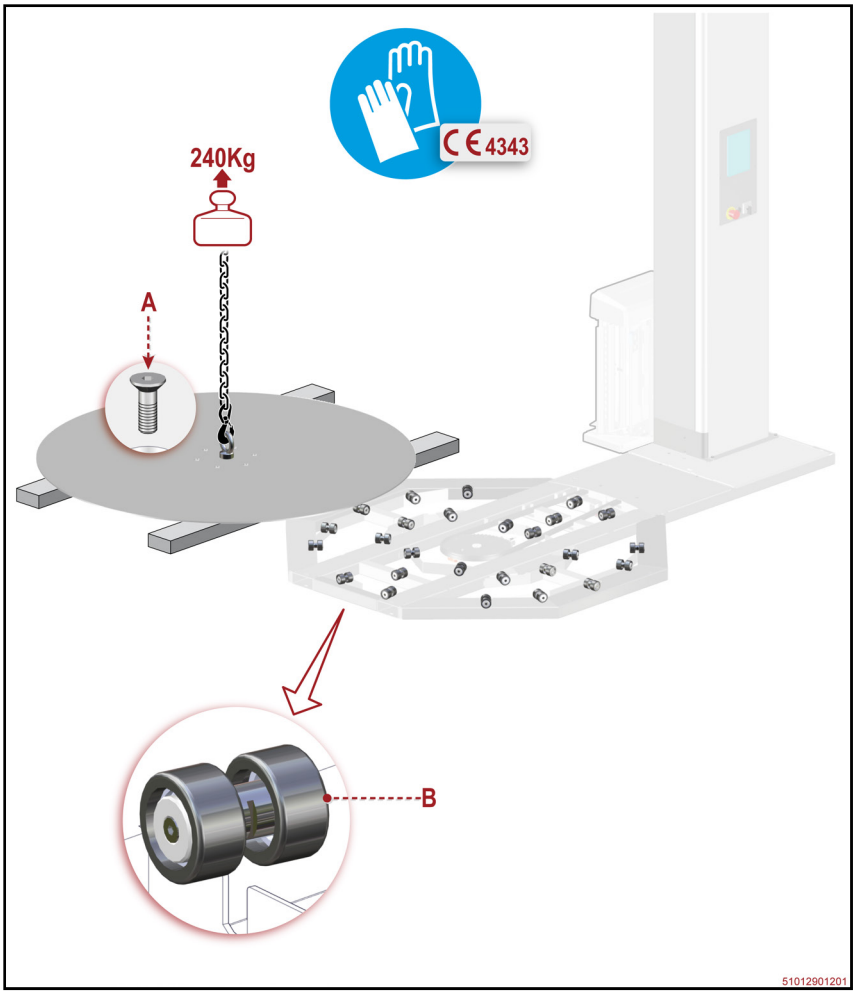
Do NOT adjust the photocell sensibility excessively in order to prevent it from detecting elements that are not to be wrapped.
The detection of elements that are not to wrapped can alter the point of stop of reel holding carriage.

Replacing the rotating platform wheels (standard version)

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.

– The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

Attention Warning

Always wear suitable personal protective equipment in order to avoid safety and health hazards.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.

3. Loosen the screws **A**.

4. Fit the eyebolt on the rotating platform.

5. Attach the lifting device to the eyebolt.

6. Lift and move the rotating platform on the side.

7. One at a time, remove all the wheels **B**.

8. One at a time, fit all the new wheels.

Important

Replace the components ONLY with GENUINE SPARE PARTS or with other components of equivalent design and functional specifications.

9. Adjust the platform in its original position.

10. Remove the lifting device.

11. Remove the eyelet.

12. Tighten the screws **A**.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

13. Start the machine and make sure that the operation has been carried out properly.

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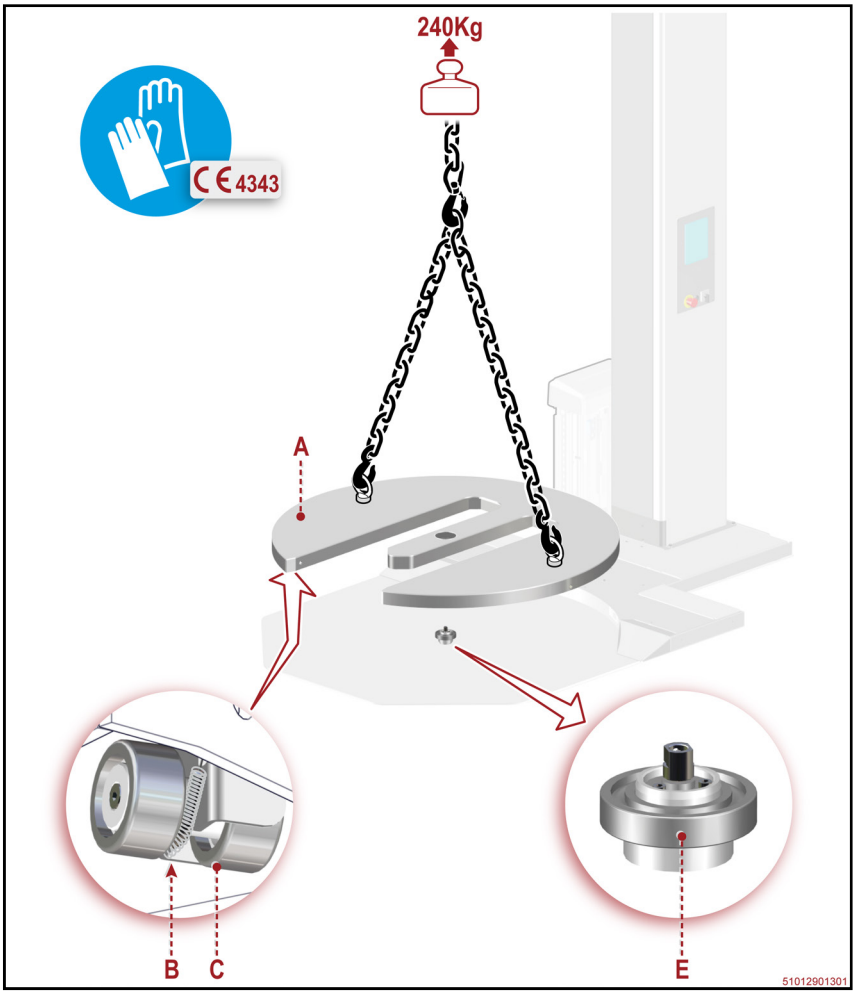
Replacing the rotating platform wheels (version HSD)

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.

– The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.



Attention Warning

Always wear suitable personal protective equipment in order to avoid safety and health hazards.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.

3. Disconnect all connectors from their sensors.

4. Fit the eyebolts on the rotating platform.

5. Set up a hook-shaped lifting device with a suitable capacity.

6. Hook the lifting device using the eyelets.

7. Lift the rotating platform **A** and place it on supports to facilitate the operation.

Important

The lifting device must be kept tensioned, to avoid sudden falls and the associated body parts crushing risks.

8. One by one, undo the retaining springs **B** and remove the wheels **C**.

9. One at a time, fit all the new wheels and fasten the retaining springs **B**.

10. Check the integrity of the bearing **E** and, if necessary, replace it.

Important

Replace the components ONLY with GENUINE SPARE PARTS or with other components of equivalent design and functional specifications.

11. Slightly lift the platform , remove the supports and reposition it on the base.

– **During repositioning, be careful that the pin of the platform properly engages in bearing E.**

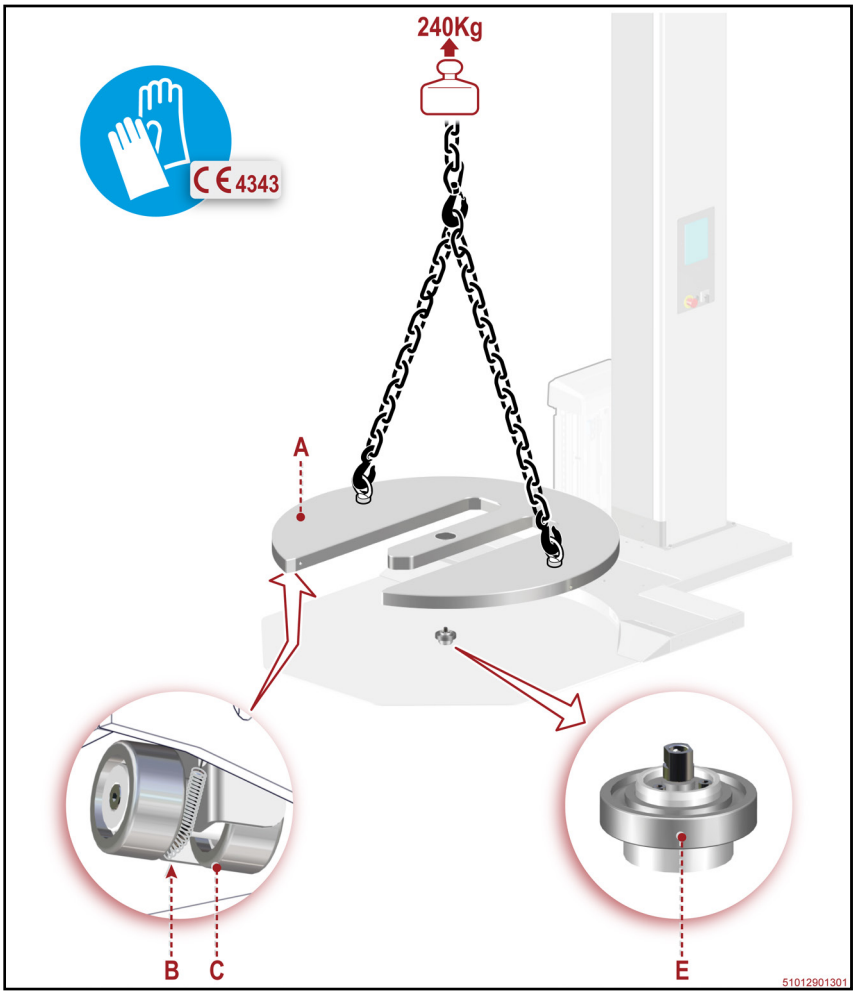
12. Remove the lifting device.

13. Remove the eyebolts

14. Connect the connectors to their sensors.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

15. Start the machine and make sure that the operation has been carried out properly.



Replacing the lifting belt of the carriage

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.
– The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

Attention Warning

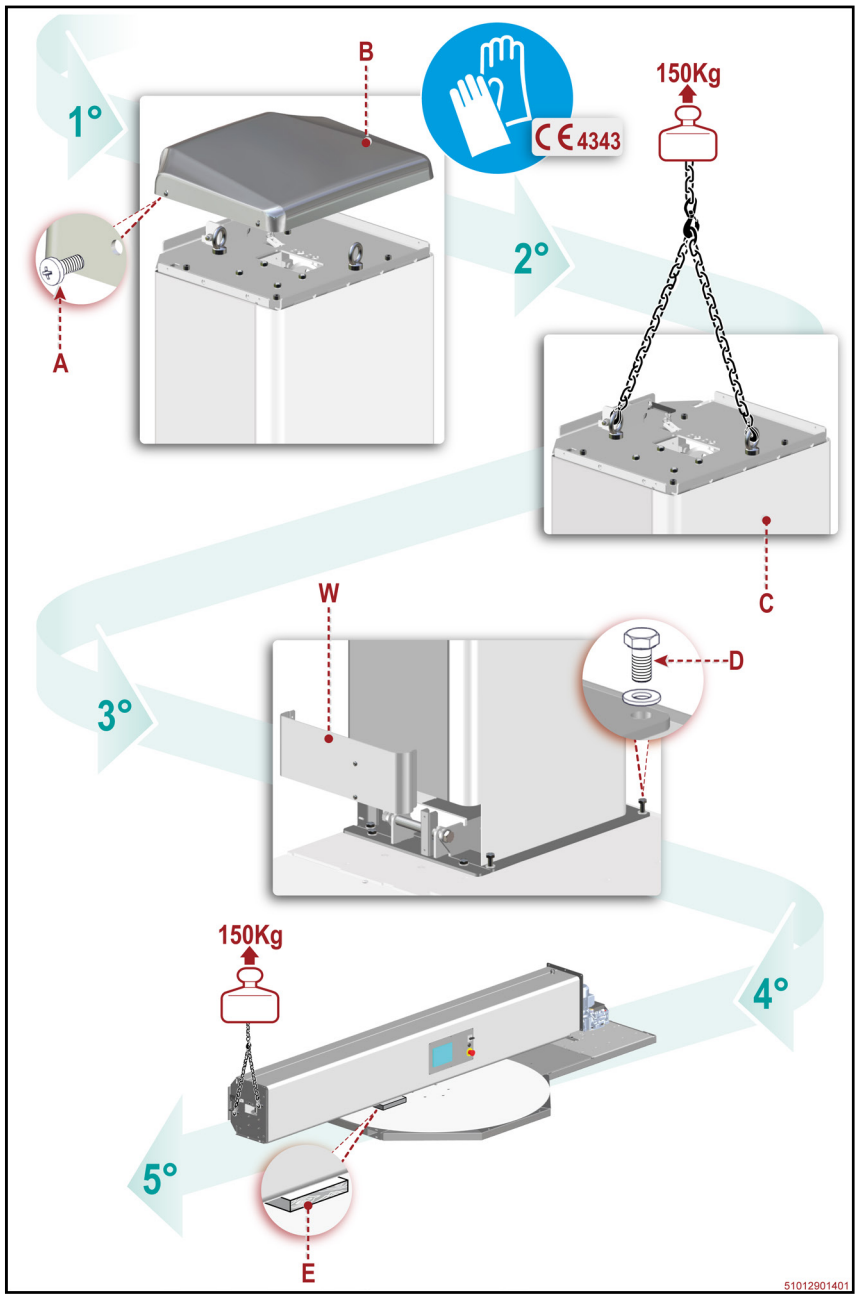
Always wear suitable personal protective equipment in order to avoid safety and health hazards.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.

3. To reach high, not easily accessible or otherwise hazardous areas, implement adequate safety measures to avoid risks.

4. Disassemble the pressing roller (See "Disassembly and re-assembly of the Pressing Roller").

5. Disassemble the reel holding carriage (See "Disassembly and re-assembly of the reel holding carriage").



Important

Only for reel holding carriages of type PW

1°

6. Remove the fastening elements **A** and remove the component **B**.

2°

7. Attach the column **C** to a lifting device.

3°

8. Remove the guard **W**.

9. Loosen the screws **D**.

4°

10. Bring the column to a horizontal position.

– **Insert the shim E under the column to keep it horizontal.**

5°

11. Remove the fastening elements and remove the component **K**.
12. Disconnect all connectors from their sensors.
13. Slip out pin **F**.

6°

14. Partially remove the reel holder carriage to reach the fastening elements.

7°

15. Remove the fasteners **G**.
16. Remove the bushing **H** and remove the damaged belt **L**.
17. Insert the bushing **H** in the new belt.

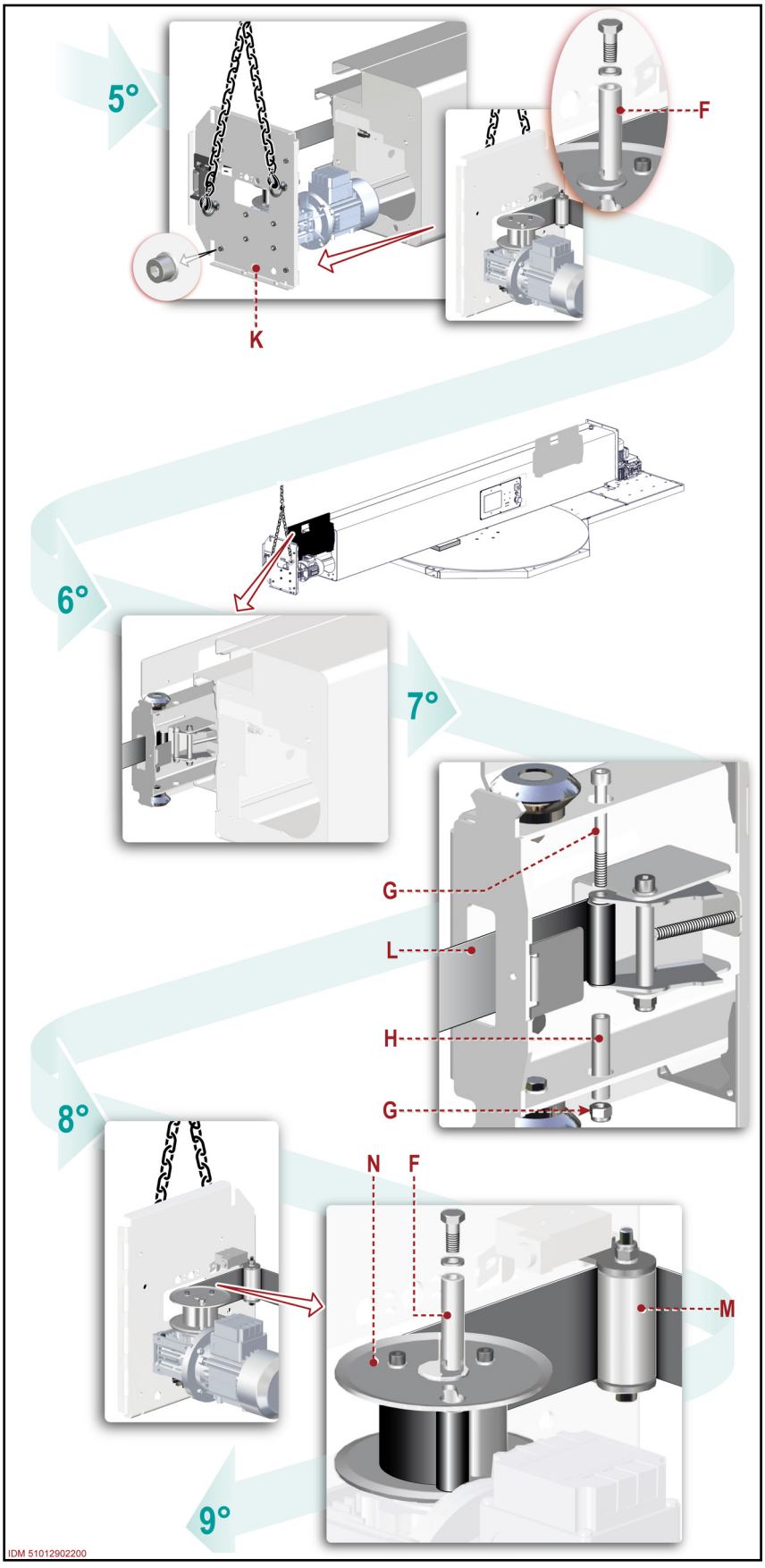
Important

Replace the components ONLY with GENUINE SPARE PARTS or with other components of equivalent design and functional specifications.

18. Secure the end of the belt (with bushing) by means of the fastening elements **G**.
19. Remount the reel holder carriage.

8°

20. Lead the belt over the roller **M**.
21. Insert the pin **F** to connect the end of the belt to the pulley **N**.



9°

22. Install the component **K** and lock it in place with the fastening elements.

23. Connect the connectors to their sensors.

24. Keep the belt taut and move the reel holder carriage to match the base of the column.

10°

25. Lift the column to its vertical position.

26. Introduce and tighten the screws **D**.

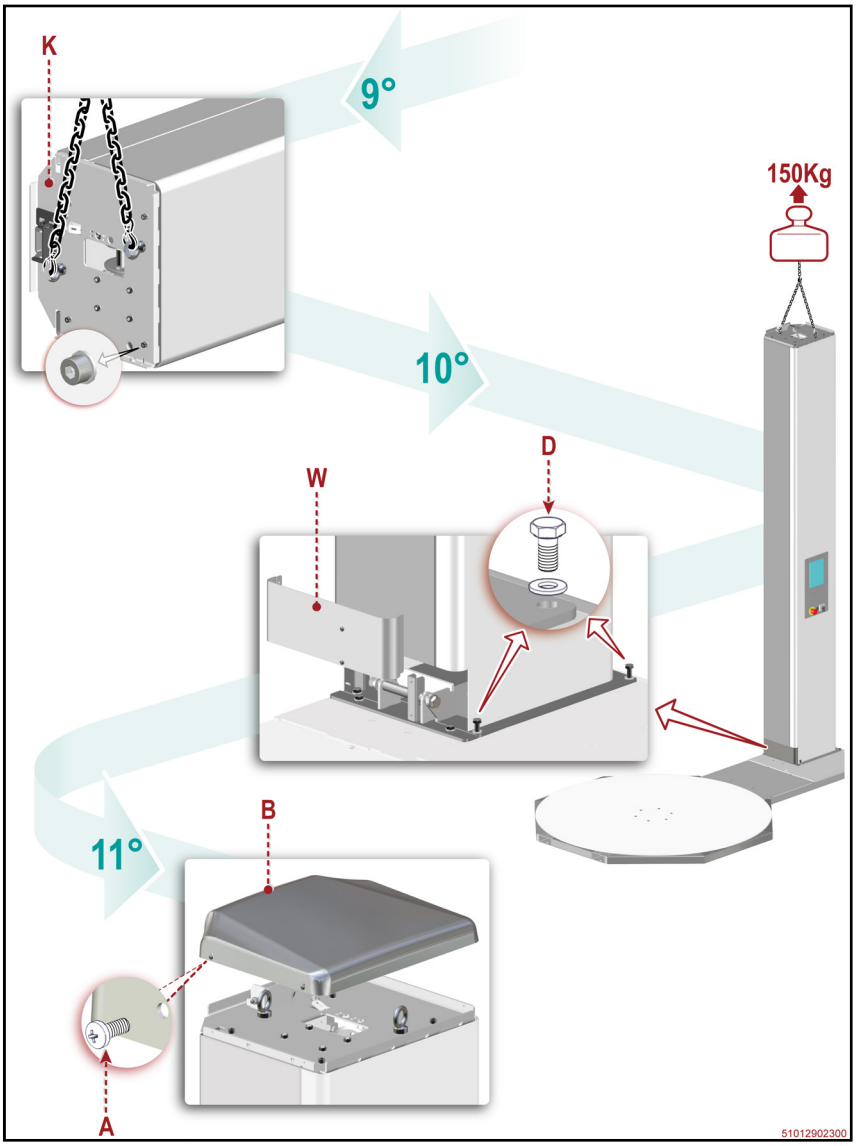
27. Remove the lifting device.

28. Install the guard **W**.

11°

29. Install the component **B** and lock it in place with the fastening elements **A**.

30. Install the reel holding carriage (See “Disassembly and re-assembly of the reel holding carriage”).



Important

Only for reel holding carriages of type PW

31. Install the pressing roller (See “Disassembly and re-assembly of the Pressing Roller”).

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

32. Start the machine and make sure that the operation has been carried out properly.

Description of the main components of the Pressing Roller

The Pressing Roller keeps the product stabilised during wrapping.

A) Pressing roller disc: it rests on the product to keep it stable.

B) Pneumatic actuator: it is used to vertically move the pressing roller disc.

Disassembly and re-assembly of the Pressing Roller

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.
Make sure to fulfil the required requirements in order to work under safe conditions.

– This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.

– The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

Attention Warning

Wear the suitable personal protective equipment (gloves and shoes) to avoid any abrasion and/or crushing hazard.

2. Rotate main disconnector to position **"O"** (OFF) to deactivate the power supply.

3. Disconnect the pneumatic supply

4. To reach high, not easily accessible or otherwise hazardous areas, implement adequate safety measures to avoid risks.

5. Loosen the screws **A** and remove the cover **B**.

6. Loosen the screws **C** and remove the component **D**.

7. Disconnect the electric and pneumatic connections.

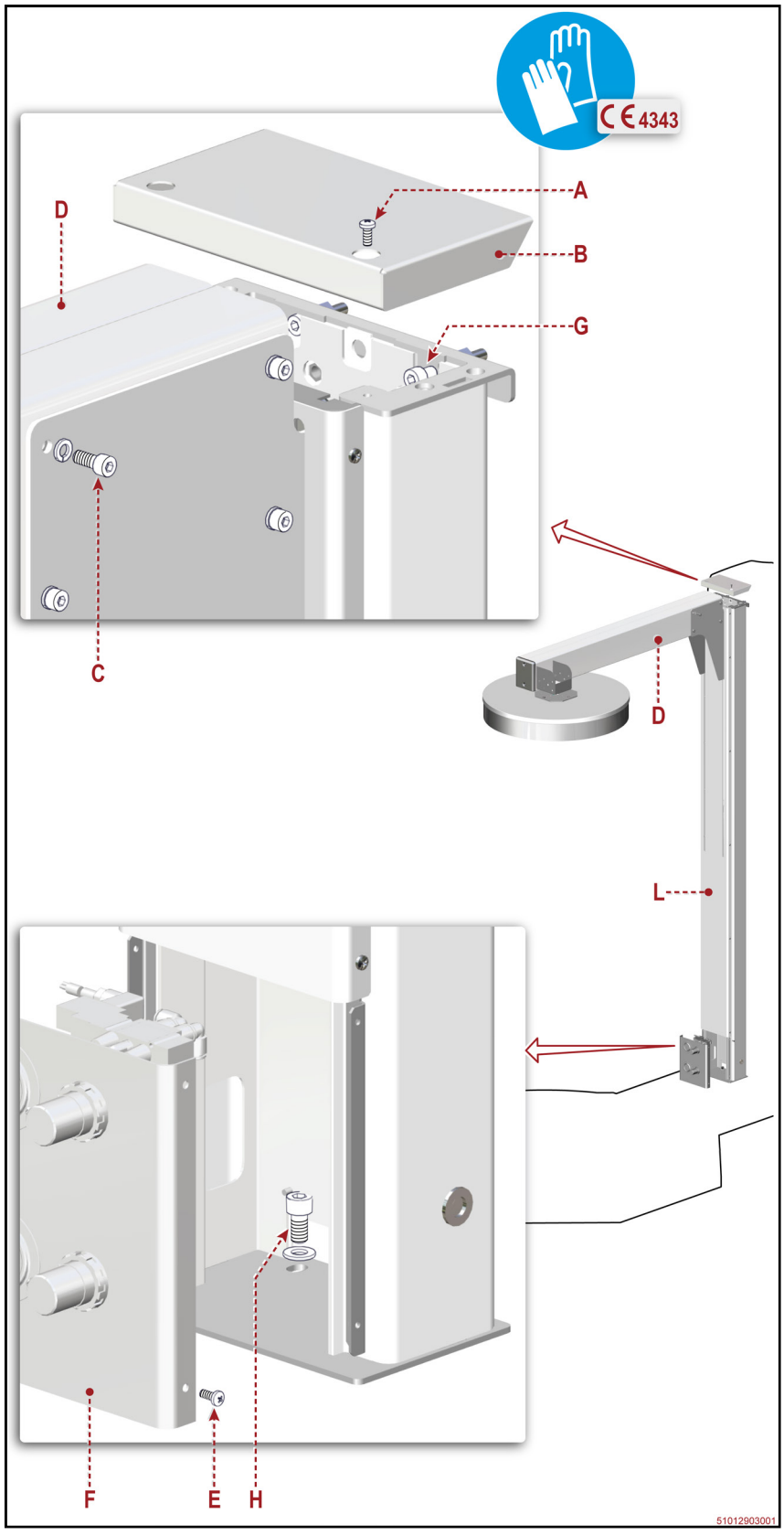
8. Loosen the screws**E** and disassemble the front panel **F**.

9. Loosen the screws **G**.

10. Loosen the screws **H**.

11. Remove the component **L**.

12. Position the component **L** in a suitable place so that it does not constitute any obstacle.



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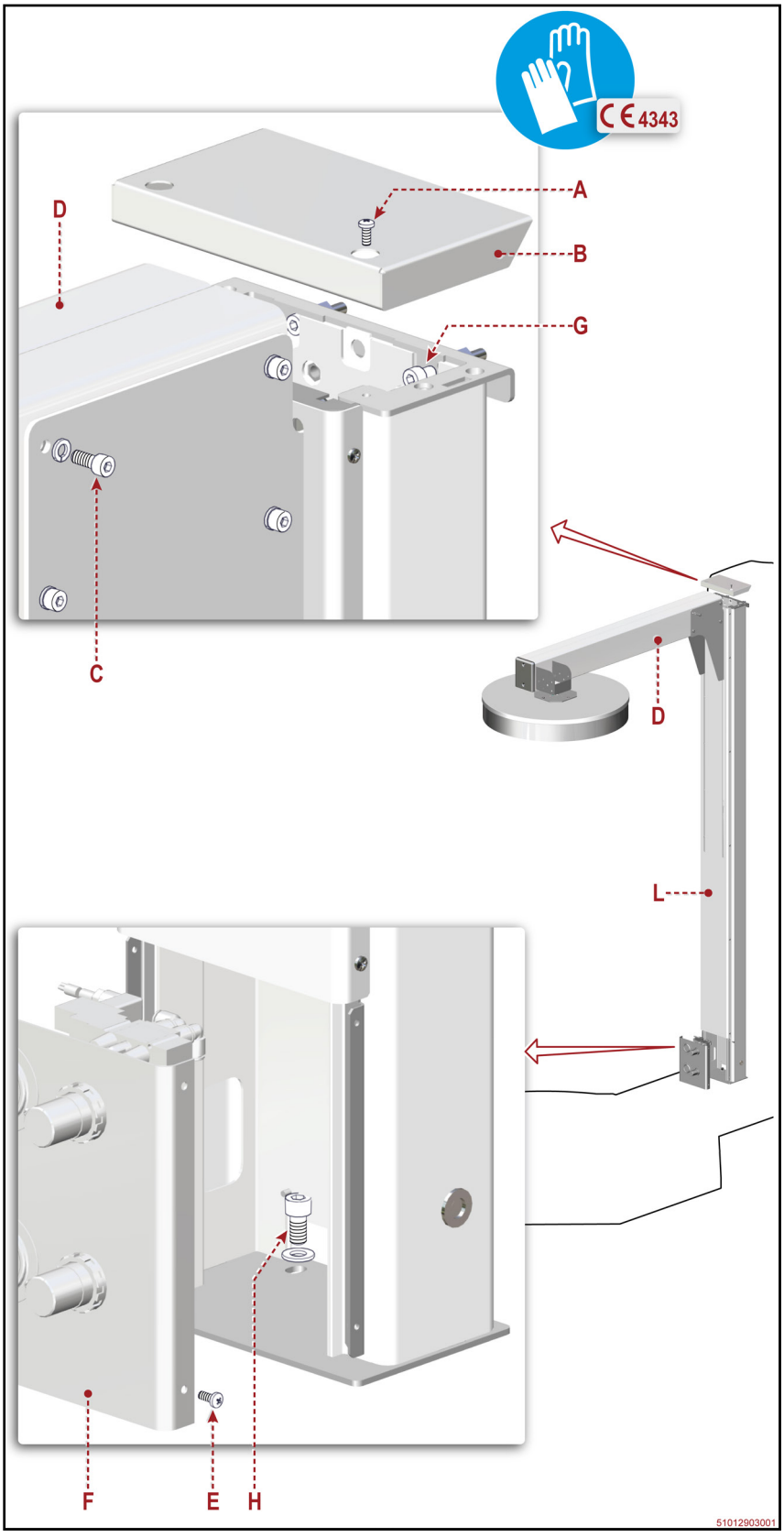
Re-assembly of the Pressing Roller

1. Fit the component **L** and secure it with the screws **H**.
2. Introduce and tighten the screws **G**.
3. Re-install the front panel **F** and fasten it with the screws **E**.
4. Re-connect the electric and pneumatic connections.
5. Fit the component **D** and secure it with the screws **C**.
6. Install the cover **B** and fasten it with the screws **A**.

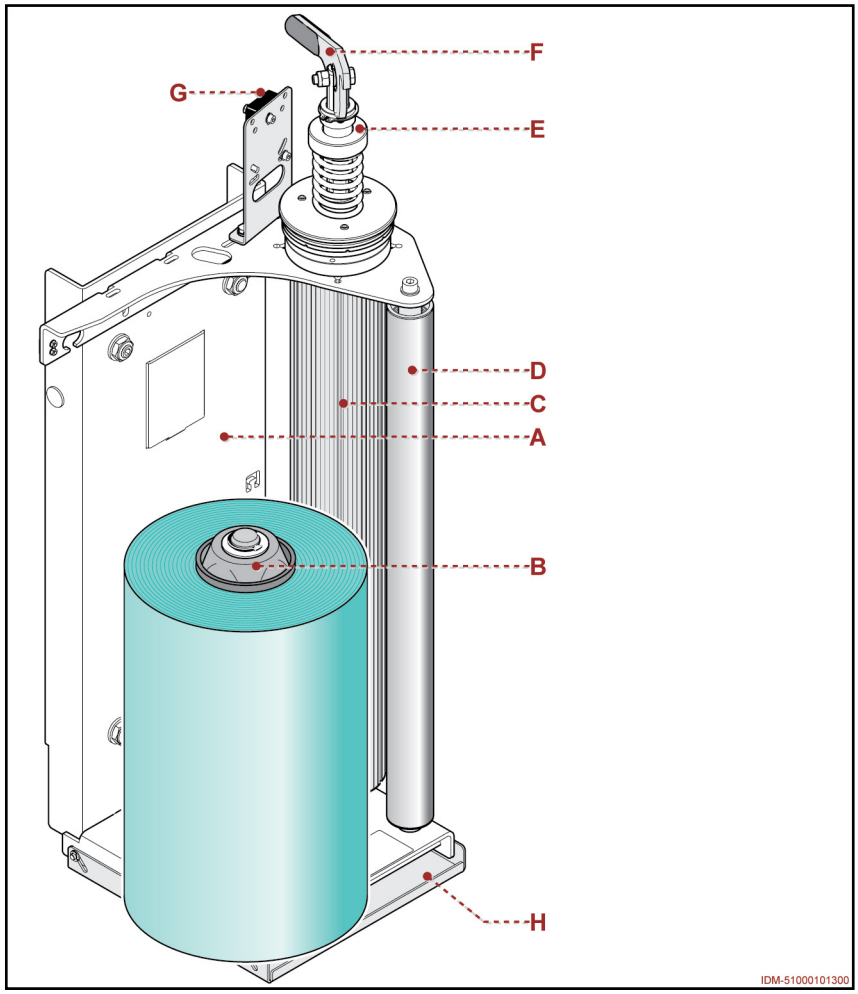
– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

7. Start the machine and make sure that the operation has been carried out properly.



Reel holding carriage (M)

■ Main components



A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel holder: it is equipped with braking system to avoid reel unwinding.

C) Roller: designed to tension the film.

– Roller is coated with inserts in order to ensure film pulling during wrapping.

D) Roller (idle)

E) Ring: device used to adjust the tension of the film.

F) Lever: device used to disengage the roller **C**.

G) Photocell: it detects the presence and the height of the load to be wrapped in order to stop the upward movement of reel holding carriage.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

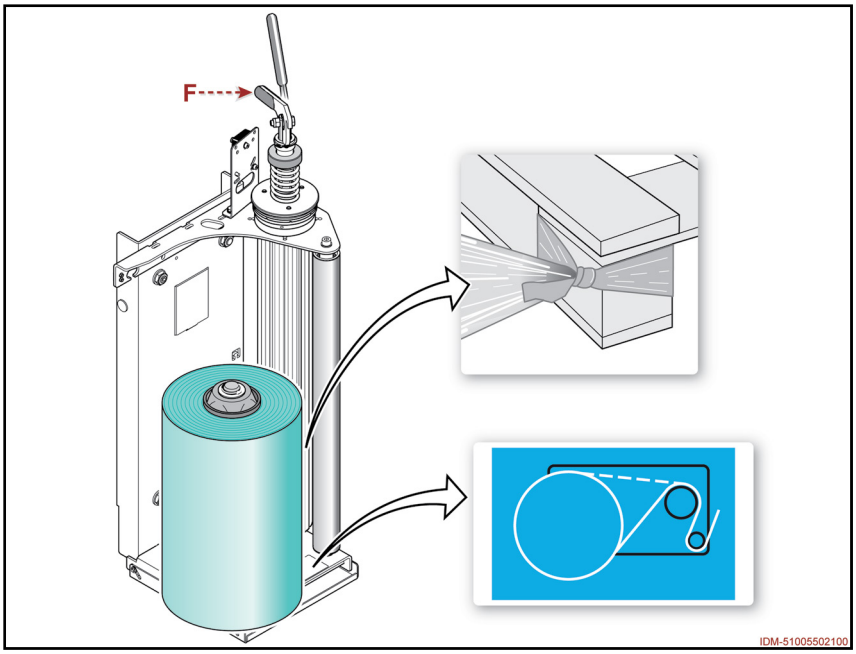
H) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

NOTE

On request, the reel holder carriage can be supplied in version for net-type wrapping.

Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Remove the cardboard core of the reel.
4. Insert the new reel.



NOTE

Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.
If film characteristics appear to be different, consider whether you should adjust the film tension.

5. Insert film according to the required direction of the adhesive size.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Start wrapping.
8. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.

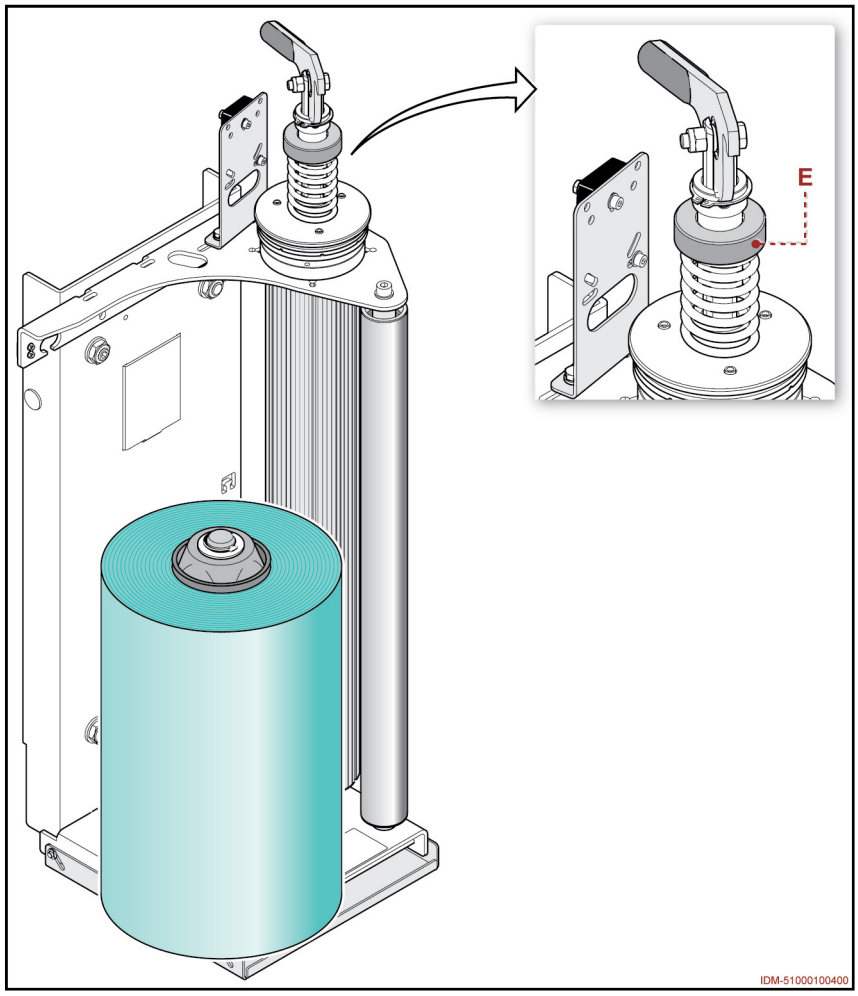
Tension adjustment of film

– **The operation is necessary to adjust the film tension on the load to be wrapped.**

1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Start wrapping.
4. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.
5. Adjust the film tension via the ring **E**.

– **Clockwise:** the value increases.

– **Anti-clockwise:** the value decreases.



Cleaning and replacement of brake disc

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**

– **Make sure to fulfil the required requirements in order to work under safe conditions.**

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.

2. Remove the fastening elements and remove the lever.

3. Remove in a sequence the components **B-C-D-E**.

4. Clean the contact surfaces of the brake discs **E-F**.

5. Check the wear level of the friction material of the disc **E**.

– In the case of excessive wear, replace the component.

6. Install the disc **E** with the friction material facing downwards.

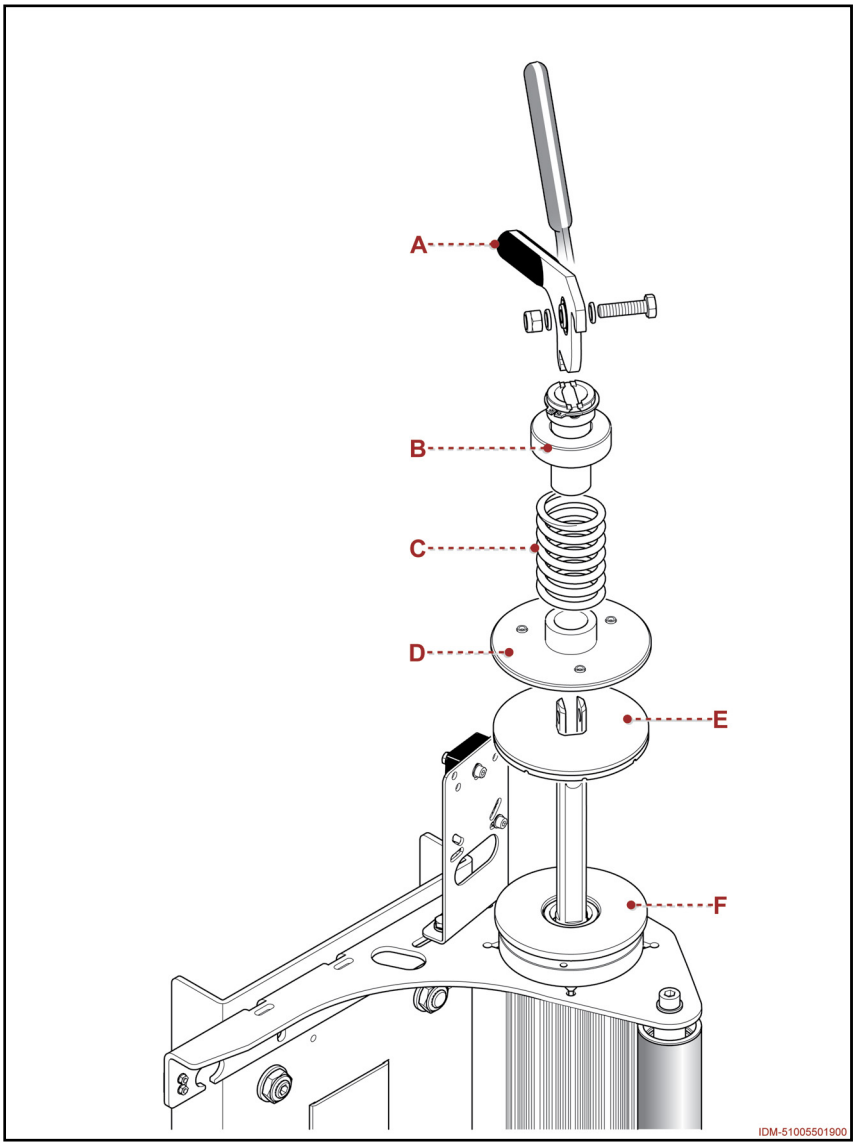
7. Install in a sequence the components **D-C-B**.

8. Engage the lever **A** in a vertical position and insert the fastening elements.

9. Lower the lever to its horizontal position.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

10. Start the machine and make sure that the operation has been carried out properly.

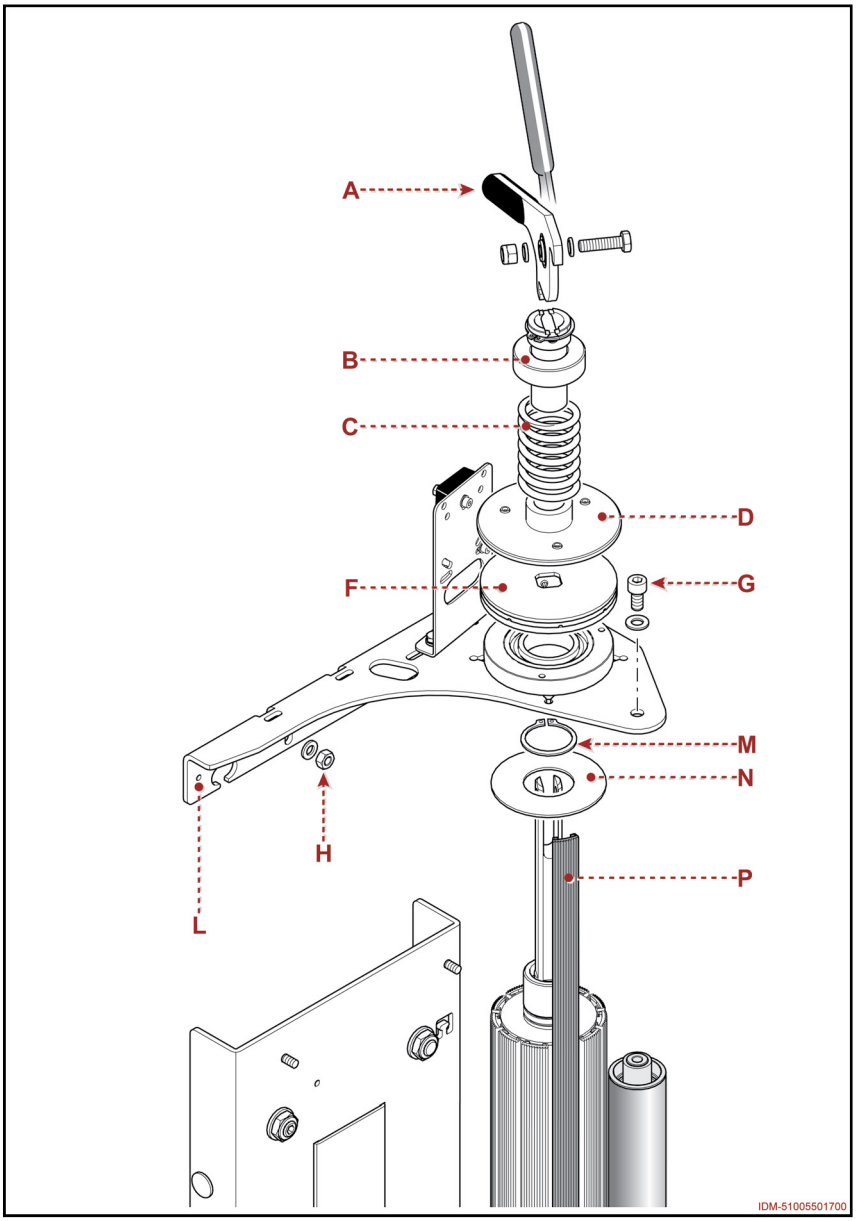


■ Replacing the outer surface of roller

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**

– **Make sure to fulfil the required requirements in order to work under safe conditions.**

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**



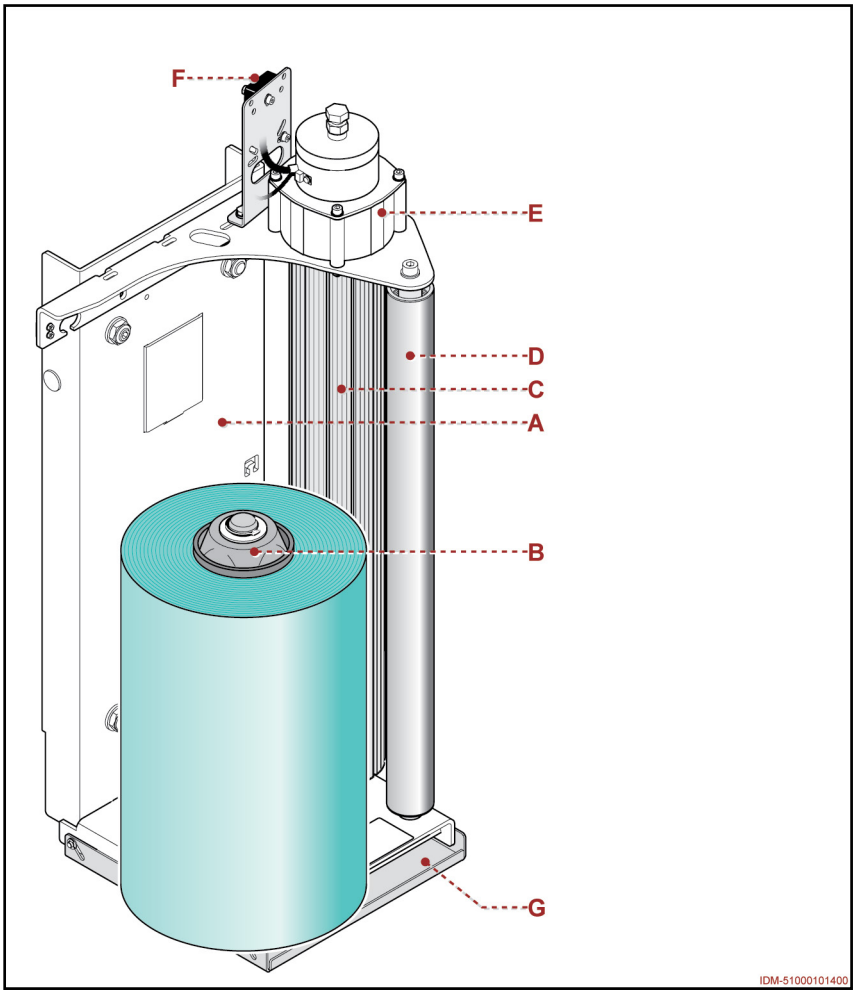
1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the lever.
3. Remove in a sequence the components **B-C-D**.
4. Remove the component **F**.
5. Unscrew screw **G**.
6. Unscrew the nuts **H**.
7. Remove the plate **L**.
8. Remove stop ring **M**.
9. Remove the component **N**.
10. Remove all the external cylinder surface inserts **P**, one at a time.
11. Thoroughly clean the grooves of the roller.
12. Insert in a sequence, one at a time, all the new external cylinder surface inserts.
13. Install component **N**.
14. Reinstall the retainer ring **M**.
15. Fit back the plate **L** and fix it with the nuts **H** without tightening.
16. Insert screw **G** and tighten it.
17. Adjust the position of the plate **L** and tighten the nuts **H**.
18. Install component **F**.
19. Install in a sequence the components **D-C-B**.
20. Engage the lever **A** in a vertical position and insert the fastening elements.
21. Lower the lever to its horizontal position.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

22. Start the machine and make sure that the operation has been carried out properly.

Reel holding carriage (FM)

■ Main components



A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel holder: it is equipped with braking system to avoid reel unwinding.

C) Roller: designed to tension the film.

– Roller is coated with inserts in order to ensure film pulling during wrapping.

D) Roller (idle)

E) Electromechanical brake: device that adjusts the tension of the film.

F) Photocell: it detects the presence and the height of the load to be wrapped in order to stop the upward movement of reel holding carriage.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

G) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

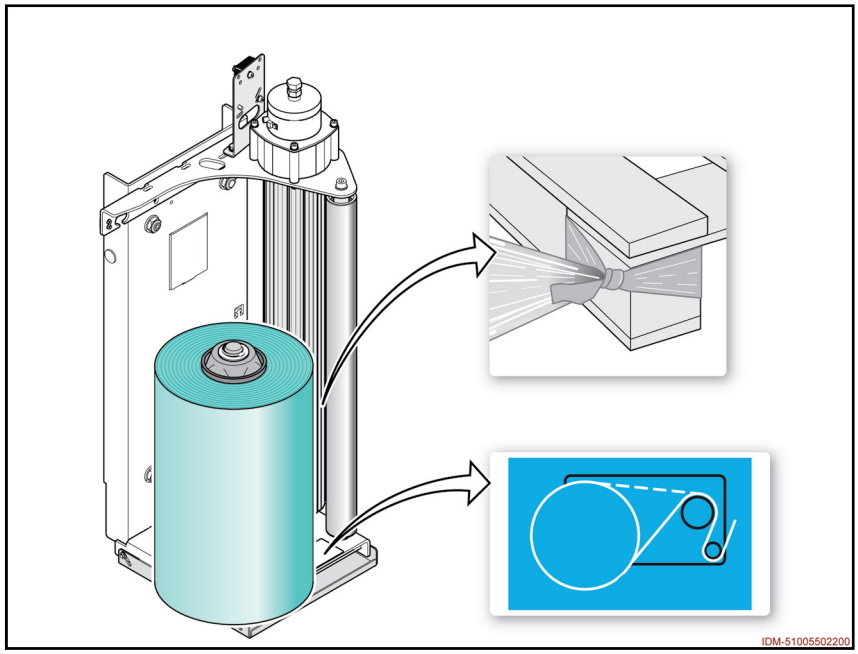
Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Remove the cardboard core of the reel.
3. Insert the new reel.

NOTE

Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.
If film characteristics appear to be different, consider whether you should adjust the film tension.

4. Insert film according to the required direction of the adhesive size.



Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

5. Tie the trailing end of the film to the base of the product to be wrapped.
6. Start wrapping.

Cleaning and replacement of brake disc

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**

– **Make sure to fulfil the required requirements in order to work under safe conditions.**

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Remove the fastening elements and remove the actuator **A**.

2. Remove in a sequence the components **B-C-D-E-F**.

3. Clean the contact surfaces of the brake discs **D-F**.

4. Check the wear level of the friction material of the disc **E**.

– In the case of excessive wear, replace the component.

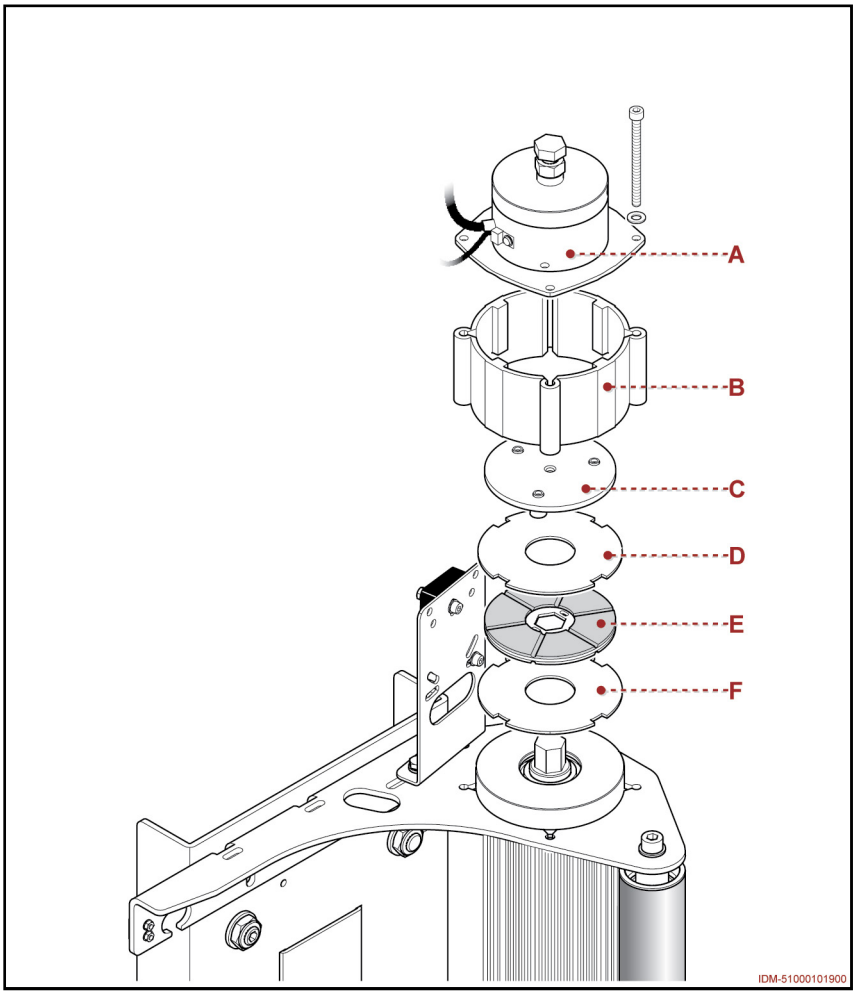
5. Install in a sequence the components **F-E-D-C-B**.

6. Install the component **A** and lock it in place with the fastening elements.

7. Adjust brake.
See “Adjustment of brake” for further details.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

8. Start the machine and make sure that the operation has been carried out properly.



Adjustment of brake

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**

– **Make sure to fulfil the required requirements in order to work under safe conditions.**

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

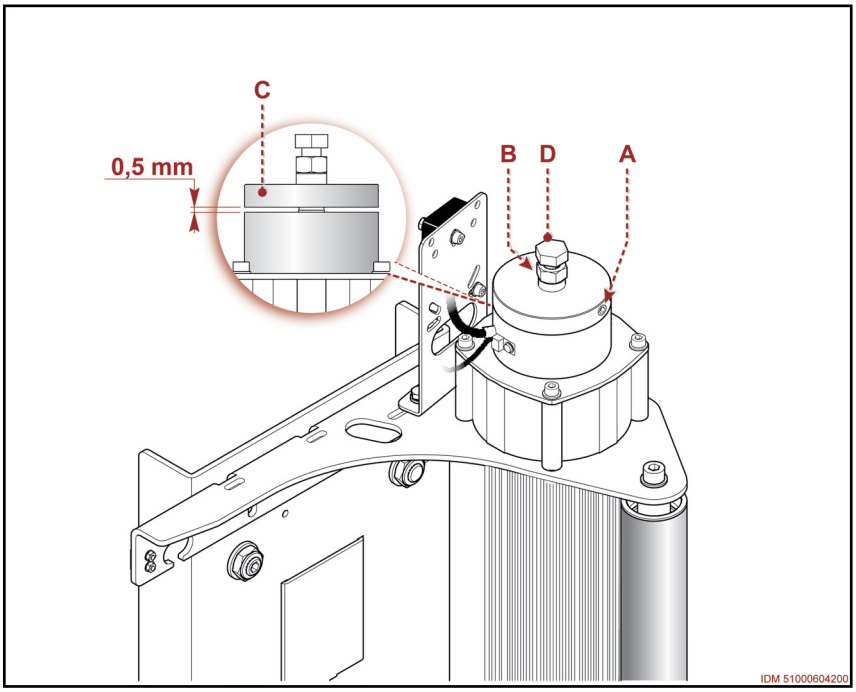
1. Loosen the screw **A**.
2. Loosen the lock nut **B**.
3. Insert thickness gauge (thickness0,5 mm) under disc **C**.
4. Keep disc **C in proper position and regulate screw D** to adjust brake.

– Clockwise: the distance gets higher.

– Counter clockwise: distance gets shorter.

5. Tighten lock nut **B**.
6. Tighten the screw **A**.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**



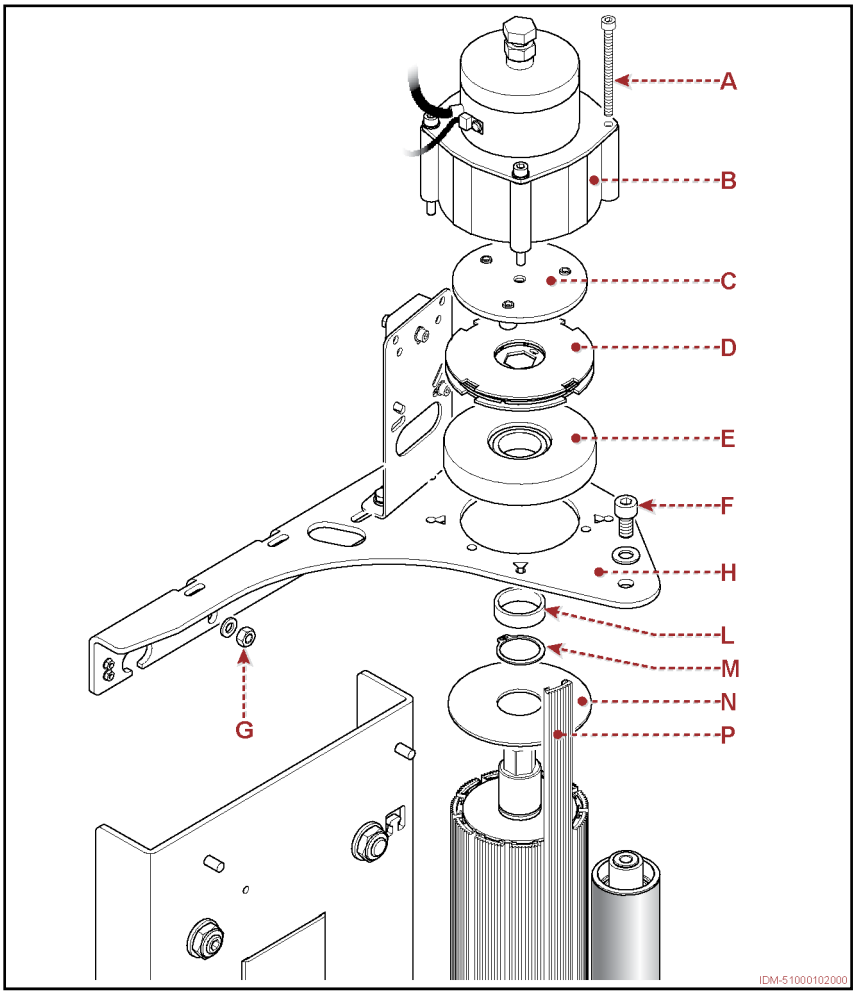
7. Start the machine and make sure that the operation has been carried out properly.

Replacing the outer surface of roller

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**

– **Make sure to fulfil the required requirements in order to work under safe conditions.**

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**



1. Loosen the screws **A**.
2. Disassemble the brake assembly **B**.
3. Remove in a sequence the components **C-D-E**.
4. Unscrew screw **F**.
5. Unscrew the nuts **G**.
6. Remove the plate **H**.
7. Extract spacer **L**.
8. Remove stop ring **M**.
9. Remove the component **N**.
10. Remove all the external cylinder surface inserts **P**, one at a time.
11. Thoroughly clean the grooves of the roller.
12. Insert in a sequence, one at a time, all the new external cylinder surface inserts.
13. Install component **N**.
14. Reinstall the retainer ring **M**.
15. Install the spacer **L**.
16. Fit back the plate **H** and fix it with the nuts **G** without tightening.
17. Insert screw **F** and tighten it.
18. Adjust the position of the plate **H** and tighten the nuts **G**.
19. Install in a sequence the components **E-D-C**.
20. Install the brake assembly **B** and fix it with the screws **A**.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

21. Start the machine and make sure that the operation has been carried out properly.

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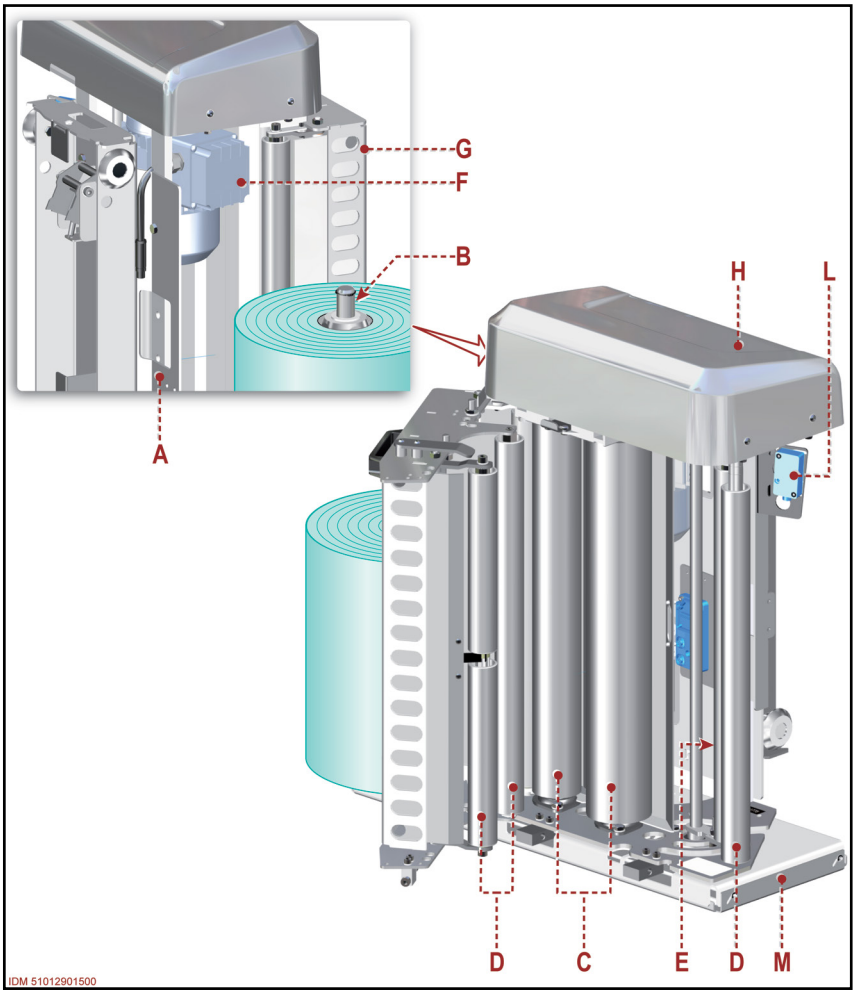
Reel holding carriage (PW)

■ Main components



A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel holder: it is equipped with braking system to avoid reel unwinding.

C) Rollers: they are used to pre-stretch the film.

– The rollers are activated by a chain drive, which is operated by an independent electric motor.

– The film pre-stretch can be modified by changing the drive ratio by replacing the pulleys.

D) Rollers: idle rollers which are used to insert the film.

E) Dancer roller (idle): it is equipped with sensor to detect the film tension.

– The roller is equipped with a sensor that interfaces with the electric motor **F** to adjust the speed of the rollers **C**.

F) Electric motor: it drives the pre-stretch rollers.

G) Interlocked mobile guard: safety device to prevent access to the components whose operation may represent a risk.

– When opening the guard, the machine stops in safe conditions. The machine restarts only once the guard has been closed and operation has been restored.

H) Protective guard for the drive system of rollers

L) Photocell: it detects the presence and the height of the load to be wrapped in order to stop the upward movement of reel holding carriage.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

M) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Open the cover **A**.
3. Remove the cardboard core of the reel.
4. Insert the new reel.

NOTE

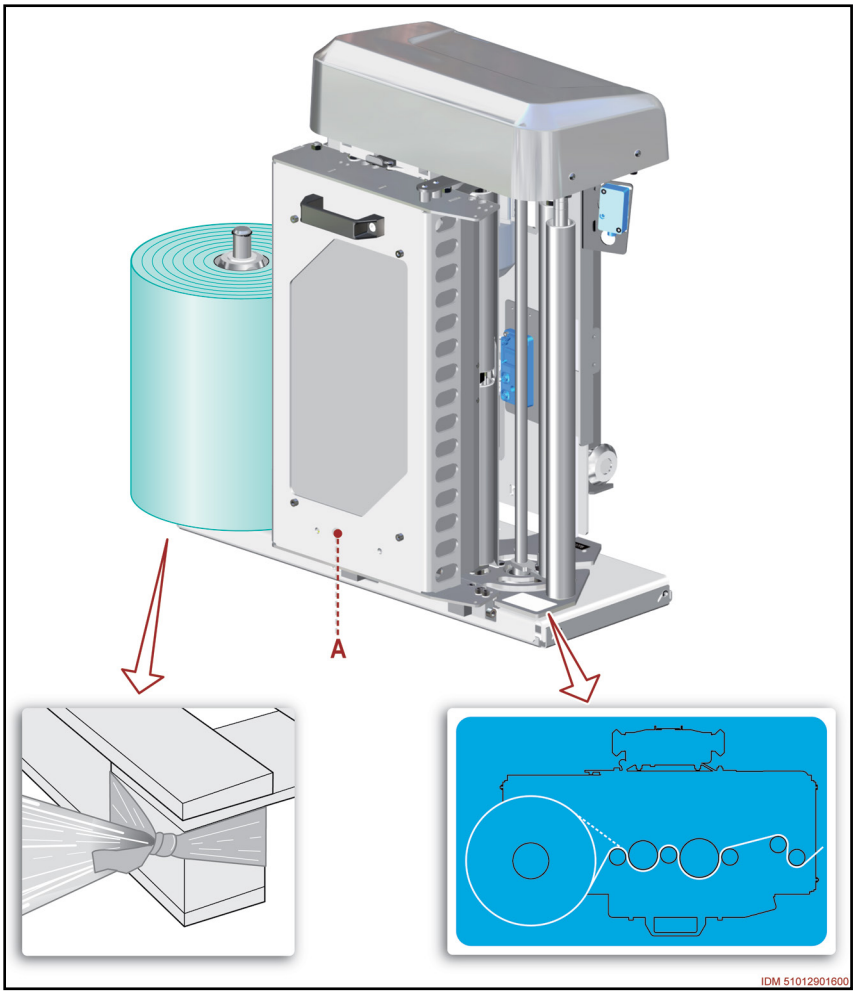
Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.
If film characteristics appear to be different, consider whether you should adjust the film tension.

5. Insert film according to the required direction of the adhesive size.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Close the cover **A**.
8. Start wrapping.

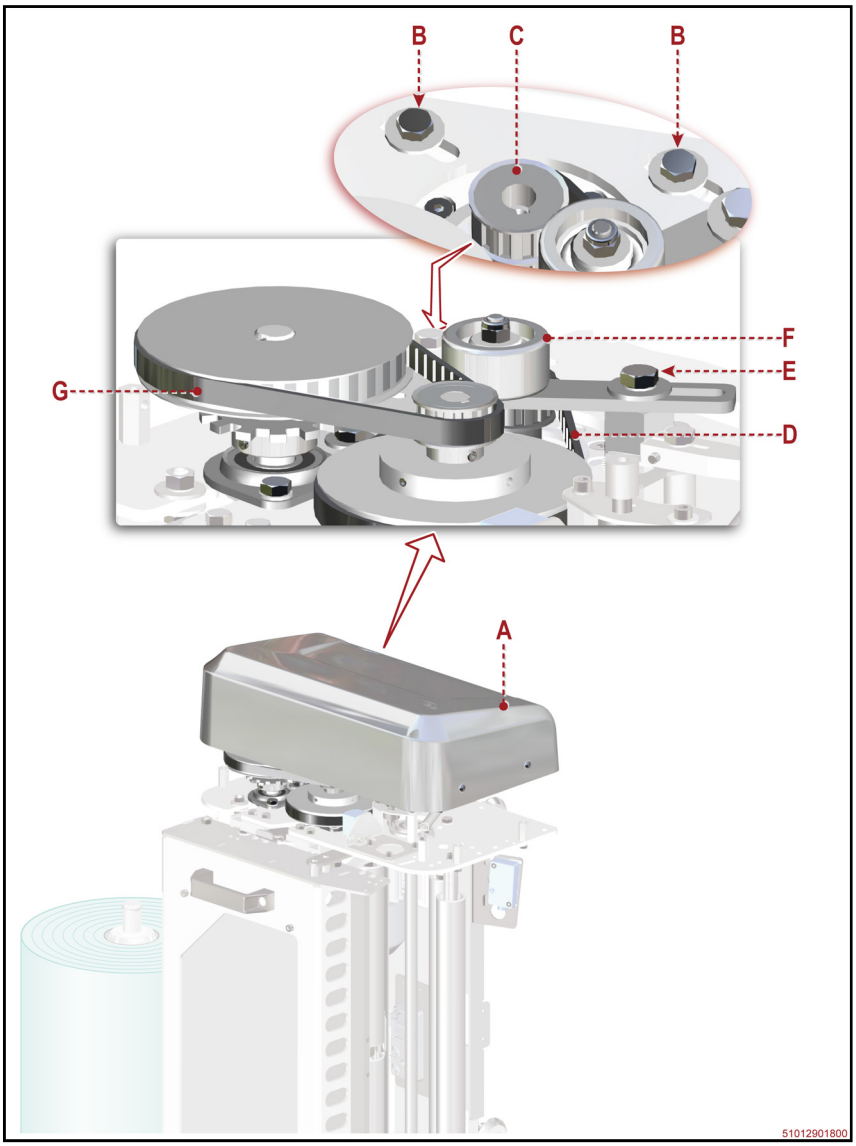


Adjustment of drive chain tensioning

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**
Make sure to fulfil the required requirements in order to work under safe conditions.

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Loosen screws and remove guard **A**.
3. Slightly loosen screws **B**.
4. Manually adjust the motor unit **C** to regulate the tension of belt **D** and, at the same time, tighten the screws **B**.



Important

Do not tighten component excessively in order to avoid the deterioration of the rotating parts.

5. Slightly loosen screws **E**.
6. Manually adjust the tightener **F** to regulate the tension of belt **G** and,at the same time, tighten the screw **E**.

Important

Do not overtighten so as not to cause any malfunctioning.

7. Assemble the guard **A**, and then fasten it by using the screws.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

8. Start the machine and make sure that the operation has been carried out properly.

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■ Pre-stretch percentage variation (film pre-stretch kit)

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.

1°

1. Loosen screws and remove guard **A**.

2°

2. Loosen the screw **B** and move the tightener support **C** in order to completely loosen the belt **D**.

3. Remove the belt **D**.

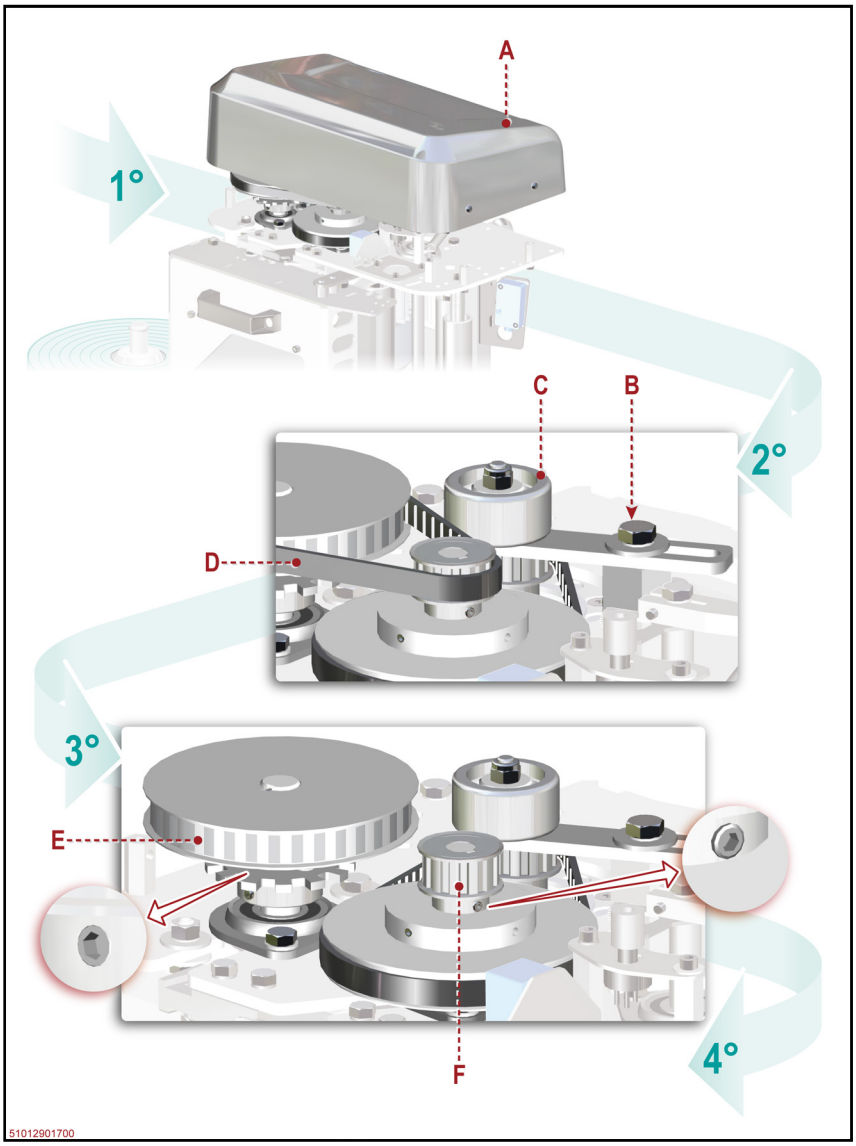
3°

4. Remove the fastening elements from the pulleys **E-F**.

5. Remove the pulleys **E-F**.

6. Select the pulleys for the new film pre-stretch percentage.

7. Install the pulleys and lock them with the fastening elements.



Important

Make sure that the pulleys are perfectly aligned one to the other.

– The table shows the pre-stretching percentage values.

Pre-stretching percentage	*Full kit*	*Pulley **E***					*Pulley **F***	*Belt **D***
	Code	*Model*	*Code*	*Number of teeth*	*Model*	*Code*	*Number of teeth*	*Code*
100%	SBA0002595	21L050	SCA0000632	21	14L050	SCA0000628	14	SCA0000637
125%	SBA0003924	28L050	SCA0000633	28	17L050	SCA0000630	17	S3400140ZZZ
150%	SBA0003289	30L050	SCA0000634	30	16L050	SCA0000629	16	S3400140ZZZ
175%	SBA0003922	44L050	SCA0000639	44	21L050	SCA0000632	21	S3400078ZZZ
200%	SBA0003923	32L050	SCA0000635	32	14L050	SCA0000628	14	S3400140ZZZ
225%	SBA0003287	21L050	SCA0000632	21	13L050	SCA0000631	13	S3400140ZZZ
250%	SBA0003926	32L050	SCA0000635	32	12L050	SCA0000627	12	S3400140ZZZ
275%	SBA0010980	40L050	SCA0000636	40	14L050	SCA0000628	14	SCA0000638
300%	SBA0002596	40L050	SCA0000636	40	13L050	SCA0000631	13	SCA0000638
360%	SBA0014582	44L050	SCA0000639	44	12L050	SCA0000627	12	S3400282ZZZ

4°

8. Re-install the belt **D** on the pulleys.
9. Manually adjust the tightener **C** to regulate the tension of belt **D** and,at the same time, tighten the screw **B**.

Important

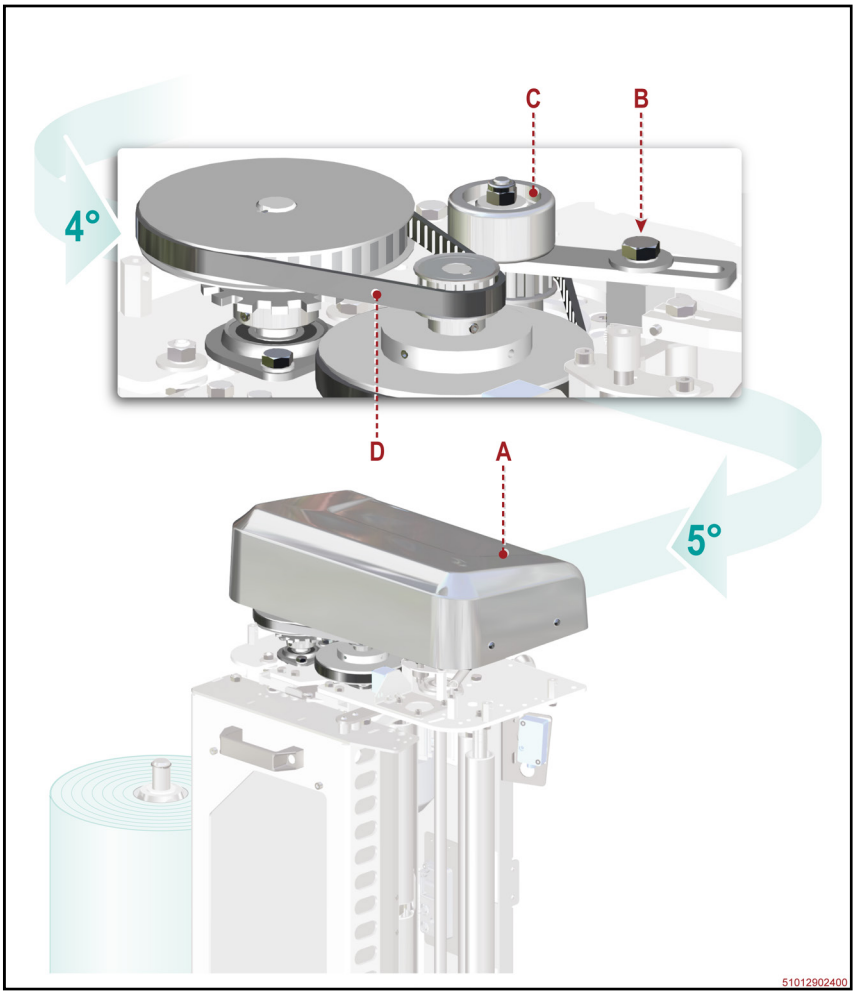
Do not overtighten so as not to cause any malfunctioning.

5°

10. Assemble the guard **A**, and then fasten it by using the screws.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

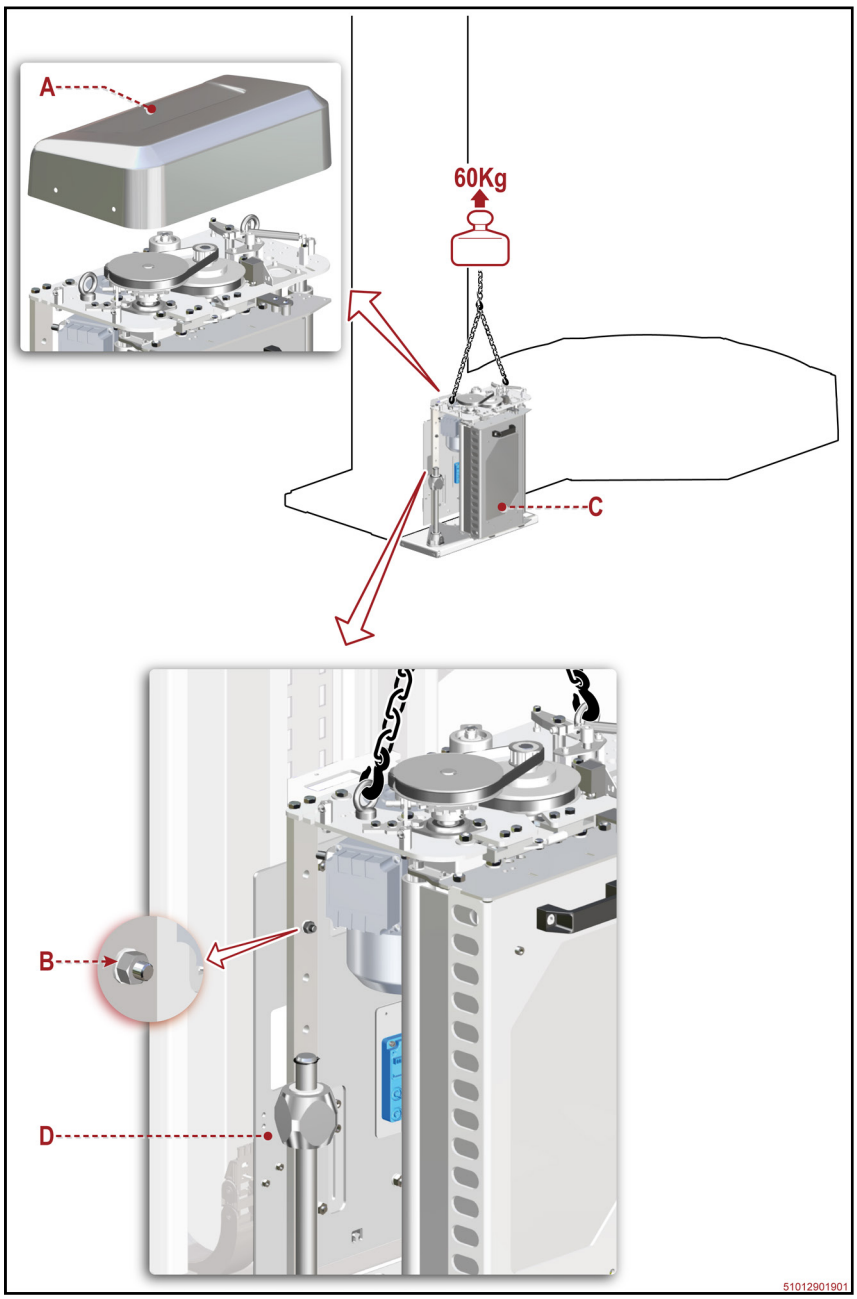
11. Start the machine and make sure that the operation has been carried out properly.



Disassembly and re-assembly of the reel holding carriage

– **The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.**
Make sure to fulfil the required requirements in order to work under safe conditions.

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**



1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Set up a hook-shaped lifting device with a suitable capacity.
3. Loosen screws and remove guard **A**.
4. Hook the lifting device using the eyelets.
5. Disconnect all connectors from their sensors.
6. Disconnect the earthing cable.
7. Loosen the screws **B**.
8. Disassemble the reel holding carriage **C** from the support **D**.
9. Position the component in a suitable place so that it does not constitute any obstacle.
10. Remove the lifting device.

Re-assembly of the reel holding carriage

1. Hook the lifting device using the eyelets.
2. Assemble the reel holding carriage **C** on the support **D**.
3. Tighten the screws **B**.
4. Connect the earthing cable.
5. Connect the connectors to their sensors.
6. Remove the lifting device.
7. Assemble the guard **A**, and then fasten it by using the screws.

– **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

8. Start the machine and make sure that the operation has been carried out properly.

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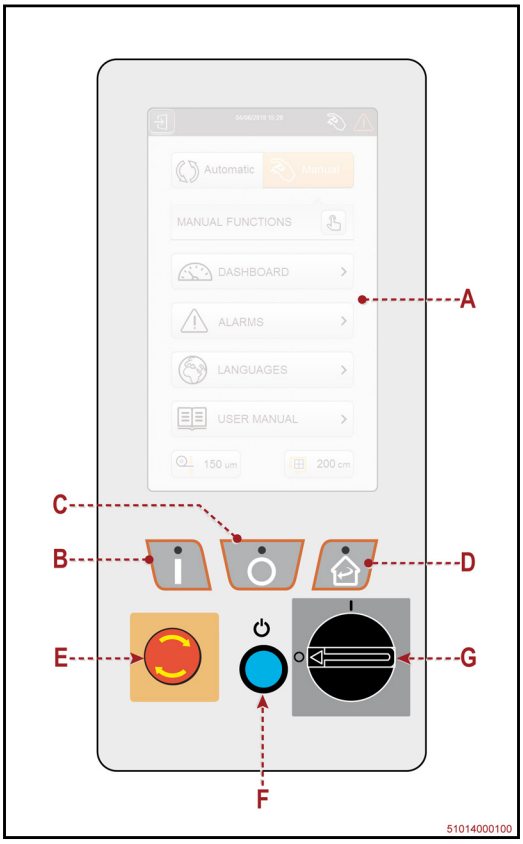
Recommendations on Operation and Use

- Consult the user manual, in particular during the first use, and make sure that you fully understand its content.
- Find out the position and function of the controls and simulate some operations (in particular start and stop) in order to acquire familiarity.
- Only use the unit according to the manufacturer's instructions and do not tamper with the devices in order to obtain different performance from that expected.
- Make sure that all the safety devices are properly installed and efficient.
- DO NOT use or allow other persons to use the machine if the safety devices are faulty, disabled and/or incorrectly installed.
- If troubles arise, do NOT continue to use the machine. Stop it immediately and restart only after restoring the normal operating condition.
- DO NOT leave the machine unattended during operation and DO NOT leave it at the end of the work without stopping it to safety conditions.
- **In addition to the recommendations, carefully read the SAFETY WARNINGS (see "General information and safety") in order to reduce the risks of man-machine interactions.**
- **Caution is always necessary. Safety is also the responsibility of all the persons interacting with the machine throughout its operating life.**

Control description

The illustration shows the main commands and their description and function are listed.



A) Operator interface: control system that programmes and displays the operating status of the labelling machine.

– The operator interface has a touch-screen colour display with active matrix.

B) Start button: control that carries out the listed functions.

– **Start of the automatic wrapping:** only with enabled automatic mode

– **Start of platform rotation:** only with enabled manual mode.

C) Cycle stop button: control that carries out the listed functions.

– **Stop of automatic wrapping: only with enabled automatic mode**

– **Stop of platform rotation:** only with enabled manual mode.

D) Key: control matched with a LED , which shows the position of the reel holding carriage.

– LED OFF: reel holding carriage in wrapping start position.

– LED ON: reel holding carriage not in wrapping start position. Press the control to move the carriage to the correct position.

E) Emergency stop button: safety control that, in case of an imminent risk, stops all parts whose function might constitute a risk.

– The control must stay “locked” until all the normal operating conditions have been restored.

– After having normalised running conditions, unblock the button with a deliberate action to authorise restart.

F) Illuminated button (blue light): control designed to activate electric power supply.

– Blue light off: activated power supply line.

– Blue light on: power supply deactivated.

NOTE

Control enabled only with isolator switch G in position “I” (ON).

G) Isolator switch: safety control to disconnect power supply.

– Position **“O” (OFF)**: power supply off

– Position **“I” (ON)**: power supply on

– Control can be padlocked in order to avoid operations by non-authorised personnel.

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Description of the operator interface

The operator interface is a control system that programmes the parameters and displays the operating status of the machine.

– The control system interacts with the machine PLC and is equipped with a touch-screen colour display with active matrix.

– Just tap the display areas to see the different functions.

– The functions develop over several screens, which can be accessed by means of the navigation keys (See “Operator interface navigation diagram (standard)”).

– **Only suitably trained personnel can use the operator interface.**

– Certain functions are exclusive and password-protected with different authorization levels.

NOTE

Enter the password to access the screen pages with protected functions (See “Password entering mode”).

– **“Advanced” level password:** only for the personnel authorised to supervise the production activity.

– **Level “Siat” password:** only for the Technical Assistance Service or the personnel authorised by the manufacturer.

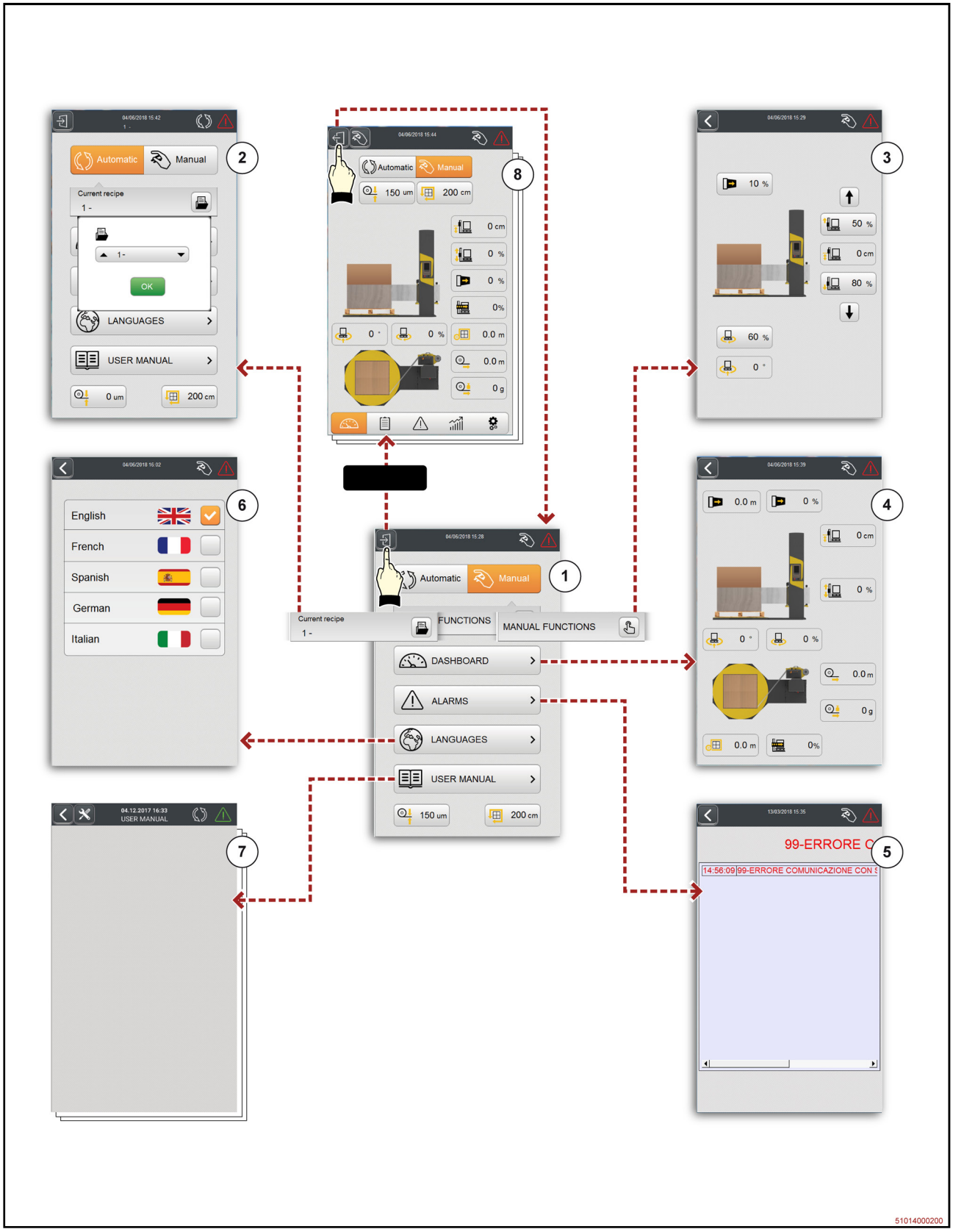
NOTE

The activities to be performed by operators do not require any password.

Operator interface navigation diagram (standard)

The figure shows the navigation logic diagram and the list includes the description and the function of the screens.

– Certain screens of the navigation logic diagram may develop in several displays.

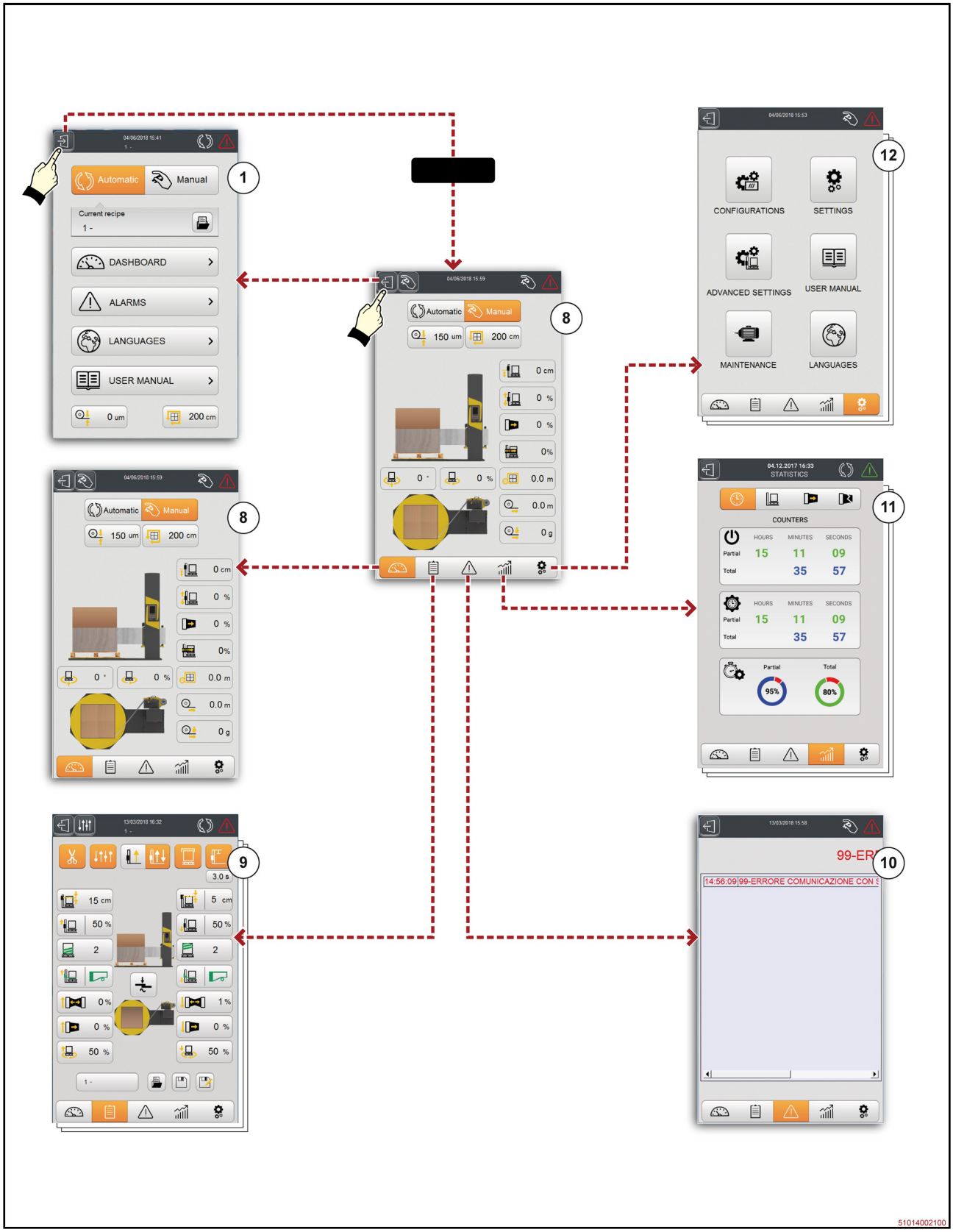


no.	*Name*	*Function description*
1	MAIN screen	- Screen appears after loading the software and shows the keys to access the other functions.
2	RECIPES screen	- Screen displays the list of programmed recipes. The controls in screen are enabled only during the operation in “automatic mode.”
3	MANUAL FUNCTIONS screen	- Screen displays the controls that activate operation in “manual mode.” The controls in the screen are enabled only during operation in “manual mode.”
4	DASHBOARD screen	- Screen displays the instant values of the operating parameters.
5	ALARMS screen	- Screen shows the list of current alarms in chronological order (starting from the most recent alarm).
6	LANGUAGES screen	- Screen is used to select the desired language.
7	USER MANUAL screen	- Screen is used to read the use and maintenance manual in electronic format. (if any)
8	ADVANCED DASHBOARD screen	- Screen displays the parameters that are intended only for the personnel authorised to supervise the production activity and to create or modify the recipes.

Operator interface navigation diagram (advanced)

The figure shows the navigation logic diagram and the list includes the description and the function of the screens.

– Certain screens of the navigation logic diagram may develop in several displays.

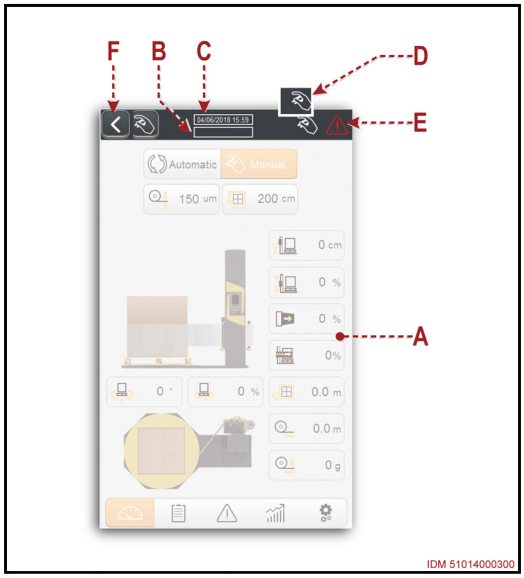


no.	Name	Function description
1	MAIN screen	- Screen appears after loading the software and shows the keys to access the other functions.
8	ADVANCED DASHBOARD screen	- Screen displays the parameters that are intended only for the personnel authorised to supervise the production activity and to create or modify the recipes.
9	PARAMETERS screen	- Screen displays the parameters that are used to programme the recipes.
10	ALARMS screen	- Screen shows the list of current alarms in chronological order (starting from the most recent alarm).
11	COUNTERS screen	- Screen displays the general production data counters.
12	TOOLS screen	- Screen displays the controls that are used to access the relevant functions.

Description of a typical screen

The figure shows an example of a “typical screen” and the areas in common with other screens are highlighted; the list includes the description of the relevant functions.

– Carefully read the functions of the elements in common with all the screens in order to “navigate” in an easier and more intuitive way.



A) Main area: it displays the parameters (diagrams, numbers, etc.) concerning the different operating functions of every individual screen.

B) Field: it displays the name of the screen.

C) Field: it displays the date and the current time.

D) Field: it displays the operating mode.

– “Hand” icon: wrapping in “manual mode.”

– “Circular arrows” icon: wrapping in “automatic mode.”

E) “Triangle” icon: it shows the operating status.

– Green colour: normal operation (no alarms).

– Orange colour: operation with a warning.

– Red colour: stopped operation due to an alarm.

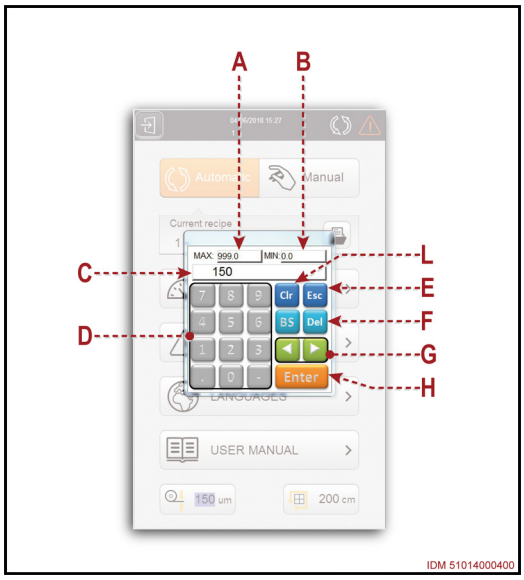
F) Icon: it is used to display the previous screen.

Description of the keyboard

Some values that are displayed in the areas of every screen may be suitably programmed.

– Any time you press a programmable or editable area, the keyboard will appear in the display.

– The figure shows the keyboard and the list shows the description of the functions.



A) Field that displays the maximum value that can be entered

B) Field that displays the minimum value that can be entered

C) Field that displays the entered value

D) Numeric keys

E) Key that closes the screen without storing the entered values

F) Key to delete the entered characters, one at a time

G) Keys to move the cursor

H) Key to store the entered value

L) Key to delete all entered characters

Function description of the displayed icons

The figures show the displayed icons and the list includes the relevant function.

■ Programming icons (shaded gray background)

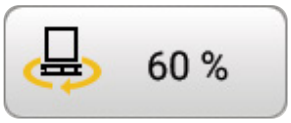
– It programmes the thickness of the film (only for reel holding carriage of type PW - DM).

– It programmes the perimeter of the load to be wrapped (only for reel holding carriage of type PW - DM).

– It programmes the tensioning of the film for the wrapping.

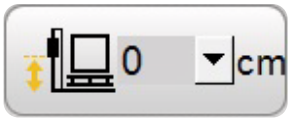
– It programmes the lifting speed of the reel holding carriage.
The value is expressed as a percentage compared with the programmed operating speed.

– It programmes the lowering speed of the reel holding carriage.
The value is expressed as a percentage compared with the programmed operating speed.

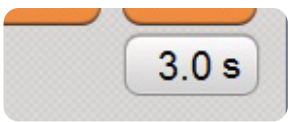


– It programmes the rotating speed of the platform.
The value is expressed as a percentage compared with the programmed operating speed.

– It programmes the lowering level of the reel holding carriage , which is necessary to insert the protection sheet.



– It programmes the distance (from the ground) of the reel holding carriage at wrapping start.



– It programmes the delay between the lowering of the Pressing Roller and the start of the rotating platform (only for machines equipped with Pressing Roller).

– It programmes the lifting level of the reel holding carriage , beyond the edge of the load to be wrapped.
If you touch the image , the control will be displayed to programme the lifting time.

– It programmes the lifting time of the reel holding carriage beyond the edge of the load to be wrapped.
If you touch the image , the control will be displayed to programme the lifting level.

– It programmes the lifting speed of the reel holding carriage.
The value is expressed as a percentage compared with the programmed operating speed.
If you touch the image , the control will be displayed to programme the film overlapping percentage during the lifting step.

– It programmes the film overlapping percentage during the lifting of the reel holding carriage.
If you touch the image , the control will be displayed to programme the lifting speed of the reel holding carriage.

– It programmes the lowering speed of the reel holding carriage.
The value is expressed as a percentage compared with the programmed operating speed.
If you touch the image , the control will be displayed to programme the film overlapping percentage during the lowering step.

– It programmes the film overlapping percentage during the lowering of the reel holding carriage.
If you touch the image , the control will be displayed to programme the lowering speed of the reel holding carriage.

– It programmes the number of wrapping revolutions for the lower reinforcement.

– It programmes the number of wrapping revolutions for the upper reinforcement.

– It programmes film tensioning for wrapping during the lifting of the reel holding carriage.

– It programmes film tensioning for wrapping during the lowering of the reel holding carriage (Only with enabled double automatic wrapping).

– It programmes the rotating speed of platform during the lifting of the reel holding carriage.
The value is expressed as a percentage compared with the programmed operating speed.

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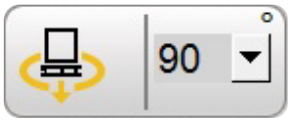
– It programmes the rotating speed of platform during the lowering of the reel holding carriage (Only with enabled double automatic wrapping).
The value is expressed as a percentage compared with the programmed operating speed.

– It programmes the angular position of the rotating platform at the end of the lifting of the reel holding carriage.
If you touch the image , the control will be displayed to programme the angular position at the end of the lowering of the reel holding carriage.



– It programmes the angular position of the rotating platform at the end of the lowering of the reel holding carriage.
If you touch the image , the control will be displayed to programme the angular position at the end of the lifting of the reel holding carriage.

– It programmes the film pre-stretch percentage during the lifting of the reel holding carriage (only for reel holding carriage of type DM).

– It programmes the film pre-stretch percentage during the lowering of the reel holding carriage (only for reel holding carriage of type DM).
The function is enabled only with double automatic wrapping.

– It selects the desired recipe in the drop-down menu.

– It programmes the height of the load to be wrapped.
If you enter the value, the photocell that detects the load height will be disabled.

■ Display icons (gray background)

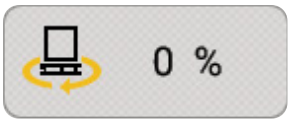
– Instant distance (from the ground) of the reel holding carriage

– Instant angular position of the rotating platform

– Instant speed of film unwinding (only for reel holding carriage of type PW - DM).

– Tensioning of the film for the wrapping (only for reel holding carriage of type PW - DM).

– Instant speed (lifting and lowering) of the reel holding carriage
The value is expressed as a percentage compared with the programmed operating speed.



– Instant rotation speed of the platform
The value is expressed as a percentage compared with the programmed operating speed.

– Instant length of the film unwrapped from the reel (only for reel holding carriage of type PW - DM).

– Instant weight of the film unwrapped from the reel (only for reel holding carriage of type PW - DM).

– Instant length of the film used for the wrapping

– Total film stretching percentage (pre-stretch and tensioning)
The function is enabled only for reel holding carriages of type PW - DM.

■ Non-release hold keys (shaded gray background)

– It activates the lifting of the reel holding carriage.

NOTE
The activation of the key will be enabled only in case of “manual mode” operation.

– It activates the lowering of the reel holding carriage

NOTE
The activation of the key will be enabled only in case of “manual mode” operation.

■ Single-action keys (orange or shaded gray)

– Orange background: enabled function.
– Shaded gray background: disabled function.

– It enables and disables the film cutting device (only for machines equipped with CW system).

– It enables and disables the advanced settings

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– It enables the single automatic wrapping (lifting of the reel holding carriage)

– It enables the double automatic wrapping (lifting and lowering of the reel holding carriage)

– It enables and disables the working cycle with sheet feeder

– It enables and disables the Pressing Roller

– It enables and disables the film sealing (only for machines equipped with CW system).

– It enables and disables the creasing system during the lifting of the reel holding carriage.
Touch the image to select the creasing type (upper or lower side of the film).

– It enables and disables the creasing system during the lowering of the reel holding carriage (Only with enabled double automatic wrapping).
Touch the image to select the creasing type (upper or lower side of the film).

– It loads the selected recipe in the PLC memory in order to execute it.

– It saves the changes to the selected recipe.

– It saves the changes in a new recipe

Language selection mode

The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Display the LANGUAGES screen **(6)** (See "Operator interface navigation diagram (standard)").
2. Touch the icon that corresponds to the desired language.

– The text that is to be found in all screens will immediately update to the selected language.

Password entering mode

The figure shows the points of intervention and the description shows the procedures to be adopted.

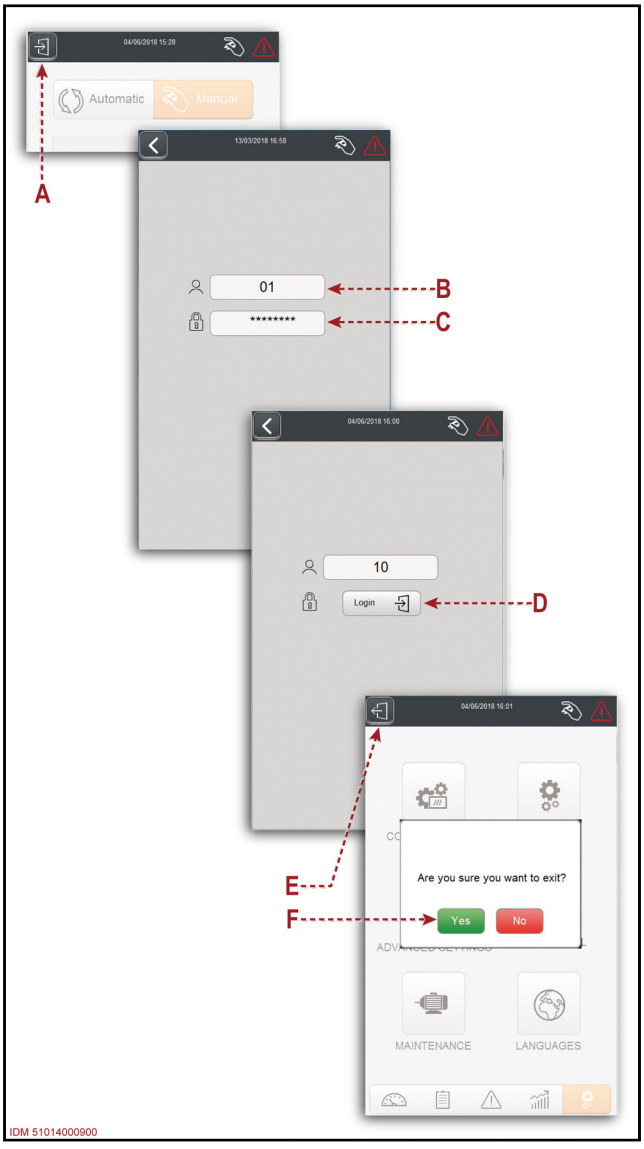
1. Touch the icon **A**.
2. Press the field **B** and enter the operator ID.
3. Press the field **C** and enter the password.
4. Press the key **D** to confirm.

NOTE

Any time you deactivate the power supply of the machine, you must repeat the procedures to enter the password.

– **To prevent operations by unauthorised people, cancel the password as specified.**

5. Touch the icon **E**.
6. Press the key **F** to confirm.



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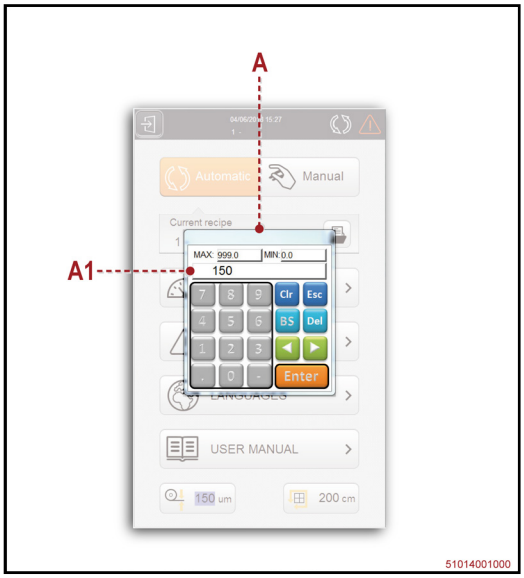
How to programme or edit the parameters

The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Stop the machine
2. Display the desired screens (one at a time) where you need to programme or edit the values.
3. Touch the desired area.

– The keyboard **A** is displayed.

4. Enter the new value.

– The area **A1** displays the entered value.

5. Press “ENTER” to confirm.

Recipe management

■ How to programme a new recipe

NOTE

You can programme up to 12 recipes.

1. Display the ADVANCED SETTINGS screen **(8)** (See “Operator interface navigation diagram (standard)”).
2. Press key **E**.

– The display shows the PARAMETER screen **(9)**.

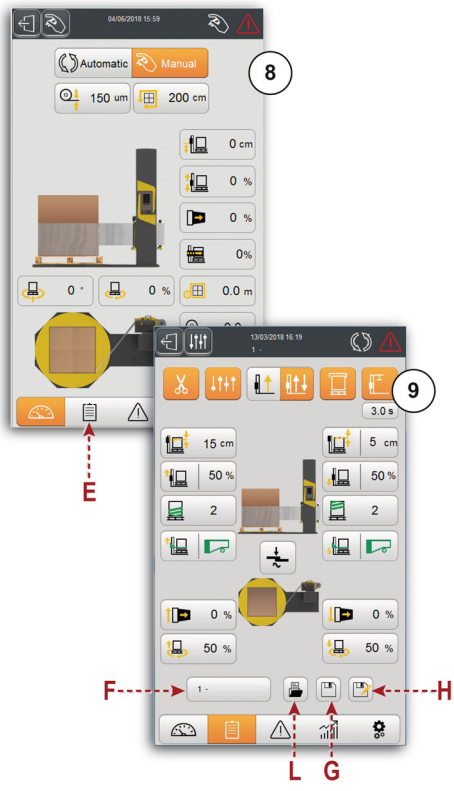
3. Press key **L**.
4. Select the desired recipe from the drop-down menu.
5. Press the key **H** to duplicate the selected recipe.
6. Select the first available ID from the drop-down menu.

– If there are 12 are already programmed recipes, select one of them that is not used any more in order to overwrite it.

7. Touch the area **F**.

– The keyboard is displayed.

8. Enter the new name of the recipe and press the “ENTER” key to confirm.
9. Change the desired parameters.
10. Press the key **G** to save the new recipe.

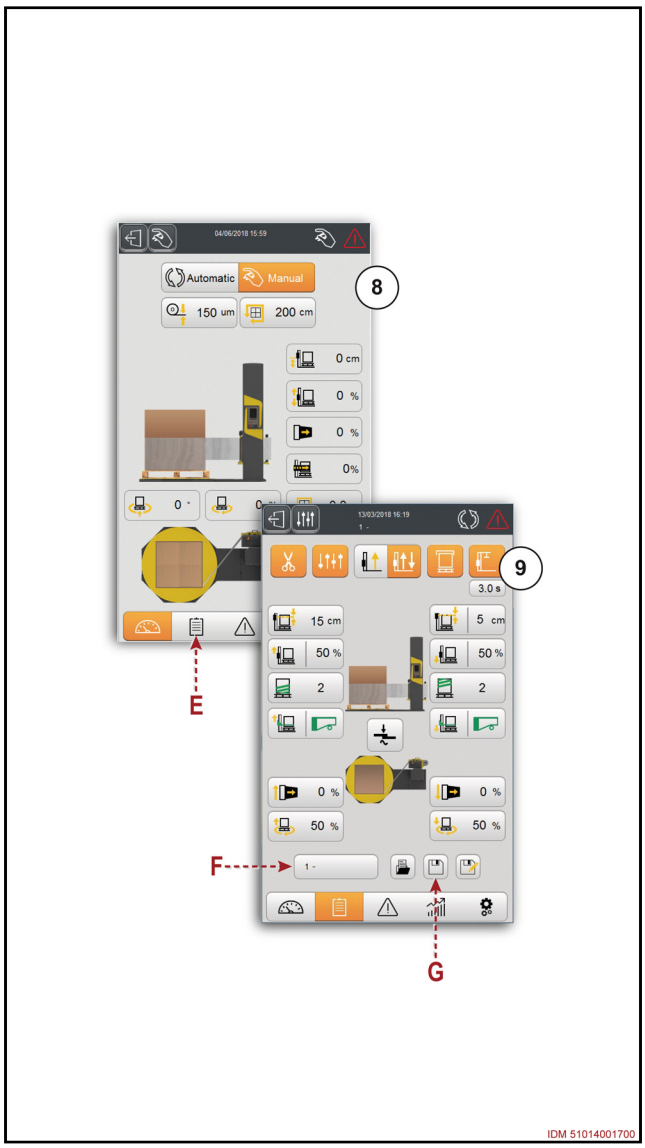


Modifying a recipe

1. Display the ADVANCED SETTINGS screen **(8)** (See “Operator interface navigation diagram (standard)”).
2. Press key **E**.

– The display shows the PARAMETER screen **(9)**.

3. Touch the area **F**.
4. Select the desired recipe from the drop-down menu.
5. Press the “check” key to confirm.
6. Change the desired parameters.
7. Press the key **G** to save all changes made.



How to load a recipe in the PLC

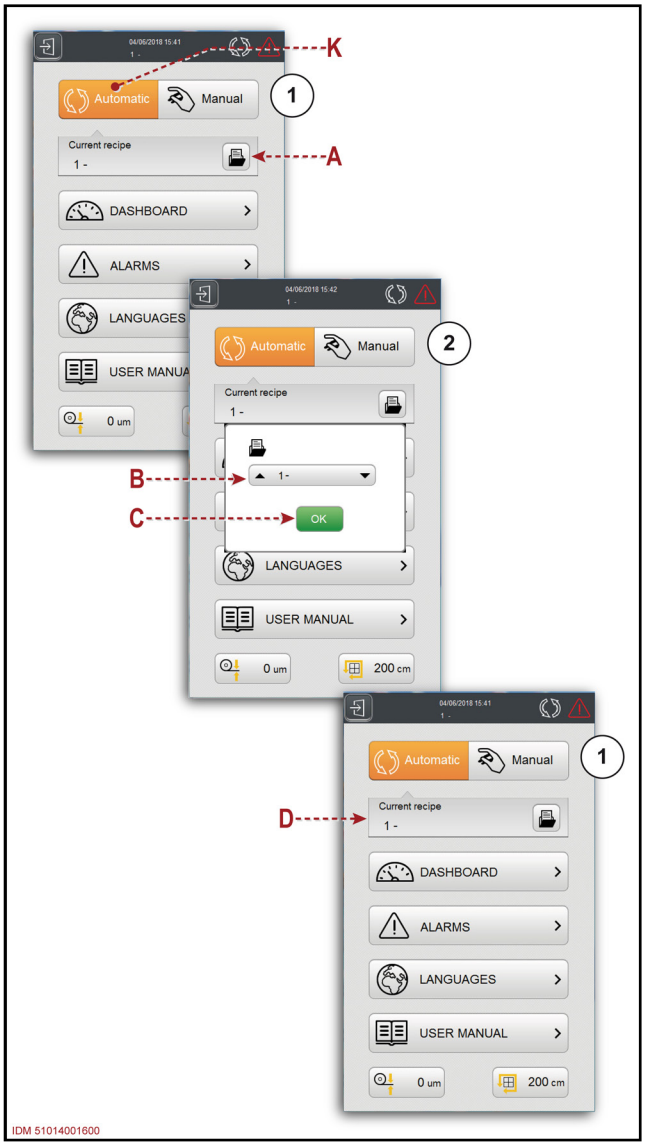
1. Display the MAIN screen **(1)** (See "Operator interface navigation diagram (standard)").
2. Press key **K**.
3. Touch the area **A**.

– The display shows the RECIPES screen **(2)**.

4. Touch the area **B**.
5. Select the desired recipe from the drop-down menu.
6. Press the key **C** to confirm.

– The selected recipe will be automatically loaded.

– The field **D** displays the loaded recipe.

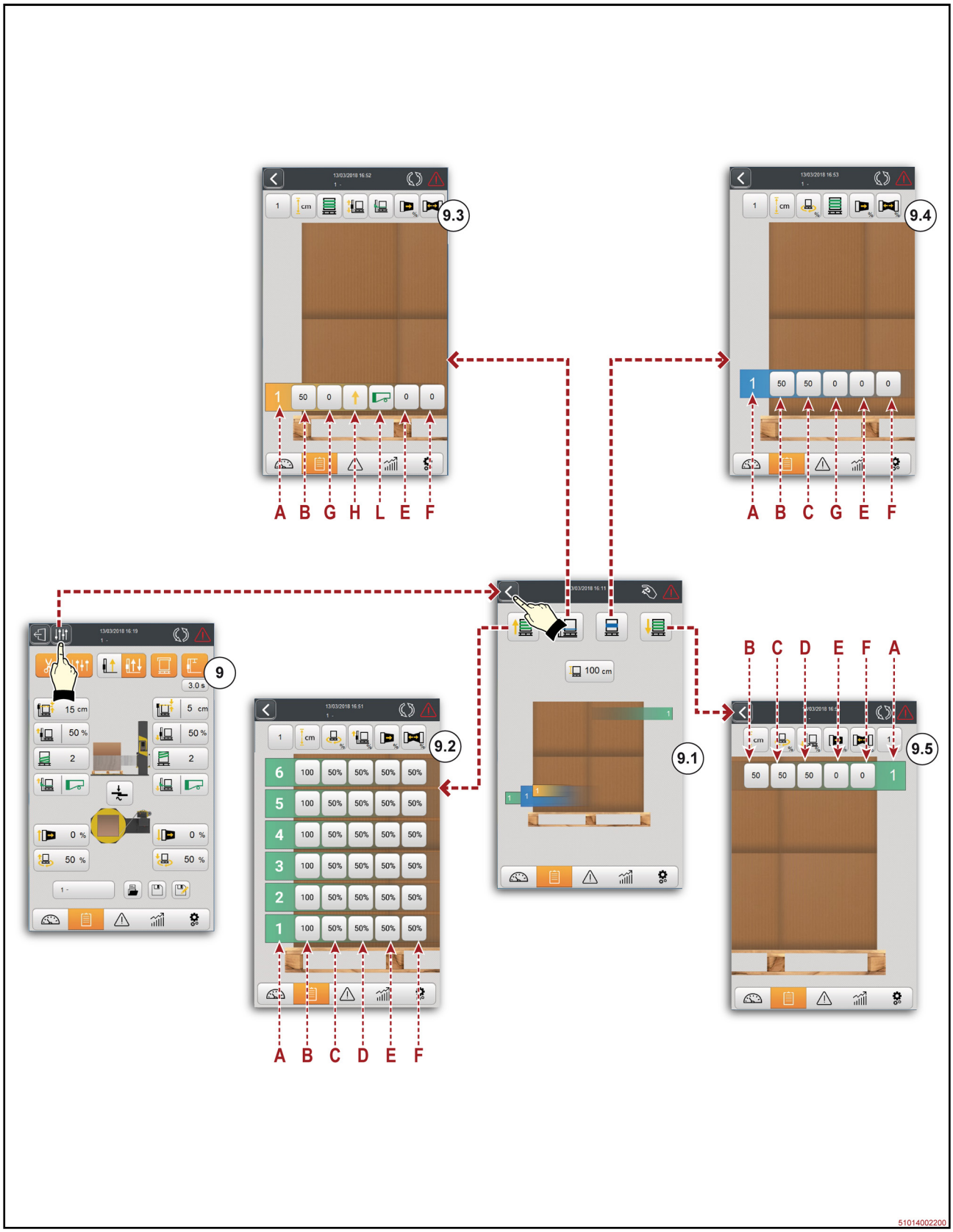


How to programme the bands and the wrapping reinforcements

The figure shows the screens to programme the wrapping and the reinforcements.

NOTE

You can programme up to 6 different reinforcement and wrapping areas.



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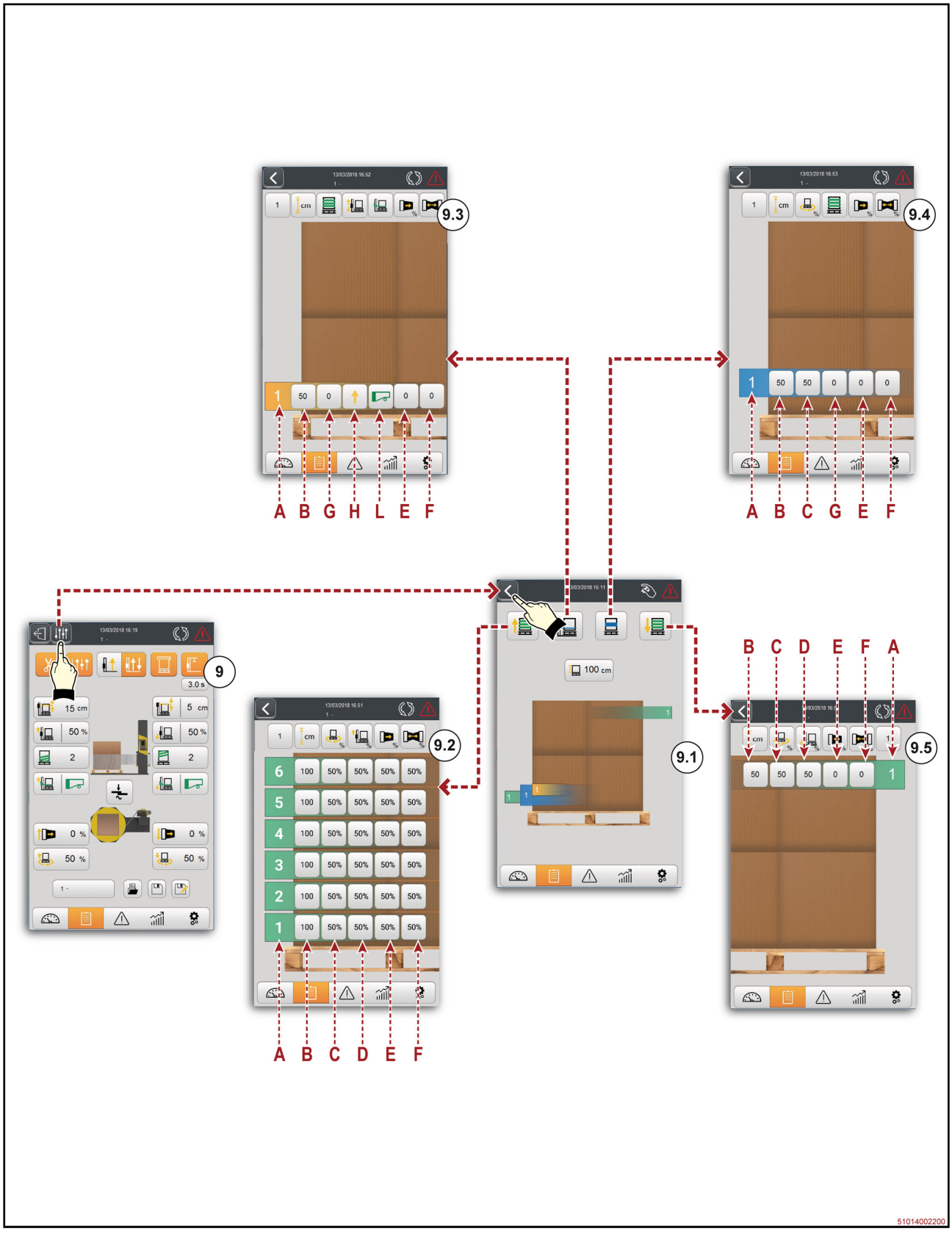
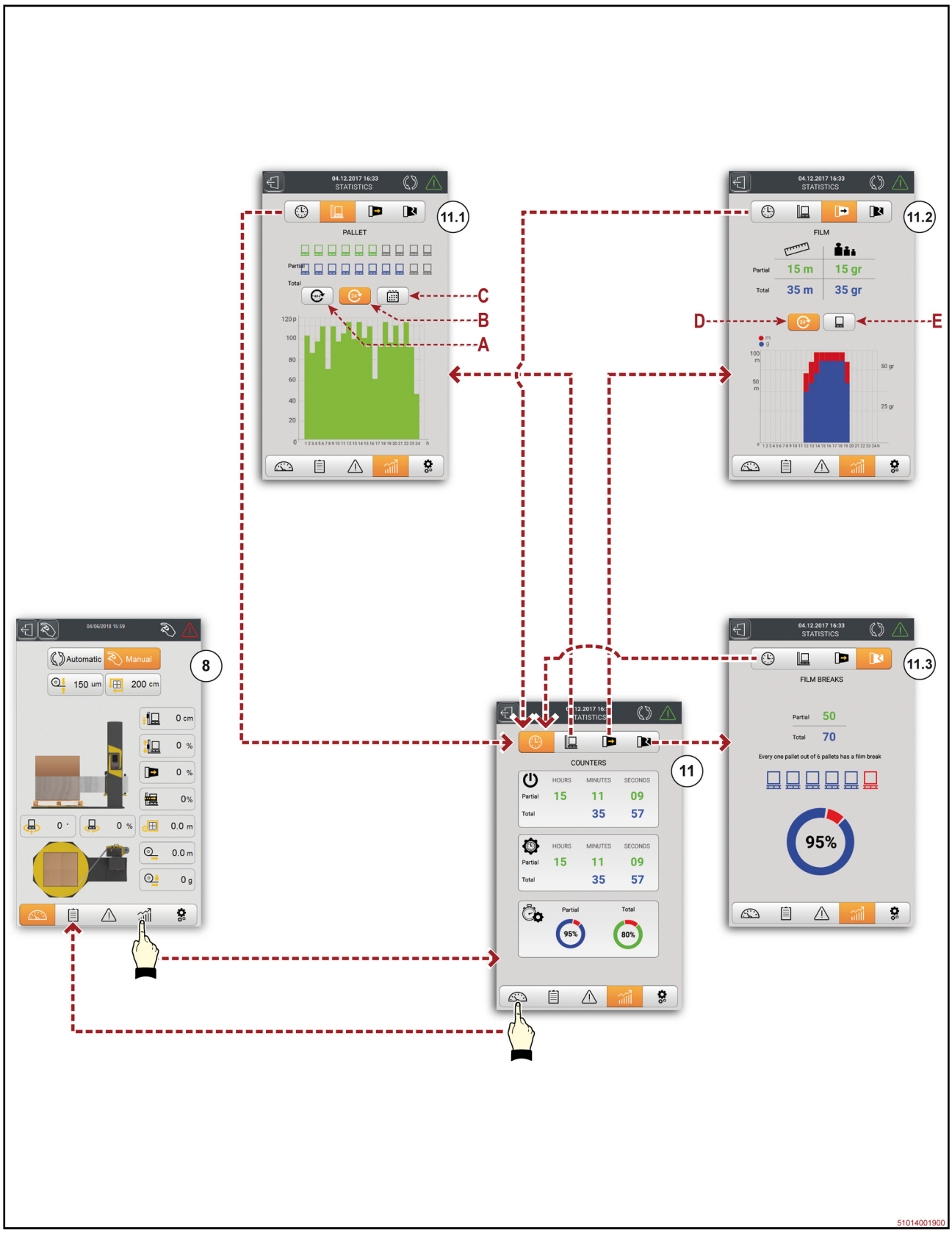
no.	Name	Function description
9	PARAMETERS screen	- Press the key to display the WRAPPING screen **(9.1)**.
9.1	WRAPPING screen	- The screen displays the controls that are used to access the reference functions. The summary shows (in different colours) the quantity and the type of the programmed wrapping and reinforcement bands. - Green colour: quantity of wrapping bands. - Blue colour: quantity of reinforcement bands. - Orange colour: quantity of reinforcement bands (with creasing system).
9.2	WRAPPING BANDS (LIFTING) screen	- The screen displays the fields that are used to programme the wrapping parameters. - Column **A**: ID of the wrapping area. - Column **B**: height of the corresponding wrapping area. - Column **C**: rotating speed of the platform within the corresponding wrapping area (The value is expressed as a percentage compared with the programmed operating speed). - Column **D**: lifting speed of the reel holding carriage within the corresponding wrapping area (The value is expressed as a percentage compared with the programmed operating speed). - Column **E**: tensioning of the film within the corresponding wrapping area. - Column **F**: pre-stretch of the film within the corresponding wrapping area (only for reel holding carriage of type PW - DM). **Important** To copy the same value in all fields of a column , touch the icon in the upper part.
9.3	REINFORCEMENT BANDS (WITH CREASING SYSTEM) screen	- The screen displays the fields that are used to programme the wrapping parameters. - Column **A**: ID of the wrapping area. - Column **B**: height of the corresponding wrapping area. - Column **E**: tensioning of the film within the corresponding wrapping area. - Column **F**: pre-stretch of the film within the corresponding wrapping area (only for reel holding carriage of type PW - DM). - Column **G**: quantity of reinforcement bands within the corresponding wrapping area. - Column **H**: direction of movement of the reel holding carriage within the corresponding wrapping area. - Column **L**: direction of movement of the creasing system within the corresponding wrapping area. **Important** To copy the same value in all fields of a column , touch the icon in the upper part.
9.4	REINFORCEMENT BANDS (WITHOUT CREASING SYSTEM) screen	- The screen displays the fields that are used to programme the wrapping parameters. - Column **A**: ID of the wrapping area. - Column **B**: height of the corresponding wrapping area. - Column **C**: rotating speed of the platform within the corresponding wrapping area (The value is expressed as a percentage compared with the programmed operating speed). - Column **E**: tensioning of the film within the corresponding wrapping area. - Column **F**: pre-stretch of the film within the corresponding wrapping area (only for reel holding carriage of type PW - DM). - Column **G**: quantity of reinforcement bands within the corresponding wrapping area. **Important** To copy the same value in all fields of a column , touch the icon in the upper part.


9.3
A B G H L E F
9.4
A B C G E F
9
9.2
A B C D E F
9.1
100 cm
B C D E F A
9.5
51014002200

no.	Name	Function description
9.5	WRAPPING BANDS (LOWERING) screen	- The screen displays the fields that are used to programme the wrapping parameters. - Column **A**: ID of the wrapping area. - Column **B**: height of the corresponding wrapping area. - Column **C**: rotating speed of the platform within the corresponding wrapping area (The value is expressed as a percentage compared with the programmed operating speed). - Column **D**: lowering speed of the reel holding carriage within the corresponding wrapping area (The value is expressed as a percentage compared with the programmed operating speed). - Column **E**: tensioning of the film within the corresponding wrapping area. - Column **F**: pre-stretch of the film within the corresponding wrapping area (only for reel holding carriage of type PW - DM). **Important** To copy the same value in all fields of a column , touch the icon in the upper part.

How to display the wrapping statistics

The figure shows the screens with wrapping statistical data.



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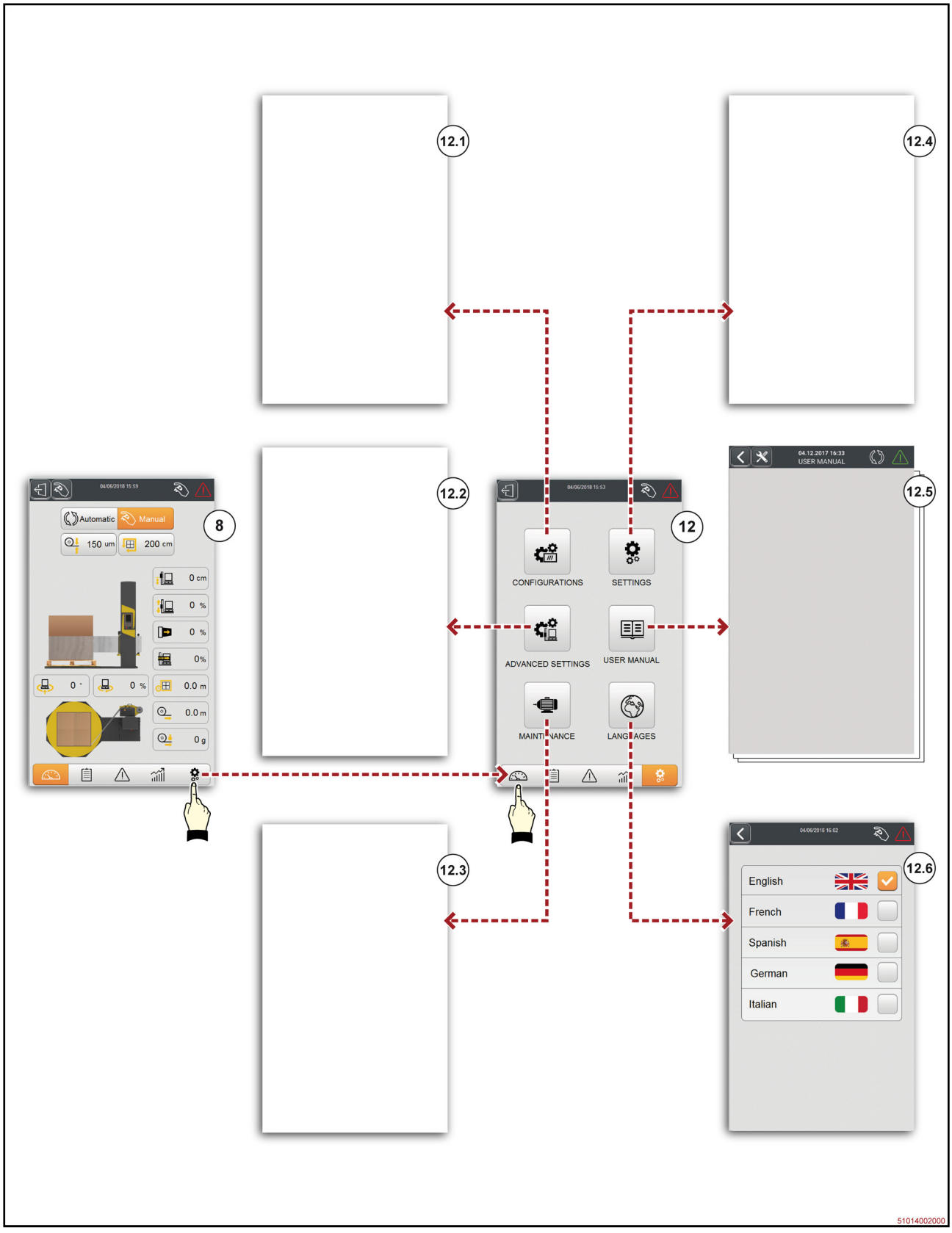
no.	*Name*	*Function description*
8	ADVANCED DASHBOARD screen	- Press the key to display the COUNTERS screen **(11)**.
11	COUNTERS screen	- The screen displays the controls that are used to access the reference functions. The areas show some machine operation statistics. - Machine (partial and total) operating hours. - Machine (partial and total) real wrapping hours. - Diagrams showing machine (partial and total) operating and wrapping percentages.
11.1	PALLET screen	- The screen includes the controls to display the corresponding production diagrams for the wrapped loads (partial and total values). - Key **A**: control that displays the hourly production diagram. - Key **B**: control that displays the daily production diagram. - Key **C**: control that displays the monthly production diagram.
11.2	FILM screen	- The screen includes the controls to display film consumption diagrams (partial and total values). - Key **D**: control that displays the daily consumption diagram. - Key **E**: control that displays the film consumption diagram for every wrapped load.
11.3	FILM BREAKS screen	The screen displays the film break diagrams (partial and total values).

How to display the Setup parameters

The figure shows the screens to programme the operation of the machine.



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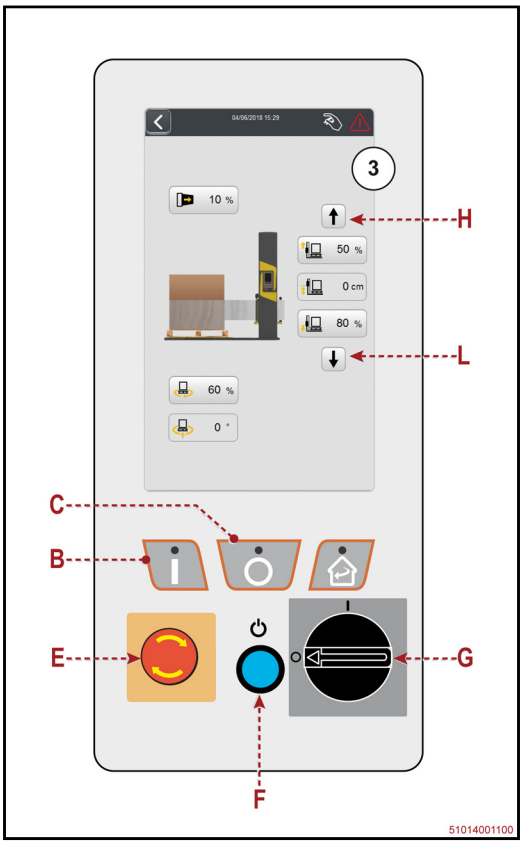
NOTE

The functions in the screens (12.1 - 12.2 - 12.3 - 12.4) are not described because they are intended for the Customer Assistance Service of the Manufacturer.

no.	*Name*	*Function description*
8	ADVANCED DASHBOARD screen	Press the key to display the TOOLS screen **(12)**.
12	TOOLS screen	- Screen displays the controls that are used to access the relevant functions.
12.1	SET-UPS screen	- The screen displays the set-up parameters of the machine.
12.2	ADVANCED SETTINGS screen	- The screen displays the set-up parameters of the machine.
12.3	MAINTENANCE screen	- The screen displays the maintenance parameters of the machine.
12.4	SETTINGS screen	- The screen displays the set-up parameters of the machine.
12.5	USER MANUAL screen	- Screen is used to read the use and maintenance manual in electronic format. (if any)
12.6	LANGUAGES screen	- Screen is used to select the desired language.

Manual wrapping

The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **G** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **F** turns on.

3. Press the push-button **F**.

– The pilot light of button **F** turns off.

4. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

5. Tie the trailing end of the film to the base of the product to be wrapped.
6. Display the MANUAL FUNCTIONS screen **(3)**.
   See "Operator interface navigation diagram (standard)"
7. Programme all wrapping parameters.

NOTE

The rotation speed must be adapted to the specifications of the load to be wrapped (type and stability).

8. Press key **B**.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– The platform begins to rotate.

– The wrapping cycle starts when performing the lower reinforcing band.

9. When the reinforcing band is completed, press and hold button **H** to make reel holder carriage rise.

■ Intermediate reinforcing band

– Release button **H** when the reel holder carriage reaches the height of interest.

– Press and hold button **H** to wrap the remaining part.

■ Upper reinforcing band with reel holder carriage descent (single wrapping)

– Release button **H** when the reel holder carriage reaches the upper part of the product.

– Press button **C** when the reinforcement band has been completed.

– Rotating platform stops in phase.

– Manually cut the film and cause it to adhere to the wrapped product.

– Press and hold button **L** to move reel holder carriage to the low position.

■ Upper reinforcing band with reel holder carriage descent (double wrapping)

– Release button **H** when the reel holder carriage reaches the upper part of the product.

– Press and hold button **L** when the upper reinforcement band has been completed.

– Release button **L** to perform the intermediate reinforcement band.

– Press and hold button **L** and release it when the upper reinforcement band has been completed.

– Press key **C**.

– Rotating platform stops in phase.

– Manually cut the film and cause it to adhere to the wrapped product.

10. Remove the wrapped product.

11. Correctly load the new product to be wrapped in the middle of rotating platform.

12. Wrap the new product by following the same procedures.

Important

Keep the reel suitably refilled to prevent to avoid interrupting the wrapping due to absence of film.

■ Normal stop

– Manually cut the film and cause it to adhere to the wrapped product.

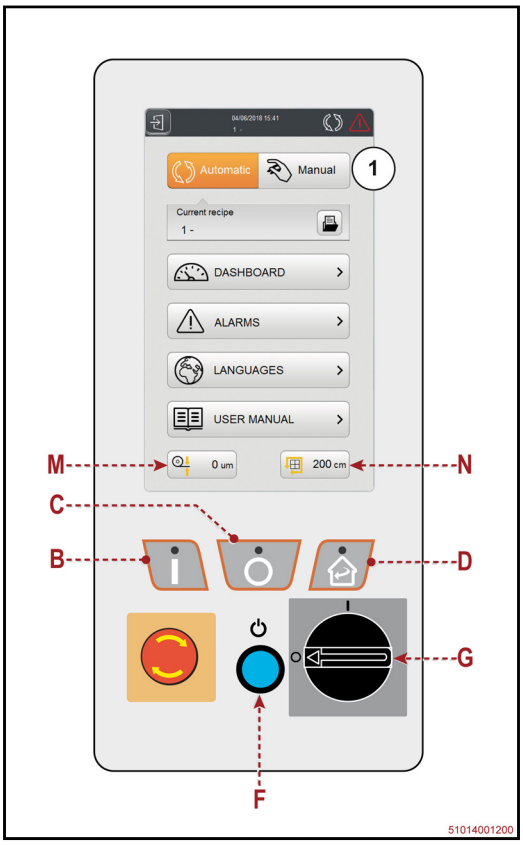
– Press and hold button **L** to move reel holder carriage to the low position.

– Remove the wrapped product.

– Rotate electric selector **G** to position **"O"** (OFF).

(Single or double) automatic wrapping

The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **G** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **F** turns on.

3. Press the push-button **F**.

– The pilot light of button **F** turns off.

4. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

5. Tie the trailing end of the film to the base of the product to be wrapped.
6. Select and activate the recipe of interest.
   See "Recipe management" for further details.
7. Touch the icon **M** to programme the thickness of the film (only for reel holding carriage of type PW - DM).
8. Touch the icon **N** to programme the perimeter of the load to be wrapped (only for reel holding carriage of type PW - DM).

Important

To prevent the correct operation from being compromised, programme the values in a thorough way.

9. Press button **B** to start the wrapping cycle.

– If the LED of key **D** is flashing, press key **D** to move reel holding carriage to its end-of-cycle position.

– When reel holding carriage is timed, the LED of key **D** turns off.

– To restart the wrapping cycle, press key **B** again.

– Audible warning device is activated to warn that the machine is operating.

– The machine stops as previously described, based on the selected type of wrapping.

NOTE

Press button C to stop wrapping; press button B to continue.
Wrapping will start at the point where it has been stopped.

– **Single mode:** the wrapping stops automatically with the reel holder carriage at the upper side of the load.
  Press button **D** to move reel holder carriage to the start of the cycle (lower part).

– **Double mode:** the wrapping stops automatically with the reel holder carriage at the starting point (lower side of the load).

10. Manually cut the film and cause it to adhere to the wrapped product.

Important

Keep the reel suitably refilled to prevent to avoid interrupting the wrapping due to absence of film.

11. Remove the wrapped product to be able to load the next one to wrap.

12. Correctly load the new product to be wrapped in the middle of rotating platform.

– With a product having the same features, press button **B** to start the wrapping cycle.

– Wrapping is carried out in the same modes.

■ Normal stop

– Make sure that the wrapping process has been completed.

– **DO NOT control a machine stop if the wrapping cycle has not been completed.**

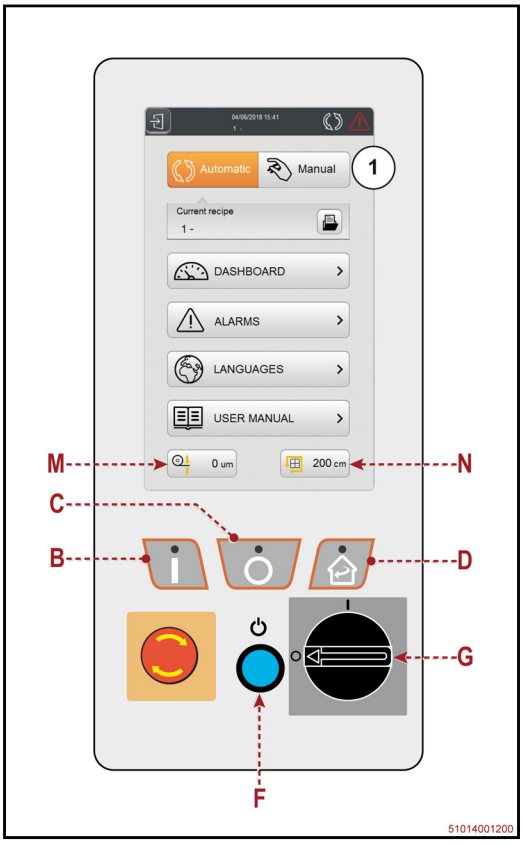
– Manually cut the film and cause it to adhere to the wrapped product.

– Remove the wrapped product.

– Rotate electric selector **G** to position **"O"** (OFF).

(Single or double) automatic wrapping with sheet feeder

The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **G** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **F** turns on.

3. Press the push-button **F**.

– The pilot light of button **F** turns off.

4. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

5. Tie the trailing end of the film to the base of the product to be wrapped.
6. Select and activate the recipe of interest.
   See "Recipe management" for further details.
7. Touch the icon **M** to programme the thickness of the film (only for reel holding carriage of type PW - DM).
8. Touch the icon **N** to programme the perimeter of the load to be wrapped (only for reel holding carriage of type PW - DM).

Important

To prevent the correct operation from being compromised, programme the values in a thorough way.

9. Press button **B** to start the wrapping cycle.

– If the LED of key **D** is flashing, press key **D** to move reel holding carriage to its end-of-cycle position.

– When reel holding carriage is timed, the LED of key **D** turns off.

– To restart the wrapping cycle, press key **B** again.

– Audible warning device is activated to warn that the machine is operating.

– The machine stops as previously described, based on the selected type of wrapping.

NOTE

Press button C to stop wrapping; press button B to continue.
Wrapping will start at the point where it has been stopped.

– **Single mode:** the wrapping stops automatically with the reel holder carriage at the upper side of the load.

– Insert the covering sheet.

– Press the key **B** to complete the wrapping of the covering sheet.

Press button **D** to move reel holder carriage to the start of the cycle (lower part).

– **Double mode:** the wrapping stops automatically with the reel holder carriage at the upper side of the load.
– Insert the covering sheet.
– Press key **B**.
– The machine completes the wrapping cycle and stops automatically with the reel holder carriage at the lower side of the load.

10. Manually cut the film and cause it to adhere to the wrapped product.

Important

Keep the reel suitably refilled to prevent to avoid interrupting the wrapping due to absence of film.

11. Remove the wrapped product to be able to load the next one to wrap.

12. Correctly load the new product to be wrapped in the middle of rotating platform.

– With a product having the same features, press button **B** to start the wrapping cycle.
– Wrapping is carried out in the same modes.

■ Normal stop

– Make sure that the wrapping process has been completed.
– **DO NOT control a machine stop if the wrapping cycle has not been completed.**
– Manually cut the film and cause it to adhere to the wrapped product.
– Remove the wrapped product.
– Rotate electric selector **G** to position **"O"** (OFF).

Stop in alarm conditions and restart

The figure shows the points of intervention and the description shows the procedures to be adopted.

– All moving devices will automatically stop in case of alarm conditions any time there is an irregular operation.

– The display shows the ALARMS screen **(5)**.

1. Find out the causes of the anomaly.

Important

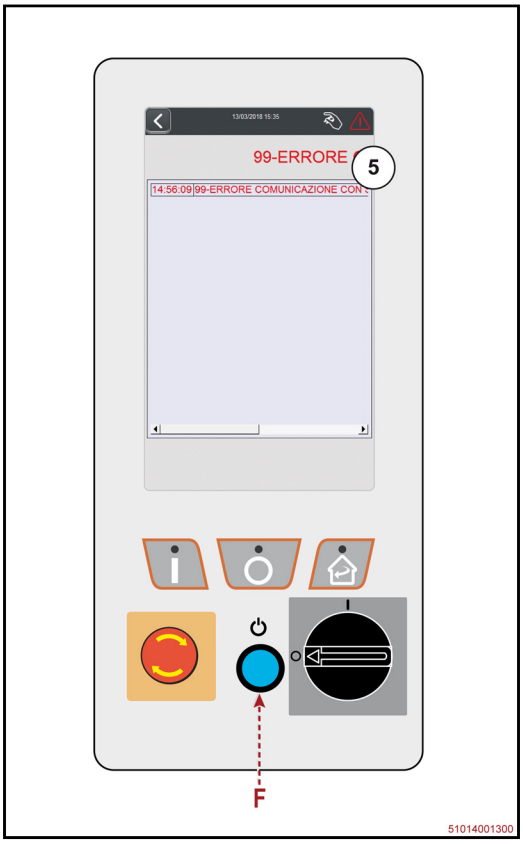
For more details on information and alarm messages, read the attached documents.

2. Restore normal running conditions

3. Press the push-button **F**.

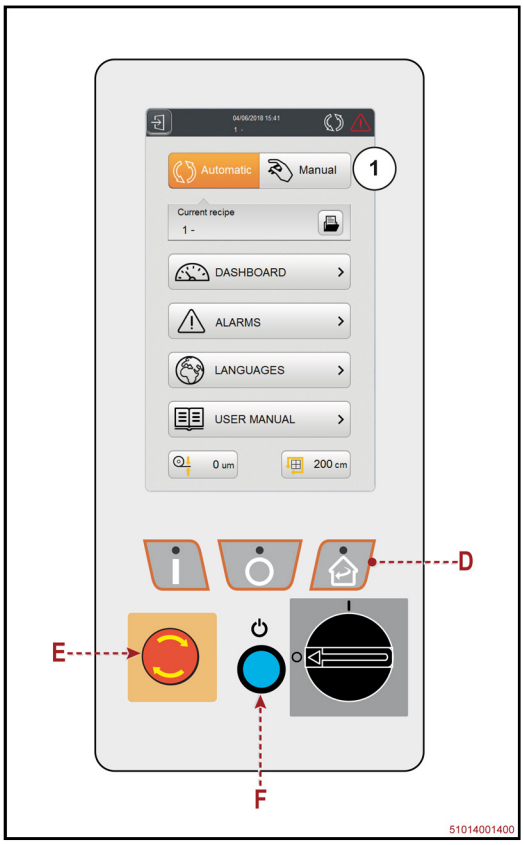
– Every solved alarm will automatically disappear.

4. Start the wrapping process.



Emergency stop and new start-up

The figure shows the points of intervention and the description shows the procedures to be adopted.



1. In the presence of an imminent risk press emergency button **E**.

– All moving devices immediately stop.

– The pilot light of button **F** turns on.

2. Identify the causes that have caused the stop.
3. Restore normal running conditions

Important

The recovery operations that are not within the operator's field of competence shall be carried out by authorised personnel and with recognised skills.

4. Manually cut the film and cause it to adhere to the wrapped product.

NOTE

Decide whether to remove or to leave the already wrapped film.

5. Unlock the emergency stop button with a voluntary action.
6. Press the push-button **F**.

– The push-button lamp **F** shuts off.

7. Press key **D**.
8. Wait for the units to synch and become automatically timed.
9. Tie the trailing end of the film to the base of the product to be wrapped.
10. Start the wrapping process.

Use of the weighing unit (optional)

Weighing shall be carried out ONLY with the system stopped, before starting or after completing the wrapping.

NOTE

The measured value is not valid for fiscal use.

– The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Activate the power supply of weighing unit.

2. Wait for the weighing unit to start.

3. Press the key **A** to reset the tare.

4. Properly place the new load to be wrapped in the middle of the rotating platform.

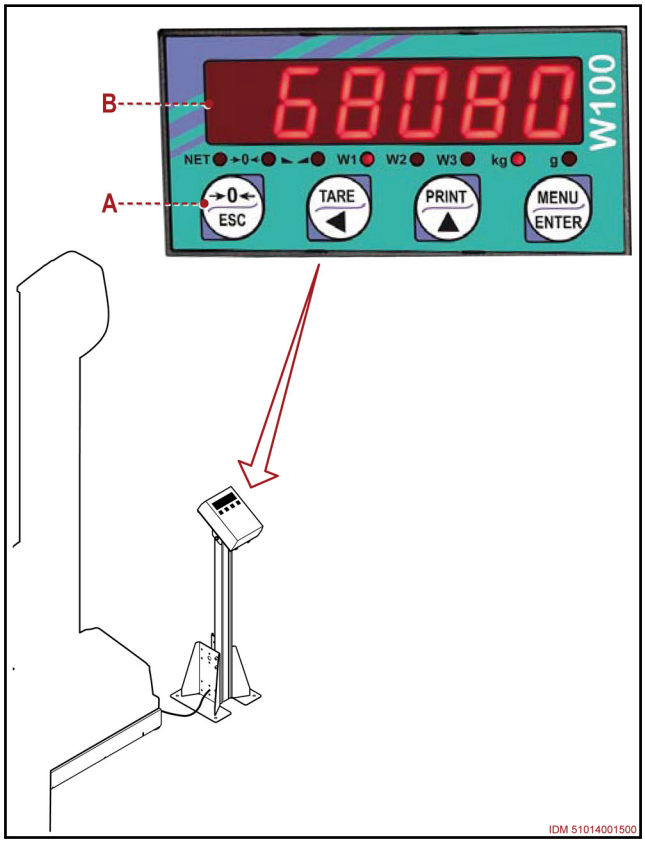
– The operation is to be carried out using a forklift truck of adequate capacity, with the forks inserted in the intended points.

5. Remove the lifting device.

6. The display **B** shows the weight of the load.

NOTE

For more details on the functions and controls of the weighing unit, see the specific reference documentation.



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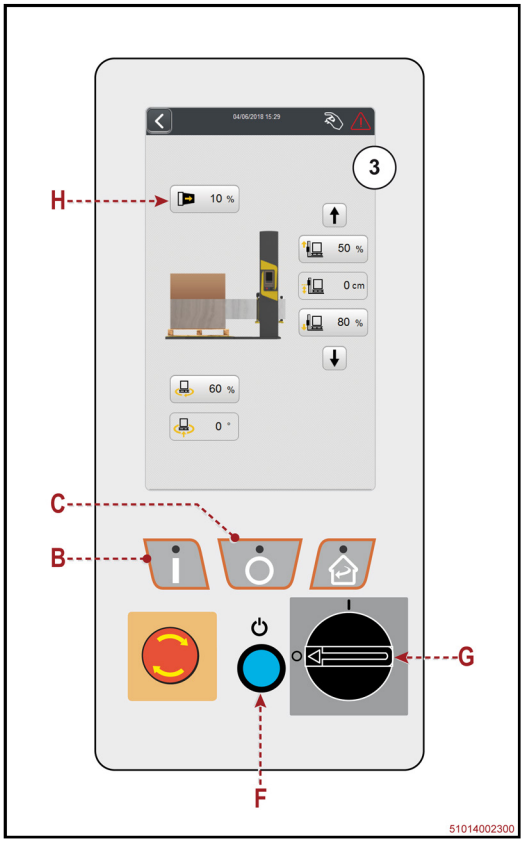
Calculation of film pre-stretch

The procedure is used to check if the programmed film pre-stretch corresponds to the real value.

– The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Rotate main disconnector **G** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **F** turns on.

2. Press the push-button **F**.

– The pilot light of button **F** turns off.

3. Introduce a sample product to be wrapped in the middle of the rotating platform.

4. Tie the trailing end of the film to the base of the product to be wrapped.

5. Display the MANUAL FUNCTIONS screen **(3)**.
See "Operator interface navigation diagram (standard)"

6. Enter the value 0% in the area **H** (film tensioning).

7. Press key **B**.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– The platform begins to rotate.

8. Press the key **C** after the rotating platform has completed a known number of wrappings (e.g. 20).

– Rotating platform stops in phase.

9. Apply the formula to find the length of the film that was used.

Number of wrappings x Perimeter of sample product (m) = Length of the used film (m)

10. Manually cut the film.

11. Unwrap the film that was used for the wrapping.

12. Weigh the film using a precision scale.

13. Apply the formula to find the weight per meter of the film that was used.

$$\frac{\text{Film weight (g)}}{\text{Film length (m)}} = \text{Weight per meter of the used film}$$

14. Unwrap 10 meters of film from the reel.

15. Weigh the film using a precision scale.

16. Apply the formula to find the specific weight of the film.

$$\frac{\text{Film weight (g)}}{\text{Film length (m)}} = \text{Specific weight of the film (g/m)}$$

17. Apply the formula to find the film pre-stretch value.

$$\frac{\text{Specific weight of the film (g/m) - Weight per meter of the used film (g/m)}}{\text{Weight per meter of the used film (g/m)}} = \text{Pre-stretch}$$

18. Check that the film pre-stretch corresponds to the set value.

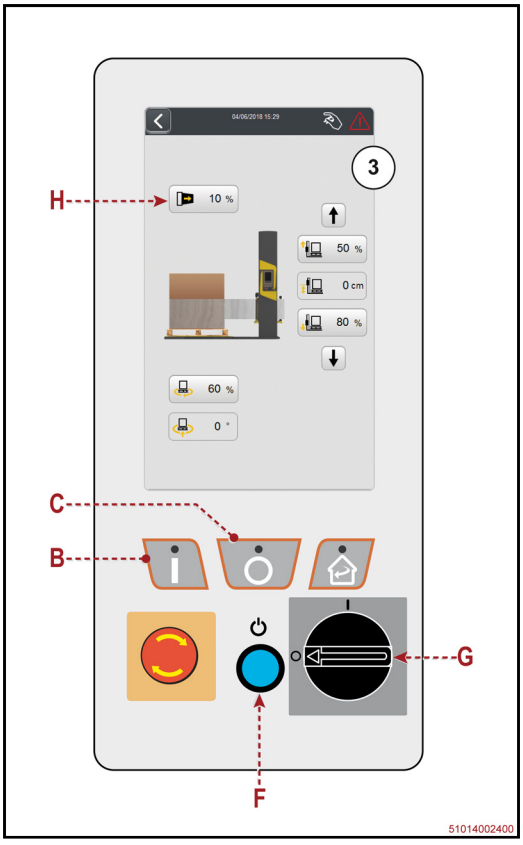
Important

If the values do not match, call the manufacturer's Technical Assistance Service.

Calculation of film tensioning

The procedure is used to check if the programmed film tensioning corresponds to the real value.

– The figure shows the points of intervention and the description shows the procedures to be adopted.



1. Rotate main disconnector **G** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **F** turns on.

2. Press the push-button **F**.

– The pilot light of button **F** turns off.

3. Introduce a sample product to be wrapped in the middle of the rotating platform.

4. Tie the trailing end of the film to the base of the product to be wrapped.

5. Display the MANUAL FUNCTIONS screen **(3)**.
See "Operator interface navigation diagram (standard)"

6. Enter the value 20% in the area **H** (film tensioning).

7. Press key **B**.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– The platform begins to rotate.

8. Use a specific tool to detect the peripheral speed of the film outfeed roller.

9. Use a specific tool to detect the peripheral speed of the load to be wrapped.

10. Press key **C**.

– Rotating platform stops in phase.

11. Apply the formula to find the tensioning of the film.

$$\frac{\text{Peripheral speed of the product}}{\text{Peripheral speed of film outfeed}} = \text{Film tensioning}$$

12. Check that film tensioning corresponds to the set value.

Important

If the values do not match, call the manufacturer's Technical Assistance Service.

Machine Disposal and Scrapping

■ Machine dismantling

– Disconnect the supplies form the energy sources (electrical, pneumatic, etc.) in order to prevent any restart.

– Carefully drain the systems containing hazardous substances, according to the applicable regulations on safety at work and environmental protection.

– Position the machine in a place that is not easily accessible by non authorised people.

■ Machine Scrapping

– The machine is to be scrapped at the authorized centres by skilled personnel equipped with all the necessary means to operate in safety conditions.

– The personnel carrying out the scrapping of the machine must identify any residual energy and implement a “safety plan” to avoid any unexpected hazard.

– Check whether there are any residual risks and take all necessary measures in order to work under safe conditions.

– Dispose of all polluting materials and liquids and all waste generated during the operations according to the laws in force.

– Dispose of Electrical and Electronic Apparatus Waste properly, at authorised collection centres, to avoid harmful and damaging effects.

Analytical index

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