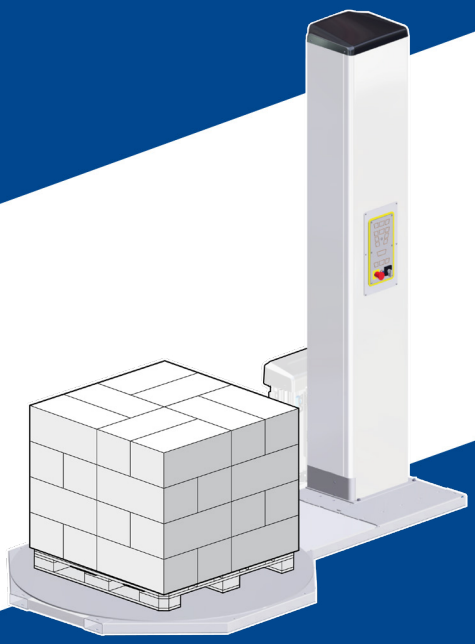
Semi-automatic pallet wrapper



OneWrap Plus

Operation and maintenance manual

Translation of the “ORIGINAL INSTRUCTIONS”

Code **SBC0038276** ed. 11-2022 - rev. 0.1

Summary

Top pressor

Reel holding carriage (M)

Reel holding carriage (FM)

Reel holding carriage (SM)

Reel holding carriage (LP)

Disposal 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

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.**

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

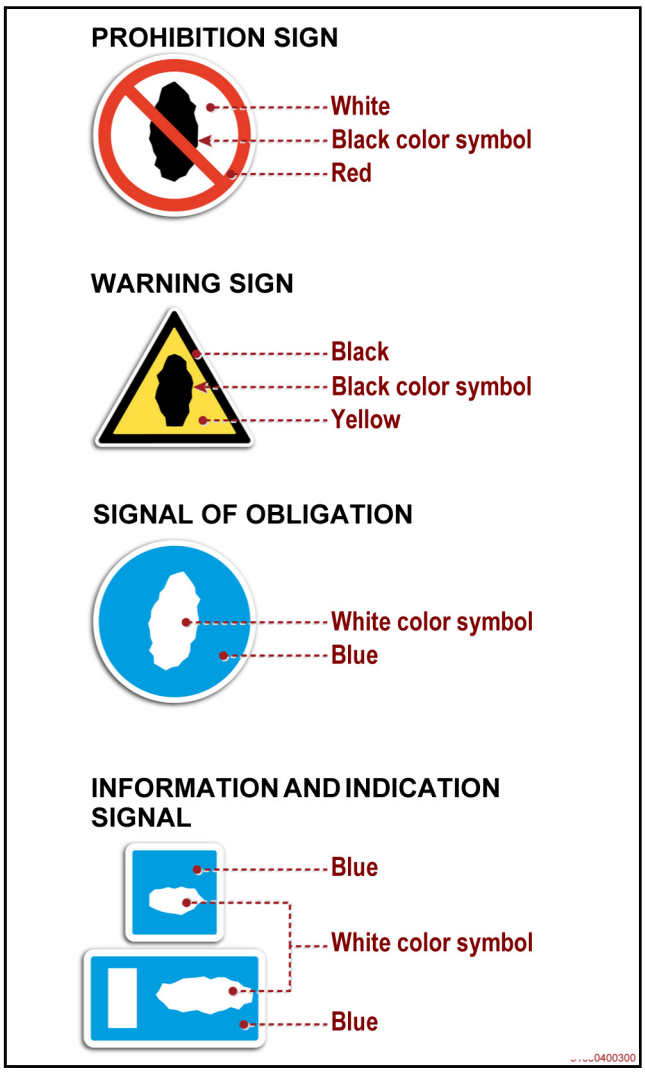
– The information signals may be of different shapes and colours, to indicate dangers, obligations, prohibitions and indications.

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

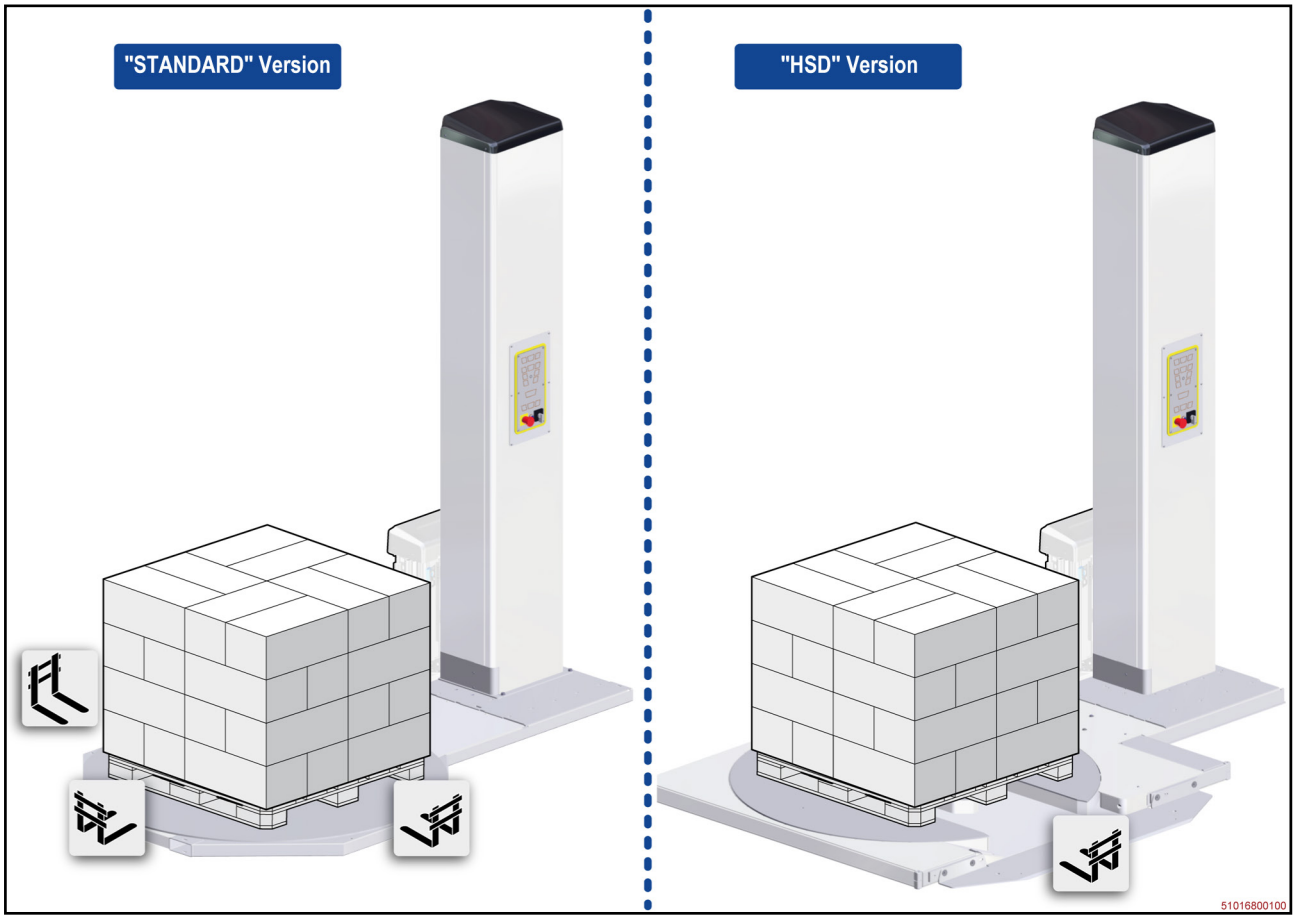
– For more details on the type and position of the signals applied, refer to the paragraph “Position of safety signals and information”.

– 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



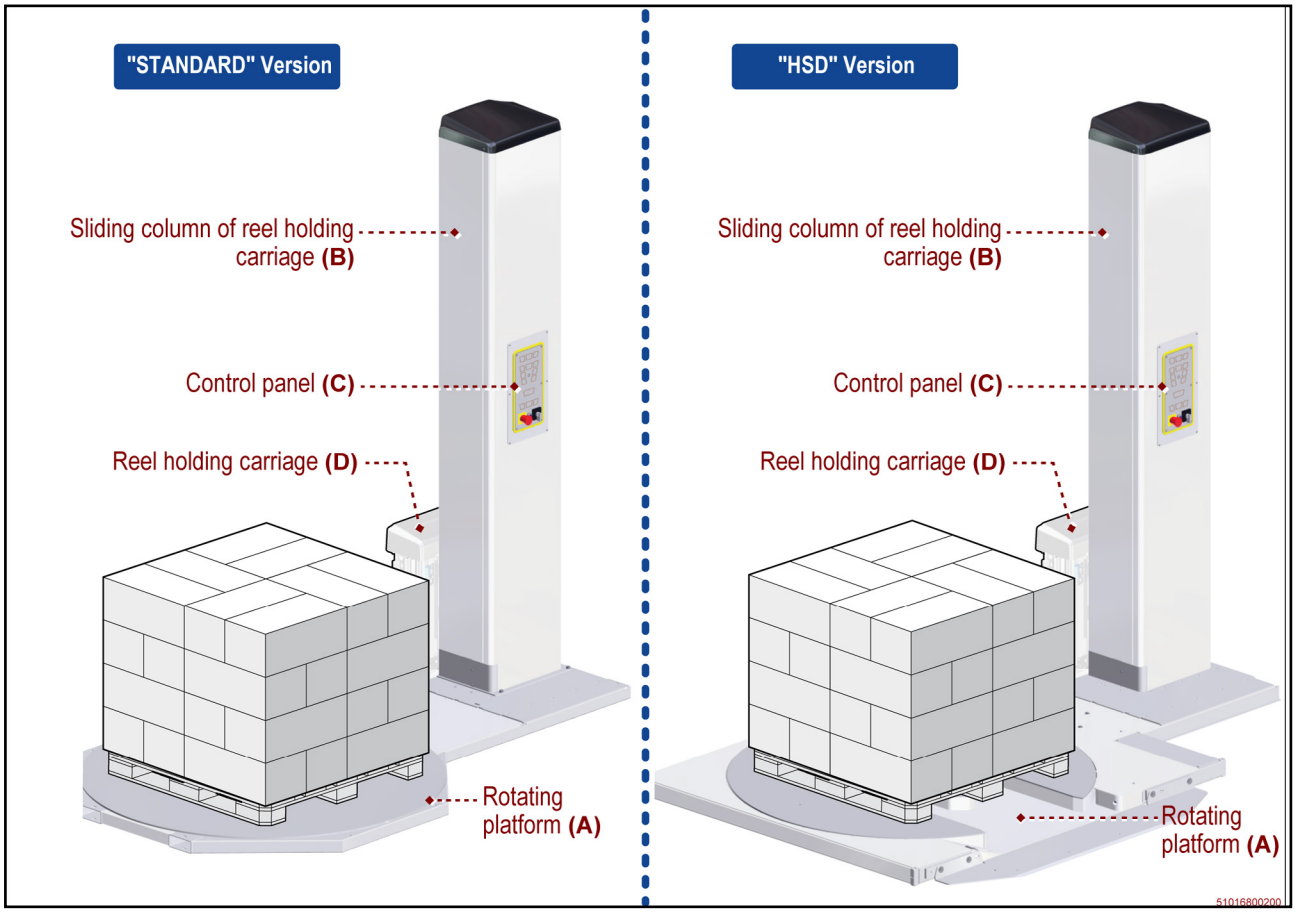
The semi-automatic wrapper series “OneWrap Plus” is designed to secure products loaded on pallets using stretch film.

- 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 holder carriage (type SM):** suitable for wrapping with film prestretch adjustment by changing the gear transmission ratio.

– **Reel-holder carriage (type LP):** suitable for wrapping, with motorised film pre-stretching and electronic tension adjustment from the control panel.

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

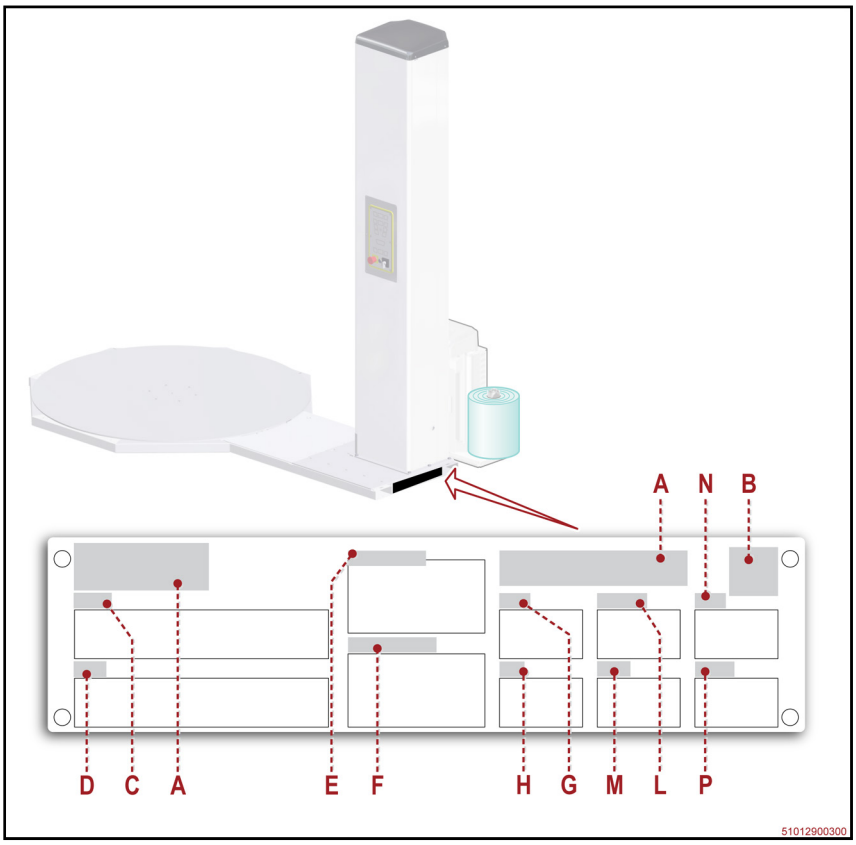
H) Power supply voltage

L) Installed electric current:

M) Power supply frequency

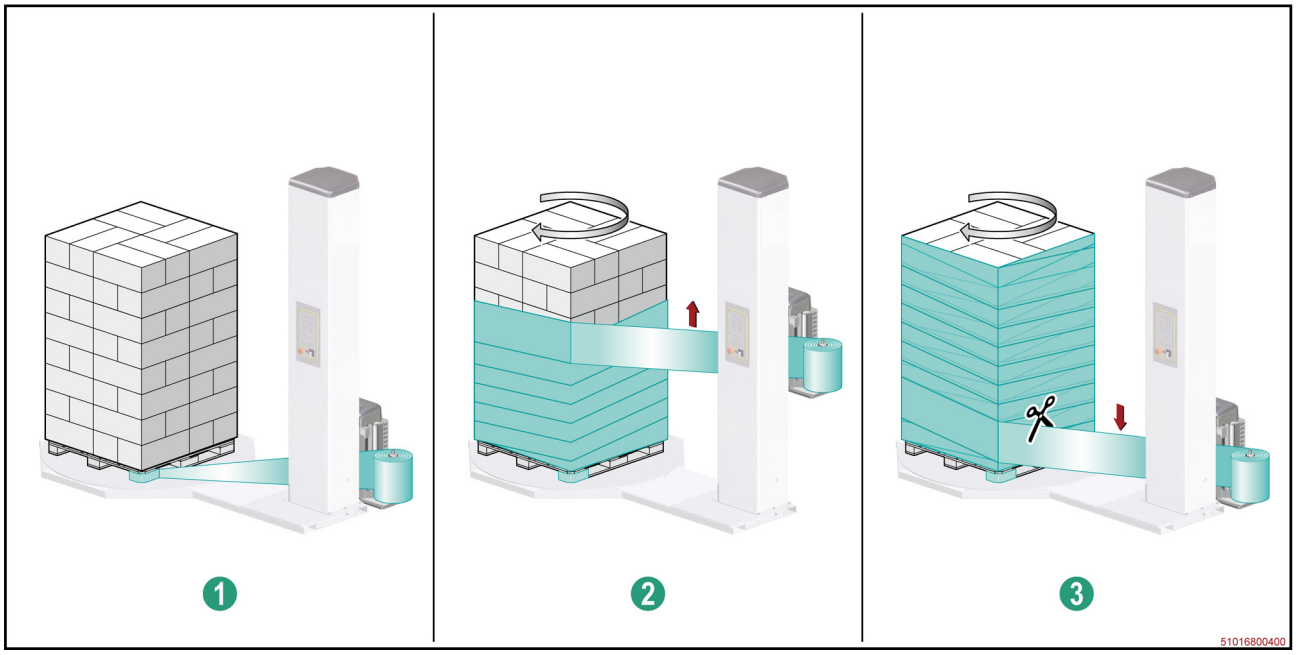
N) Installed electric power:

P) Power supply phases



Cycle

The figure shows the operating cycle with indication of the main operating steps.



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.

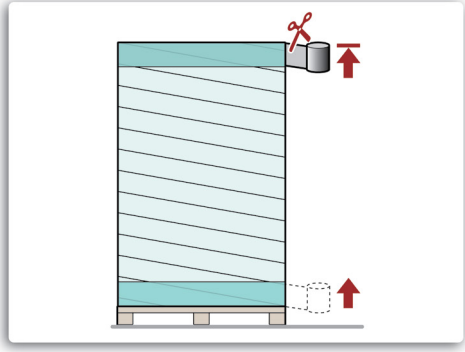
– With the manual mode, platform rotates at a reduced speed, while reel holding carriage is activated by a non-release control.
This mode allows for the wrapping to be made on an occasional basis, according to the specifications of the load to be wrapped (See “Manual wrapping”).

– With the automatic mode, the wrapping can be programmed according to the specifications of the loads to be wrapped.

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

– **Single wrapping:** starts at the base of the load to be wrapped and ends in its upper part.
Stabilisation wrappings cab be made at the base and in the upper part of the load to be wrapped.

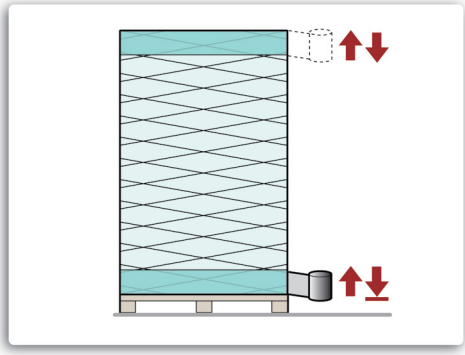
– Reel holding carriage is moved back to the base from control panel in order to start a new wrapping operation.



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:** starts and ends at the base of the load after wrapping it in the lifting and lowering steps of reel holding carriage.
Stabilisation wrappings cab be made at the base and in the upper part of the load to be wrapped.

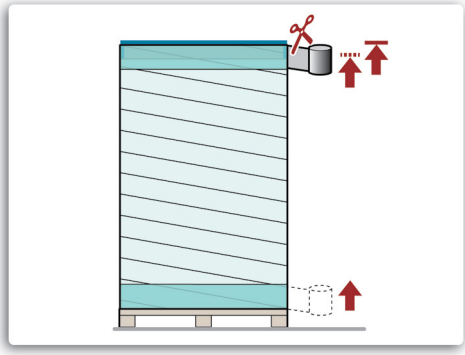


– **Single wrapping with sheet feeder:** starts at the base of the load to be wrapped and temporarily stops in its upper part.
Stabilisation wrappings cab be made at the base and in the upper part of the load to be wrapped.

– After inserting the covering sheet the operator must enable the control to restart the wrapping.

– After completing the upper reinforcement, the wrapping stops.
Stabilisation wrappings cab be made in the upper part of the load to be wrapped.

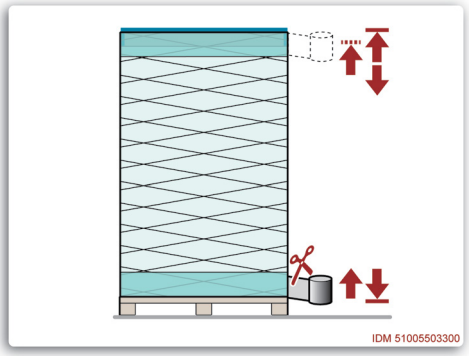
– Reel holding carriage is moved back to the base from control panel in order to start a new wrapping operation.



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 with sheet feeder:** starts at the base of the load to be wrapped and temporarily stops in its upper part.
Stabilisation wrappings cab be made at the base and in the upper part of the load to be wrapped.
– After inserting the covering sheet the operator must enable the control to restart the wrapping.
– After completing the reinforcement at the top of the load, the wrapping continues downwards and stops after the closing wrapping.
Stabilisation wrappings cab be made in the upper part of the load to be wrapped.



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.
– The risk mainly relates to the area between the sliding column and the reel holding carriage.
– **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.
– **Top pressor:** this device keeps the product stabilised during wrapping.
– **Lifting disc:** device to increase the height of the rotating platform **“HSD”** above the floor.
– **External guard:** safety system (guards and control devices) that prevents access to the wrapping area.
– When an access to the area is detected, the monitoring devices control machine operation stop in safe conditions.
– **Heating set for control panel:** device needed when the machine has to be used in low-temperature environments.
– **Film cutting device:** it cuts the film automatically at the end of wrapping (only for reel holding carriage of type “LP”).
– **Radio control:** optional device that is used as a remote control.

Description of the safety devices

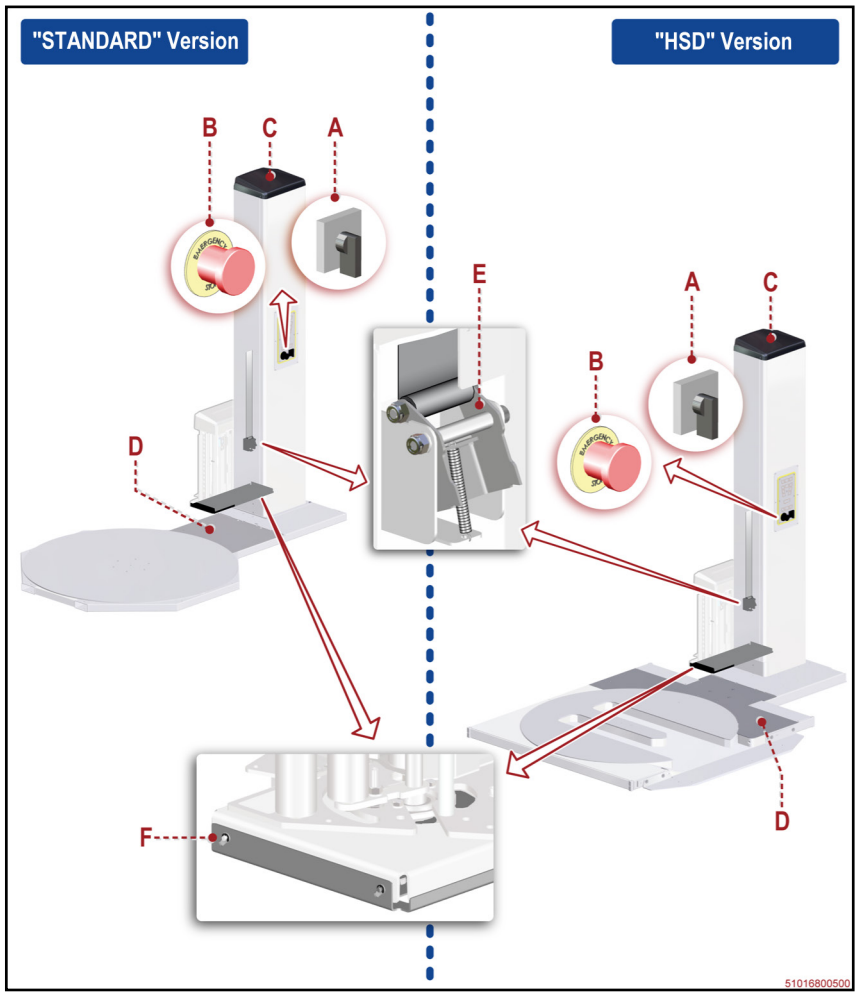
The machine is equipped with safety devices that reduce the risks during the man-machine interaction.

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.

NOTE

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.

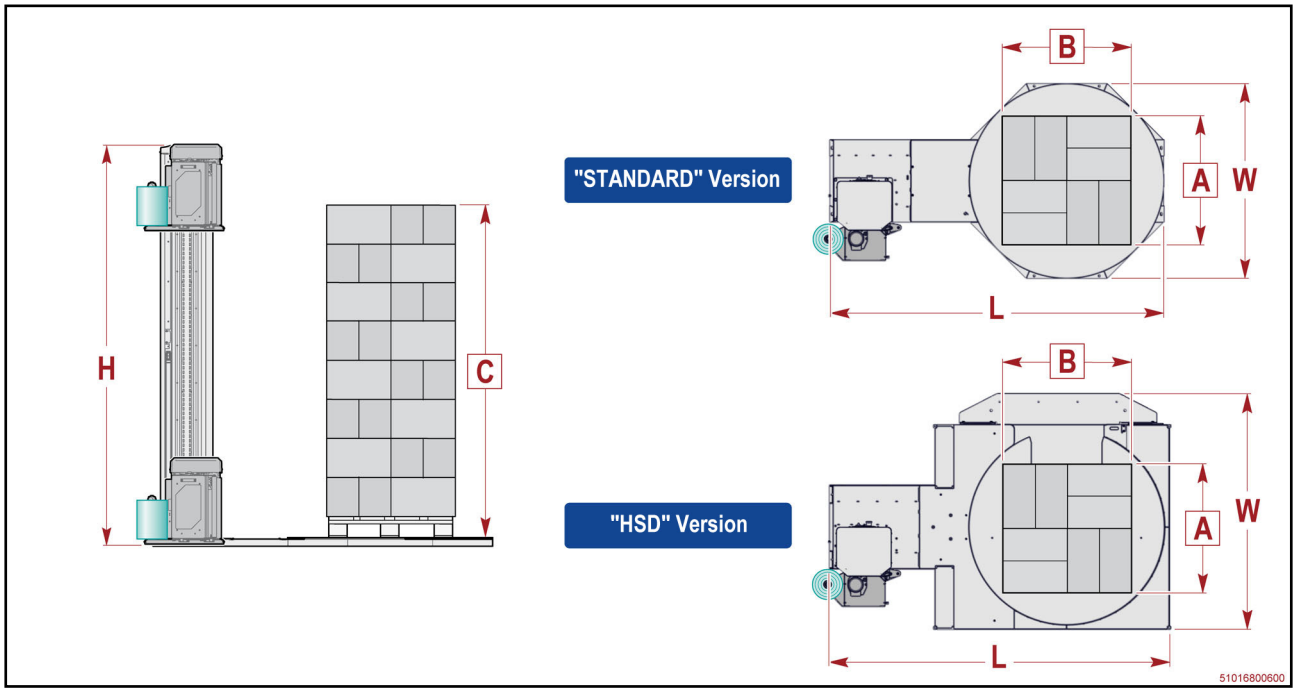
– The device is secured and it can be opened only by means of tools.

– 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 blocks the fall of reel holding carriage in the event of lifting strap breaking.

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)

OneWrap Plus 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_M	Min 600x600x700 Max 1000x1200x2200	100 ÷ 2400	1650	2831x1650x2714	495
16_L_FM					495
16_L_SM					503
16_L_LP					517
16_M_M	Min 600x600x700 Max 1000x1200x2600	100 ÷ 2400	1650	2831x1650x3114	505
16_M_FM					505
16_M_SM					513
16_M_LP					527
16_H_M	Min 600x600x700 Max 1000x1200x3000	100 ÷ 2400	1650	2831x1650x3514	515
16_H_FM					515
16_H_SM					523
16_H_LP					537
18_L_M	Min 600x600x700 Max 1200x1200x2200	100 ÷ 2400	1800	2892x1800x2714	535
18_L_FM					535
18_L_SM					543
18_L_LP					557
18_M_M	Min 600x600x700 Max 1200x1200x2600	100 ÷ 2400	1800	2892x1800x3114	545
18_M_FM					545
18_M_SM					553
18_M_LP					567
18_H_M	Min 600x600x700 Max 1200x1200x3000	100 ÷ 2400	1800	2892x1800x3514	555
18_H_FM					555
18_H_SM					563
18_H_LP					577

OneWrap Plus 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)
22_L_M	Min 600x600x700 Max 1550x1550x2200	100 ÷ 2400	2200	3382x2200x2714	641
22_L_FM					641
22_L_SM					649
22_L_LP					663
22_M_M	Min 600x600x700 Max 1550x1550x2600	100 ÷ 2400	2200	3382x2200x3114	651
22_M_FM					651
22_M_SM					659
22_M_LP					673
22_H_M	Min 600x600x700 Max 1550x1550x3000	100 ÷ 2400	2200	3382x2200x3514	661
22_H_FM					661
22_H_SM					669
22_H_LP					683
Height above ground of the platform 75 mm					
(*) For reel holding carriages of type **LP** add 50 mm to the length and 80 mm to the height of the machine.					

■ Dimensions and weights (version HSD)

OneWrap Plus 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_M	Min 600x600x700 Max 1000x1200x2200	100 ÷ 1200	1650	2890x1998x2732	695
HS_L_FM					695
HS_L_SM					703
HS_L_LP					717
HS_M_M	Min 600x600x700 Max 1000x1200x2600	100 ÷ 1200	1650	2890x1998x3132	705
HS_M_FM					705
HS_M_SM					713
HS_M_LP					727
HS_H_M	Min 600x600x700 Max 1000x1200x3000	100 ÷ 1200	1650	2890x1998x3532	715
HS_H_FM					715
HS_H_SM					723
HS_H_LP					737
Height above ground of the platform 83 mm					
(*) For reel holding carriages of type **LP** add 50 mm to the length and 80 mm to the height of the machine.					

■ Technical specifications

	Unit of measurement	Value
OPERATING PROPERTIES		
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
Installed electric power:		
- Reel holding carriage **M**	kW	0,92
- Reel holding carriage **FM**	kW	0,97
- Reel holding carriage **LP**	kW	1,29
Environmental conditions		
Maximum operating height (asl)	m	1000

	Unit of measurement	Value
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 top pressor

	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	13,74
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

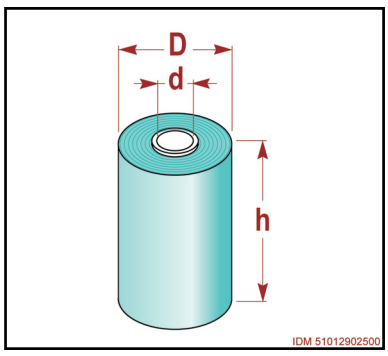
■ Specifications of the accessories available on request

	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
Film thickness	µm	9-12-17-23
Max Weight	kg	17



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Description of outer areas

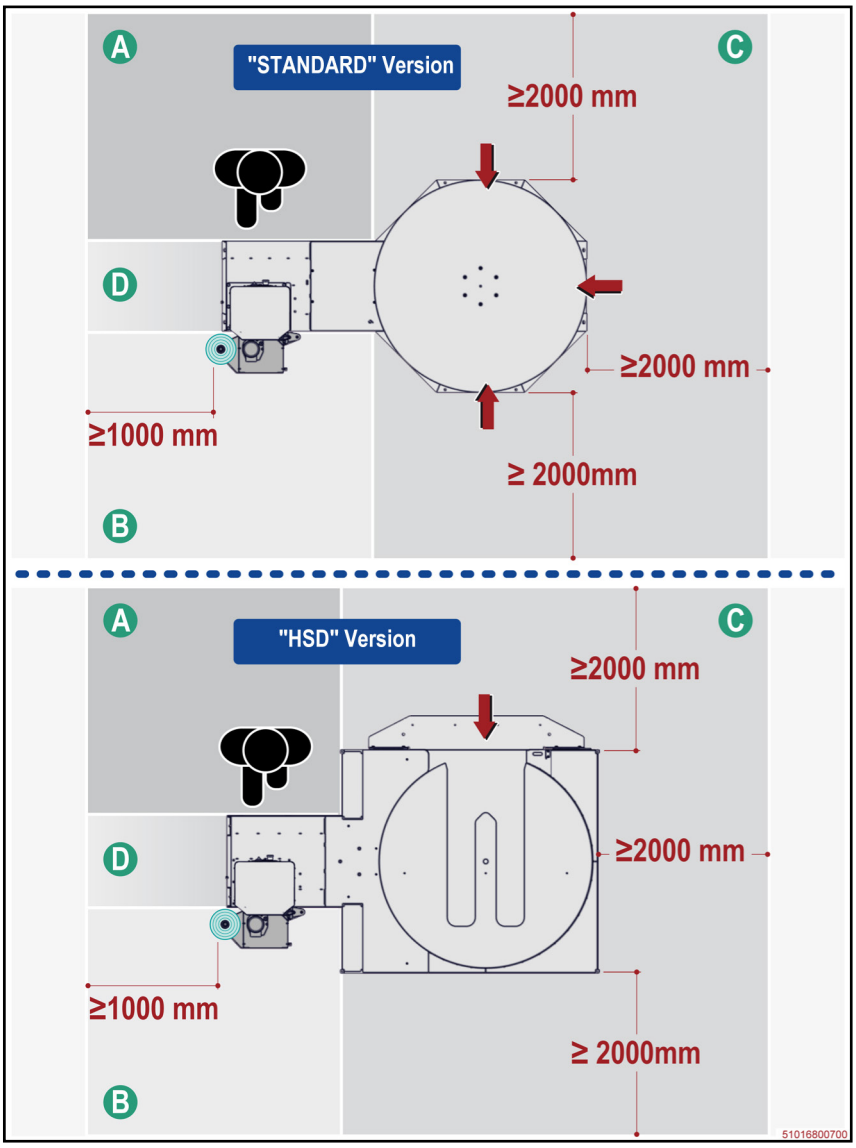
The figure shows different areas to be considered in the planning of the installation area.

A) Operator control and standing area

B) Refill area for reel

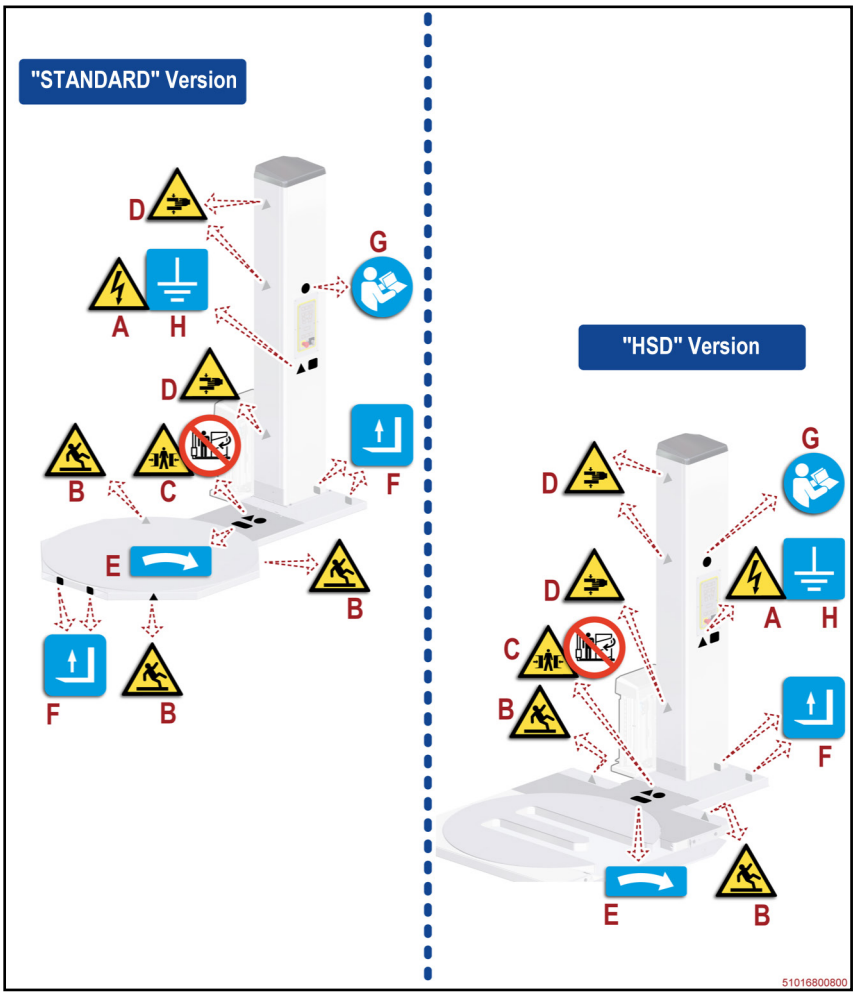
C) Loading/unloading area for the products to be wrapped

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

H) Information Signal: indicates the earthing point.

– 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 on 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.

– Ensure the area around the machine, especially the control post, is ALWAYS unobstructed and in good condition to minimize the risks for the Operator.

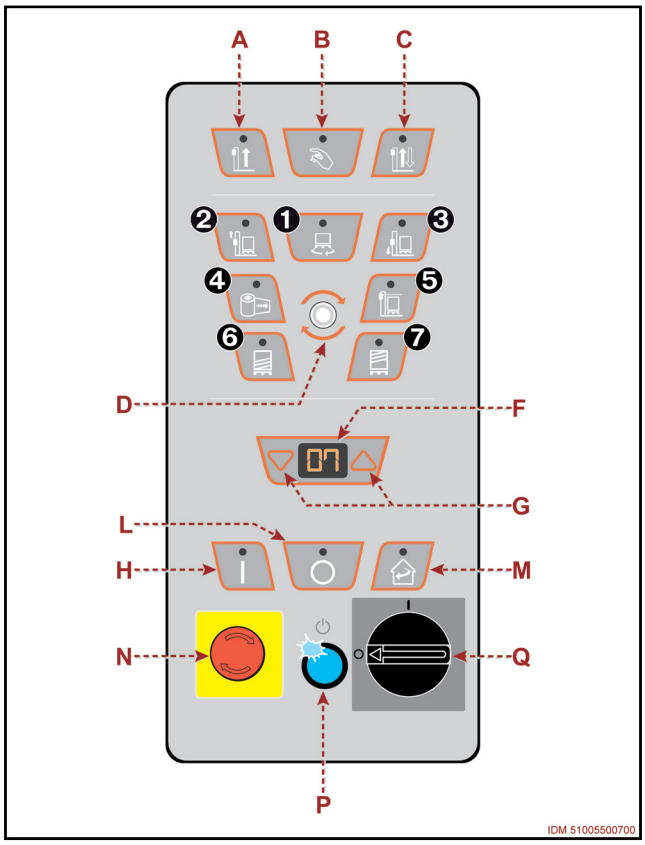
– Keep the reel suitably refilled to prevent to avoid interrupting the wrapping due to absence of film.

– Check whether according to the “Instructions for use” the operators are obliged to wear Personal Protective Equipment during use and operation.

– Even if the “Instructions for use” do not prescribe the use of PPE, keep to the laws applicable to the workplace.

Control description

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



A) Button: control that enables single automatic wrapping (rise of the reel holder carriage).

– **Single automatic wrapping without sheet feeder:** press control once (LED with solid light).

– **Single automatic wrapping with sheet feeder:** press control twice (blinking LED).

B) Button: control that enables manual wrapping.

C) Button: control that enables double automatic wrapping (rise and descent of the reel holder carriage).

– **Double automatic wrapping without sheet feeder:** press control once (LED with solid light).

– **Double automatic wrapping with sheet feeder:** press control twice (blinking LED).

D) Key: control for selecting the wrapping parameter to set and for enabling recipe selection.

– **Recipe enabling:** press control and keep it pressed (about 5 seconds).

– **Parameter selection:** press control repeatedly and release it when the LED corresponding to the icon to be programmed turns on.

– **❶ - Setup of wrapping speed**
- The number shown on display **F** refers to a value scale from 0 to 10.

– **❷ - Carriage speed:** setting of the lifting speed.
- The number shown on display **F** refers to a value scale from 0 to 10.

– **❸ - Carriage speed:** setting of the lowering speed.
- The number shown on display **F** refers to a value scale from 0 to 10.

– **❹ - Setup of the tension and cut of film**
- Solid LED ON: programming of film tension (only for reel holding carriage of type FM - LP).
  The number shown on display **F** refers to a value scale from 0 to 99.
- Flashing LED: programming of film cut (only for reel holding carriage of type LP).
  Value “0”: function deactivated.
  Value “1”: function activated

– **❺ - Setup of the detection delay of photocell and load height**
- Led on: programming time (in seconds) from the detection of the end of the load until the stop of the reel holder carriage.
- Slow flash LED: programming of the height of the load to be wrapped.
  The value is expressed in metre and it can be measured with a tolerance of ±10%.

NOTE

Set up value “0” to allow special photocell to detect the height without measuring the load to be wrapped.

- Fast flash LED: programming of downward movement (in seconds) of the reel holding carriage.
  The downward movement of reel holding carriage is necessary to introduce the protection sheet.

– **❻ - Setup of the number of wrapping revolutions for bottom reinforcement.**
  - The number shown on display **F** refers to the number of wrapping revolutions to be carried out for the reinforcing bands.

– **❼ - Setup of the number of wrapping revolutions for upper reinforcement.**
  - The number shown on display **F** refers to the number of wrapping revolutions to be carried out for the reinforcing bands.

F) Digital display: it displays different functions (value of the selected parameter, active alarm, selected recipe, etc.).

G) Keys: controls that increase or reduce the value shown in the display **F**.

– In manual mode (control **B** pressed), buttons **G are used to activate (rise-descent) reel holder carriage.**

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

– **Automatic wrapping:** when one of buttons **A-C** is activated, command **H** is used to start the cycle in automatic mode.

– **Manual platform rotation:** by activating button **B**, control **H** starts the rotation of platform.

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

– **Automatic wrapping:** when one of buttons **A-C** is activated, command **L** is used to stop the cycle in automatic mode.

– **Manual platform rotation:** by activating button **B**, control **L** stops the rotation of platform.

M) Key: control that is used to reset the position of reel holding carriage.

– LED on: press control to perform the reset.

N) 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.

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

– Control enabled only with isolator switch **Q** in position **“I” (ON)**.

– Blue light off: activated power supply line.

– Blue light on: power supply deactivated.

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

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

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

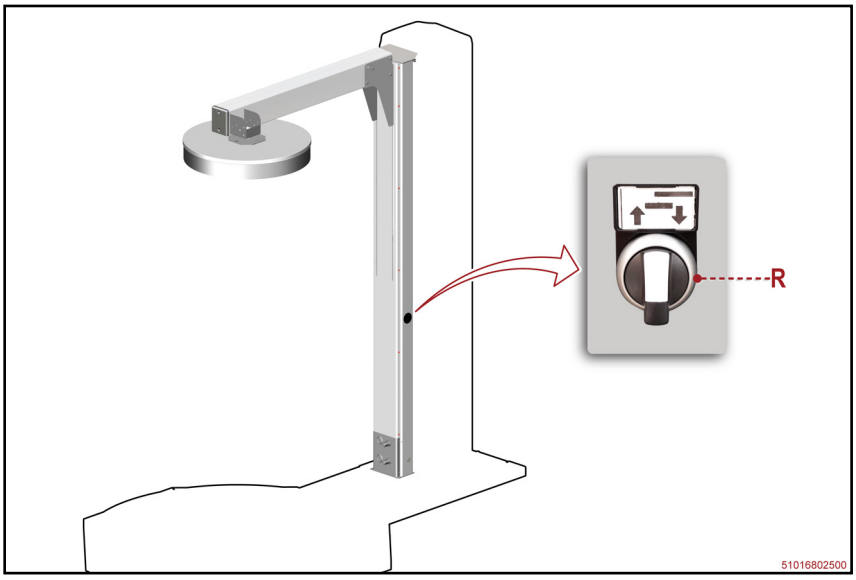
– Control can be padlocked in order to avoid operations by non-authorised personnel.

■ Controls of pressing device (optional)

R) Selector (non-release hold control): it is used to activate pressing device.

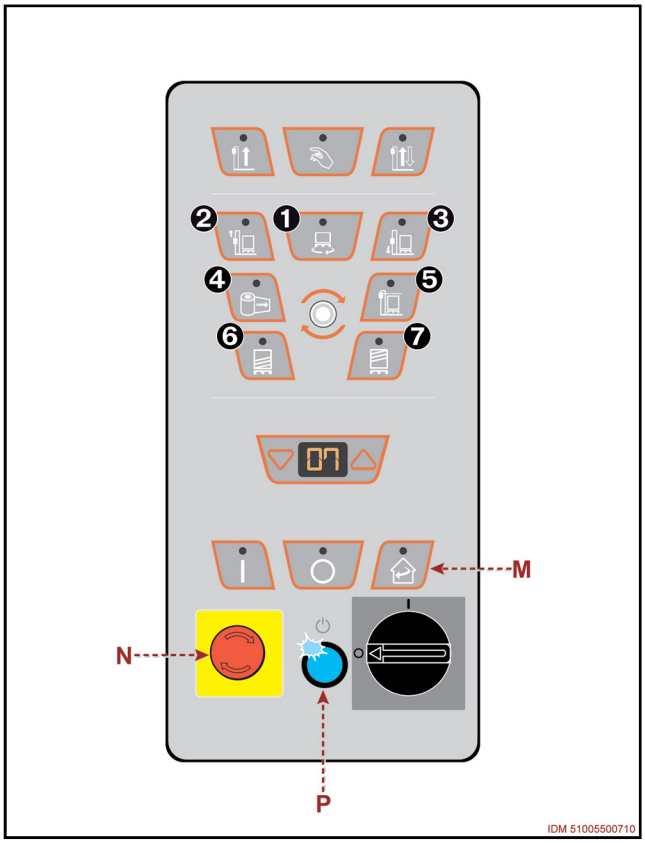
– “Arrow up” position: the arm of pressing device moves upwards.

– “Arrow down” position: the arm of pressing device moves downwards.



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 **N**.

– All moving devices immediately stop.

– The pilot light of button **P** 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 **P**.

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

7. Press key **M**.
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.

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.

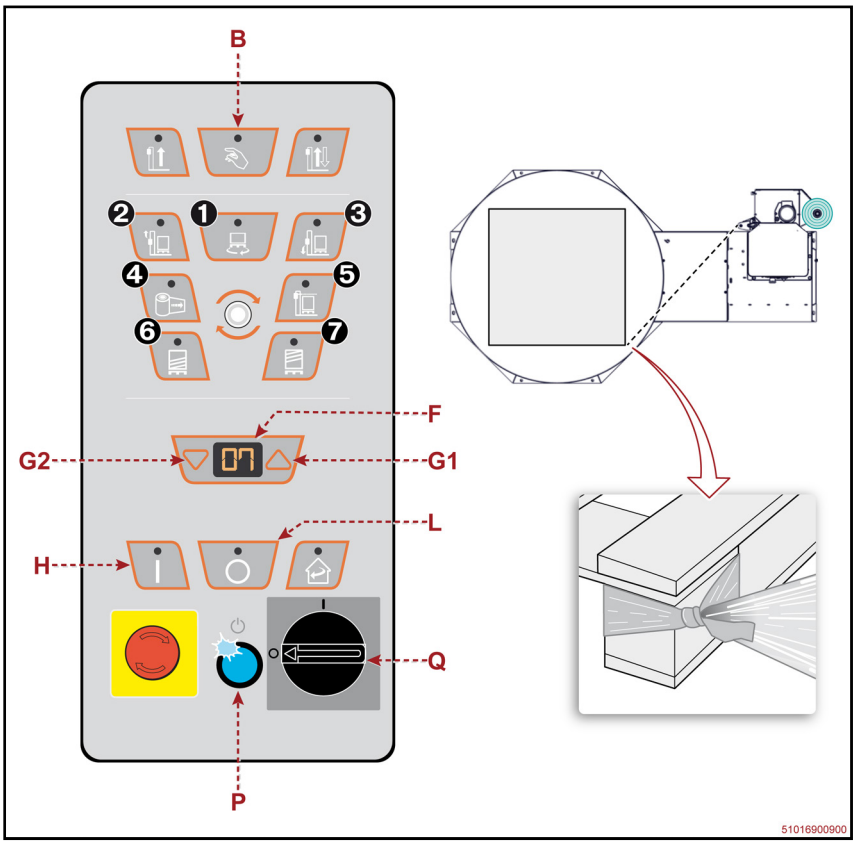
2. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

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

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

– The pilot light of button **P** 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. Use control to lower pressing device (if available).

7. Press key **B**.

– The button LED turns on.

8. Select the parameter ❶ to adjust the speed of the rotating platform.

9. Press one of buttons **G1-G2** in order to increase or decrease the value until the desired value is obtained.

NOTE

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

10. Select the parameters ❷ - ❸ one at a time to adjust the rise/descent speed of the reel holder carriage.

11. Press one of buttons **G1-G2** in order to increase or decrease the value until the desired value is obtained.

12. Adjust the film tension according to the product to be wrapped.
See "Tension adjustment of film" for further details.

13. Press key **H**.

– 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.

14. When the reinforcing band is completed, press and hold button **G1** to make reel holder carriage rise.

NOTE

The motion of reel holder carriage is shown on display F.

■ Intermediate reinforcing band

– Release button **G1** when the reel holder carriage reaches the height of interest.

– Press and hold button **G1** to wrap the remaining part.

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

– Release button **G1** when the reel holder carriage reaches the upper part of the product.

– Press button **L** 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 **G2** to move reel holder carriage to the low position.

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

– Release button **G1** when the reel holder carriage reaches the upper part of the product.

– Press and hold button **G2** when the upper reinforcement band has been completed.

– Release button **G2** to perform the intermediate reinforcement band.

– Press and hold button **G2** and release it when the upper reinforcement band has been completed.

– Press key **L**.

– Rotating platform stops in phase.

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

15. Use control to lift pressing device (if available).

16. Remove the wrapped product.

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

18. 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.

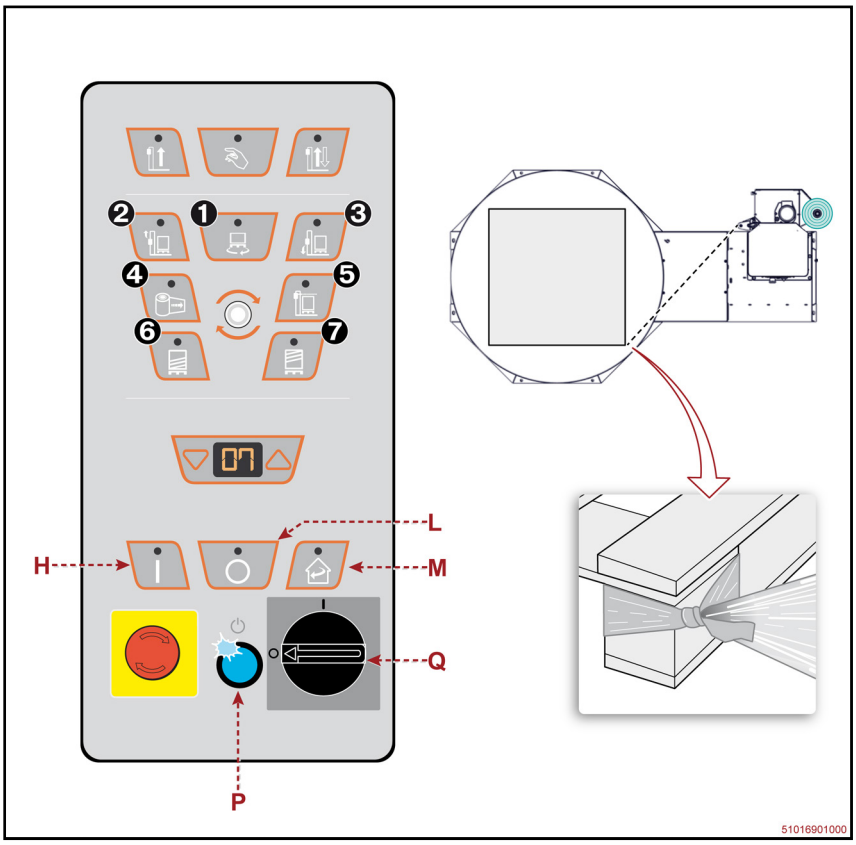
– Press and hold button **G2** to move reel holder carriage to the low position.

– Remove the wrapped product.

– Rotate electric selector **Q** 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 **Q** to position **"I"** (ON) to activate the power supply.

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

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

– The pilot light of button **P** 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. Use control to lower pressing device (if available).
7. Select and activate the recipe of interest.
   See "Recipe management" for further details.
8. Press button **H** to start the wrapping cycle.

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

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

– To restart the wrapping cycle, press key **H** 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 L to stop wrapping; press button H to continue.
Wrapping will start at the point where it has been stopped.

– **Stop reel holding carriage by means of button H to complete the reinforcing bands.**

– **On completing the bands, press button H to activate the movement of reel holding carriage.**

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

9. 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.

10. Use control to lift pressing device (if available).

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.

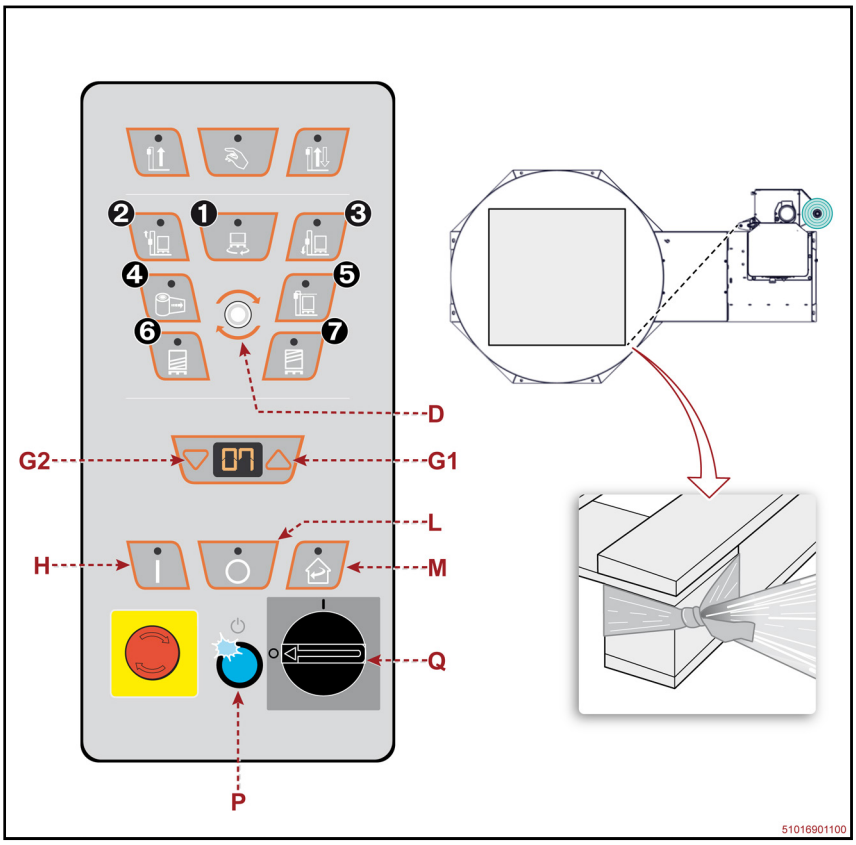
– With a product having the same features, press button **H** to start the wrapping cycle.
– Wrapping is carried out in the same modes.

■ 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 **Q** 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 **Q** to position **"I"** (ON) to activate the power supply.

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

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

– The pilot light of button **P** 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. Use control to lower pressing device (if available).
7. Select and activate the recipe of interest.
   See "Recipe management" for further details.
8. Repeatedly press the button **D** until selecting the parameter ❺.
9. Use one of controls **G1-G2** to define the descent of reel holder carriage with regard to the upper part of the product.

– The greater is the value, the greater is the movement of the reel holder carriage.

10. Press button **H** to start the wrapping cycle.

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

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

– To restart the wrapping cycle, press key **H** 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 L to stop wrapping; press button H to continue.
Wrapping will start at the point where it has been stopped.

– **Stop reel holding carriage by means of button H to complete the reinforcing bands.**
– **On completing the bands, press button H to activate the movement of reel holding carriage.**
– **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 **H** to complete the wrapping of the covering sheet.
Press button **M** 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 **H**.
– The machine completes the wrapping cycle and stops automatically with the reel holder carriage at the lower side of the load.

11. 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.

12. Use control to lift pressing device (if available).

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

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

– With a product having the same features, press button **H** 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 **Q** to position **"O"** (OFF).

Setup of parameter values

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

1. Press control **D** repeatedly and release it when the LED corresponding to the icon to be programmed turns on.

– The value of the selected parameter appears on display **F**.

2. Press one of buttons **G** to modify the value.

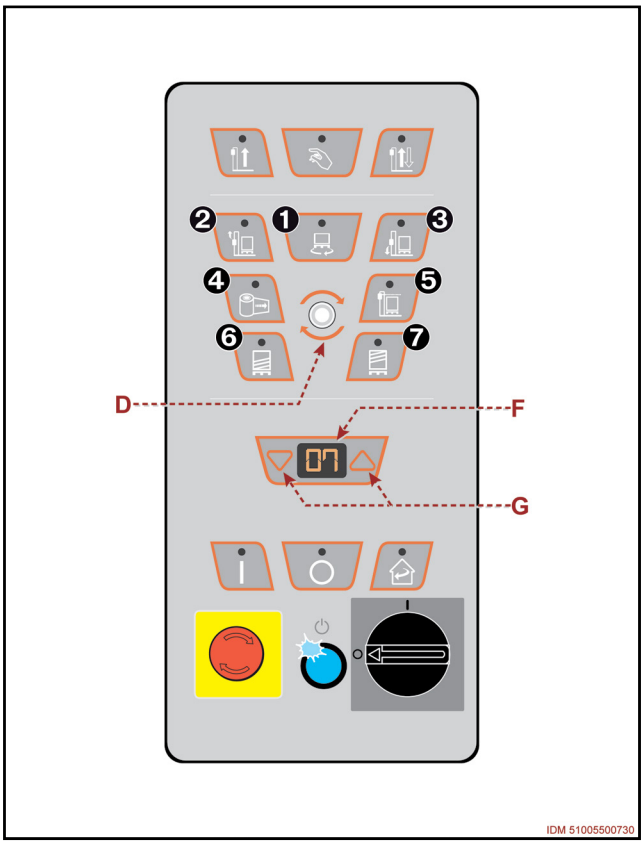
– With the parameter ❶ selected: the number shown refers to a value scale from 0 to 10.

– With parameters ❷ - ❸ selected: the number shown refers to a value scale from 0 to 9.

– With parameter ❹ selected
- Solid LED ON: the displayed number refers to a range of values from 0 to 99.
- Flashing LED: the displayed number refers to the activation of film cut (from 0 to 1).

– With the parameter ❺ selected: the number shown refers to the time expressed in seconds (from 0 to 9.9).

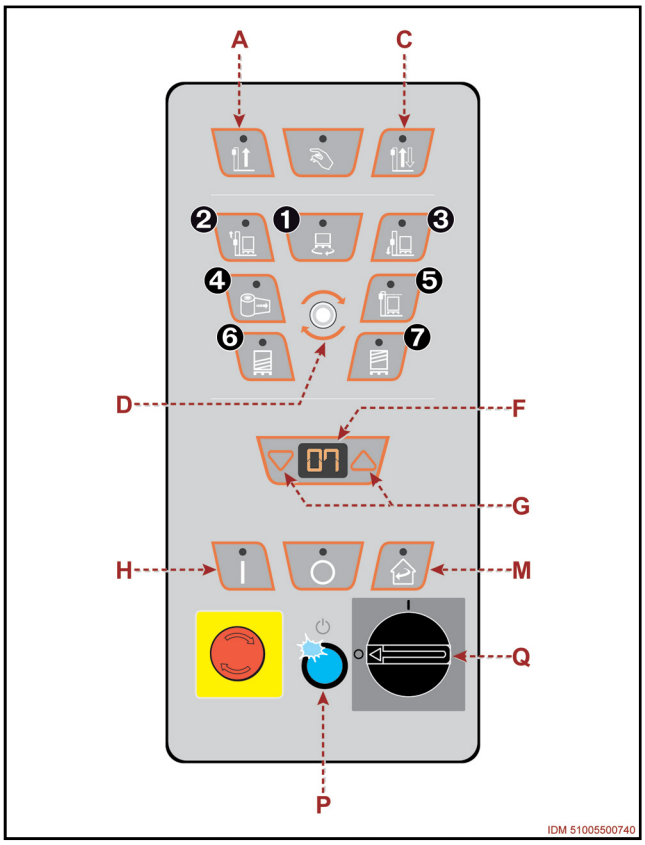
– With the parameters ❻ - ❼ selected: the number shown refers to the number of revolutions to be performed for the reinforcing wrappings (from 0 to 10).



Recipe management

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

– The described procedures refer to how to modify and/or activate a recipe.



■ Modifying a recipe

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

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

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

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

– The number of the last used recipe appears on display **F**.

3. Select the wrapping of interest by means of one of buttons **A-C**.
4. Keep button **D** pressed (about 5 seconds) in order to enable programming.
5. Press one of buttons **G** to select the number of the recipe to be modified.
6. Set up all parameters of recipe one at a time.
7. Press control **D** repeatedly and release it when the LED corresponding to the desired icon turns on.

– The value of the selected parameter appears on display **F**.

8. Press one of buttons **G** to modify the value.

– With the parameter ❶ selected: the number shown refers to a value scale from 0 to 10.

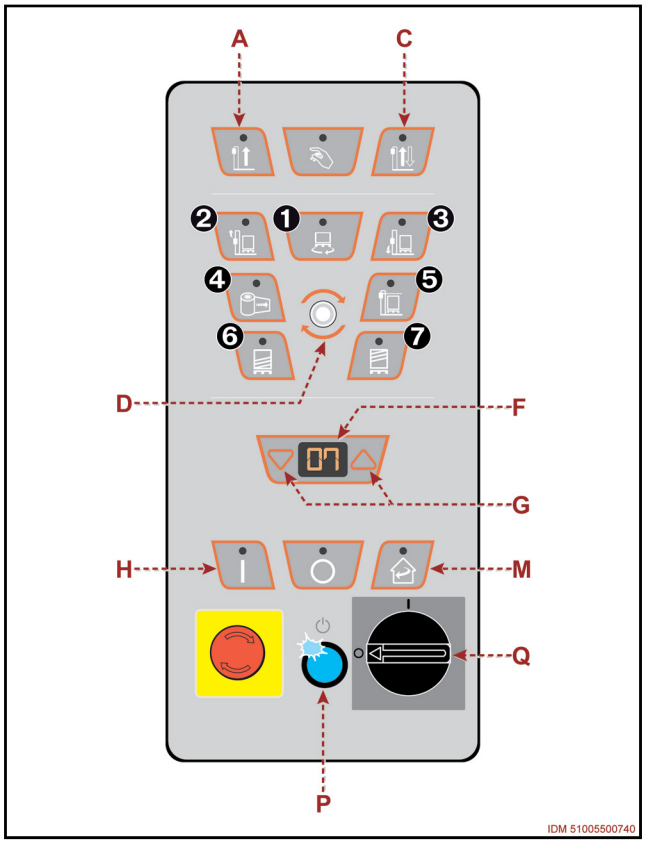
– With parameters ❷ - ❸ selected: the number shown refers to a value scale from 0 to 9.

– With parameter ❹ selected
- Solid LED ON: the displayed number refers to a range of values from 0 to 99.
- Flashing LED: the displayed number refers to the activation of film cut (from 0 to 1).

– With the parameter ❺ selected: the number shown refers to the time expressed in seconds (from 0 to 9.9).

– With the parameters ❻ - ❼ selected: the number shown refers to the number of revolutions to be performed for the reinforcing wrappings (from 0 to 10).

Loading a recipe



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

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

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

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

– The number of the last used recipe appears on display **F**.

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

Important

Remove the lifting device.

4. Tie the trailing end of the film to the base of the product to be wrapped.
5. Keep button **D** pressed (about 5 seconds) in order to enable programming.
6. Press one of buttons **G** to select the number of the recipe to be loaded.
7. Press button **H to start the wrapping cycle.**

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

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

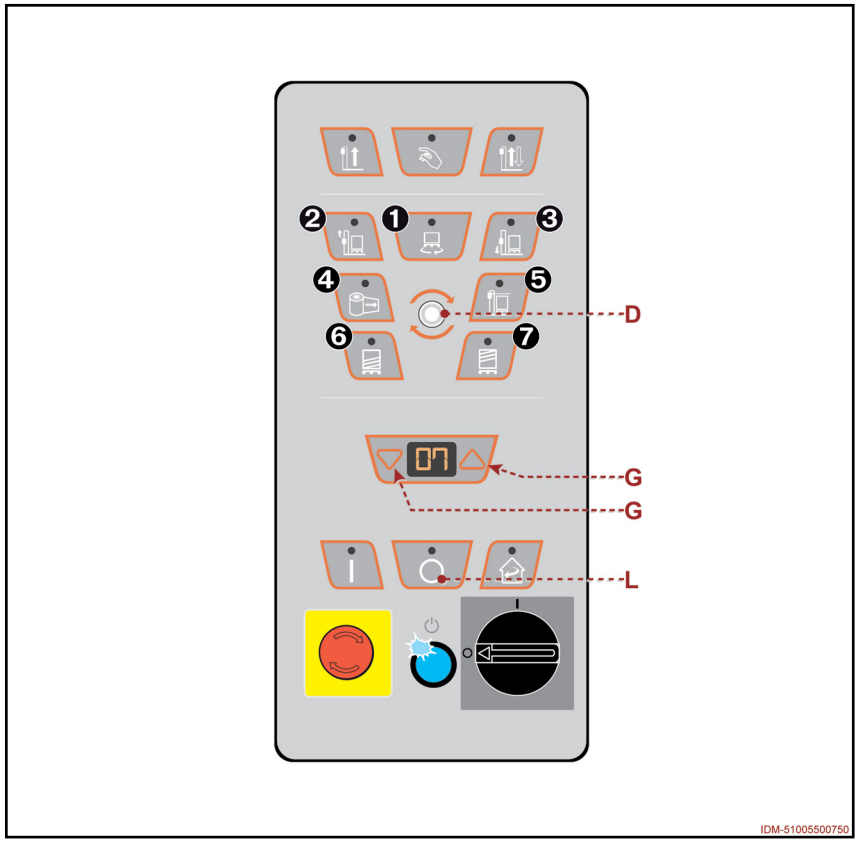
– To restart the wrapping cycle, press key **H** again.

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

Recipe lock/unlock mode

The lock mode is used to avoid that the parameters of the stored recipes are changed.

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



1. Press and hold control **L** (about 7 seconds).

– Message **“n. 0”** appears on display.

2. Press key **D**.

3. Press one of keys **G** until parameter **“19”** is displayed.

4. Press the key **D** to confirm.

– Display shows message **“c.9”**.

5. Press key **D**.

6. Press one of keys **G** to select value **“0”** or **“1”**.

– **Value “0”:** recipes unlocked. The parameters of the stored recipes can be changed.

– **Value “1”:** recipes locked. The parameters of the stored recipes cannot be changed.

7. Press the key **D** to confirm.

■ Recipe function “P0”

– Recipe **“P0”** is used to programme the wrapping process of a non-standard load, without changing the parameters of the programmed recipes.

– Recipe **“P0”** is enabled only through the recipe unlocking function.
To upload and change the recipe **“P0”** see “Recipe management”.

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.

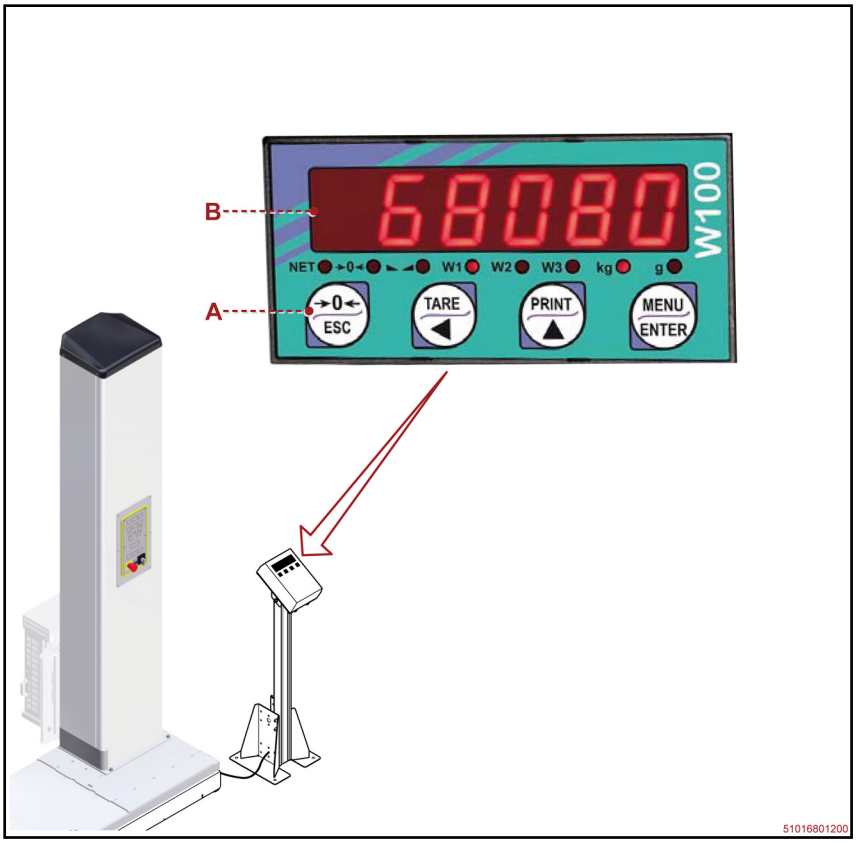
1. Activate the power supply of weighing unit.
2. Wait for the weighing unit to start.
3. Press the key **A** to reset the tare.
4. Properly place the new load to be wrapped in the middle of the rotating platform.

– 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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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”).

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

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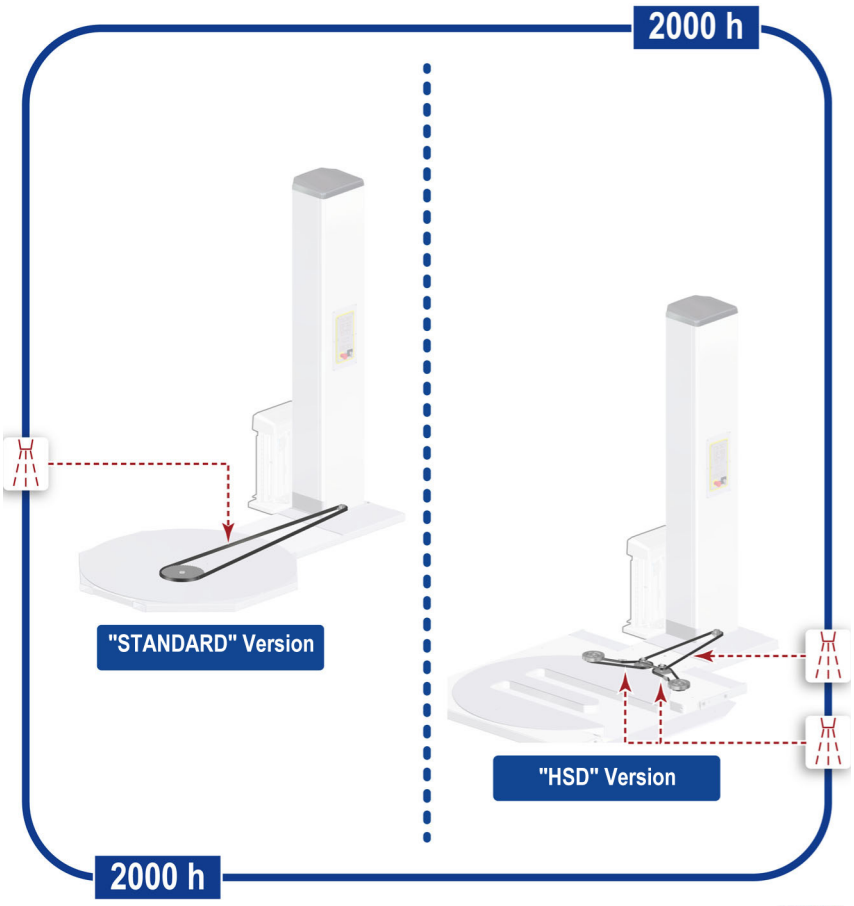
Diagram of the points of lubrication

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.



Use grease spray

Problems, causes, remedies

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

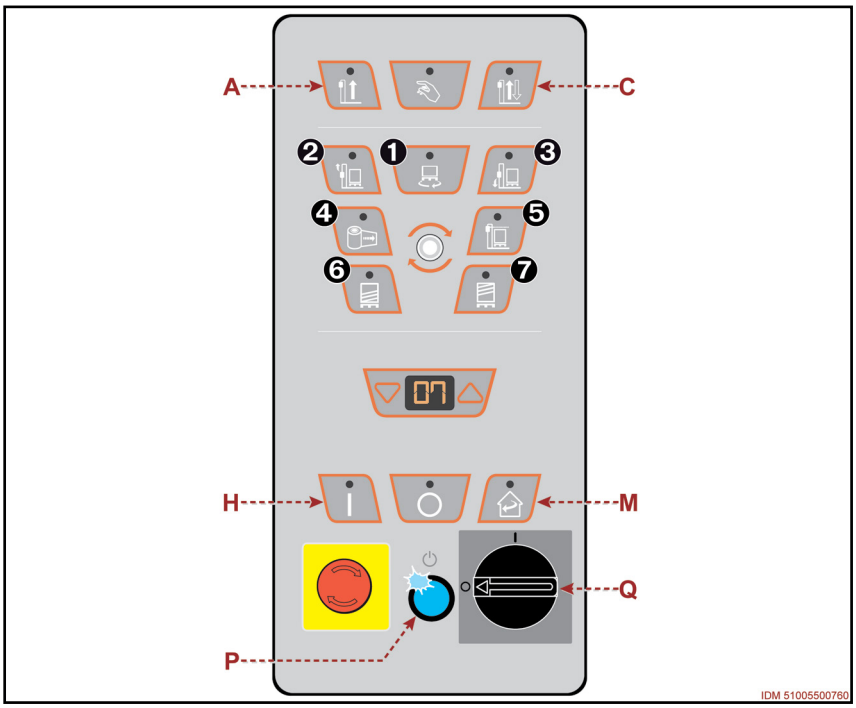
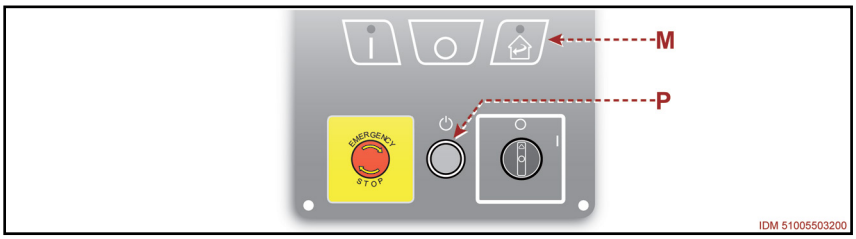


Table: Operation failures

Problem	*Cause*	*Remedy*
With isolator switch **Q** on ON, pilot light does not turn off when button **P** 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 **H** 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 **M**.
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”).
	Operation in “manual mode”	- Select the wrapping of interest by means of one of buttons **A-C**.
	Reel holding carriage not correctly timed.	- Press key **M**.
	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.

Problem	*Cause*	*Remedy*
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 (See “Setup of parameter values”).
	Bottom reinforcing band quantity not correctly set	- Modify the programming (See “Setup of parameter values”).
The film is too tightly stretched or too loose.	Tension of film not properly adjusted	- Adjust the tension of film (See “Tension adjustment of film”).
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 **M**.
	There is an obstacle under the reel holder carriage.	- Remove the obstacle. Press key **M**.
	Braking or excessive wear of the reel holder carriage lifting belt	- Replace belt (See “Replacing the lifting belt of the carriage”).
The film slips on the rollers (Only for reel holding carriages of type SM-LP).	Presence of residues or dust on the rollers	- Remove any residues. Use brushed with soft plastic bristles.
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 **P** 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 **P** to silence the alarm.
03	Failure of the relays that power the inverter power circuit.	- Press control **P** 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 **P** to silence the alarm. - Control **M** lights up. - Press control **M**. 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 **P** 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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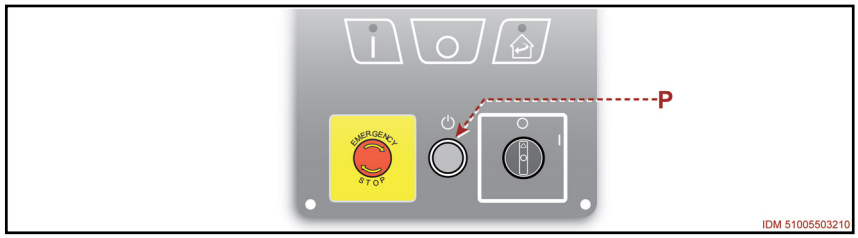


no.	Type of failure	Remedy
	Reel holder carriage inverter alarms	
20	The inverter parameters are not properly set up.	- Contact the Manufacturer's Technical Assistance Service.
21	The activation of the inverter electric power is not correctly enabled.	- Contact the Manufacturer's Technical Assistance 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 **P** 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.
	Reel holding carriage (type LP) inverter alarms	
30	The inverter parameters are not properly set up.	- Contact the Manufacturer's Technical Assistance Service.
31	The activation of the inverter electric power is not correctly enabled.	- Contact the Manufacturer's Technical Assistance Service.
32	The electric motor is damaged due to a short circuit.	- Contact the Manufacturer's Technical Assistance Service.
33	The heat protection is damaged because of the overheating of the electric motor.	- Let the motor cool down. - Press control **P** 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.
34	Inverter bis power circuit failure.	- Contact the Manufacturer's Technical Assistance Service.
35	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. - Contact the Manufacturer's Technical Assistance Service if the problem persists.
36	Overvoltage of the hardware electric power supply (higher than 4 A).	- Contact the Manufacturer's Technical Assistance Service.
37	Communication was interrupted because of an internal error.	- Contact the Manufacturer's Technical Assistance Service.
40	Machine in emergency	- Make sure that emergency button is not pressed. - Make sure that feeler of the reel holding carriage is not pressed. - Make sure that mobile guard of the reel holding carriage is not open. - Press control **P** to silence the alarm.

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.

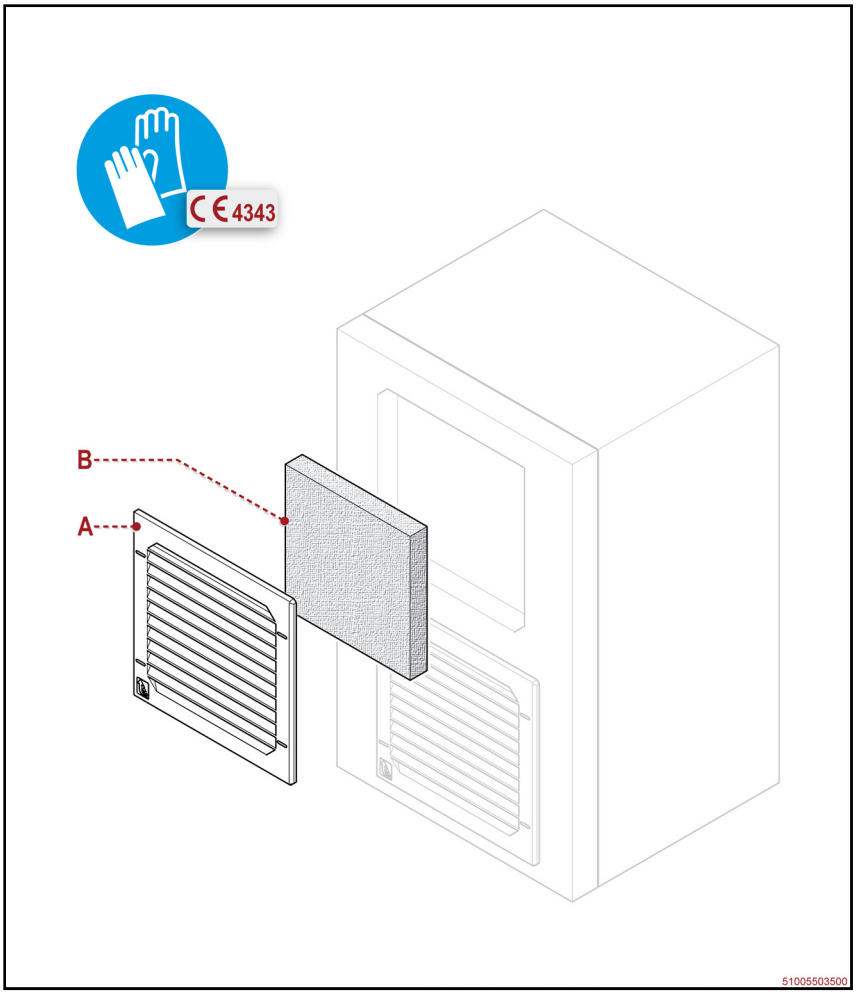
NOTE

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 top pressor (See "Disassembly and re-assembly of the Top pressor").

1°

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

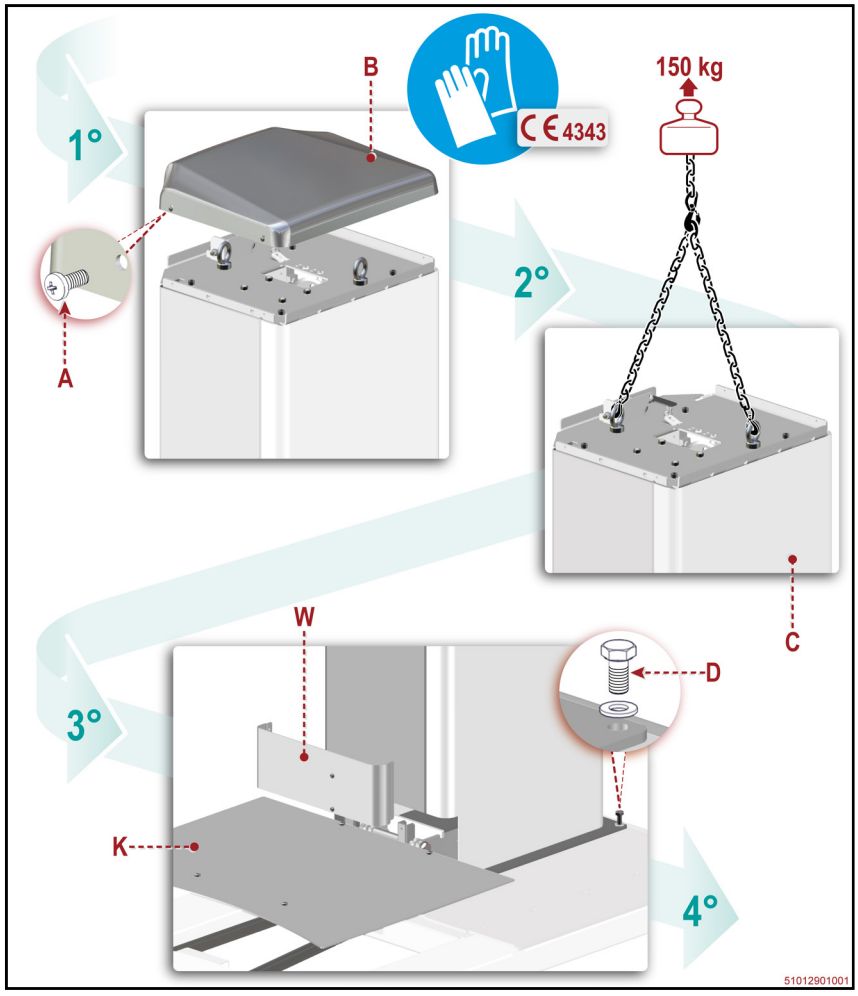
2°

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

3°

7. Disassemble the guards **K-W**.

8. Loosen the screws **D**.



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4°

9. Bring the column to a horizontal position.

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

5°

10. Slightly loosen the nuts **F**.

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

Important

Do not overtighten so as not to cause any malfunctioning.

12. Tighten the nuts **F**.

6°

13. Lift the column to its vertical position.

Attention Warning

Keep reel holding carriage conveying belt tensioned until column is in vertical position.
Do not remove the locking devices of reel holding carriage until column is in vertical position.

14. Secure the column to the support base with the special screws **D**.

Attention Warning

Check that in column base electric or pneumatic cables are not crushed and that there is no interference with machine or external elements.

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

16. Remove the lifting device.

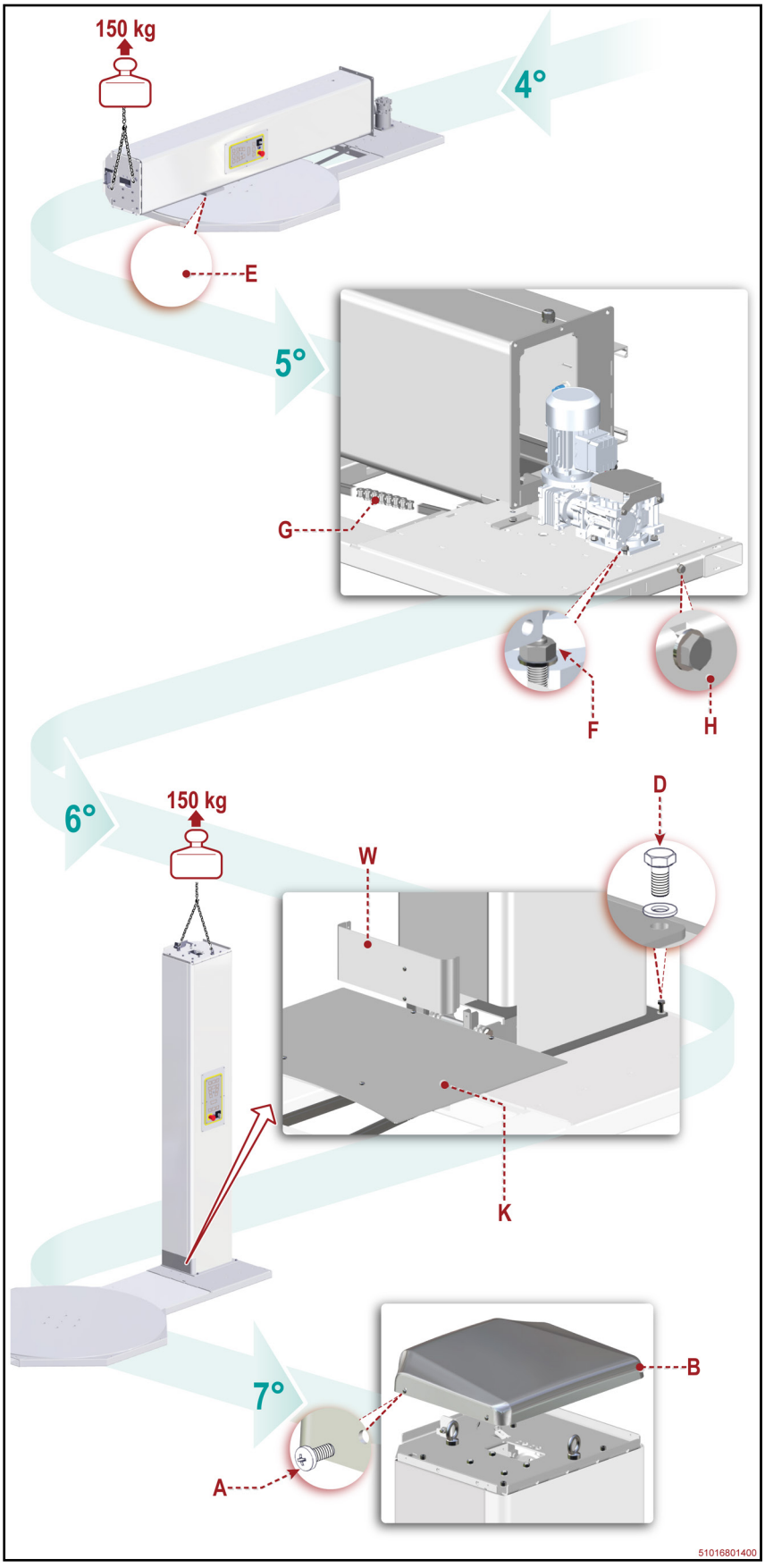
7°

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

18. Install the top pressor (See “Disassembly and re-assembly of the Top pressor”).

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

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



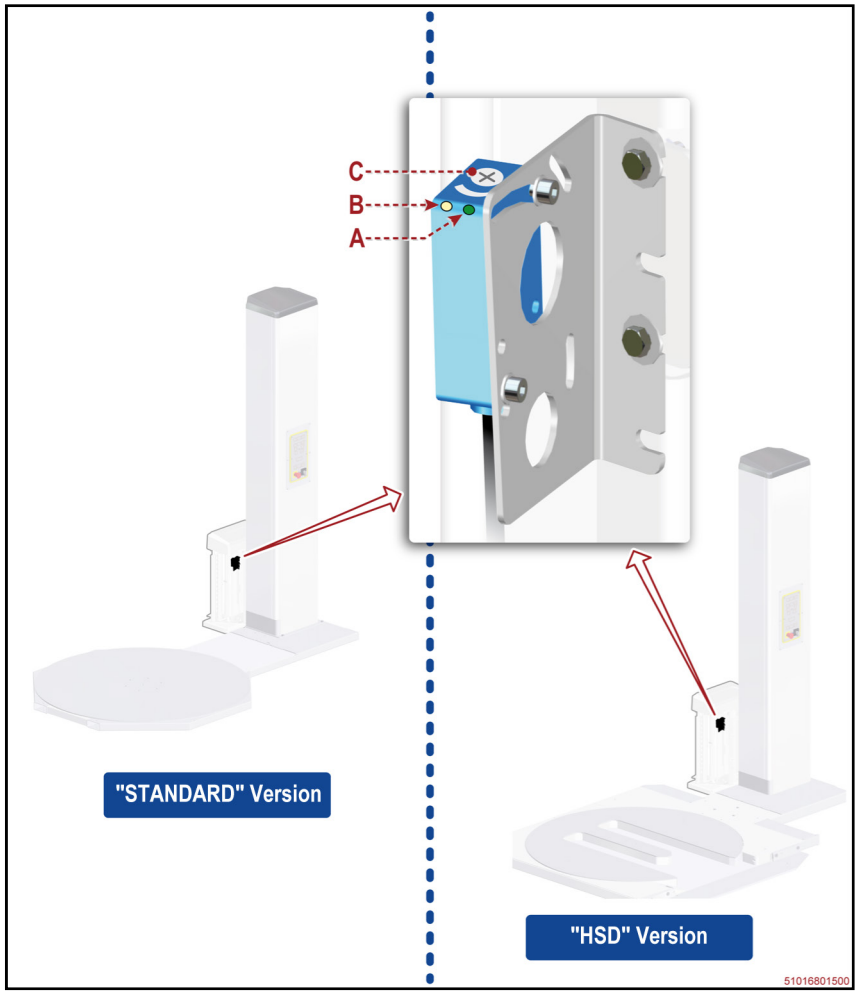
Sensitivity adjustment for the product to be wrapped detection photocell

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 increase 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.

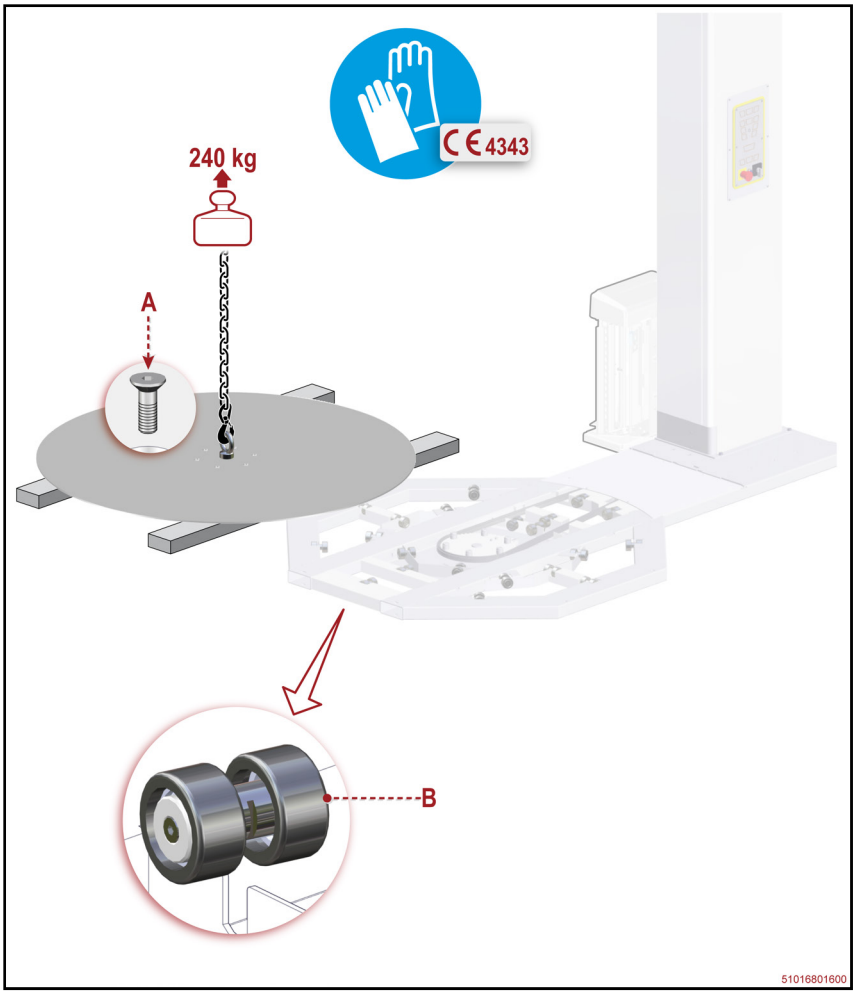
Replacing the rotating platform wheels (standard version)

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

6. Attach the lifting device to the eyebolt.

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

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

9. 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.

10. Adjust the platform in its original position.

11. Remove the lifting device.

12. Remove the eyelet.

13. 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.**

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

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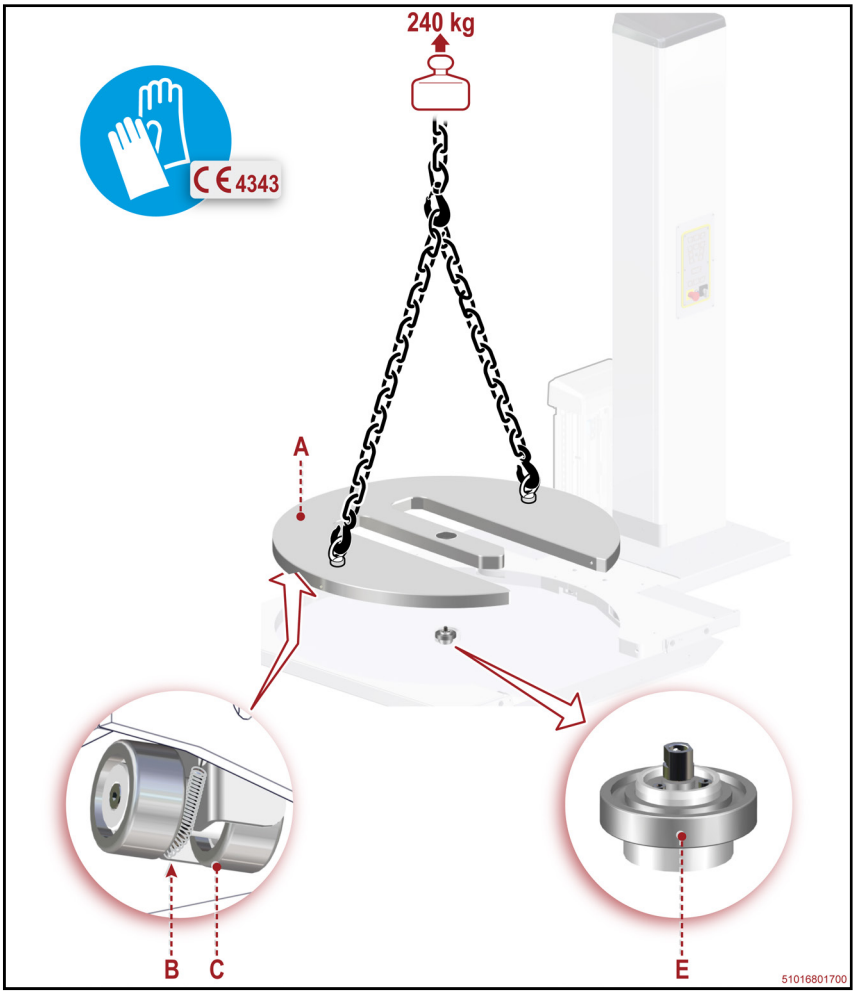
Replacing the rotating platform wheels (version HSD)

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.**

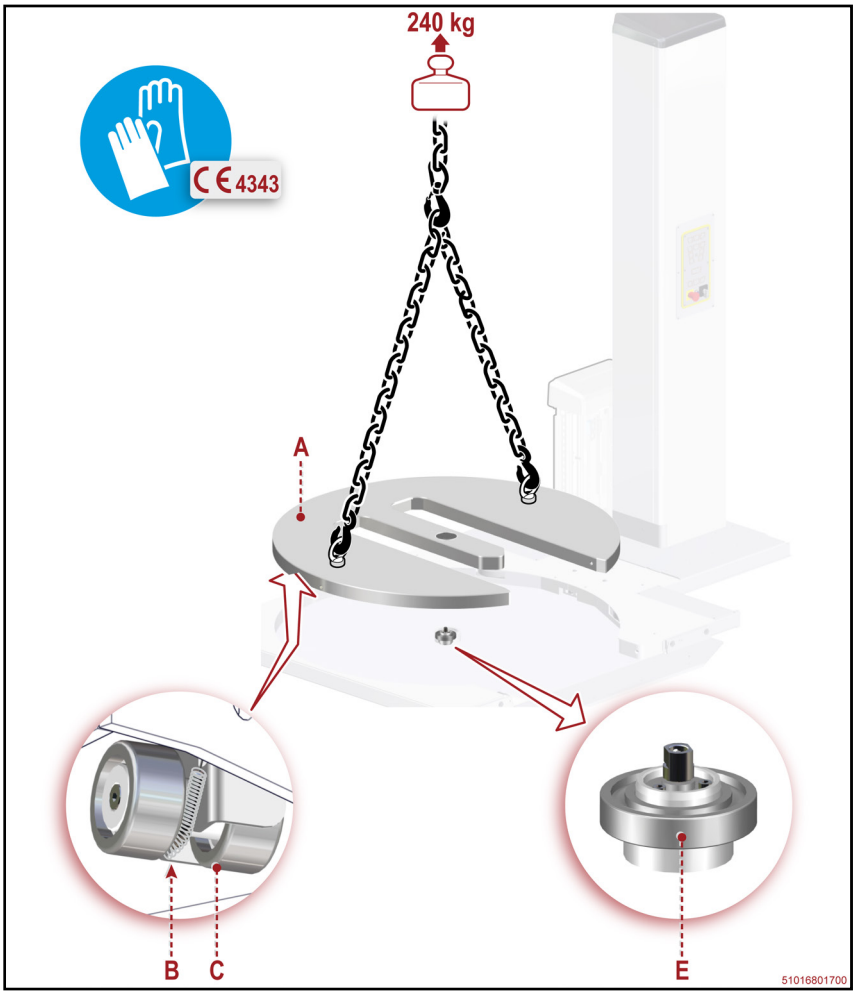
12. Remove the lifting device.

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 top pressor (See "Disassembly and re-assembly of the Top pressor").

1°

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

2°

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

3°

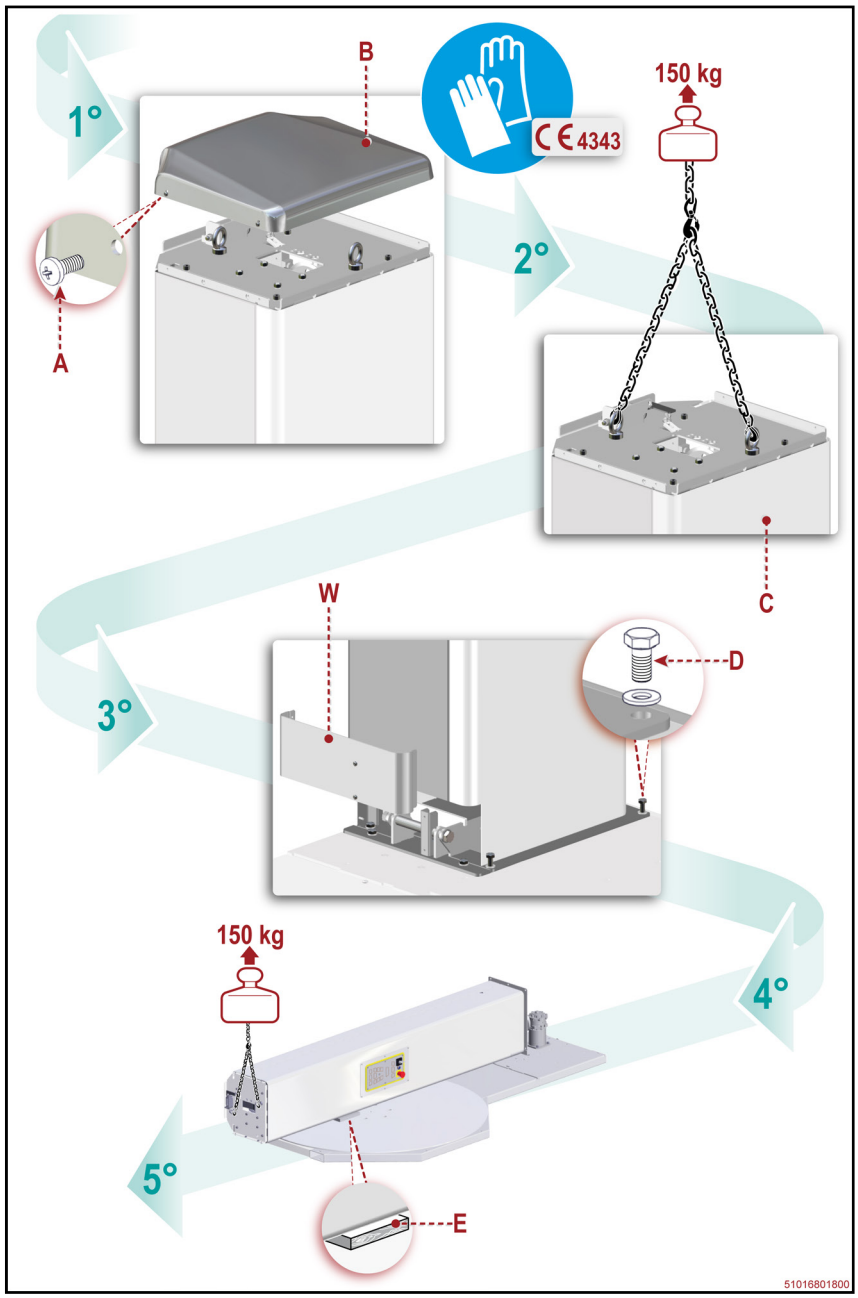
7. Remove the guard **W**.

8. Loosen the screws **D**.

4°

9. Bring the column to a horizontal position.

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



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5°

10. Remove the fastening elements and remove the component **K**.

11. Disconnect all connectors from their sensors.

12. Slip out pin **F**.

6°

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

7°

14. Remove the fasteners **G**.

15. Remove the bushing **H** and remove the damaged belt **L**.

16. 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.

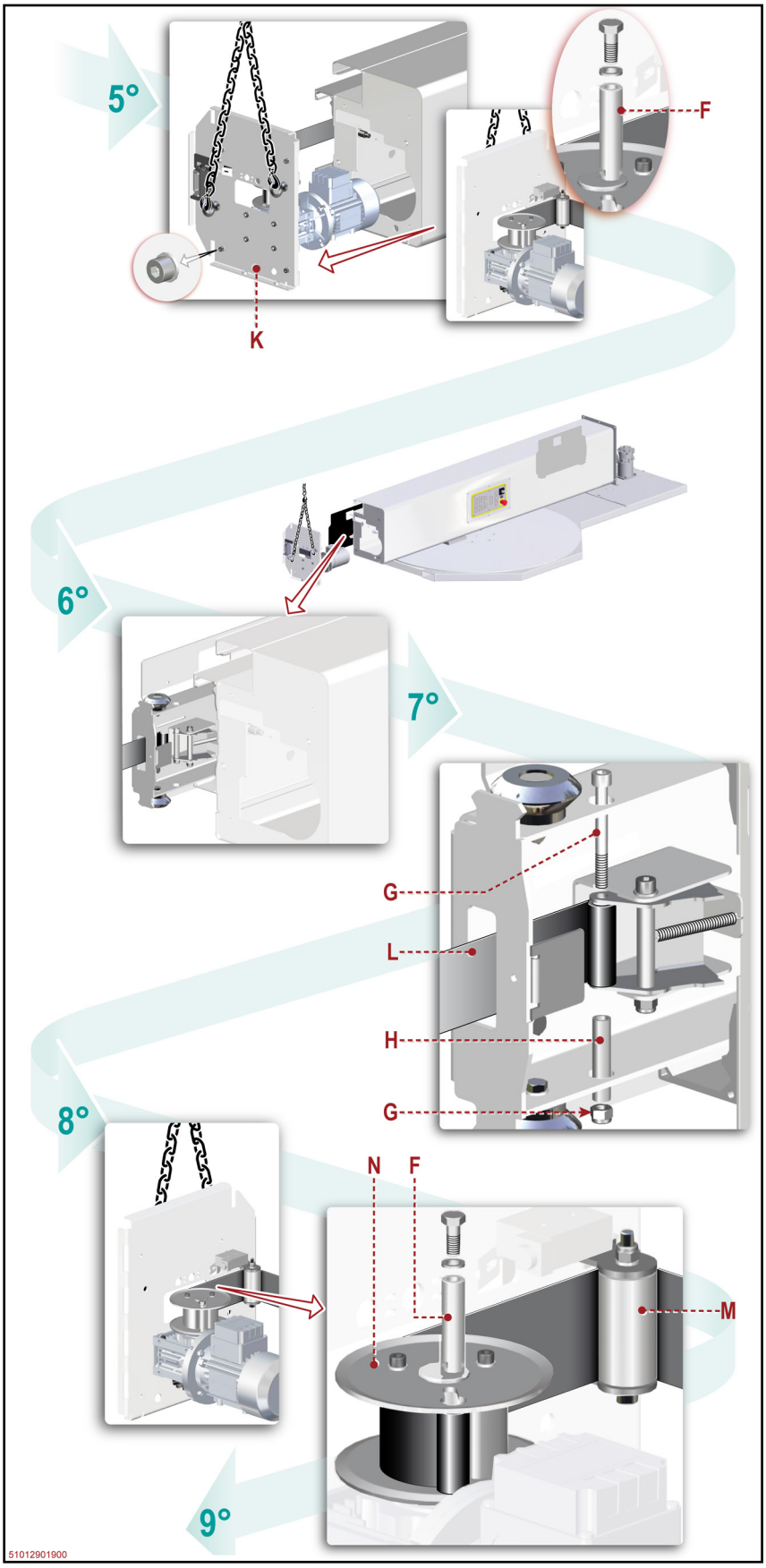
17. Secure the end of the belt (with bushing) by means of the fastening elements **G**.

18. Remount the reel holder carriage.

8°

19. Lead the belt over the roller **M**.

20. Insert the pin **F** to connect the end of the belt to the pulley **N**.



9°

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

22. Connect the connectors to their sensors.

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

10°

24. Lift the column to its vertical position.

Attention Warning

Keep reel holding carriage conveying belt tensioned until column is in vertical position.
Do not remove the locking devices of reel holding carriage until column is in vertical position.

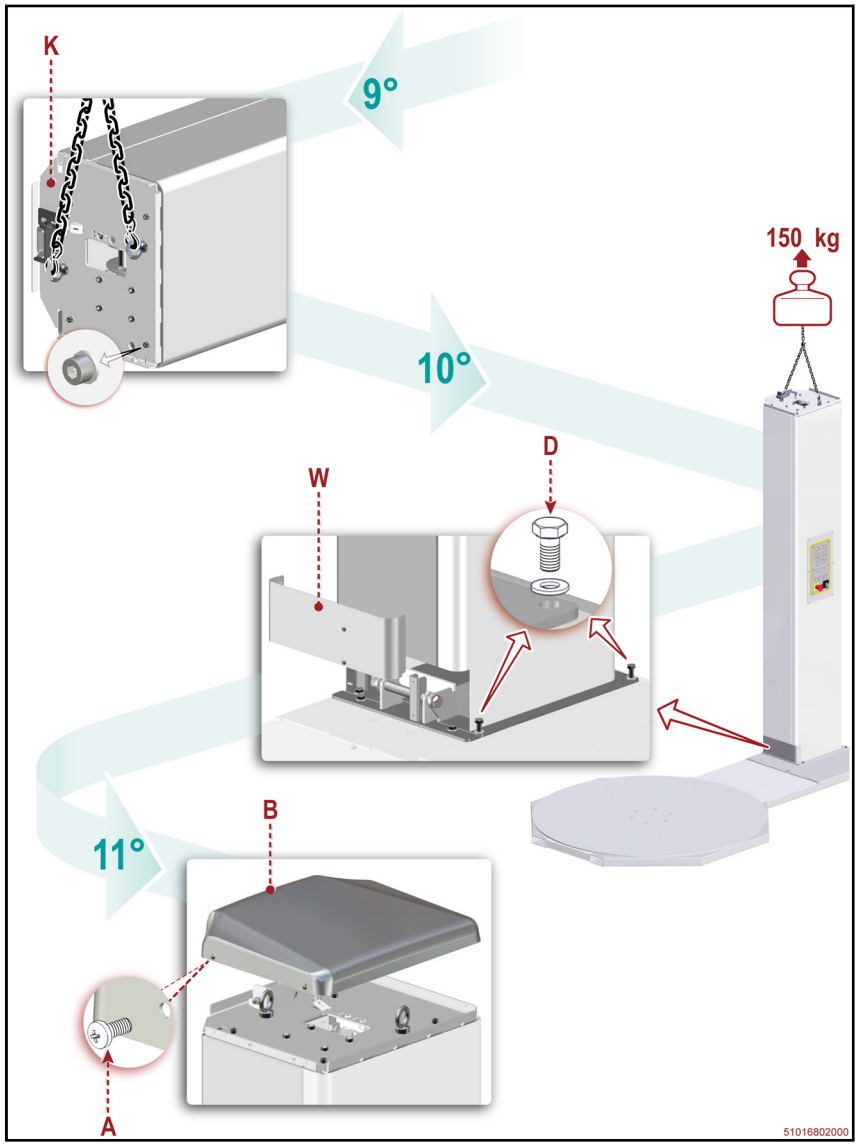
25. Secure the column to the support base with the special screws **D**.

Attention Warning

Check that in column base electric or pneumatic cables are not crushed and that there is no interference with machine or external elements.

26. Install the guard **W**.

27. Remove the lifting device.



11°

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

29. Install the top pressor (See “Disassembly and re-assembly of the Top pressor”).

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

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

Description of the main components of the Top pressor

The Top pressor keeps the product stabilised during wrapping.

A) Top pressor disc: it rests on the product to keep it stable.

B) Pneumatic actuator: it is used to vertically move the top pressor disc.

Disassembly and re-assembly of the Top pressor

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. Unplug connectors **K**.

8. Disconnect pneumatic supply **W**.

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

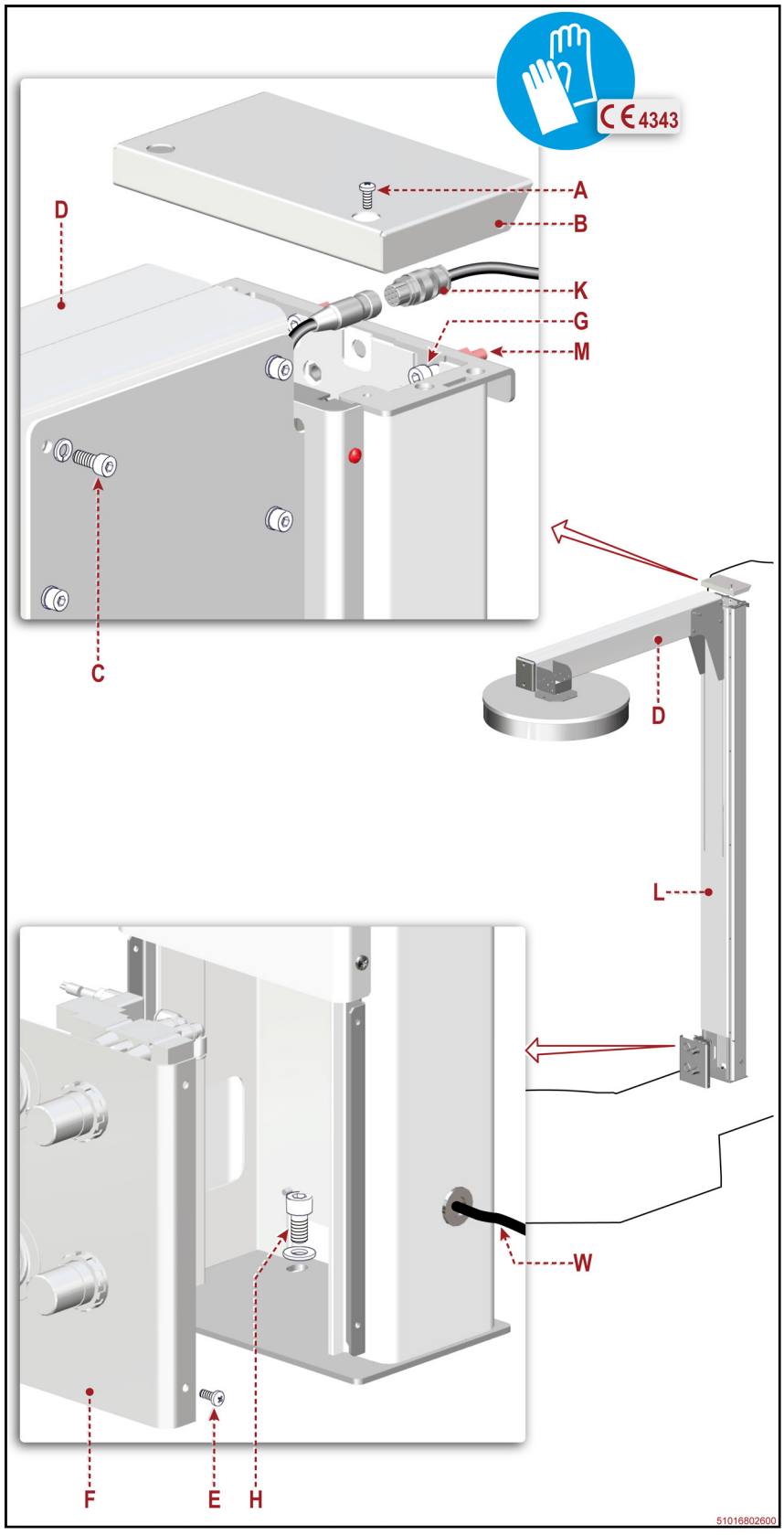
10. Loosen the screws **G**.

11. Loosen the screws **H**.

12. Remove the component **L**.

13. Remove small columns **M** from column.

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



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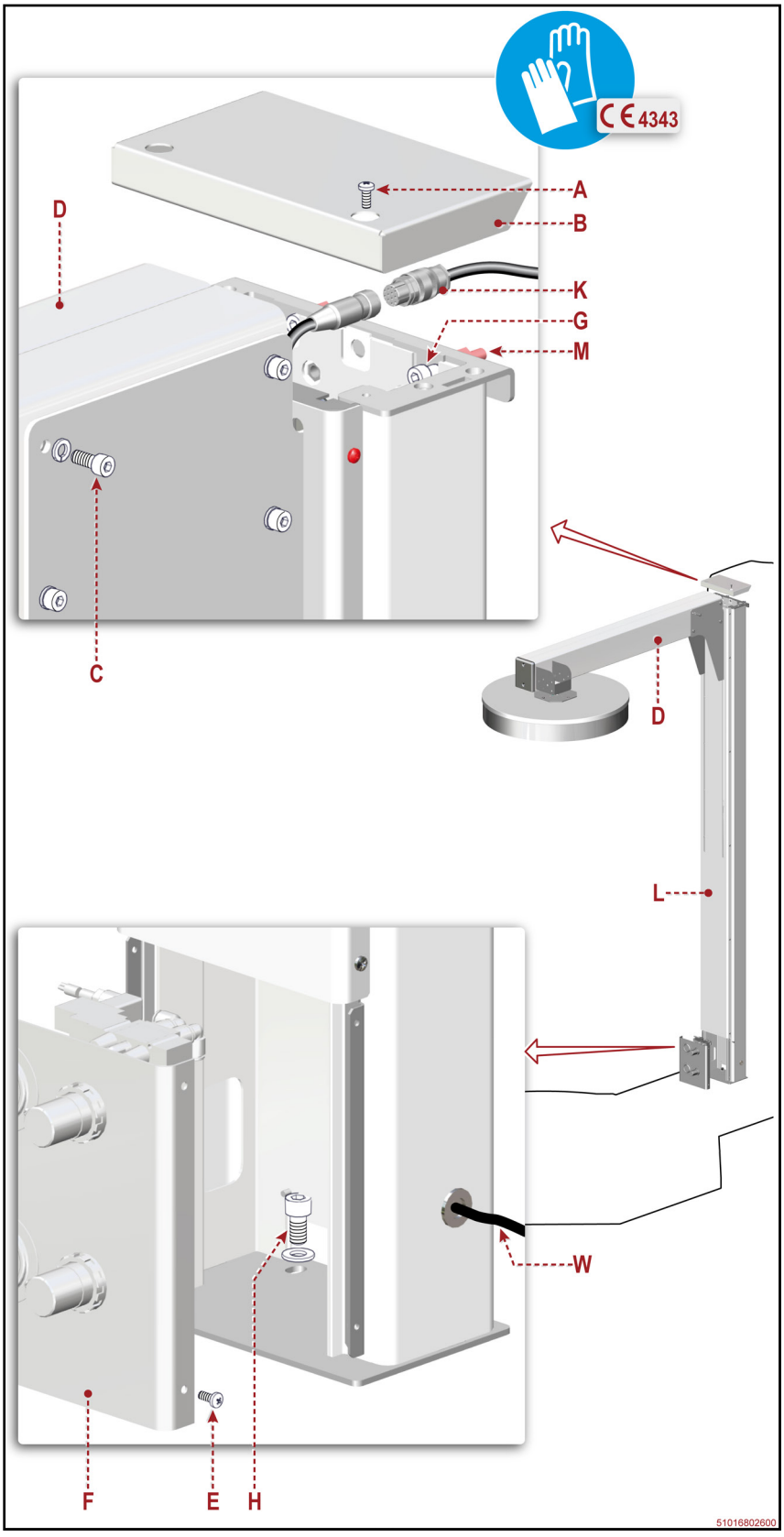
Re-assembly of the Top pressor

1. Install small columns **M** on column.
2. Fit the component **L** and secure it with the screws **H**.
3. Introduce and tighten the screws **G**.
4. Re-install the front panel **F** and fasten it with the screws **E**.
5. Re-plug connectors **K**.
6. Connect pneumatic supply **W**.
7. Fit the component **D** and secure it with the screws **C**.
8. 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.**

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



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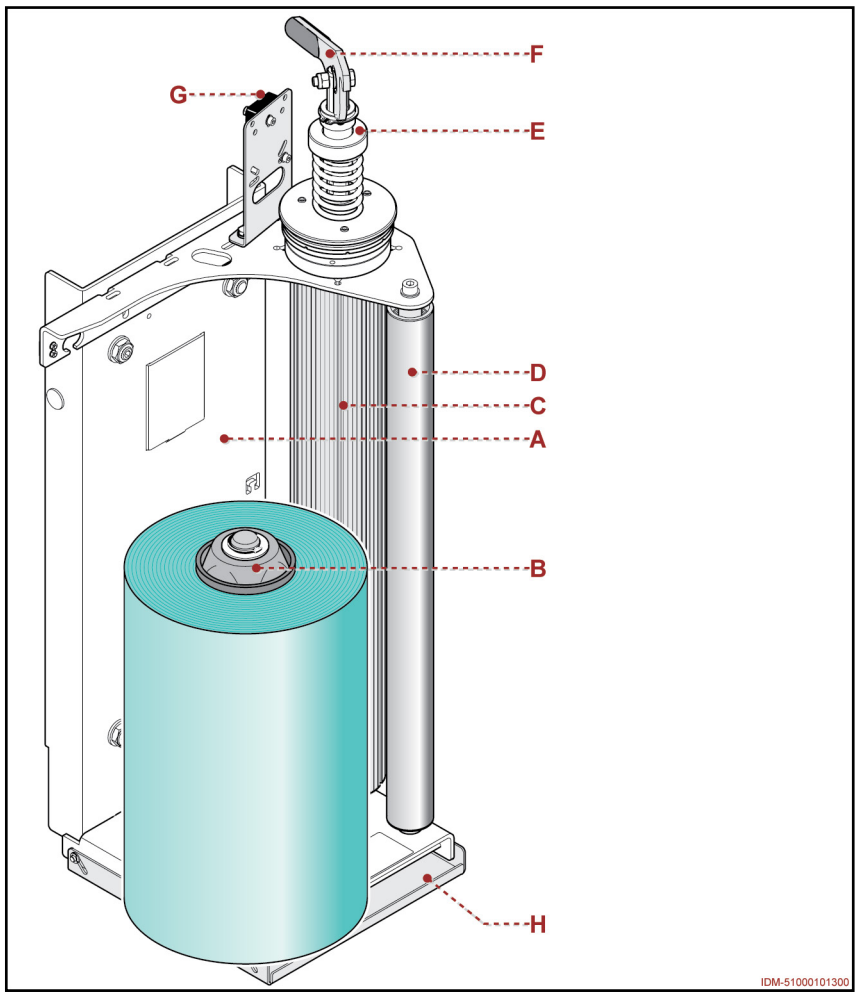
Reel holding carriage (M)

■ 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.

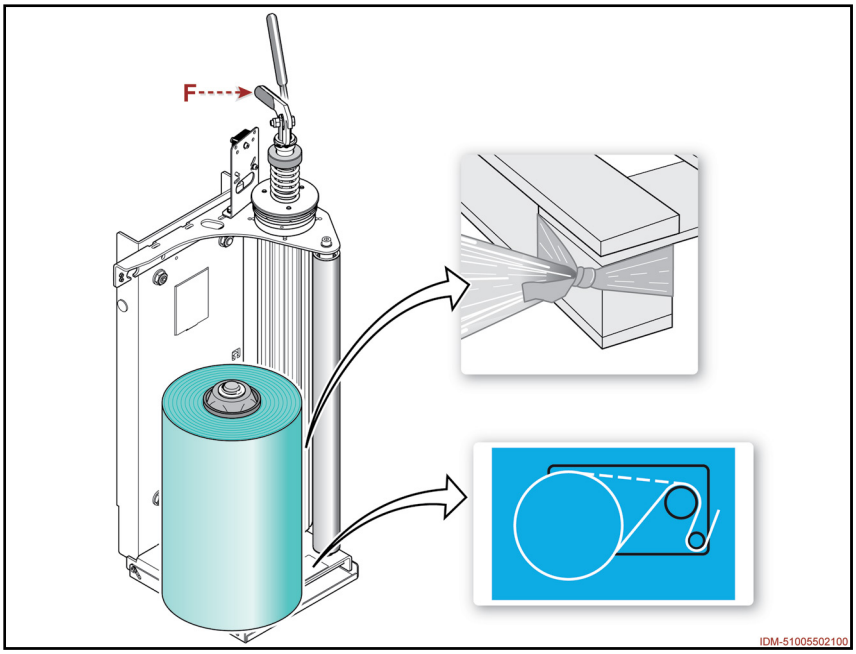
NOTE

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

IDM 510-168-1

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.

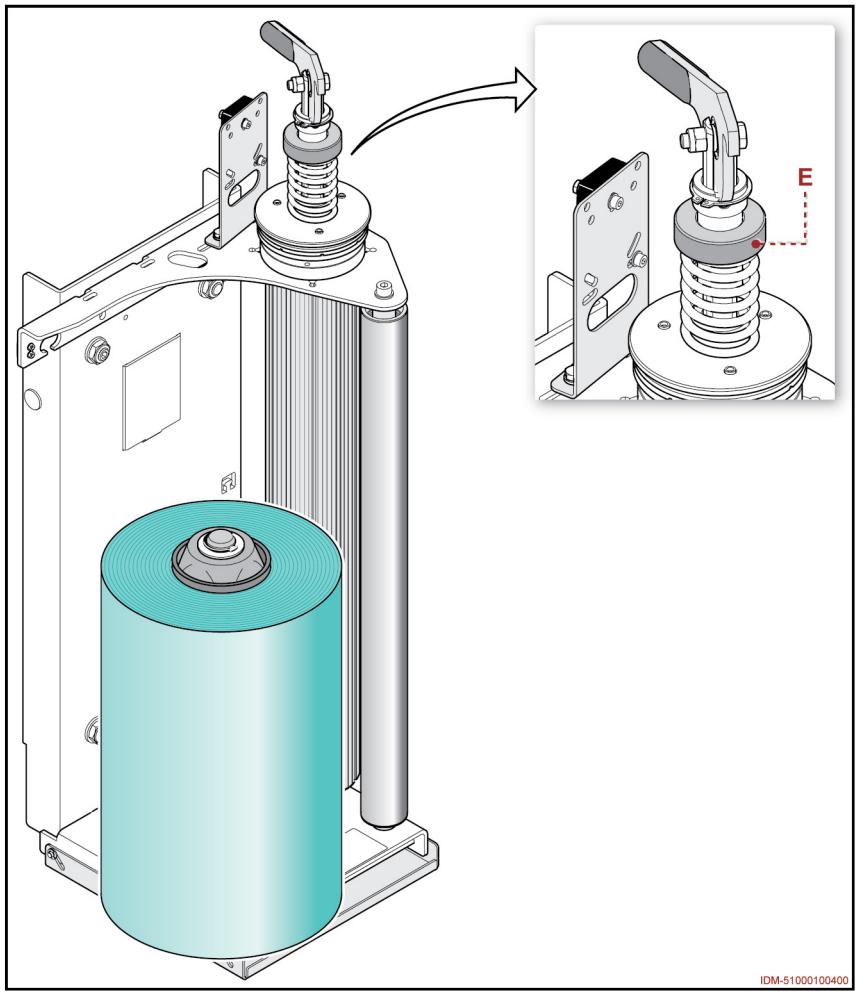
■ Tension adjustment of film

– **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.

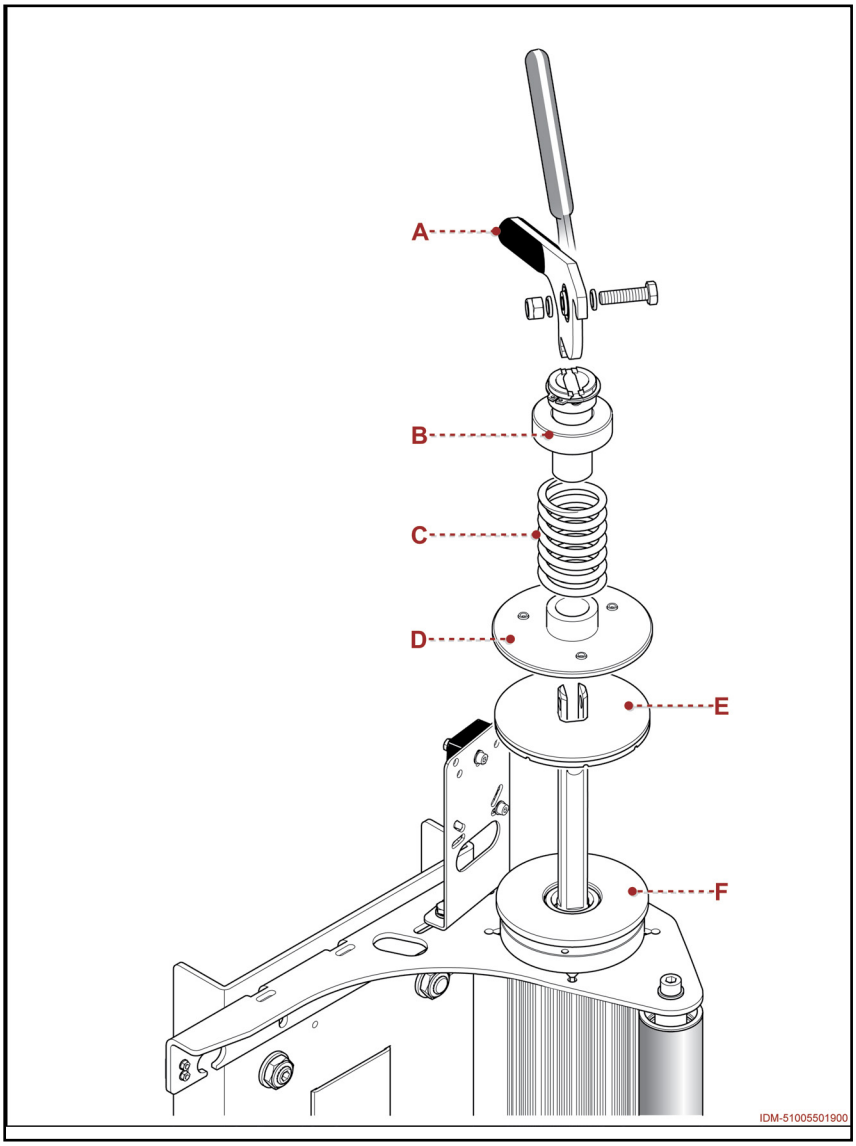


Cleaning and replacement of brake disc

– **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.**

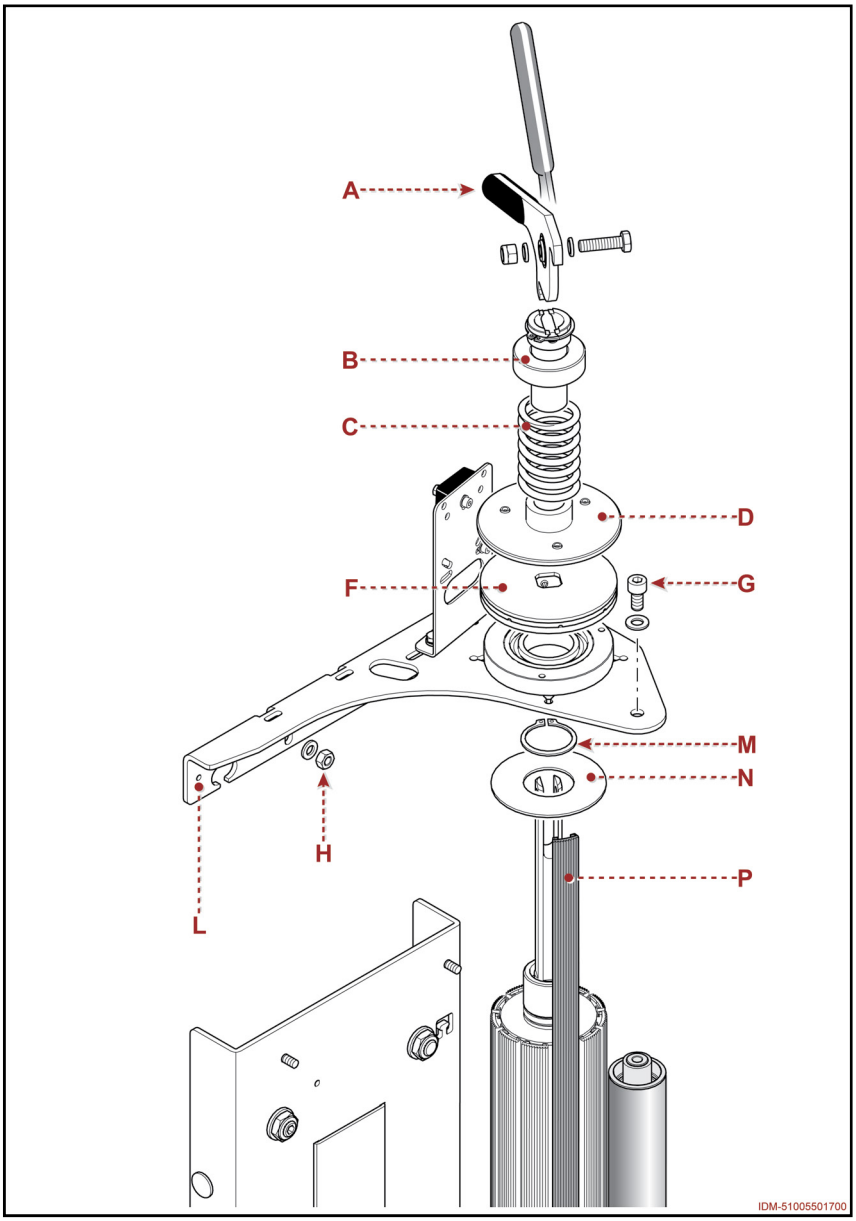
10. Start the machine and make sure that the operation has been carried out properly.

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.**



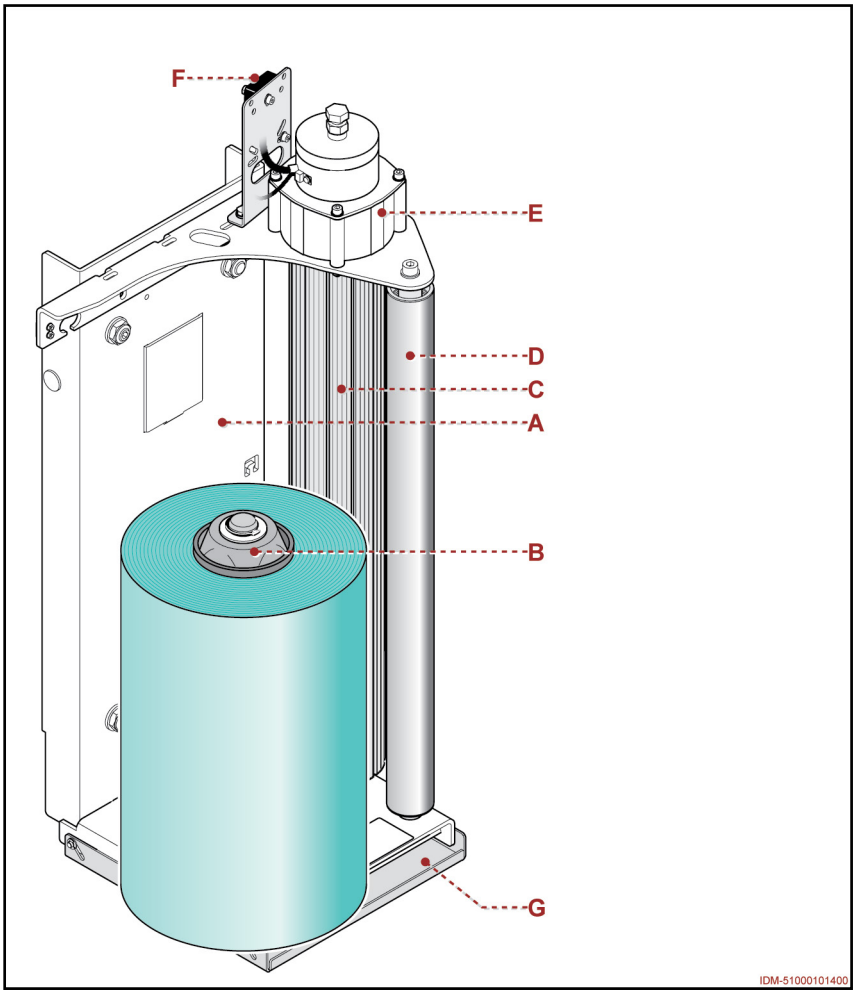
1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the lever.
3. Remove in a sequence the components **B-C-D**.
4. Remove the component **F**.
5. Unscrew screw **G**.
6. Unscrew the nuts **H**.
7. Remove the plate **L**.
8. Remove stop ring **M**.
9. Remove 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.

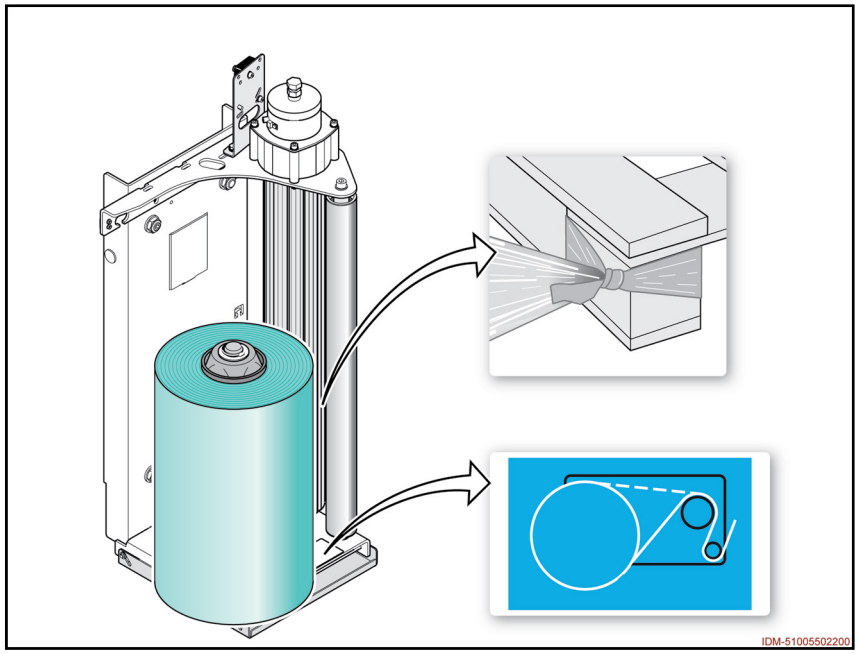
Film Coil Feeding

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.

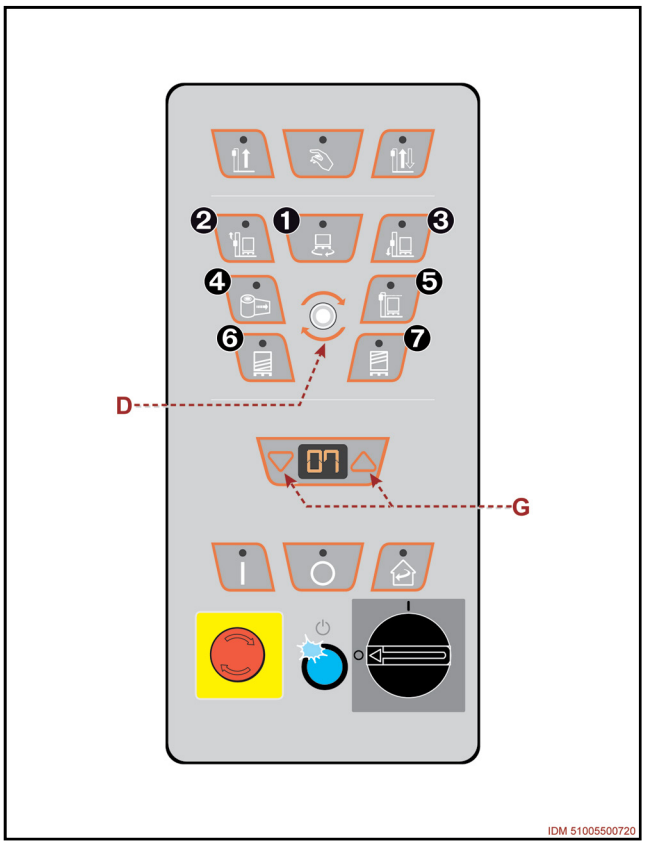
Tension adjustment of film

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

1. Repeatedly press the button **D** until selecting the parameter ❹.

– LED turns on.

2. Adjust the film tension via the controls **G**.

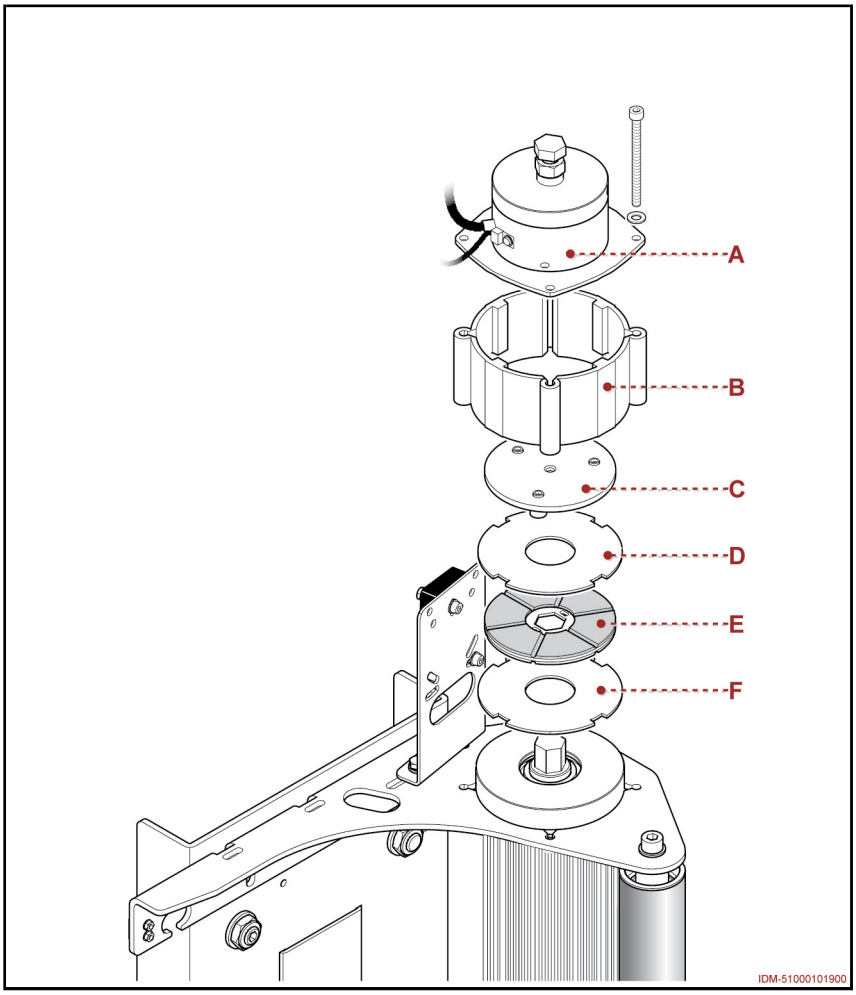


Cleaning and replacement of brake disc

– **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 “8. Start the machine and make sure that the operation has been carried out properly.” 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.

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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.**

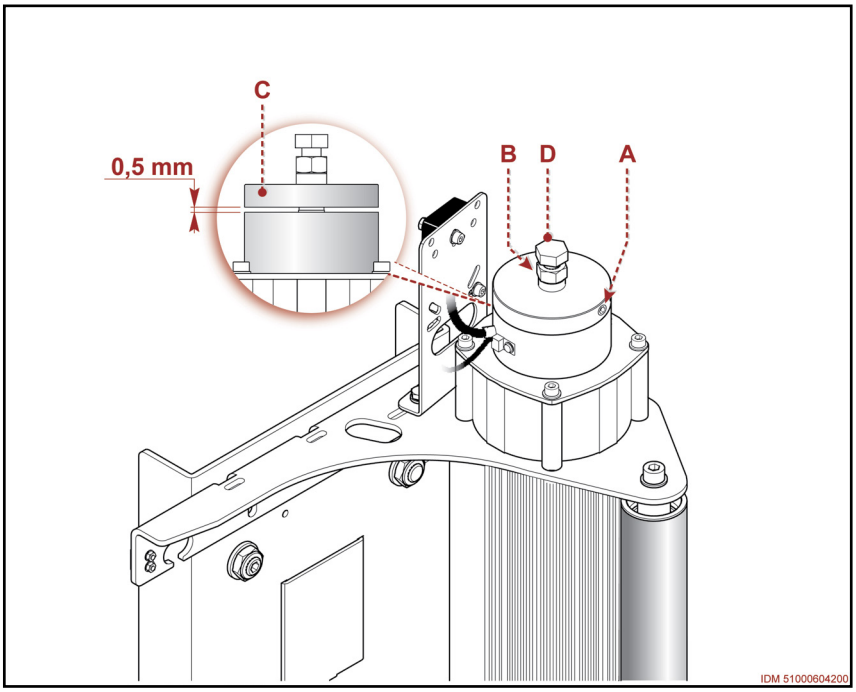
1. Loosen the screw **A**.
2. Loosen the lock nut **B**.
3. Insert thickness gauge (thickness0,5 mm) under disc **C**.
4. Keep disc **C** in proper position and regulate screw **D** to adjust brake.

– 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.**



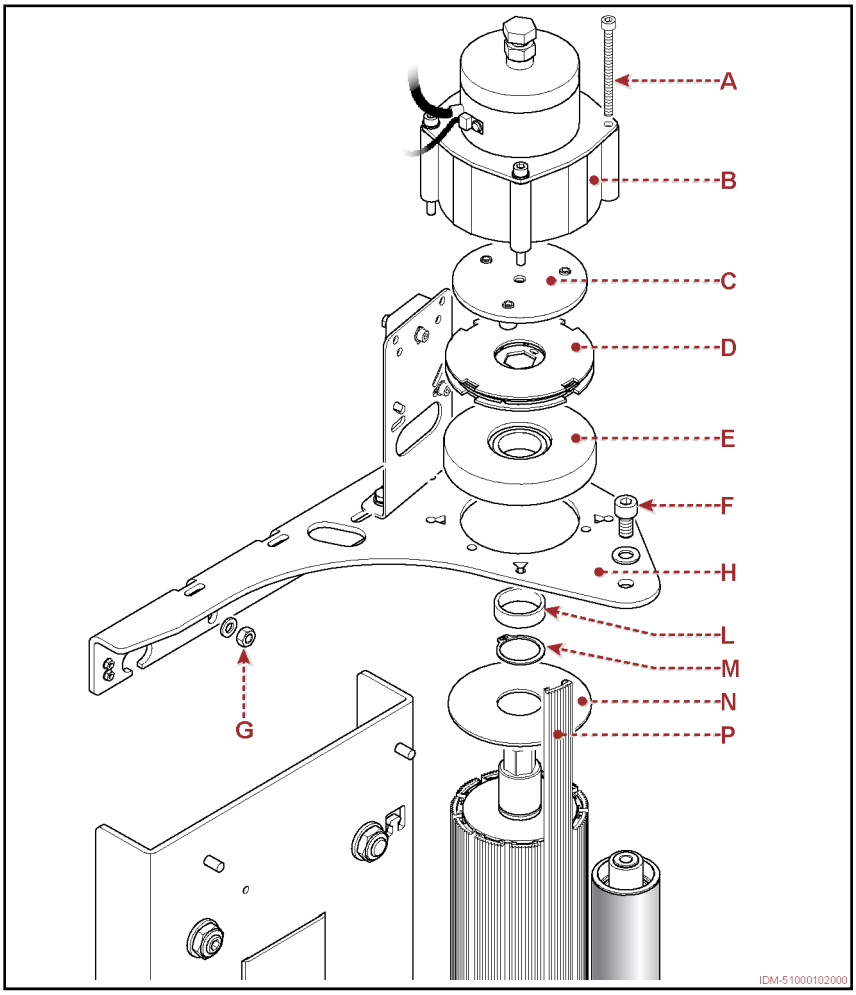
7. Start the machine and make sure that the operation has been carried out properly.

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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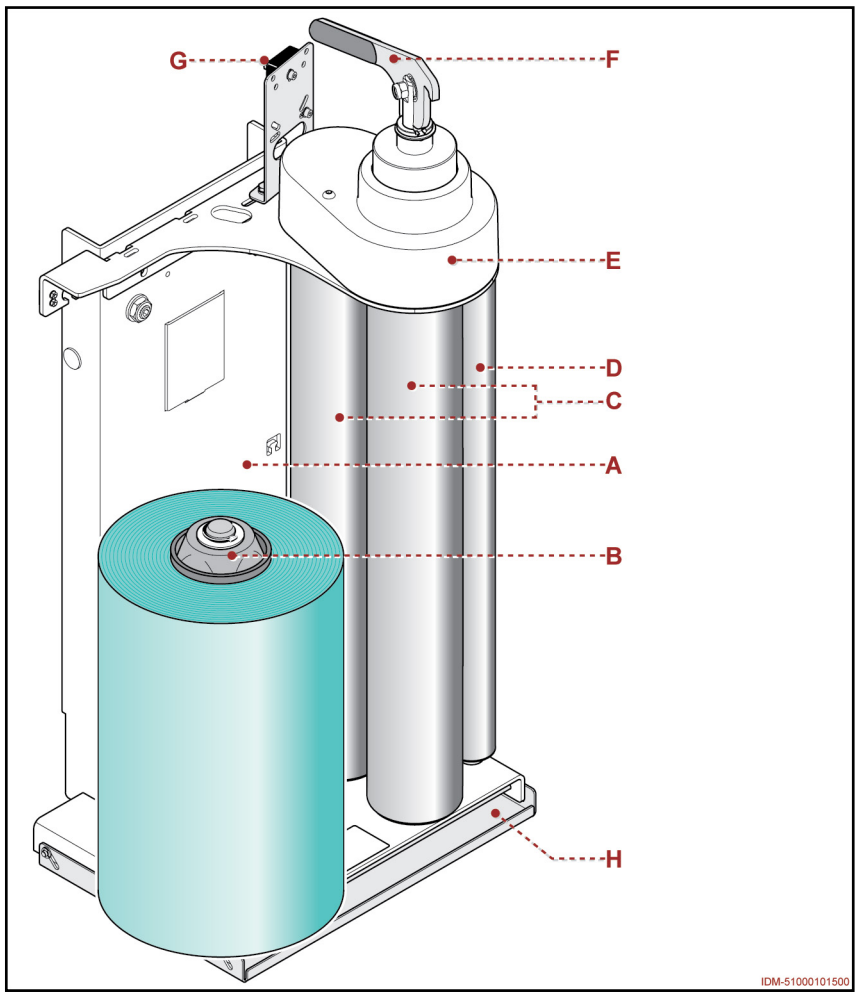
Reel holding carriage (SM)

■ 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 coupled with gears.

– The gears can be replaced with others with a different gear ratio to adjust the film pre-stretching.

D) Roller (idle)

E) Protective guard for the drive system of rollers

F) Lever: device used to disengage the rollers **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.

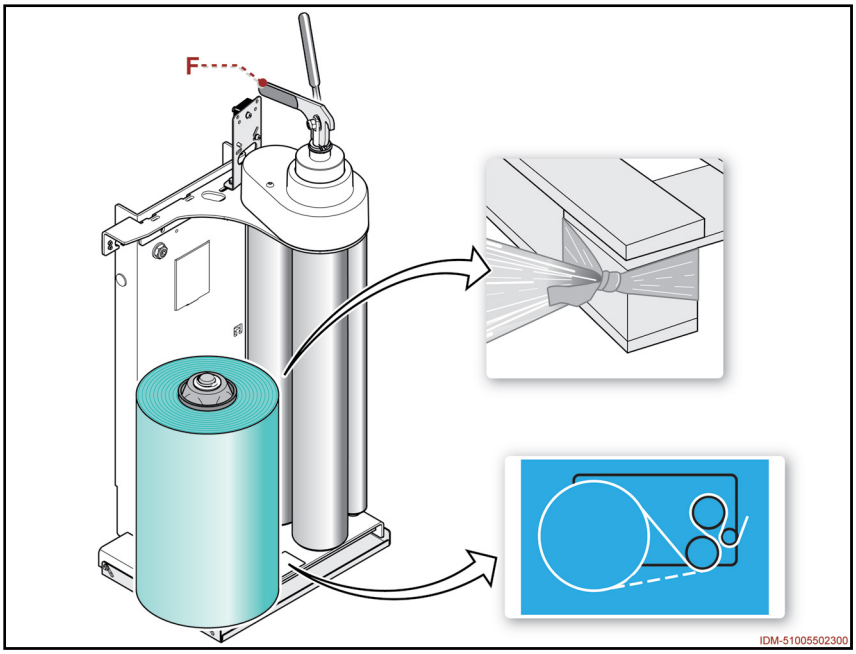
Film Coil Feeding

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.**

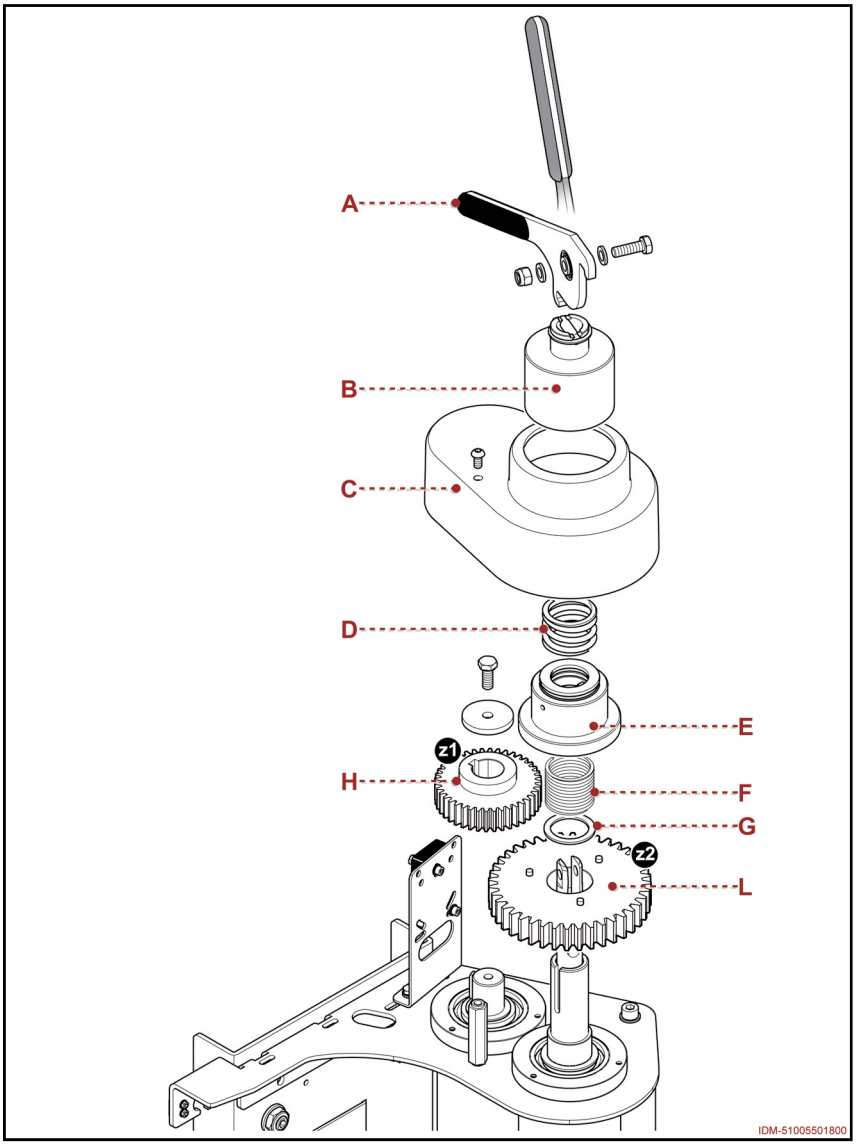
– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the component **C**.
3. Remove the fastening elements and remove the lever **A**.
4. Remove the component **B**.
5. Remove in a sequence the components **D-E-F-G**.
6. Remove the fasteners of the gear **H**.
7. Remove the gears **H-L**.
8. Select the gears **(z1-z2)** for the new film pre-stretching value.

– The table shows the pre-stretching percentage values.

Pre-stretching percentage	*N. of gear teeth z1*	*N. of gear teeth z2*
30%	39	51
60%	35	55
90%	30	60

9. Install the gear **H** and lock it in place with the fastening elements.
10. Install the gear **L**.



Important

The gear must be installed with the pins facing upwards.

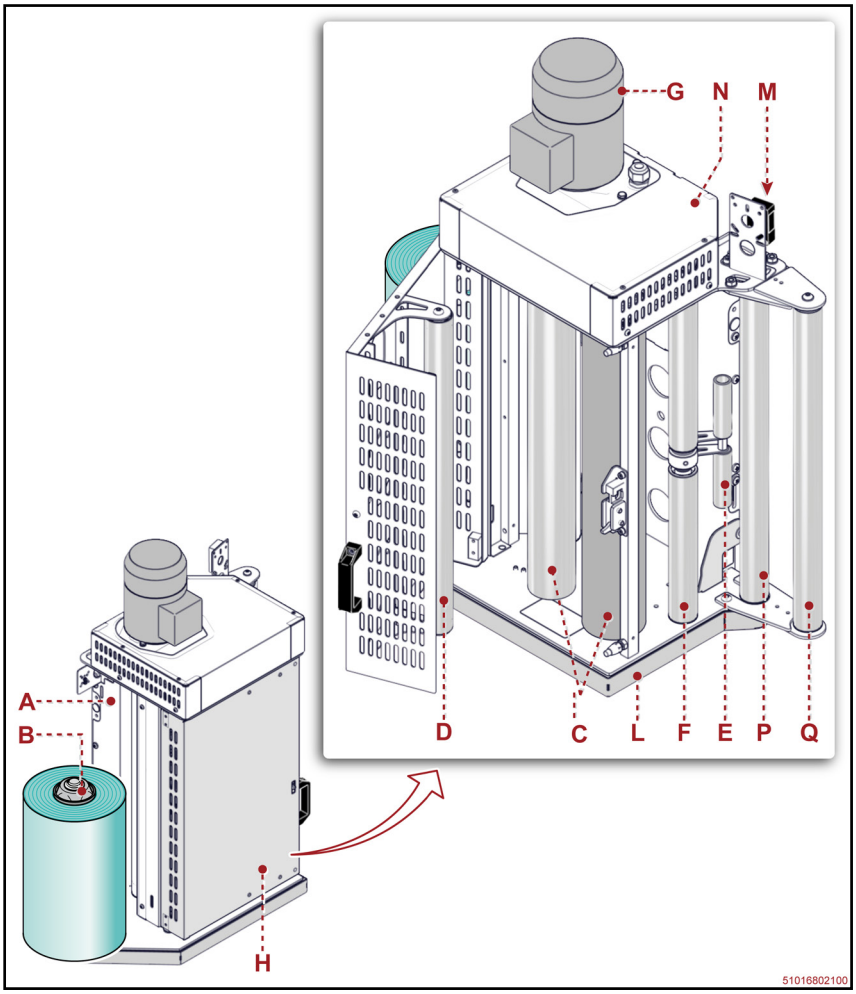
11. Install in a sequence the components **G-F-E-D**.
12. Install the component **C** and lock it in place with the fastening elements.
13. Install component **B**.
14. Engage the lever **A** in a vertical position and insert the fastening elements.
15. Lower the lever to its horizontal position.

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

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

Reel holding carriage (LP)

■ 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 coupled with gears.

D) Roller (idle)

– On closing the guard , the roller **D** is positioned centrally with respect to the rollers **C**.

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 **G** to adjust the speed of the rollers **C**.

F) Roller (idle)

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

H) 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.

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

M) 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.

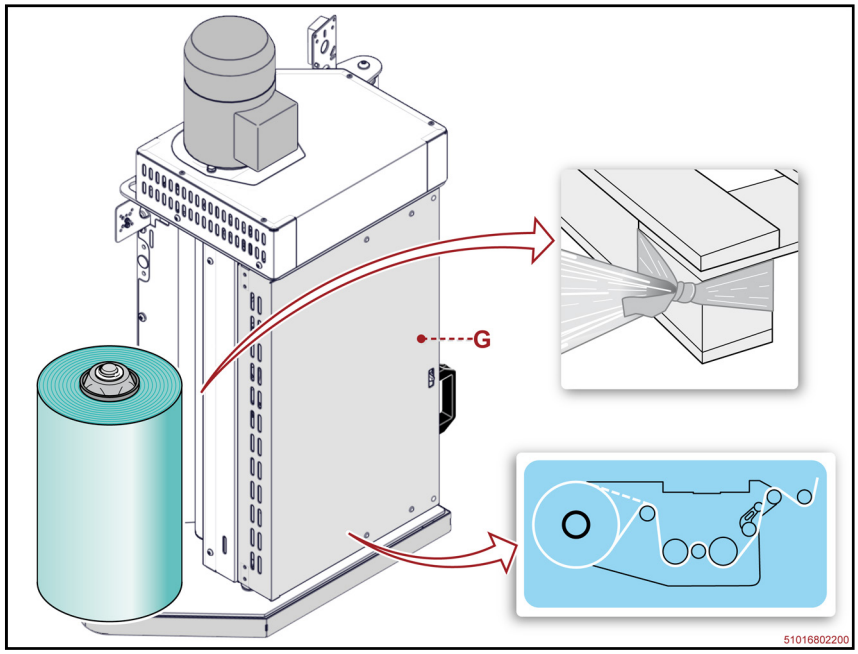
N) Protective guard for the drive system of rollers

P) Roller (idle)

Q) Roller (idle)

Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Open the cover **G**.
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

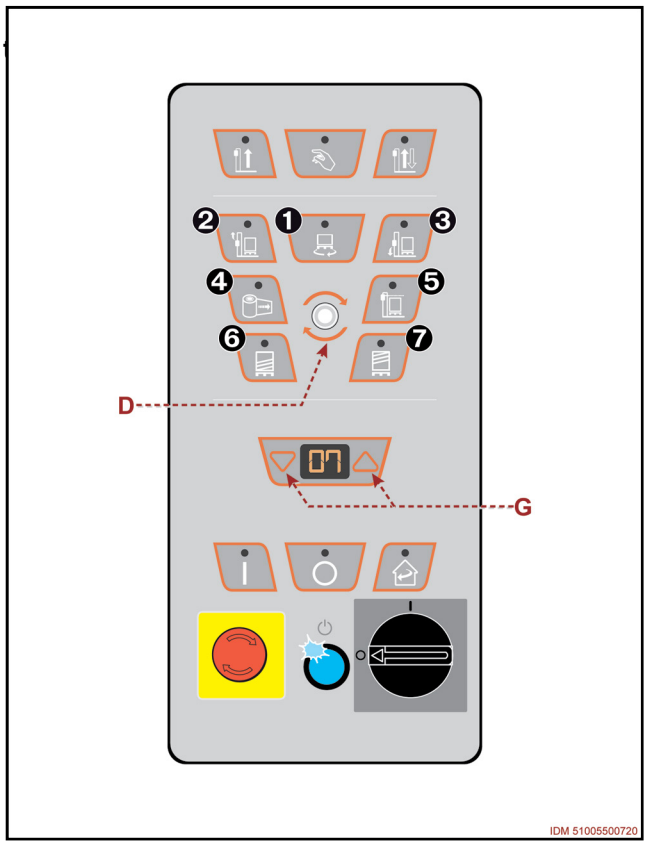
In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

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

Tension adjustment of film

– **The operation is necessary to adjust the film wrapped.**

1. Repeatedly press the button **D** until selecting the parameter ❹.
– LED turns on.
2. Adjust the film tension via the controls **G**.



Replacement of pre-stretch kit

– **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.**

NOTE

At delivery, machine pre-stretch corresponds to 240%.
To set pre-stretch to 150 / 200 / 300 %, replace the gears as indicated.

1°

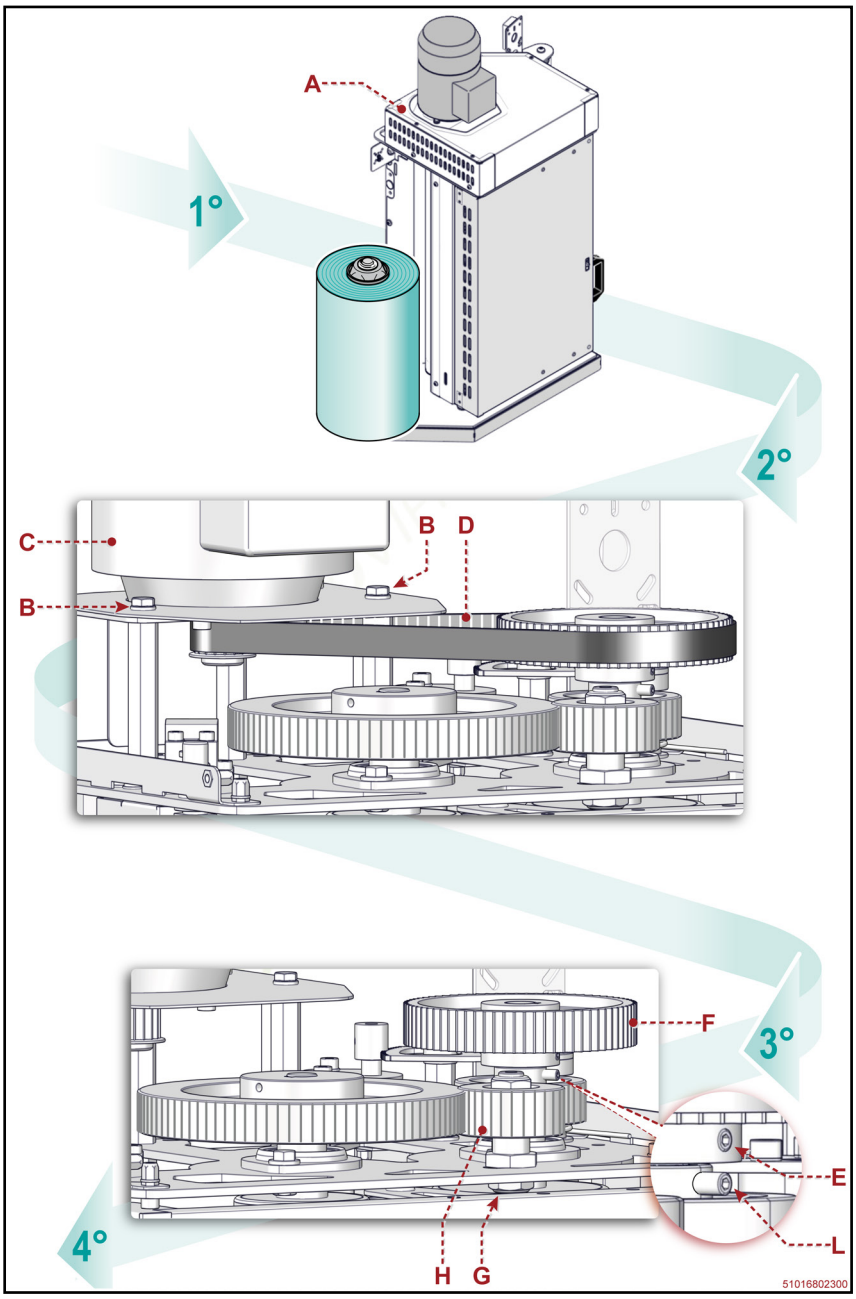
1. Disassemble the guard **A**.

2°

2. Loosen screws **B** and move motor **C** in order to completely loosen belt **D**.
3. Remove the belt **D**.

3°

4. Loosen screw **E** and remove gear **F**.
5. Loosen nut **G** and loosen gear **H**.



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4°

6. Loosen screw **L** and remove gear **M**.
7. Loosen screw **N** and remove gear **P**.
8. Install new gear **M** and tighten screw **L**.
9. Install new gear **P** and tighten screw **N**.
10. Insert the pin of gear **H** into one of the holes in order to combine it properly with gears **M-P** (see figure).
11. Lock gear in proper position by means of nut **G**.

5°

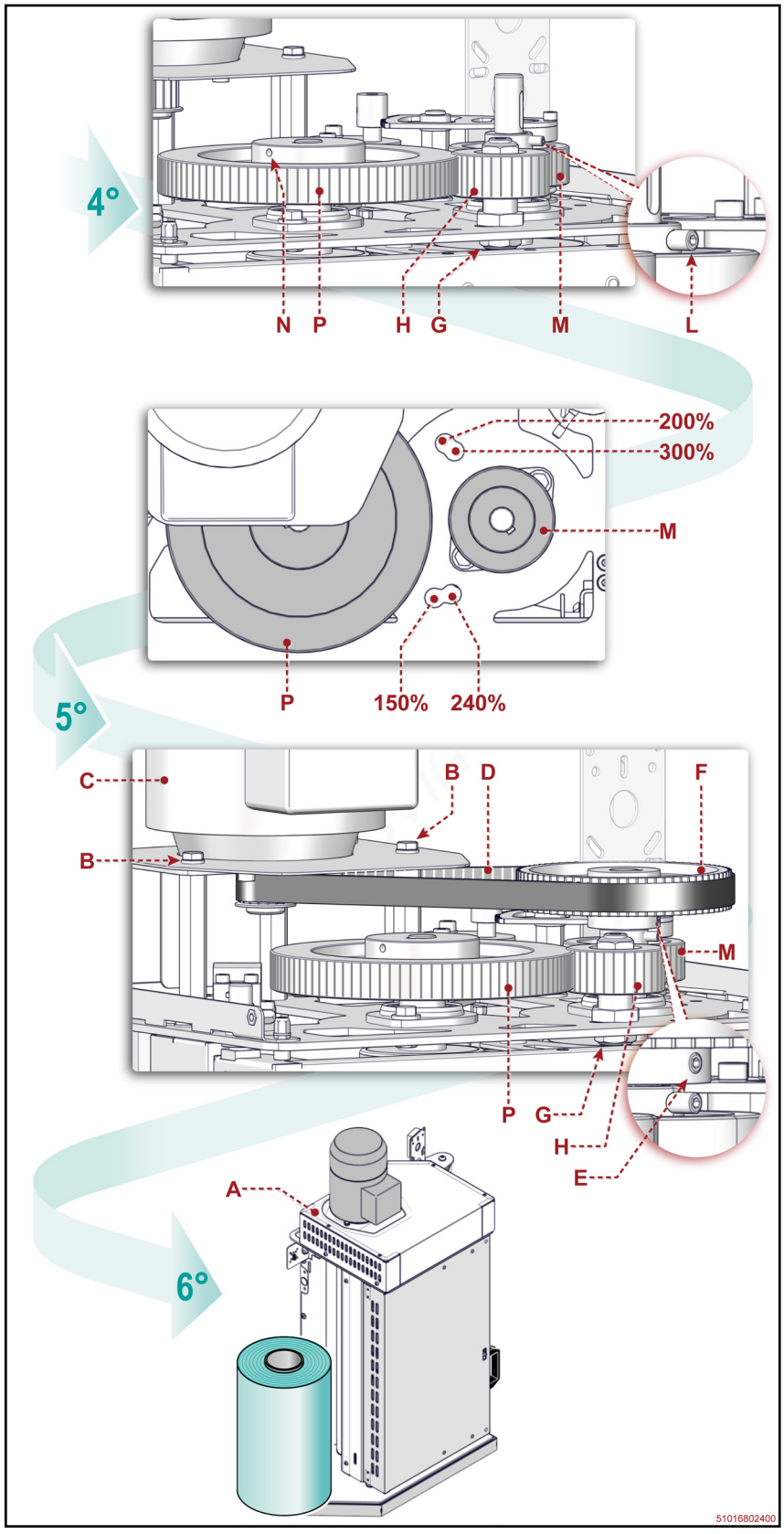
12. Install gear **F** again and tighten screw **E**.
13. Install belt **D**.
14. Shift electric motor **C** and simultaneously tighten screws **B** to adjust the tension of belt **D**.

6°

15. Reassemble the guard **A**.

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

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



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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