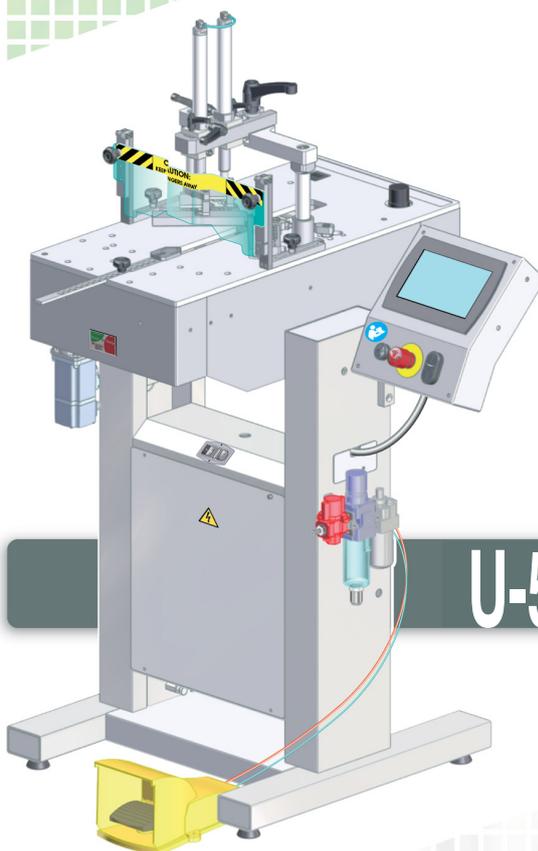


AMP™

FRAME ASSEMBLING MACHINE



U-500 PLUS

Operation and maintenance manual

Translation of the “ORIGINAL INSTRUCTIONS”

Keep this manual for the entire life of the machine
in a known and easily accessible place

00_01-2020



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Purpose of the manual

- This manual has the aim of transferring the “Instructions for use” to the Operator, to prevent and minimize risks during the man-machine interaction.
- This manual also lists the information reserved to the Maintenance Technician authorized to carry out the routine maintenance.
- **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.
- Keep the manual and the attached documents in a place known and easily traceable, so that you may refer to them whenever necessary.
- Keep the manual in a special container in a protected place, to avoid compromising its legibility.
- To easily find out the specific topics of interest, read the table of contents and the index.
- Some information may not correspond entirely to the actual configuration of the machine delivered.
- The Manufacturer reserves the right to make any changes to the content of the manuals without prior notice, provided that such changes do not alter the safety level.
- 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.
- Some symbols have been adopted to highlight parts of the text of this manual and relevant characteristics. Their description is as follows.

Danger - Warning

This symbol indicates potentially hazardous situations which, if ignored, could cause serious harm to personal health and safety.

Caution - Precaution

This symbol indicates that adequate actions must be taken to avoid harm to personal safety and health and economic damages.

Important

This symbol indicates critical technical and operating information that shall be observed.

Note

The symbol is used to strengthen the concept of reference information.

Procedure to request technical assistance.

Contact the technical service centre for any enquiry and/or to order the spare parts.

- Contact the listed references to find the nearest technical service centre.
 - Phone:
 - Fax:
 - E-mail:
- Please state the data contained in the identification plate, the approximate hours of operation and the type of defect detected in every request for technical assistance.

- 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 type

D) Manufacturing year

E) Serial number

F) Machine weight

G) Max. air supply pressure

H) Current supply voltage and frequency

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.
- Before delivering the training to the Operator, make sure that he/she knows the basic functions of a PC and that has proven experience in the use of automatic machines.
- **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.).
- **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.
- **Installer:** A qualified technician appointed and/or authorized by the Manufacturer and/or his representative, with precise technical skills and a special ability to carry out the installation.
- The Technician must also understand the electrical, electronic, pneumatic diagrams etc. to identify the functional features of the different devices.

- **Maintenance Technician:** an appointed and authorized technician, granted a password to carry out the operations that cannot be assigned to the Operator.
- The Maintenance Technician shall have precise knowledge and skills, with specific skills in the field of intervention.
- **Routine Maintenance:** All the necessary interventions to maintain the machine and the equipment installed under conditions of maximum efficiency.
- A good maintenance will ensure a stable performance over time, longer working life and constant compliance with the safety requirements.
- Routine maintenance is normally programmed by the manufacturer, defining the intervals and methods of intervention.
- **Extraordinary Maintenance:** any interventions due to unforeseeable events and not scheduled by the Manufacturer which must be performed by the Maintenance Technician.
- The purpose of such interventions is to restore, without changing, the original functionality and safety conditions.
- **Operator:** a person trained to activate the operational functions (start, stop, consumable replacements, etc.) and to perform the routine maintenance.
- In addition to being trained and informed on the how to use the machine, the operator must possess the necessary skills and expertise for the type of work to be carried out.
- **Residual risks:** all the risks remain even if all the safety solutions have been adopted and integrated when the machine has been designed.
- **Forwarder and Handler:** Authorized persons with recognized expertise in the use of means of transport and lifting devices, in safety conditions.
- **Improper use:** reasonably foreseeable use different from what is specified in the use manual, that may be caused by human behaviour.

Attached documentation

The stated documentation is supplied to the client along with this manual.

- Wiring diagrams
- Pneumatic system diagrams
- Table of sharpening values
- CE Declaration of conformity
- Declaration of conformity Electromagnetic compatibility
- Specific manuals of components or commercial subsystems installed

General safety warnings

- Carefully read the Operating Instructions contained in the manual and the ones directly labelled on the machine.
- Reading the Operating Instructions is fundamental in order to minimize the risks and avoid accidents.
- **The failure to comply with the described safety instructions may cause risks for the safety and health of people and cause economic damage.**
- Consult the user manual, in particular during the first use, and make sure that you fully understand its content.
- Respect the SAFETY WARNINGS. Avoid any IMPROPER USE of the machine and assess the RESIDUAL RISKS.
- Caution is always necessary. Safety is also the responsibility of all the persons interacting with the machine throughout its operating life.
- **In some cases, accidents may be due to the Operator using the machine carelessly.**
- **Remember that it is too late to think about safety issues when the accident has already occurred.**
- The Manufacturer has designed the machine complying with all the applicable regulations and following the best engineering practices.
- Tampering with and bypassing the safety devices may lead to severe risks for the Operators.
- 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.
- Signals which are no longer legible must be replaced and repositioned in the same place of origin.

Safety Warnings for Handling and Installation

- The manufacturer paid particular attention to the packaging in order to minimise any risk connected to shipping, handling and transport phases.
- In order to make transport easier, the equipment can be shipped with a few disassembled and properly protected and packaged components.
- Any handling operation (loading and unloading) shall be carried out according to the information marked on the machine/packaging and contained in the Operation Manual.
- During transport and/or storage, temperature must stay within the allowed limits in order to avoid any irreversible damage to the electrical and electronic components.
- Loading and transport operations must be performed through means having an appropriate capacity and anchoring at the points indicated on the packages.
- DO NOT try to bypass the handling modes and the points provided for lifting.
- 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.
- The personnel authorised to load, transport and unload the equipment must be properly trained on the use of the lifting means and have exhaustive experience in the specific sector.

- Unload the packages in the nearby of the installation area and store them in a sheltered environment.
- The installation shall be performed **ONLY** by qualified technicians, having the necessary knowledge to carry out the operations correctly and safely.
- Prepare and set up the installation area, complete with all the connections to the energy supplies, to be able to perform the installation.
- In case the machine has to interact with other production units, assess beforehand whether such integration can be performed in a proper and compliant way, without any risk.
- Signal and delimit the installation area in a proper way in order to prevent non authorised personnel from accessing the installation area.
- Ensure that the installation environment is protected against atmospheric agents, free of corrosive substances and free of any risk of explosion and/or fire.
- Installation in environments at risk of explosion and/or fire can be performed **ONLY** if the machine has been **DECLARED COMPLIANT** for this use.
- The temperature of the installation environment must be within the allowed min-max range.
- The brightness, the ventilation and the sound emissions of the installation environment must comply with the laws in force at the workplaces.
- Take additional measures to avoid the concentration of unhealthy air and to reduce noise pollution, which are harmful to the health of the operators.
- 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.
- Dispose of all packing in accordance with the laws in force in the country of installation.

Safety Warnings for Operation and Use

- The machine was designed and built to meet all the operating conditions specified by the Manufacturer.
- 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.
- **ONLY** use staples that are specified when signing the agreement or those approved by the Manufacturer.
- The machine should be used **ONLY** with the original safety devices installed by the Manufacturer.
- **DO NOT** modify the manufacturing and functional characteristics of the machine in any manner whatsoever.

- If troubles arise, do NOT continue to use the machine. Stop it immediately and restart only after restoring the normal operating condition.
- DO NOT leave the machine unattended during operation and DO NOT leave it at the end of the work without stopping it to safety conditions.
- 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.

■ Duties of the Safety Manager

- The Safety Manager must train the operator so that he/she can acquire the necessary knowledge to operate in an autonomous, suitable and risk-free way.
- The operator must be informed about reasonably predictable INCORRECT USES and about the RESIDUAL RISKS that remain.
- 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 provide the trained personnel with teaching materials and document the provided training in a way to produce such papers in case of disputes.

Safety Warnings on Residual Risks

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.

- The list includes the residual risks that may persist on this type of machine.
- **Risk of crushing and/or abrasion:** do not near or introduce your hands into the working area of the machine during operation.
- **Risk of electric shock or electrocution:** do not access live areas and/or elements without turning off the power supply.

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.
- 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.
- Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
- Always deactivate the power and pneumatic supply before carrying out any operation.
- 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.
- 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”.
- The personnel authorized to carry out the ordinary maintenance must have qualified expertise and specific skills in the field of intervention.
- Carry out all interventions **ONLY** with suitable tools in good state to avoid damaging work unit components and parts.
- Replace the components and/or safety devices **ONLY** with original spare parts in order not to alter the required safety level.
- Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.
- 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.
- **DO NOT** use the machine if the scheduled routine maintenance interventions have not been carried out.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- **DO NOT** clean or wash the machine using aggressive products that may damage its components.
- **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.
- 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.

Safety warnings for the electrical equipment

The electrical equipment has been manufactured according to the relevant regulations in force and operates correctly only if the listed conditions are met.

Important

If one or more listed conditions cannot be met, the additional solutions to be adopted must be agreed during the contractual stage.

- Environmental temperature and relative humidity included within the minimum and maximum permitted limits.
- Absence of electromagnetic disturbances and radiation in environment (X rays, laser, etc.).
- Absence, in the environment, of areas with concentration of gas and powder that are potentially dangerous and/or at risk of fire.
- Use of products and materials that are free from contaminating and corrosive agents.
- Product with chemical substances, acids, salts, etc. can come into contact with the electrical components and damage them irreversibly.

- Transport and storage temperature included between the permitted minimum and maximum limits.
A temperature and exposure time that is higher than the permitted values can irreversibly damage the electrical components.
- Altitude not higher than the permitted limits.
- The installation at a higher altitude than the permitted one compromises the functionality of the electrical and electronic components.
- Installation cable with a section that is suitable for the electrical power and intensity indicated in the special plate.
- Protection level complying with the indication in the special plate.

Important

All the values of the listed conditions are in the technical data table.

Safety warnings for the environmental impact

- 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.
- Make sure that the installation area has a suitable ventilation to avoid the concentration of unhealthy air for the Operators.
- Keep noise level to the minimum to reduce noise pollution.
- Avoid dumping polluting materials and products in the environment (oils, greases, electrical and electronic apparatus etc.).

Note

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.

Note

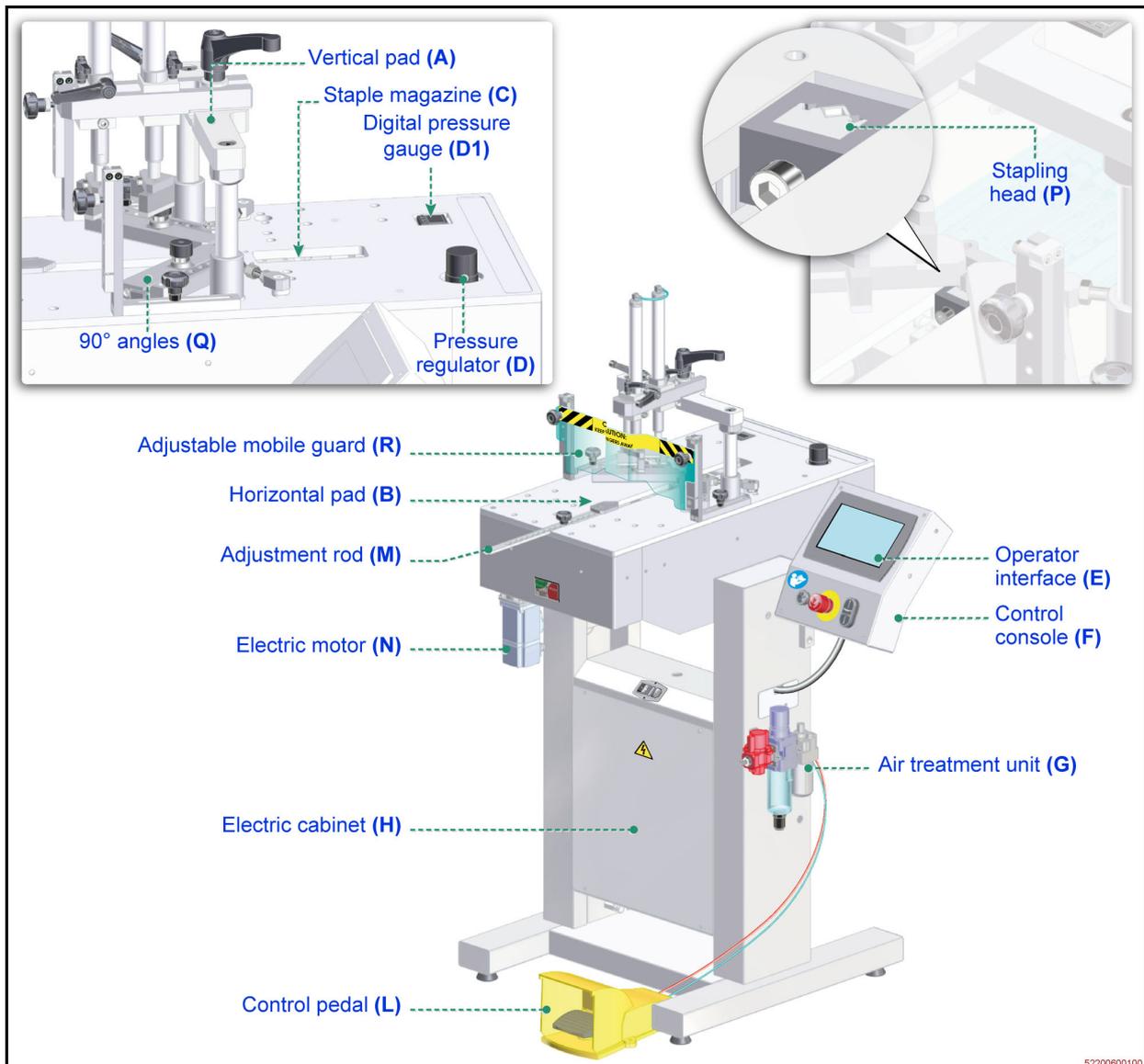
Incorrect disposal of dangerous waste is punishable with sanctions regulated by the laws in force on the territory in question.

General description of the machine

- Assembling machine is a machine designed and manufactured to staple medium and large size frame rods in semi-automatic mode.
- This type of machine is designed with innovative technologies and built with selected materials to ensure efficiency and quality in the process.
- One of the main features of this type of machines is the optimisation of the stapling process by means of **special steel staples A+**.
- The machine is intended to be installed in professional environments in the wood processing sector.
- All operating functions are programmed, managed and controlled through the operator interface of the electronic control system.
- The control system can be programmed to assemble frames of any type and size.
- Its modular design allows to equip the machine with different working units in order to fulfil the different production requirements.
- The purchased configuration can be changed for subsequent needs, without modifying the basic structure of the machine.
- Customised configurations with special components (for example rod supports, pads to increase tightness, etc.) may be required by the customer.
- The machine has undergone a Risk Assessment and is equipped with safety devices, in accordance with the applicable Directives and regulations.
- The machine must be installed ONLY in environments that are free from the risk of explosion and / or fire.
- 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.

■ Description of the main components

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



- A) Vertical pad:** it is activated by pneumatic pushers and it presses on the rods during the stapling process.
- B) Horizontal pad:** it is activated by a pneumatic pusher and it pushes the rods during the stapling process.
- C) Magazine:** container of the staples to be applied.
- D) Pressure regulator:** it is equipped with pressure gauge **D1** and it is used to adjust the operating pressure of the vertical pad **A**.
- E) Operator interface:** control system used to programme and display the operating status of the machine.
- F) Control console:** it is equipped with the operator interface **E** and with some control devices of the machine.
- G) Air treatment unit:** its purpose is filtering and dehumidifying the air flow to the pneumatic system.

H) Electric cabinet is equipped with the power electrical components (fuses, relay, etc.) that are necessary for machine operation.:

- Electrical equipment box has been designed according to the regulations in force and it has been manufactured to guarantee suitable safety conditions.

L) Control pedal: it is used to activate stapling.

M) Adjusting rod: it is used to adjust the position of the horizontal pad **B**.

N) Electric motor: it drives the carriage of the stapling head **P**.

P) Head: it is used to carry out stapling.

Q) 90° angles: they are activated by pneumatic pushers and they stop the rods during the stapling process.

R) Adjustable mobile guard: it prevents the access of upper limbs to the operating area.

Description of the safety devices

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

Note

The operator must be familiar with the functions and the position of all the safety devices in order to avoid the risks and dangers during standard operation (use, scheduled maintenance, etc.).

- The figure shows the devices and the list provides their description and function.

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

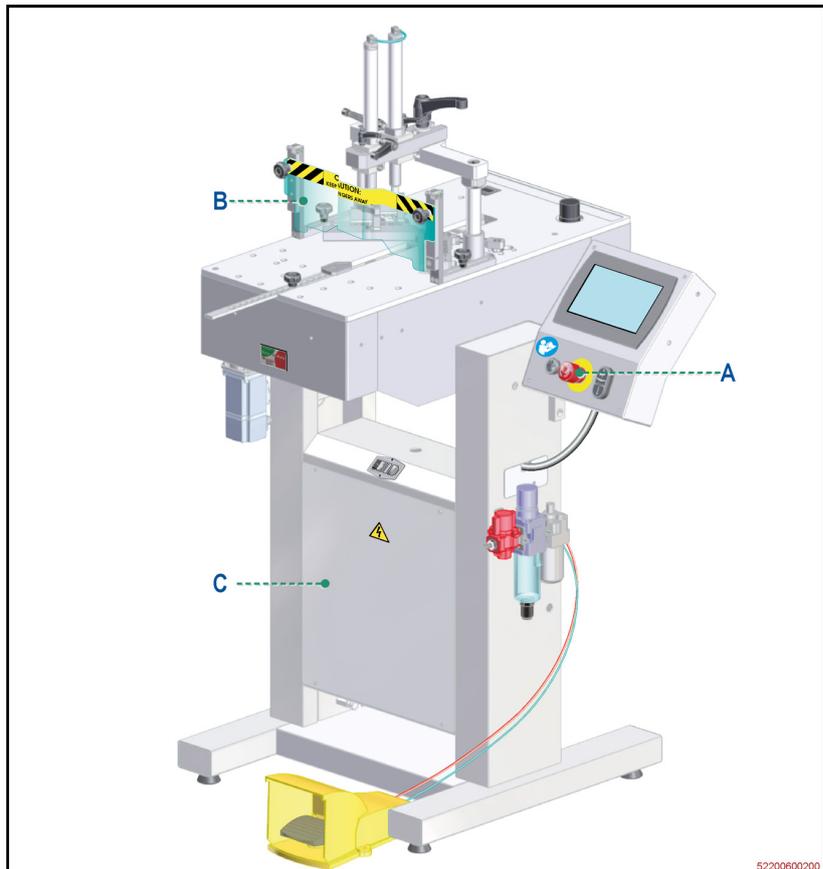
- The control must stay “locked” until all the normal operating conditions have been restored.
- After having normalised running conditions, unblock the button with a deliberate action to authorise restart.

B) Adjustable mobile guard: it prevents the access of upper limbs to the operating area.

- The guard is made of transparent material allowing to inspect the working process.

C) Fixed guard: safety device preventing access to the electric cabinet.

- The device is fastened in such a way that it can be opened only by means of tools.



Caution - Precaution

The guard must be removed only if the power supply cable has been disconnected.

Improper use

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

- DO NOT use staple types other than those recommended by the Manufacturer.
- DO NOT staple rods made of materials other than that recommended by the Manufacturer.
- DO NOT tamper with, override, bypass or eliminate the safety devices installed on the machine.
- When operating the machine, ALWAYS wear the Personal Protective Equipment specified by the Manufacturer and by the current regulations on safety at work.

- ONLY trained, documented and authorized Operators are allowed to use the machine.
- Do NOT use the machine if the scheduled maintenance operations have not been correctly carried out.
- DO NOT use the machine in places that are at risk of fire and / or explosion.
- DO NOT use the machine in environments exposed to the weather and that are not properly protected.
- DO NOT clean or wash the machine with water jets, vapour or aggressive products to prevent irreversible damage.
- 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.

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 crushing:** keep your fingers out of the operating area during the stapling process.
Keep you fingers OUT OF the slot below the transparent mobile guard.
DO NOT activate the control pedal during maintenance operations while the power supply is activated.
 - **Risk of electric shock and electrocution:** danger signal indicating not to access the areas with live parts.
Always deactivate the power and pneumatic supply before carrying out any operation.

Supplied fittings

The table shows the accessories supplied as standard.

Name	Quantity
Stapling head (7 mm)	1
Stapling head (10 mm)	1
Stapling head (15 mm)	1
Hexagon wrench (5 mm)	1
Adjustable foot	4
Pressure gauge	1
Pneumatic system quick coupling	1
Magnetic rod for staple removal	1
Standard vertical stop device	1
Double hydraulic stop device	1

Technical data

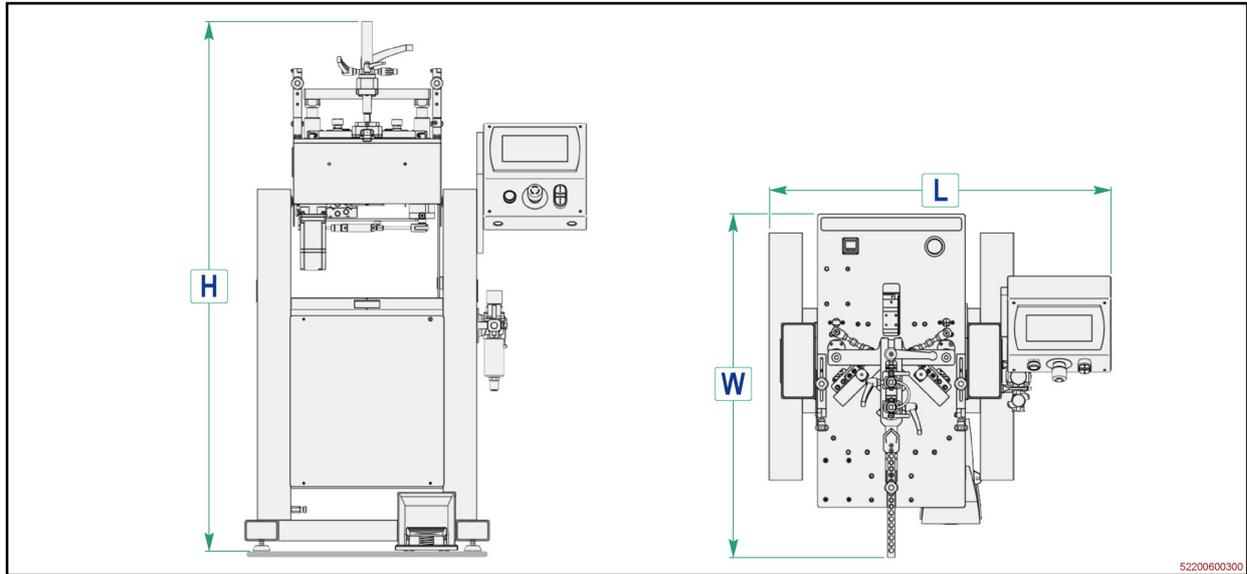


Table: Technical data of the machine

Description	Unit of measurement	Value
SPECIFICATIONS OF THE SUPPLY SOURCES		
Electrical power supply		
Installed electric power	kW	0,4
Absorbed power	kW	0,4
Electric current voltage	V	110/220
Auxiliary circuit voltage	V dc	24
Electric power frequency	Hz	50/60
Main switch fuse	A	5
Fuse on electronic card M380	A	5 / 10
Pneumatic power supply		
Operating pressure	bar (psi)	3÷6 (40÷80)
Air consumption at operating pressure	NI/cycle	4
General Requirements		
Dimensions and weights		
Length, width, height (LxWxH)	mm (")	680x890x1430 (27x35x56)
Work surface Height	mm (")	970 (38)
Total unladen weight	kg (lbs)	135 (298)
Environmental conditions		
Maximum operating height (asl)	m	1000
Relative humidity (at a temperature included between °C and °C)	-	90% ÷ 50%
Ambient functioning temperature	°C	5 ÷ 40
Environmental brightness	LUX	150
Noise and vibration levels		
A-weighted continuous and equivalent acoustic pressure level	DB	<70
Weighted instantaneous acoustic pressure level	DB	<130
vibration level	m/s ²	<2,5
OPERATING PROPERTIES		
HOURLY PRODUCTION		
	Pieces/h	200
Rod height	mm (")	6 ÷ 107 (1/4 ÷ 4 1/4)
Rod width	mm (")	10 ÷ 185 (3/8 ÷ 7 1/4)
Capacity of staple magazine	n°	200
Standard staple height	mm	7, 10, 15
Optional staple height	mm	3, 5, 12
Max. number of positions for staple infeed	n°	14
Max. number of superimposed staples	n°	9

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Description of outer areas

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

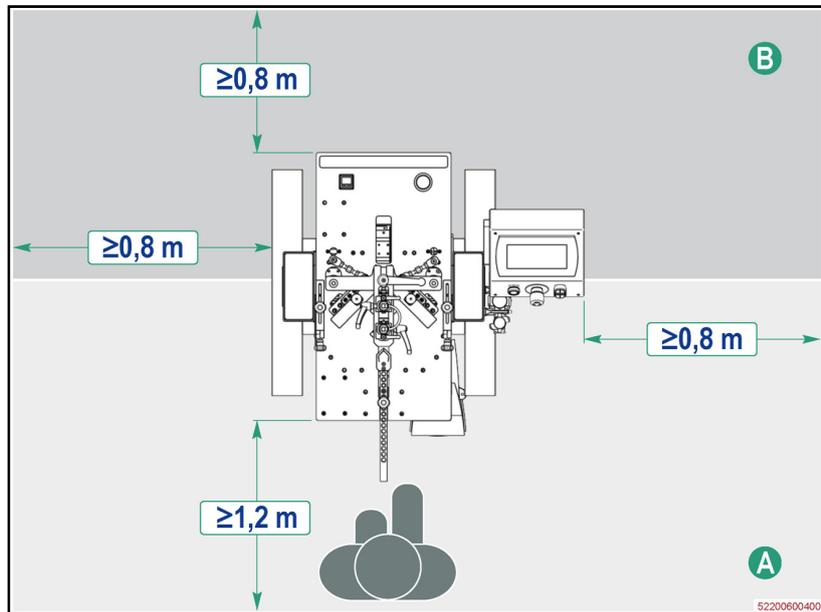
- Plan the installation area in order to ensure a healthy working place and suitable safety conditions in consideration of the nearby working activities.

A) Control area only for the operator

B) Maintenance interventions area

Important

ALWAYS keep the perimeter areas clean and free of obstacles in order to reduce the risks to the minimum during man-machine interaction.



Safety and information symbols

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

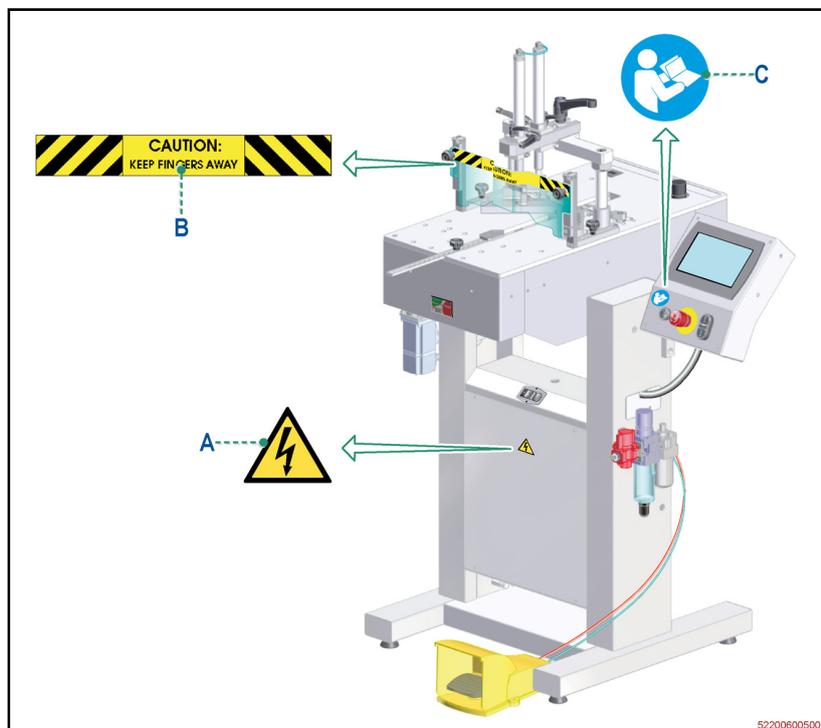
A) Electrical shock or electrocution hazard: hazard signal that warns the operator from accessing the areas under voltage in order to avoid risks.

B) Risk of cutting and crushing: danger sign that warns the operators not to near the operating area with their fingers.

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

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

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



Recommendations for maintenance interventions

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

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

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Scheduled maintenance intervals

The frequency of the interventions refers to the real working hours of the machine.

Maintenance table 1

<i>Frequency</i>	<i>Component</i>	<i>Procedures to be implemented</i>	<i>Remarks</i>
Every day	Complete machine	General cleaning	See “Machine cleaning”
		Check for any air leakage	In the event of any fault, contact the Technical Assistance Service of the Manufacturer.
Every 600 hours	Air treatment unit	Drain condensate	See “Cleaning and replacement of the air filter”
Every 1.000.000 staples	Staple ejection hammer	Replace	Refer to the Technical Assistance Service of the Manufacturer.
	Staple selection head	Replace	Refer to the Technical Assistance Service of the Manufacturer.
	Staple guide channel support	Replace	Refer to the Technical Assistance Service of the Manufacturer.
Every 5.000.000 staples	Vertical and horizontal stop devices	Replace the gaskets	Replace the gaskets of the staple pushers
	Valves and pressure reducers	Replace	Refer to the Technical Assistance Service of the Manufacturer.

Lubricant table

The table below specifies the lubricants recommended by the Manufacturer for each component and/or area of the machine.

Table 2: Features of the lubricants

Lubricant type	make	Abbreviation	Remarks
Synthetic oil	CASTROL	MAGNA GC 32	Pneumatic system lubricating filter
	BP	HP10	
	MOBIL	VELOCITE No. 6	
Synthetic grease	MOLYKOTE	PG21	Staple ejection hammer
	KLUBER	POLYLUB GA352 P	

Refilling of air filter lubricant

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

1. Disconnect the electric power supply of the machine.
2. Disconnect the pneumatic supply
3. Lower the flap **A**.
4. Unscrew the cup **B** in order to top up the oil or to change it, if the interval of scheduled maintenance has expired.

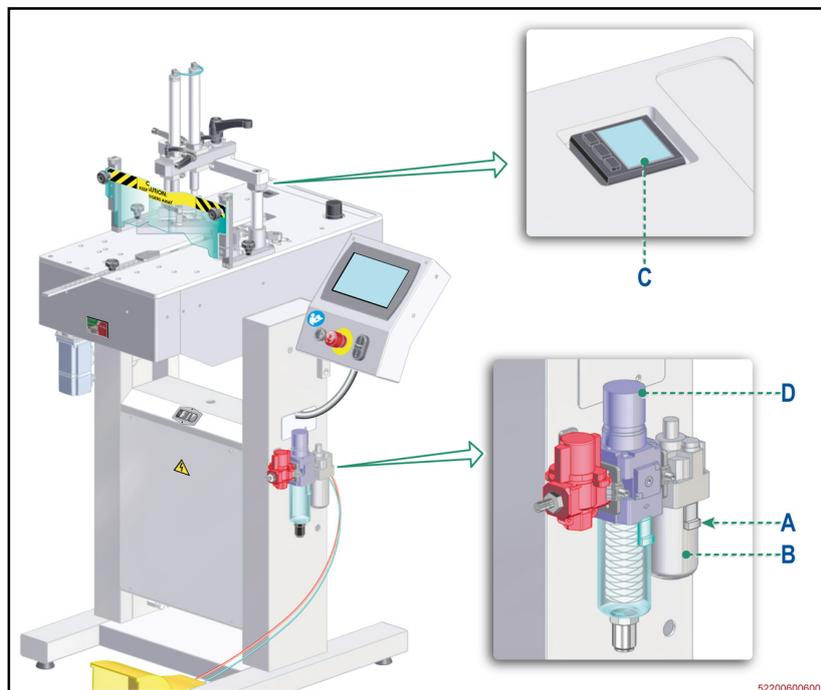
Important

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

5. Screw the oil containing cup **B**.
6. Turning on machine power supply.
7. Activate the pneumatic supply.
8. Check on gauge **C** that the pressure value is correct.
 - If the value is not correct, change it with special regulator **D**.

Important

Do not throw away any polluting material in the environment. Carry out their disposal in compliance with the relevant legislation in force.



Cleaning and replacement of the air filter

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

1. Disconnect the electric power supply of the machine.
2. Disconnect the pneumatic supply
3. Unscrew the valve **A** to drain the condensate, and then re-install it.
4. Lower the flap **B**.
5. Unscrew bucket **C** and disassemble the filter.
6. Clean filter cartridge **D** with dry compressed air.

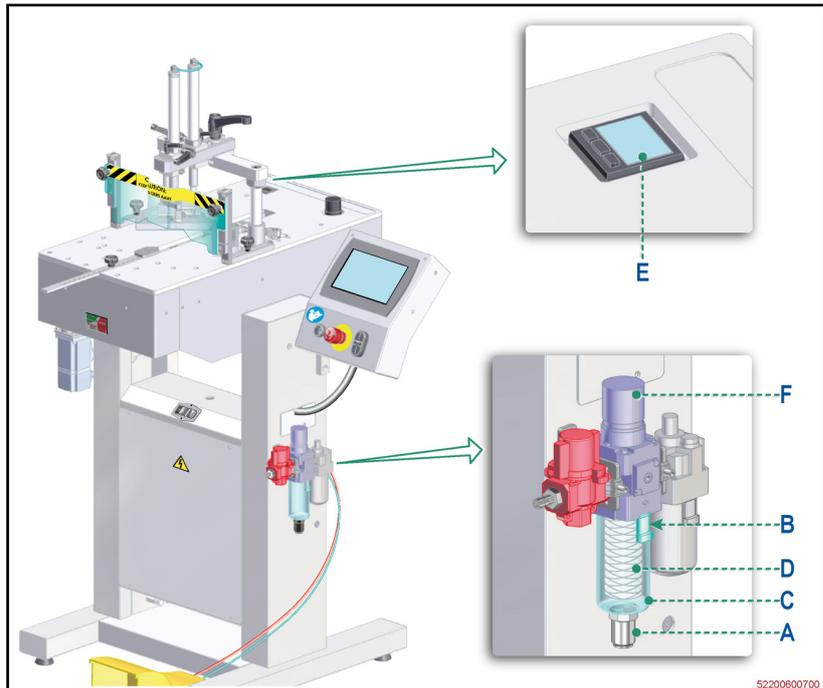
Note

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

7. Install the filter and tighten cup **C**.
8. Turning on machine power supply.
9. Activate the pneumatic supply.
10. Check on gauge **E** that the pressure value is correct.
 - If the value is not correct, change it with special regulator **F**.

Important

Do not throw away any polluting material in the environment. Carry out their disposal in compliance with the relevant legislation in force.



Machine cleaning

For this operation proceed as follows.

1. Stop the machine in safe conditions.
2. Wear the appropriate Personal Protection Equipment (PPE).
3. Remove dirt and residues with the use of a suitable vacuum system.
4. Clean the clear guards in order to ensure the visibility of the internal areas. Use a non abrasive cloth dampened with drinking water and neutral cleaner.
5. Carefully clean the stapling head and the upper part of the hammer in order to remove all residues (for ex. glue).
6. Clean the screen of the control console with a clean and dry (non-abrasive) cloth.
 - **DO NOT use corrosive and flammable cleaning products and/or products containing or releasing harmful substances.**
 - **ALWAYS keep the perimeter areas clean and free of obstacles in order to reduce the risks to the minimum during man-machine interaction.**

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

<i>Problem</i>	<i>Cause</i>	<i>Remedy</i>
The staples are not properly inserted.	Too low operating pressure	Regulate the pressure (See Control system).
	Staples not properly positioned in the magazine	Insert the staples in the magazine with the top side pointing to the machine back side and with the glue side pointing upward.
	Too low supply pressure	Adjust the supply pressure.
	Stapling head damaged.	Replace the head (See Control system).
	Staples not suitable for the material type	Replace the staples.
The superimposed staples are not properly inserted.	Staples not suitable for the material type	Replace the staples.
	Size change not properly carried out	Check the size change operations (See Control system).
Non-regular stapling	Pneumatic valves damaged	Replace or clean the valves Refer to the Technical Assistance Service of the Manufacturer.
The pedal control does not work properly.	The recipe of the new size was not properly loaded	Upload the recipe of the new size from the operator interface (See Control system).
	Too low operating pressure	Regulate the pressure (See Control system).
	Adjustable mobile guard opened	Close mobile guard.
	Power supply not activated	Press the button to activate the electric power supply. Press the switch to position "I" (ON) in order to activate the main power supply. Connect the power supply cord to the plant's mains.
When the switch is in position "I" (ON), operation will not start.	Power supply not activated	Connect the power supply cord to the plant's mains.
	Supply voltage or fuses interrupted	Replace the fuses (See "Replacement of fuses").
		Check the correct electric voltage

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Replacement of fuses

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

1. Disconnect the electric power supply of the machine.
2. Extract the fuse holder **A**.
3. Replace burnt fuse **B** with another fuse having the same features.

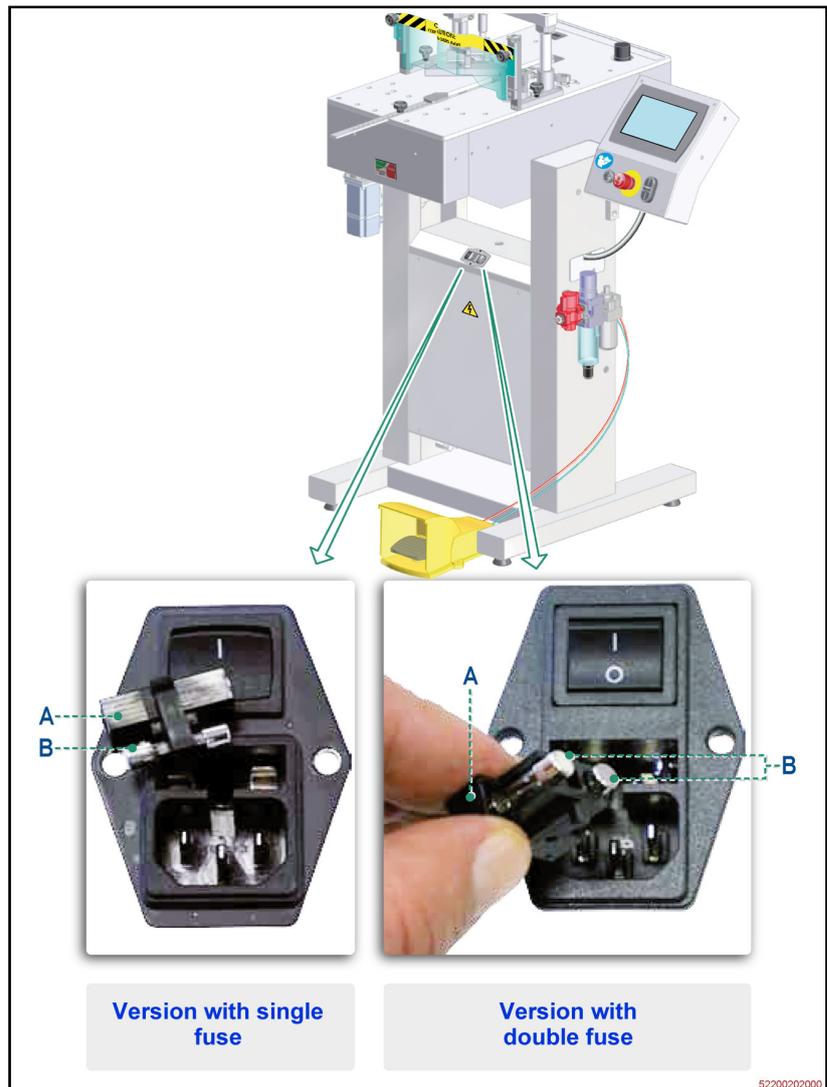
Note

Do not use fuses with an amperage higher than the recommended value.

4. Install the fuse holder **A**.
5. Turning on machine power supply.

Important

Do not throw away any polluting material in the environment. Carry out their disposal in compliance with the relevant legislation in force.



Machine Disposal and Scrapping

■ Machine dismantling

- Disconnect the supplies from 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.
- The components must be selected based on the chemical and physical characteristics of their materials and disposed of separately according to the regulations in force.

Transport and handling recommendations

- The information is intended for the operator in charge of installation and for the competent and authorised personnel in charge of operations.
- 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.
- In order to make transport easier, the equipment can be shipped with a few disassembled and properly protected and packaged components.
- Any handling operation (loading and unloading) shall be carried out according to the information marked on the machine/packaging and contained in the Operation Manual.
- The personnel authorised to load, transport and unload the equipment must be properly trained on the use of the lifting means and have exhaustive experience in the specific sector.
- Certain steps might request one or more operators, who must be previously trained and informed on the tasks they will have to perform.
- Transport the machine using appropriate means of suitable capacity.
- 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.
- DO NOT try to bypass the handling modes and the points provided for lifting.
- Slowly lift the parcels to the minimum indispensable height, and then move them with special care to prevent dangerous swinging.
- When the loads are lifted and handled, the radius of action of the lifting means must be kept free from people.
- Unload the packages in the nearby of the installation area and store them in a sheltered environment.

Installation recommendations

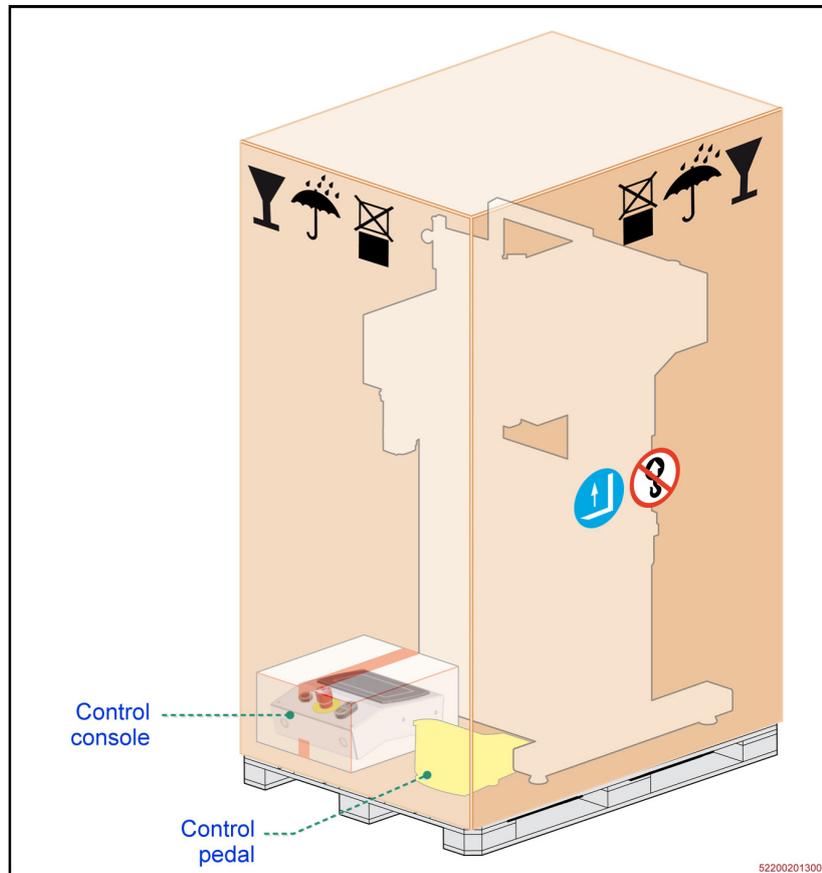
- The person in charge of the installation area and of installation must implement a “safety plan” complying with the regulations in force in the working place.
- The “safety plan” must consider all surrounding work activities and the necessary spaces along the perimeter.
- Carry out the installation according to the minimum outer clearances specified by the Manufacturer and in coordination with any surrounding work activity.
- Signal and delimit the installation area in a proper way in order to prevent non authorised personnel from accessing the installation area.
- Prepare and set up the installation area, complete with all the connections to the energy supplies, to be able to perform the installation.
- 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.
- Check that the environment has an adequate air supply and that the noise emissions are within the allowable values.
- The temperature of the installation environment must be within the allowed min-max range.
- 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.
- Before commissioning the machine, the person in charge of the installation must check that the whole system is complete with the safety guards.
- Dispose of all packing in accordance with the laws in force in the country of installation.

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Packaging

The figures show the most common types of packages.

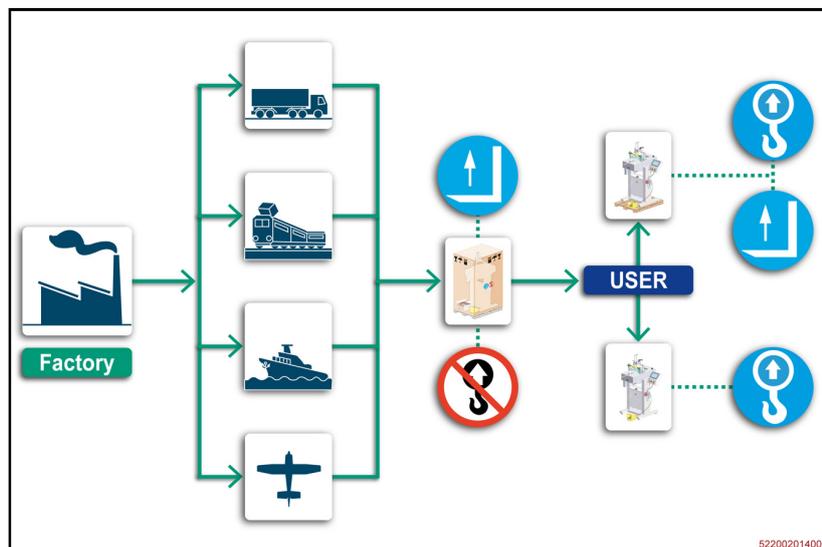
- The packaging is also made according to the type of transport chosen to keep sizes as small as possible.
- In order to make transport easier, the equipment can be shipped with a few disassembled and properly protected and packaged components.
- The packaging contains all the information needed to carry out the loading and unloading operations.
- The loose components are properly added to the packs (packed or not) in order to avoid unwanted or unexpected movements.



Transport

Transport can be made with different means of transport according to the destination.

- The drawing shows the most widely used solutions.
- Transport the machine using appropriate means of suitable capacity.
- Before transportation, make sure that the shape of the shipping items does not exceed the maximum allowed overall dimensions.

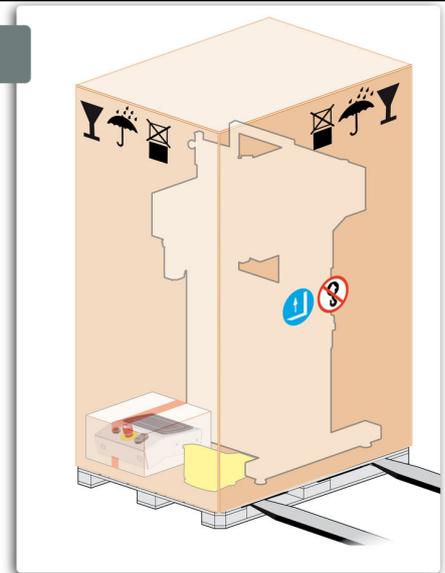


Lifting and handling of shipping items

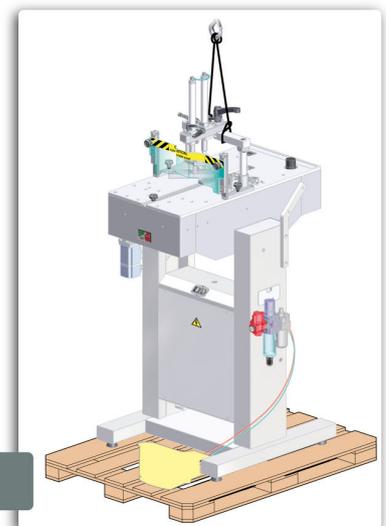
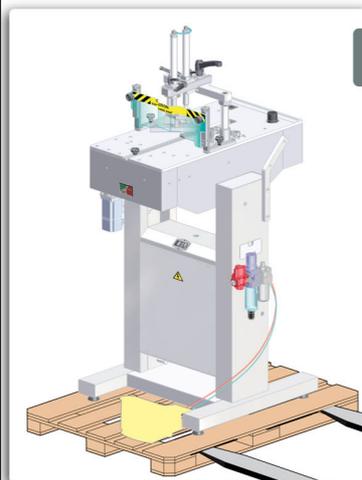
The pictures show the most common lifting and handling modes.

- Each shipping item is provided with graphical signals that supply information about the lifting and handling modes.
- Read and keep to the instructions available on the packaging, on the shipping items and/or on the disassembled parts.
- 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.
- Use lifting devices with sufficient carrying capacity and that are compatible with the size of the shipping items to be handled.
- Connect the lifting equipment to the lifting points provided on the packaged items and/or disassembled parts as required.
- Keep to the instructions about the centre of gravity and at the beginning of lifting make sure that the load is properly balanced.
- Slowly lift the pack to the minimum necessary height and move it very carefully in order to avoid dangerous vibrations.
- DO NOT handle the equipment if the field of vision is poor and in the presence of obstacles along the path to the installation area.
- When the loads are lifted and handled, the radius of action of the lifting means must be kept free from people.
- Unload the packages in the nearby of the installation area and store them in a sheltered environment.
- In case of prolonged storage, regularly check that the component stocking conditions do not change.

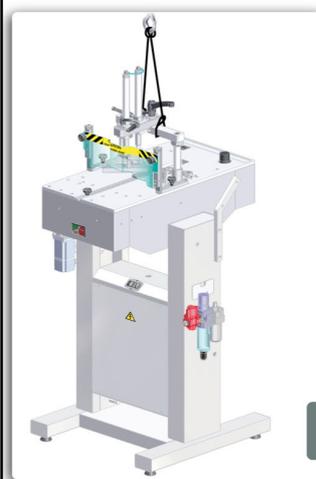
Package on pallet with cardboard case



Machine on pallet and fork lifting



Machine on pallet and hook lifting



Machine without pallet and hook lifting

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Unpacking

- Unpack each package in the most appropriate manner and ensure the integrity of the contained components.
- If some of the parts are found damaged or missing, please contact the manufacturer to agree on the action to take.
- Check that all fasteners (brackets, special supports, etc.), used to avoid sudden movements of the packaged equipment have been removed.
- The packaging material should be suitably eliminated in compliance with the applicable legislation.

Machine installation

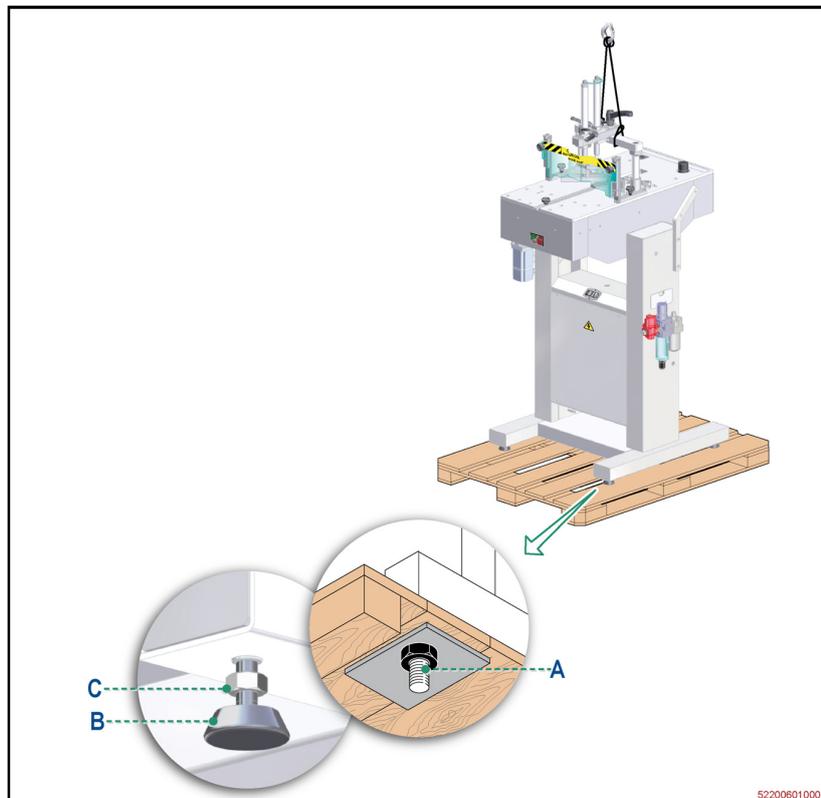
The figures show the working points and the description refers to the procedures to be followed.

1. Remove from the equipment setting any component which might be of hindrance and thoroughly clean the area.
2. Move machine near the installation area.

Important

Carefully move the load avoiding abrupt and dangerous oscillations.

3. Unpack each package in the most appropriate manner and ensure the integrity of the contained components.
4. Lift platform to a sufficient height allowing to reach fastening elements positioned in the lower part.
5. Remove threaded bars **A** and fastening elements of machine.
6. Lift machine to a sufficient height allowing the removal of platform.



- This operation must be performed with a lifting device having a suitable capacity, connected in the special points.

7. Insert supporting feet **B**.

Note

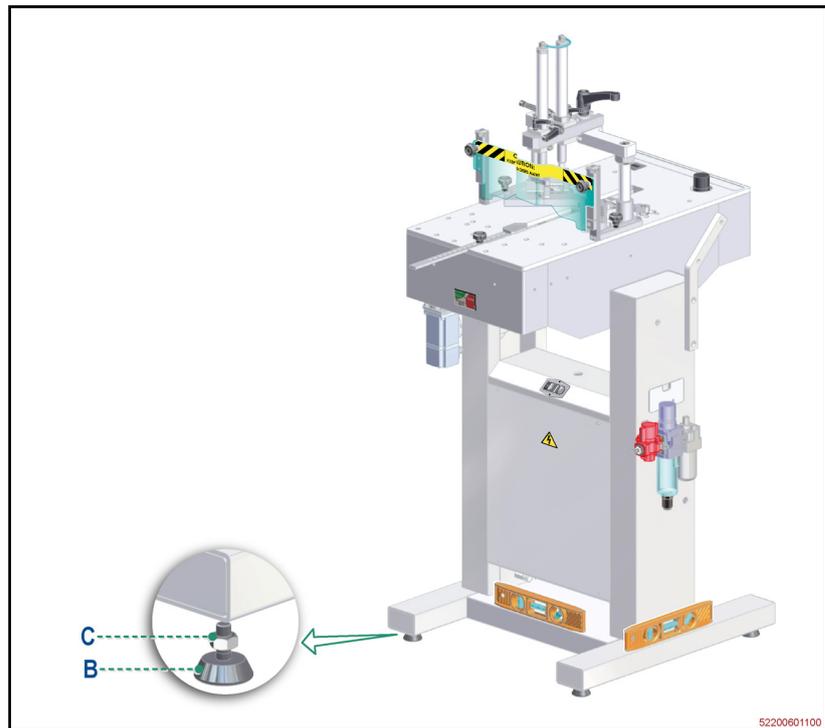
In order to allow proper support, position all feet at the same distance from frame.

Important

DO NOT tighten the lock nuts **C**.

8. Remove the lifting device.

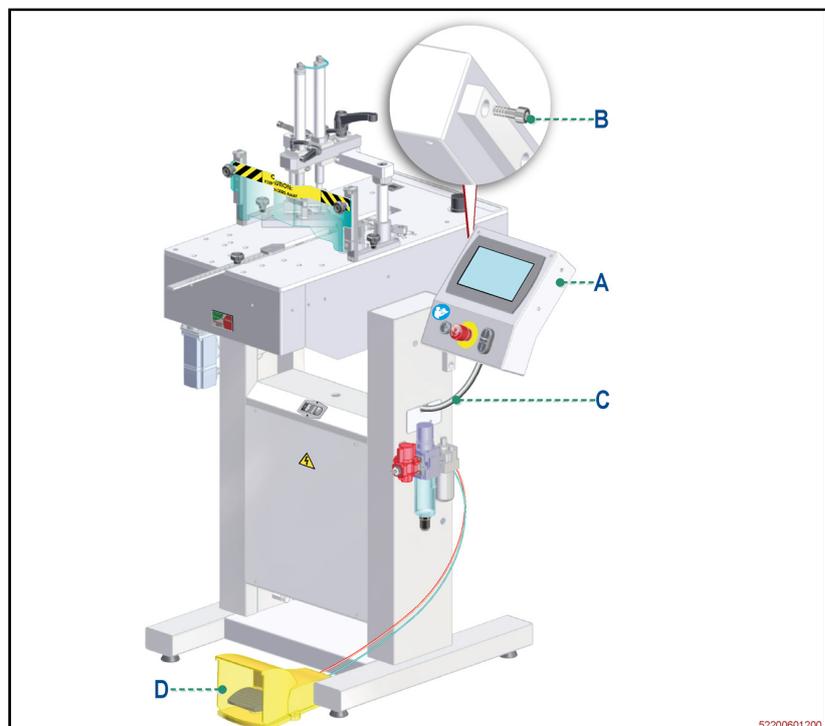
9. Check the levelling (longitudinal and transverse) by positioning the spirit level at the points shown in the figure.
10. Adjust the support feet **B** to level the machine.
11. Tighten counter nuts **C** when the operation is finished.



Installation of dismantled parts

The figures show the working points and the description refers to the procedures to be followed.

1. Install the control console **A** and fix it with screws **B**.
2. Connect connector **C**.
3. Position the control pedal **D** so that it stays stable during activation.



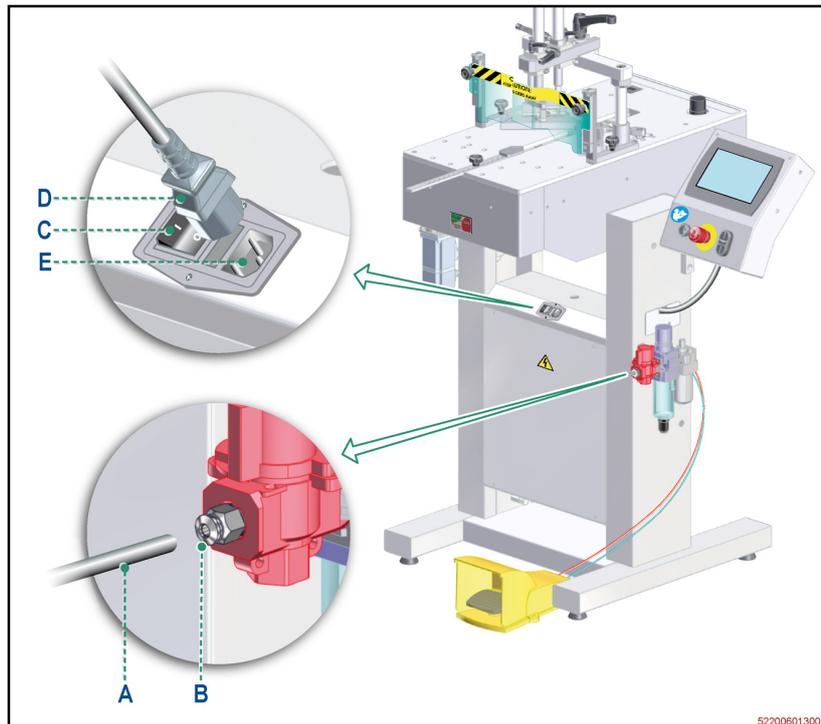
Recommendations for hook-ups

- Carry out the required connections to (electrical, pneumatic, etc.) power sources in a workmanlike manner, in accordance with applicable regulatory and legal requirements.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- 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.

Connection to power sources

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

1. Check that the power supply line has the same specifications as those stated in the identification plate.
2. Check that the pneumatic supply line has the same operating pressure as that stated in the identification plate.
3. Connect supply pipe **A** to rapid action coupling **B**.
4. Press the switch **C** to position "O" (OFF).
5. Connect the supply cable **D** to the connector **E** and to the main power outlet.



Important

Power outlet must be equipped with a circuit breaker with differential lock.

6. Press the switch **C** to position "I" (ON) in order to activate the power supply.
 - The machine is ready to be started for production.

Operator training

- Operators must be trained to work in an autonomous, adequate and risk-free manner.
- Before delivering training, it is necessary to ensure that all the safety conditions are met to avoid endangering the persons involved.
- Check the basic knowledge of the staff to be trained in order to adjust training contents and ensure that all useful information is effectively conveyed.
- The personnel to be trained must learn the basic functions of PCs and have experience with the use of wood processing machines and systems.
- 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 provide the trained personnel with teaching materials and document the provided training in a way to produce such papers in case of disputes.

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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.
- 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.
- 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) Operator interface: control system that programmes and displays the operating status.

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

B) Illuminated button (green light): control used to activate electric power supply.

- Light off: function deactivated.
- Pilot light on: function activated.

Note

Control enabled only when control E is in position “I” (ON).

C) 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.

D) Buttons: non-release hold controls used to move the stapling unit (forward or backward).

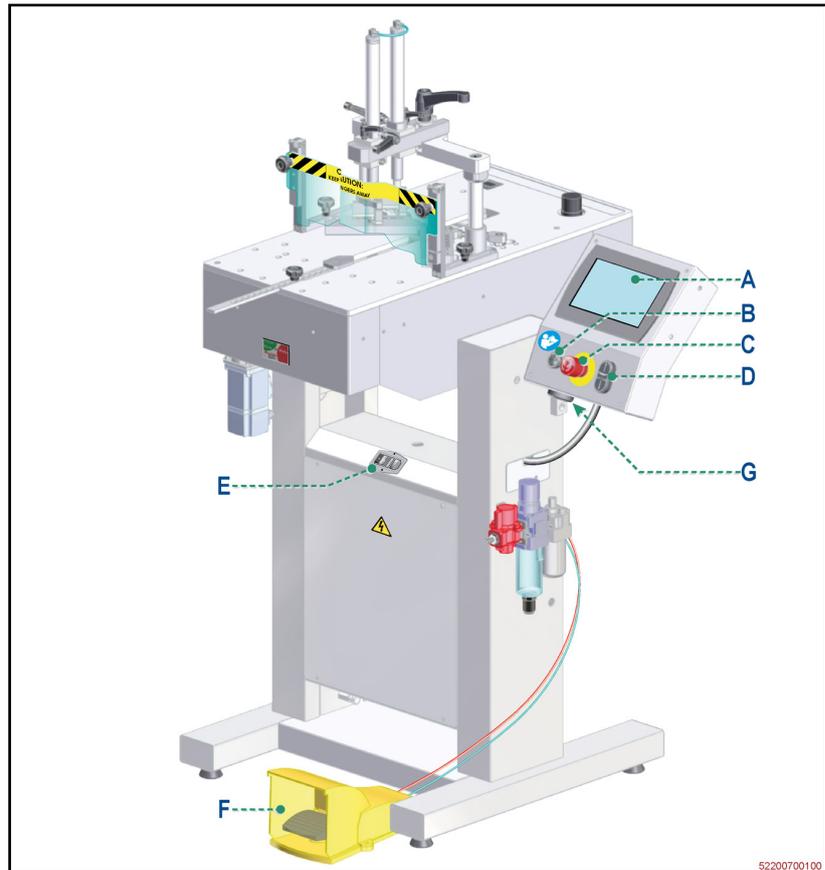
- “UP arrow” symbol: forward movement.
- “DOWN arrow” symbol: backward movement.

E) Switch: it is used to activate and deactivate the electric power supply of the machine.

- Position “O” (OFF): function activated.
- Position “I” (ON): function deactivated.

F) Control pedal: it is used to activate stapling.

G) USB port: it connects an external storage unit.



Description of the operator interface

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

- The operator interface has a touch-screen colour display with active matrix.
- By touching each area with your finger the relevant functions are displayed.
- The functions are developed in several screens that can be accessed through the navigation buttons.
- **The use of the operator interface is reserved for suitably trained personnel.**
- Access to some function is restricted and protected by passwords with different authorisation levels.

Note

Enter the password to access the screen pages with protected functions (See “How to enter the password”).

- **“5” level password:** reserved for the operator in charge of production.
- **Level 10 password:** password for the Technical assistance service or personnel authorised by the Manufacturer.

Note

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

Preliminary operations before use

In order to make production efficient, carry out the operations and inspections listed below.

- Make sure that all the safety devices are properly installed and efficient.
- Make sure that the magazine is filled with suitable staples.
- Check that the components (head, pad, clamp, etc.) correspond to the type of stapling to be performed.
- Check whether the operating pressure is suitable for the type of material to be stapled.
- Position the rods to be stapled so that they can be easily picked up.
- Set up a suitable container on which the stapled rods are to be positioned.



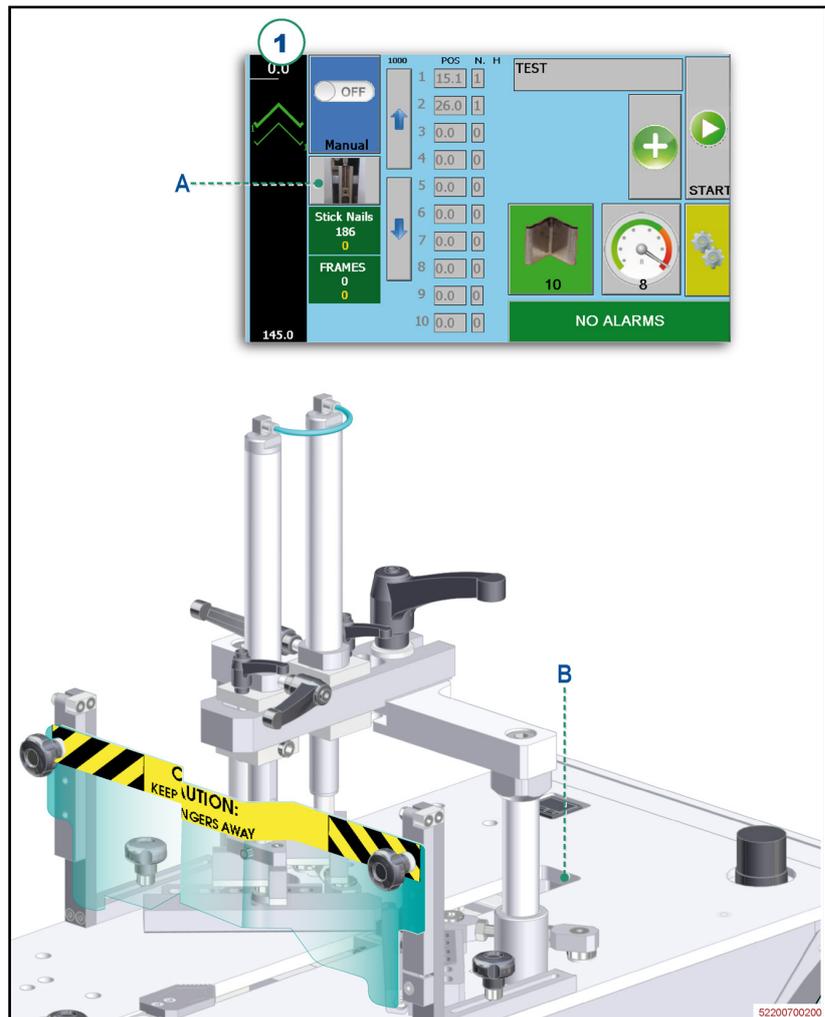
Important

ALWAYS keep the perimeter areas clean and free of obstacles in order to reduce the risks to the minimum during man-machine interaction.

Staple refilling

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

1. Stop the machine in safe conditions.
2. Press key **A**.
3. Insert the staples in the magazine **B** with the top side pointing to the machine back side and with the glue side pointing upward.
4. Press the key **A** again.



Size changeover

The operation must be carried out after each size change.

– The figures show the working points and the description refers to the procedures to be followed.

1. Insert the rods of the new size on the working plane in stapling position.

■ Pad positioning

2. Loosen the handle **A**, position the staple pusher **B** in vertical position with respect to the rods to be stapled and tighten the handle **A**.

3. Loosen the handle **C**, position the staple pusher **D** in vertical position with respect to the rods to be stapled and tighten the handle **C**.

4. Loosen the handles **E-F**.

5. Press key **G**.

6. Press key **H**.

– This operation activates the staple pushers **B-D** that define the stopping point necessary to properly staple the rods.

7. Tighten handles **E-F**.

8. Press the key **H** again.

9. Press the key **G** again.

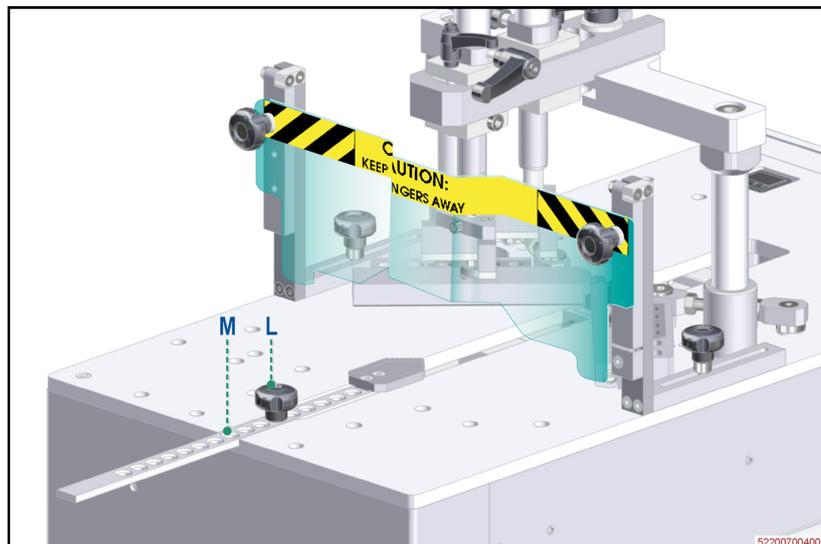


■ Horizontal clamp positioning

10. Unscrew the knob **L**.

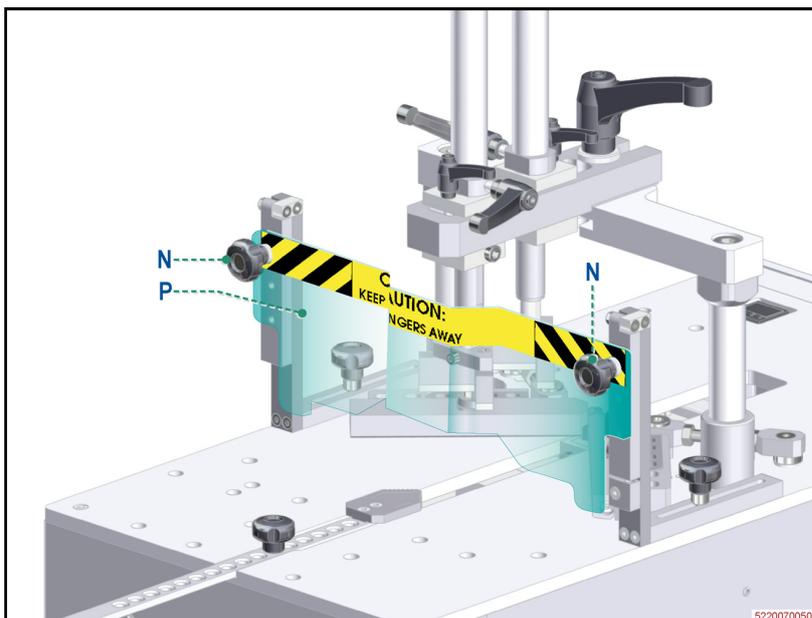
11. Lift the rod **M** and position it with respect to the rods.

12. Tighten knob **L**.



■ Positioning of the protection guard

13. Loosen the knobs **N**, position the guard **P** at 6÷8 mm from the rods and tighten the knobs again.



■ Replacement of the stapling head

14. Press key **G**.
15. Press key **Q**.
- This operation is necessary to open the staple magazine.
16. Loosen the screw **R**.
17. Replace the head **S** with a piece that is suitable for the new size.
18. Tighten the screw **R**.
19. Remove the staples from the magazine and replace them with those of the new size.

Note

Use the magnet supplied in order to extract the staples from the magazine.

20. Press the key **Q** again.



■ Operating pressure

21. Lift the knob **T**.

22. Use the knob **T** to adjust the operating pressure of the machine.

- Clockwise: the value increases.
- Anti-clockwise: the value decreases.

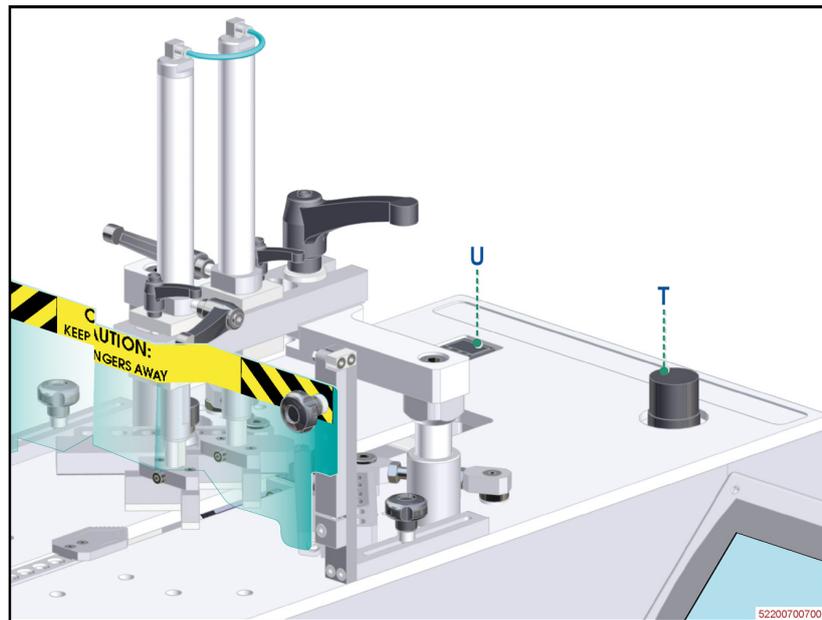
23. Make sure that the pressure value is correct by checking the digital pressure gauge **U**.

- Soft wood 1,5÷2 bar
- Medium-hard wood 2÷3 bar
- Hard wood 3÷5 bar

24. Lower the knob **T**.

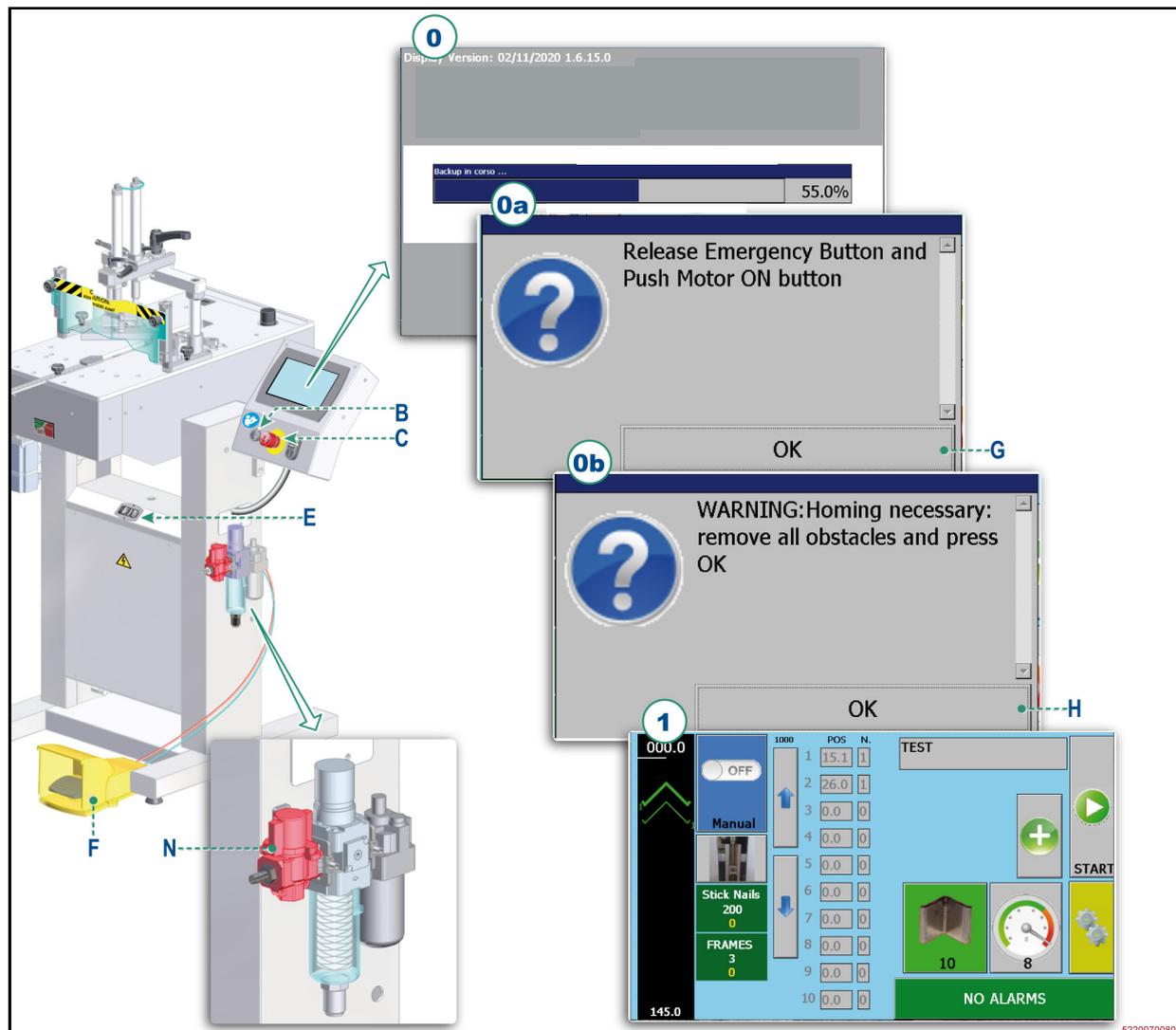
25. Remove the rods

26. Programme the stapling cycle (See Control system).



Start of the stapling cycle

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



1. Open the valve **N** to restore the pneumatic supply.
2. Press the switch **E** to position "I" (ON) in order to activate the power supply.
 - The operator interface starts.
 - Once the software has been loaded, screen **(0a)** appears on the display.
3. Press the push-button **B**.

Note

In case the light of control B does not turn on, unlock the emergency stop button C and press button B again.

4. Press key **G**.
5. Press key **H**.
 - The HOME screen **(1)** appears on display.
6. Select and activate the required set of parameters (See "Loading a recipe").
7. Insert the rods to be stapled in proper position.

Note

In order to obtain proper stapling, keep the rods properly positioned on the working plane.

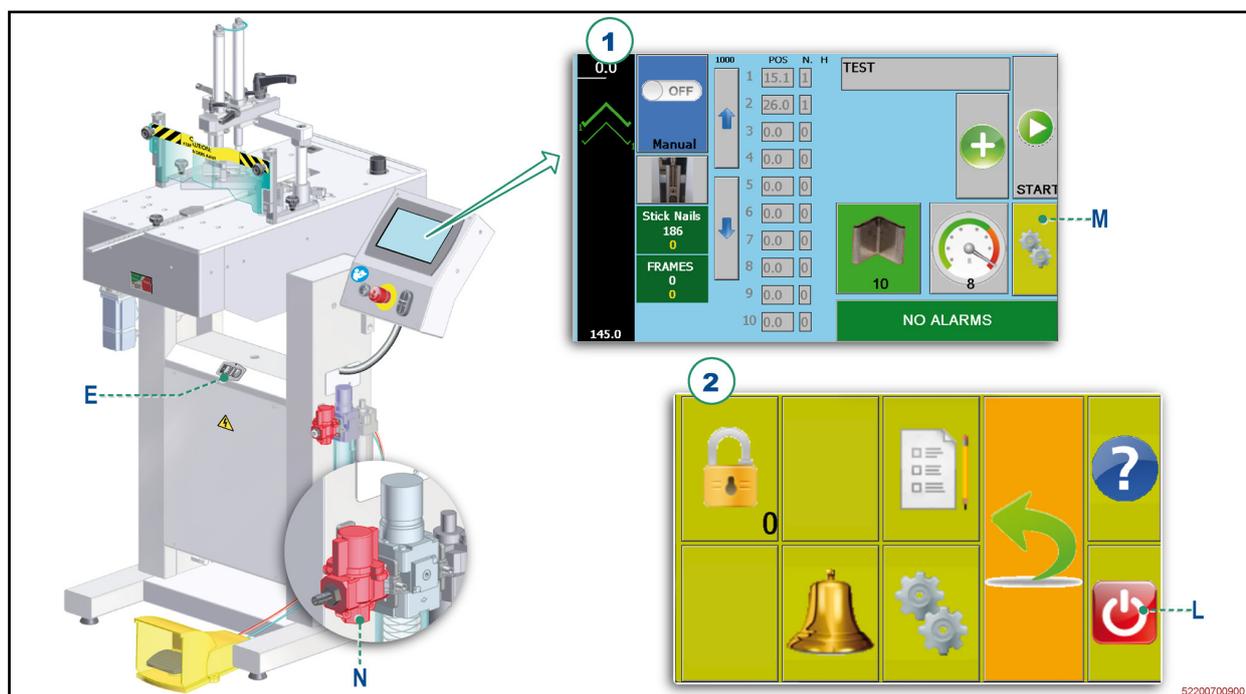
! Danger - Warning

Do not insert your fingers beyond the transparent guard to avoid any risk of cutting.

8. Press the pedal F to perform the selected stapling cycle.

Stop at the end of every working day

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



1. Press key M.
2. The NAVIGATION screen (2) appears on display.
3. Press key L.
 - The display turns off to show that the operating system is not working.
4. Press the switch E to position “O” (OFF).
5. Close tap N to deactivate the pneumatic supply.

Emergency stop and new start-up

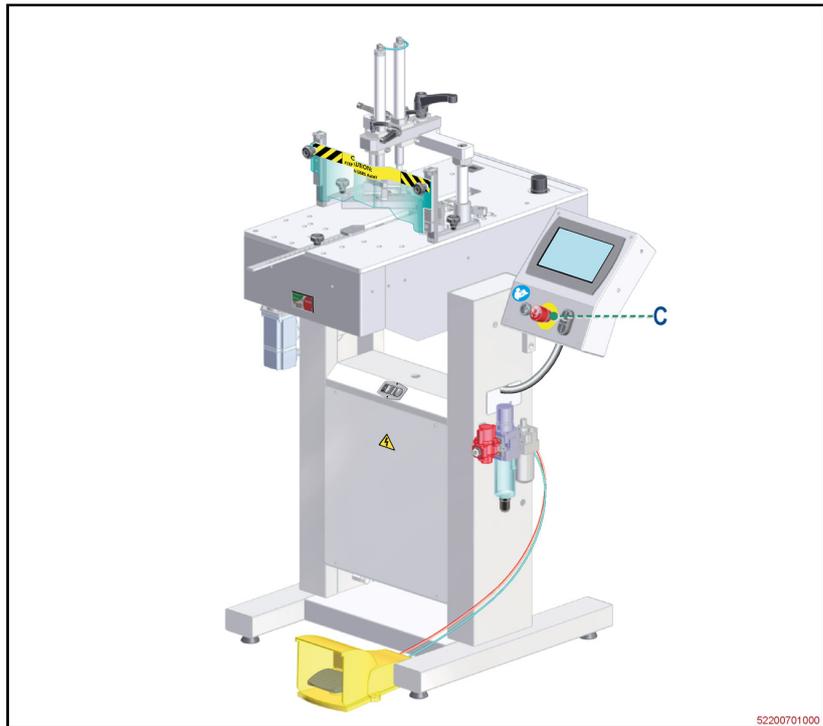
The figure shows the points of intervention and the description shows the procedures to be adopted.

1. In the presence of an imminent risk press emergency button **C**.
 - All dangerous parts of the machine stop instantaneously.
2. Find out the causes that have led to the activation of the emergency stop control.
3. Restore normal running conditions
4. Unlock the emergency stop button with a voluntary action.
5. Start off machine to check correct operation.



Important

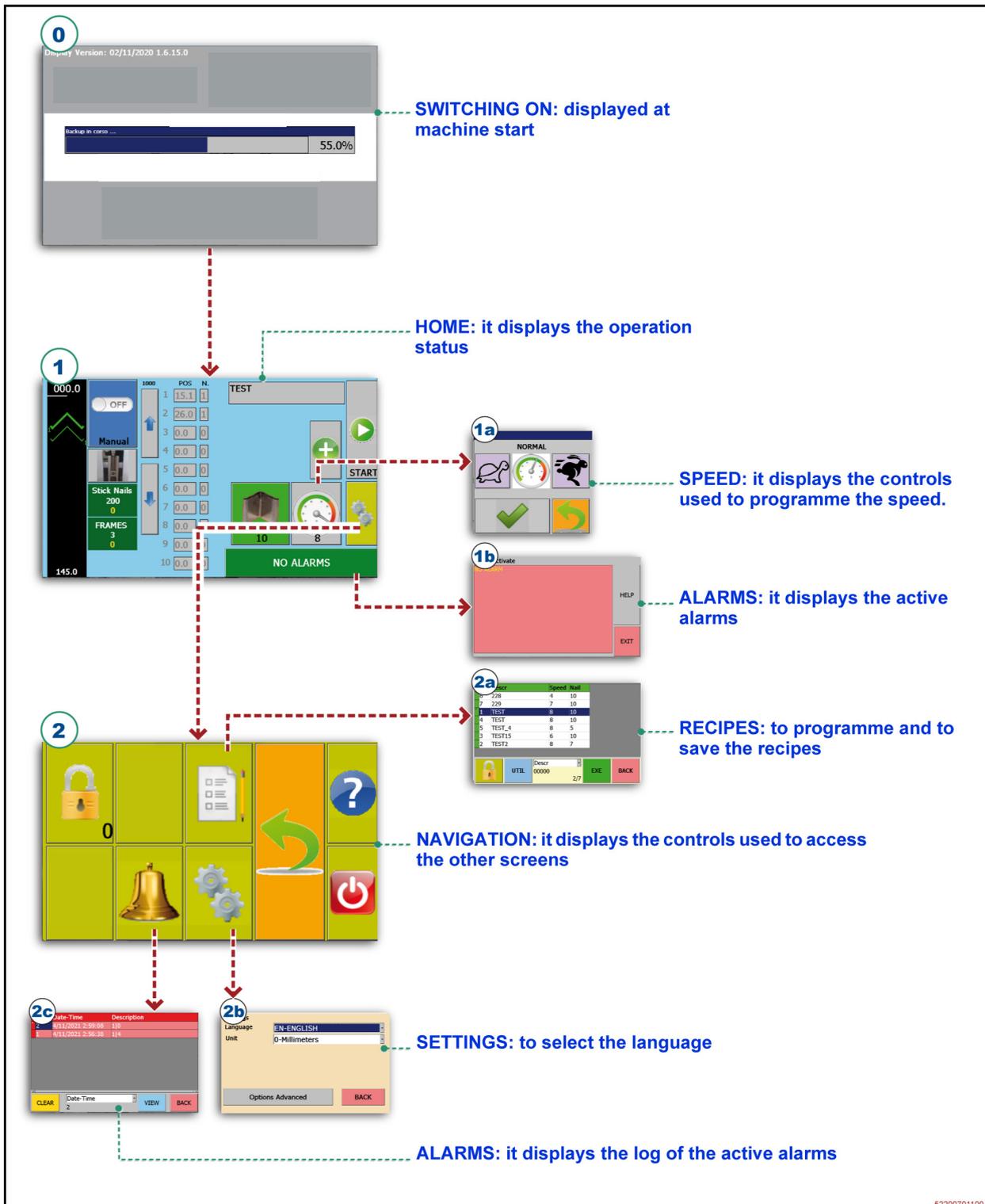
The recovery operations that are not within the operator's field of competence shall be carried out by authorised personnel and with recognised skills.



Operator interface navigation scheme

The picture shows the logical “navigation” scheme and the list includes the description and functions of the screens.

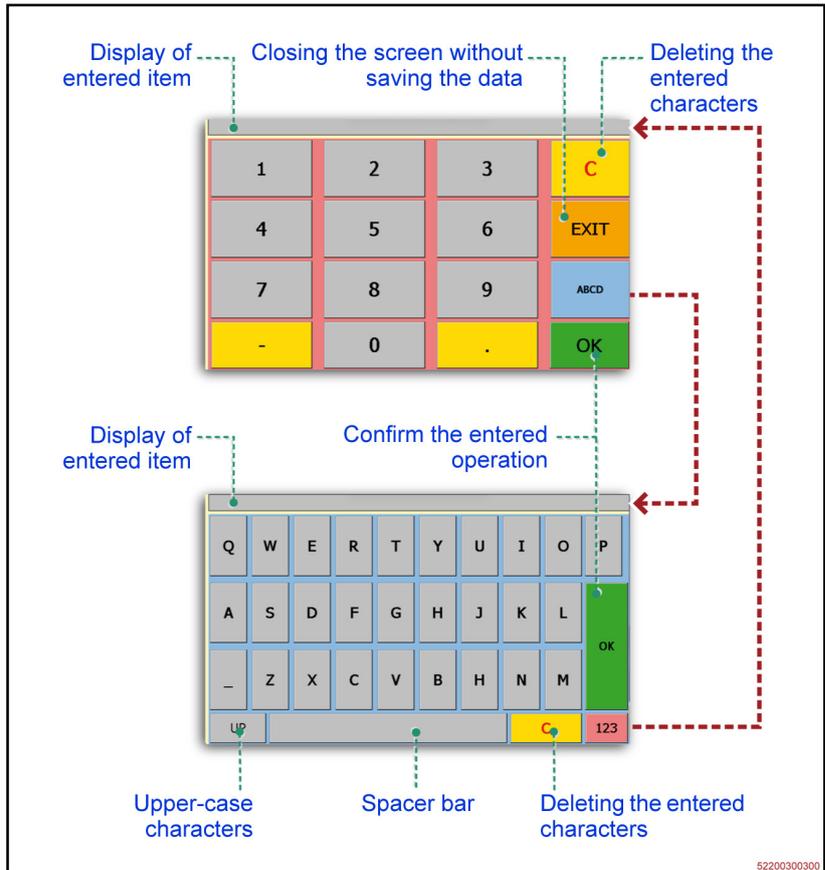
- Some screen pages of the operating logic diagram may appear in different displays.
- For further details about single screen pages, see the information included in the description of each of them.



Description of the keyboards

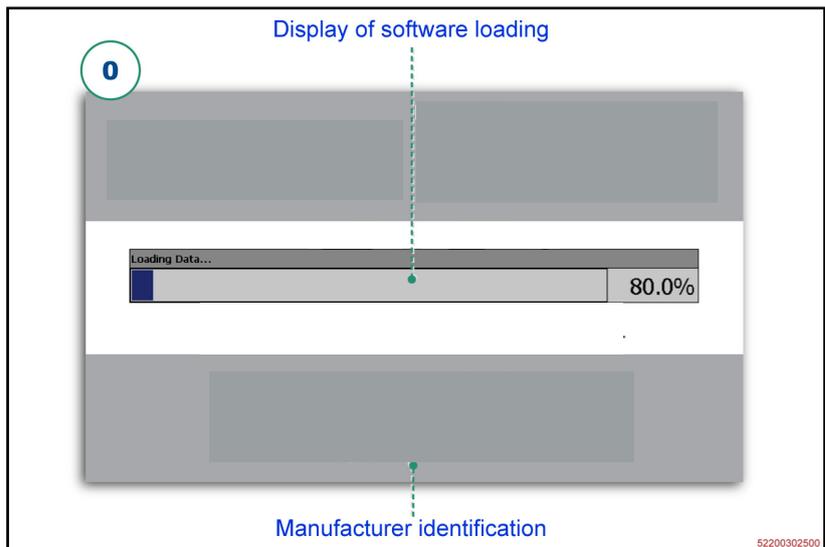
Some of the values displayed in the areas of each screen can be programmed.

- Whenever a programmable or modifiable area is pressed, numeric keypad or alphanumeric keypad appears on the display.



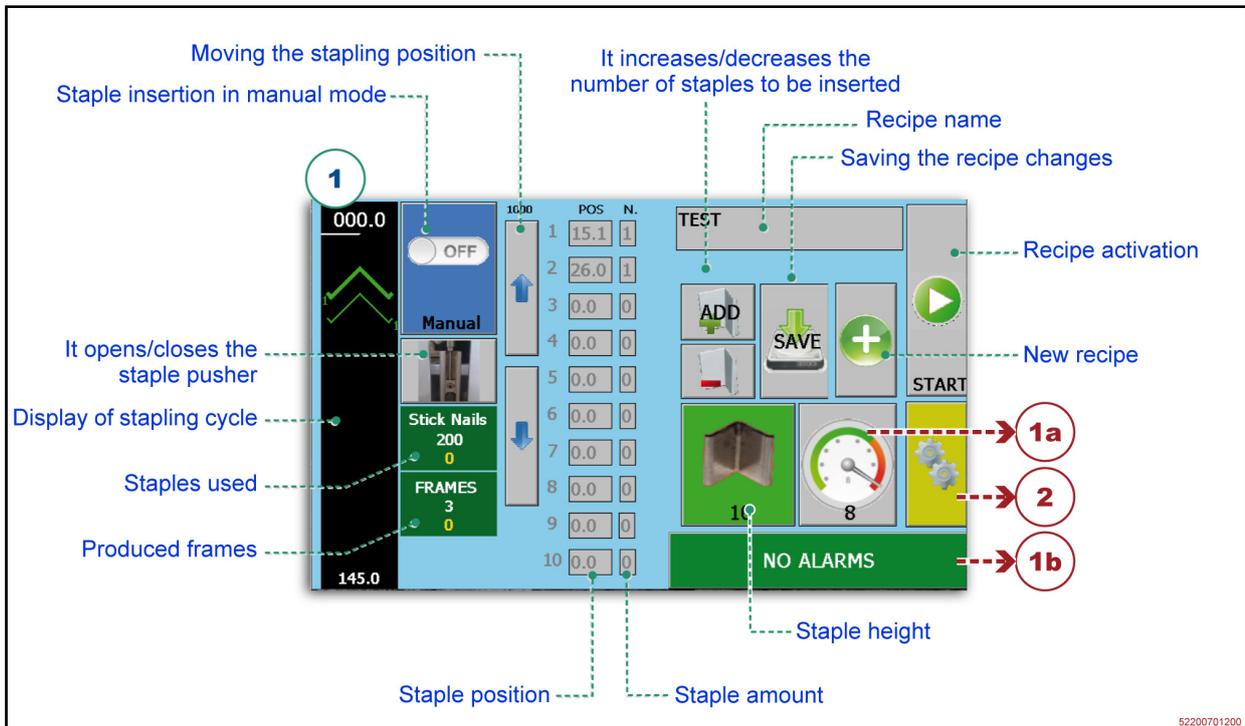
SWITCHING ON screen (0)

Screen appears at machine start and it displays the Manufacturer's data.



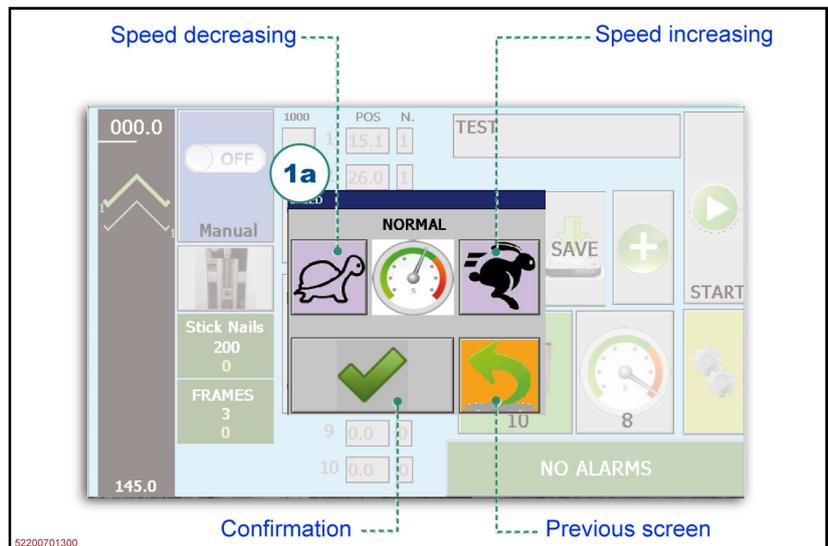
HOME screen (1)

The screen displays the operating status and is displayed at the end of the software upload.



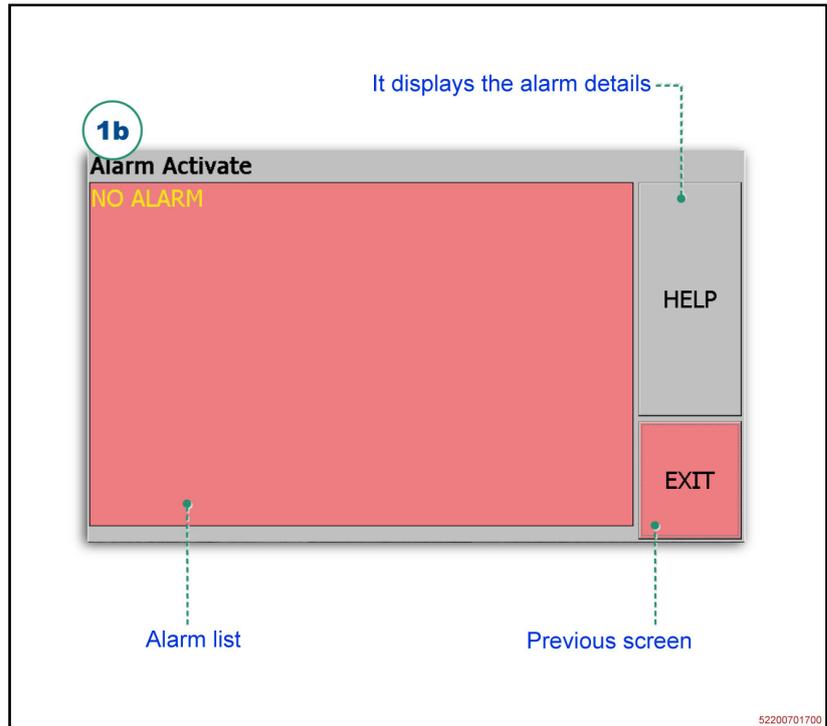
SPEED screen (1a)

Screen displays the controls used to programme the operating speed.



ALARMS screen page (1b)

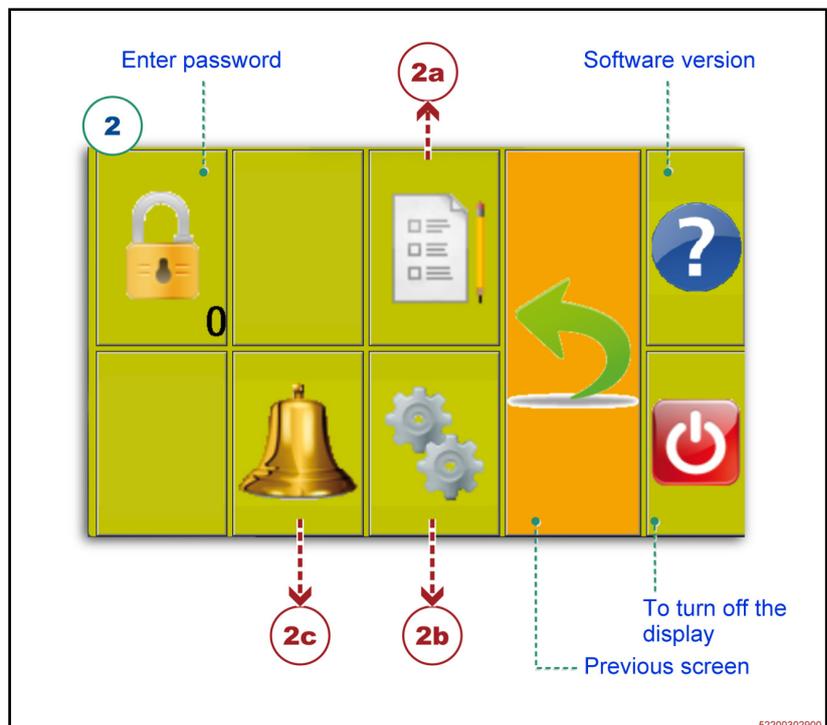
Screen displays the list of active alarms chronologically (starting from the most recent one).



GB

NAVIGATION screen (2)

This screen displays the keys to access the functions of the relevant pages.



SET OF PARAMETERS screen (2a)

Screen is used to select and save the programmed recipes.

Recipe list

ID	Descr	Speed
6	228	4
7	229	7
1	TEST	8
4	TEST	8
5	TEST_4	8
3	TEST15	6
2	TEST2	8

2a

Enter password

UTIL

Descr 00000

3/7

EXE

BACK

It imports/exports recipes

Menu to select a column and to define the display sequence

Previous screen

Recipe activation

52200303000

SETTINGS screen (2b)

Screen is used to select the desired language.

- Screen displays also some operating parameters.

Language selection

2b

Settings

Language EN-ENGLISH

Unit 0-Millimeters

Options Advanced

BACK

It imports/exports recipes

Previous screen

52200303100

ALARMS screen page (2c)

Screen page displays the log of the tripped alarms with reference to the event time.

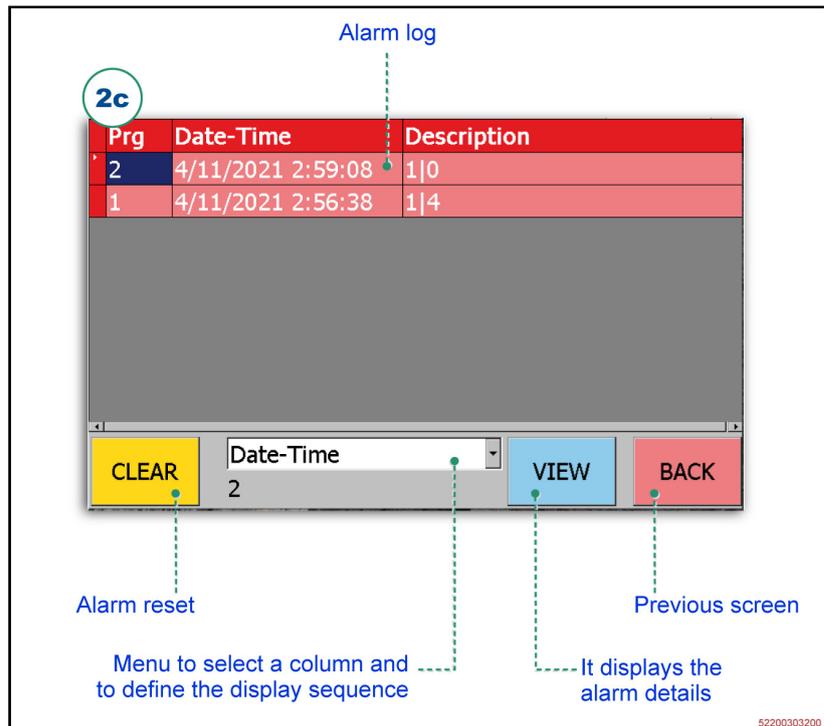


Table of the alarm messages

The table shows the messages of the anomalies that might occur during operation.

Table 1: Alarm list

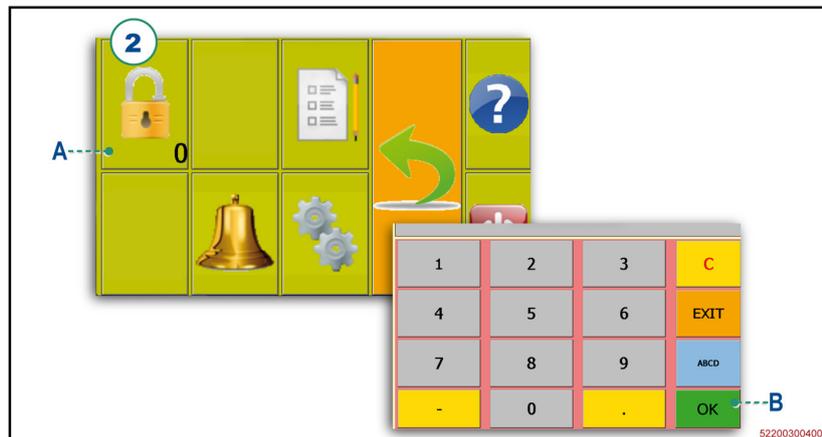
no.	Alarm description	Cause	Remedy
	No alarm	There are no active alarms	The machine is ready for operation
	HEAD not reset	The stapling head has not carried out the reset	Carry out the reset
	Static error servo	One of the axes is not able to keep the required position	Refer to the Technical Assistance Service of the Manufacturer.
	Dynamic error servo	One of the axes does not reach the required position	Refer to the Technical Assistance Service of the Manufacturer.
	Error during reset	Reset was not successful	Refer to the Technical Assistance Service of the Manufacturer.
	Axis on min. software limit	The level of one of the axes is lower than the software min. limit parameter	Refer to the Technical Assistance Service of the Manufacturer.
	Axis on max. software limit	The level of one of the axes is higher than the software max. limit parameter	Refer to the Technical Assistance Service of the Manufacturer.
	Guard open:	The adjustable mobile guard is open	Close mobile guard.
	INSUFFICIENT staples for cycle	The number of staples available in the magazine is not sufficient to complete the processing cycle.	Refill the magazine with staples
	EMERGENCY	Emergency button pressed.	Unlock the emergency stop button with a voluntary action.
	STICK PUSHER OPEN	The staple pusher is open and the staple loading procedure has not been completed	Complete the staple loading procedure
	HEAD at min. limit	-	-

no.	Alarm description	Cause	Remedy
	HEAD at max. limit	-	-
	Main air lack	Air supply is insufficient	Check the pneumatic system
	HEAD MOTION TIME OUT	The head drive motor has taken too long to reach the required position	Refer to the Technical Assistance Service of the Manufacturer.

How to enter the password

Follow the procedure below.

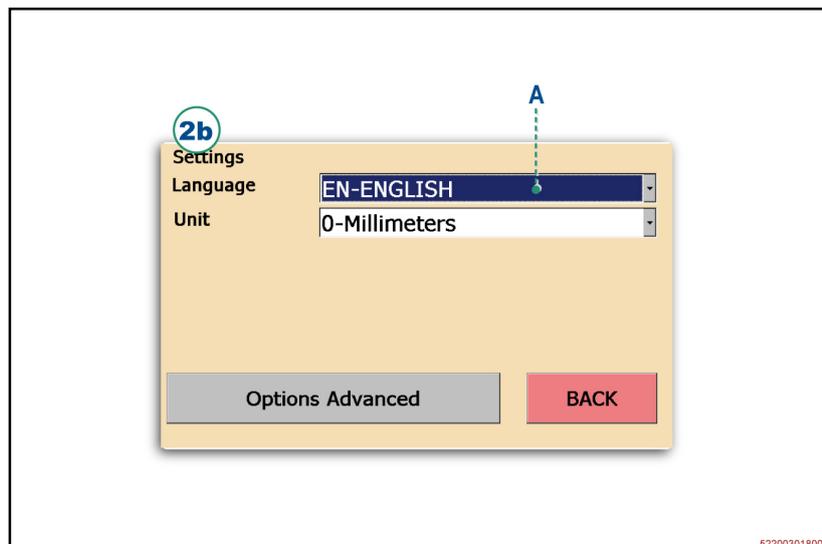
1. Display the NAVIGATION screen (2).
2. Press key **A**.
 - The display shows the keyboard.
3. Enter the password.
4. Press the key **B** to confirm.



How to select display language

Follow the procedure below.

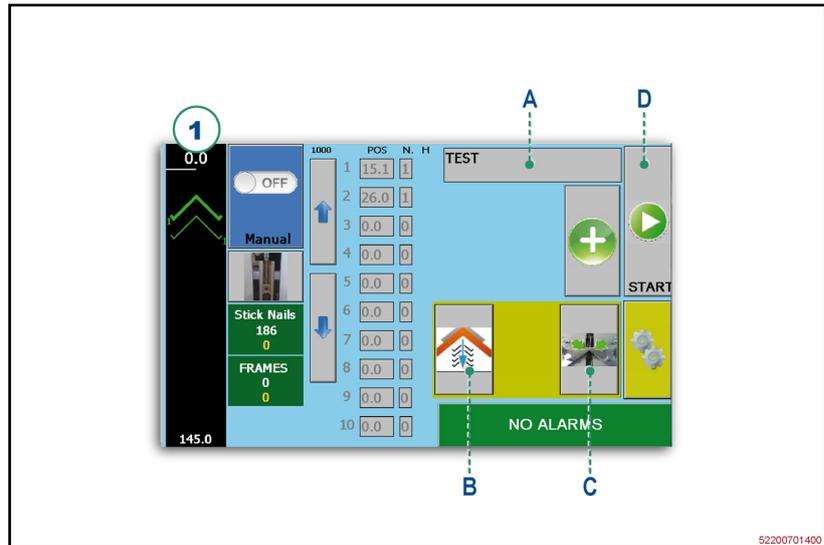
1. Display the SETTINGS screen (2b).
2. Select the desired language from drop-down menu **A**.
 - The text that is to be found in all screens will immediately update to the selected language.



Loading a recipe

Follow the procedure below.

1. Access the HOME screen (1)
 2. Select the desired set of parameters from the drop down menu A.
 3. Press key B to select the stapling direction.
 4. Press key C to activate or deactivate the 90° angles.
 5. Press the key D to confirm.
- The selected recipe is automatically loaded.



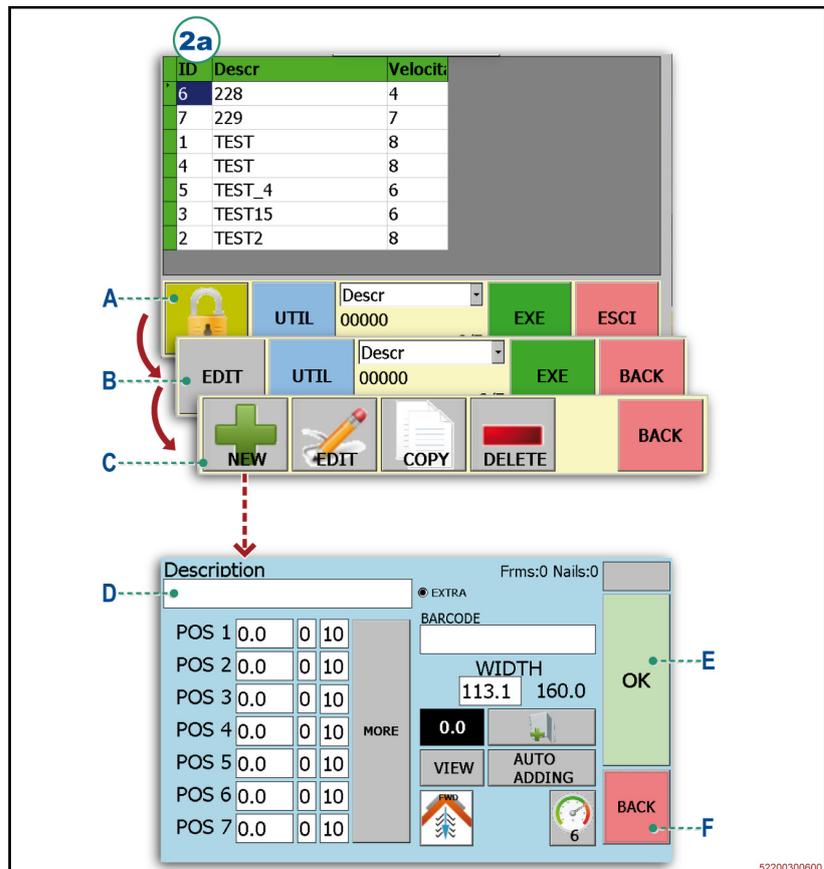
Programming a new recipe

Follow the procedure below.

1. Display screen page RECIPE (2a).
 2. Press key A.
 3. Enter the password.
 4. Press key B.
 5. Press key C.
 6. Enter the identification code of the new recipe in field D.
 7. Change the desired parameters.
 8. Press the key E to confirm.
- All the parameters that have been changed are saved in the new recipe.

Note

To exit without saving, press key F.



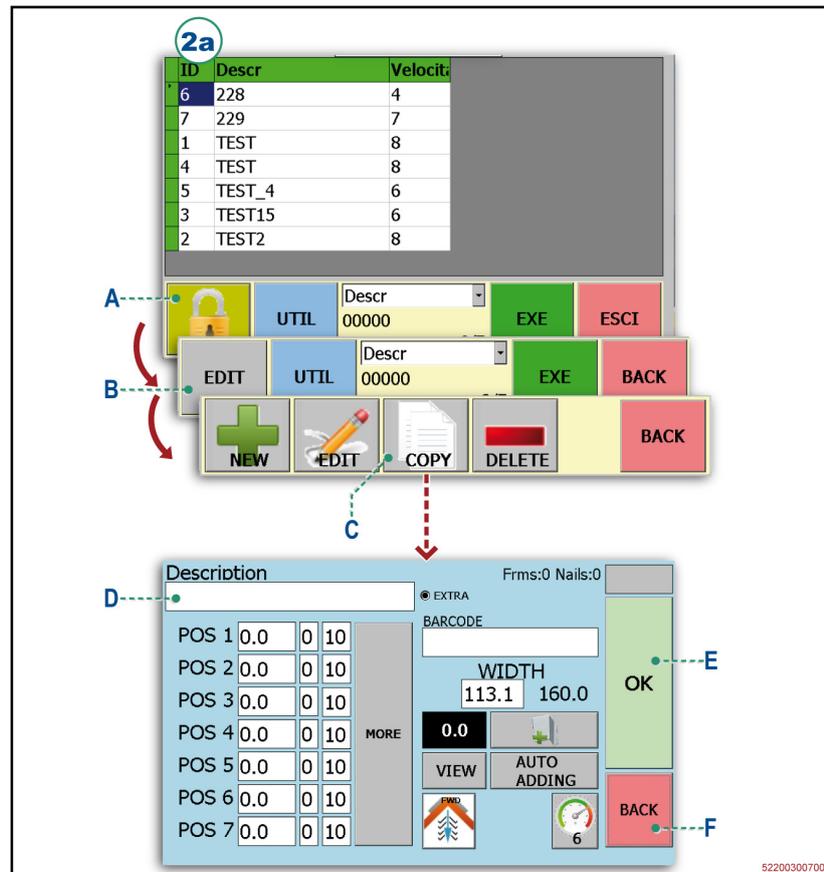
How to duplicate a recipe to programme a new one

Follow the procedure below.

1. Display screen page RECIPE (2a).
2. Select the recipe to be copied from the list.
3. Press key A.
4. Enter the password.
5. Press key B.
6. Press key C.
7. Enter the new name of the recipe in field D.
8. Change the desired parameters.
9. Press the key E to confirm.
 - All the parameters that have been changed are saved in the new recipe.

Note

To exit without saving, press key F.



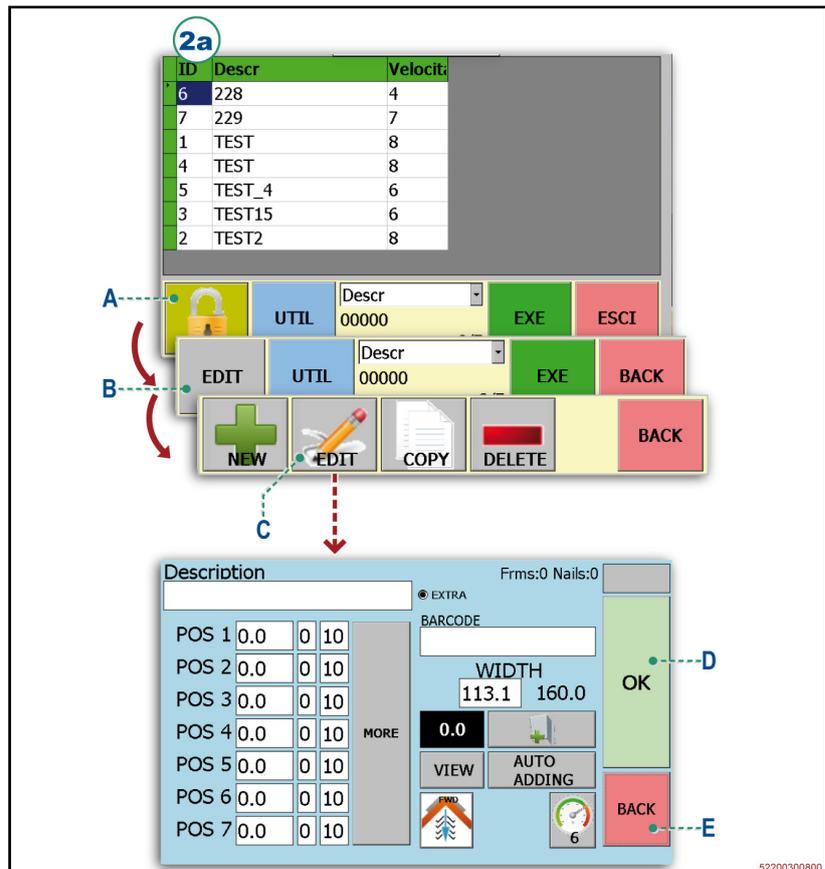
Modifying a recipe

Follow the procedure below.

1. Display screen page RECIPE (2a).
2. Select the recipe to be changed from the list.
3. Press key **A**.
4. Enter the password.
5. Press key **B**.
6. Press key **C**.
7. Change the desired parameters.
8. Press the key **D** to confirm.
 - All changed parameters are saved and overwritten on the original parameters of the selected recipe.

Note

To exit without saving, press key **E**.



Deleting a recipe

Follow the procedure below.

1. Display screen page RECIPE (2a).
2. Press key **A**.
3. Enter the password.
4. Press key **B**.
5. Press key **C**.
6. Enter the identification code of the recipe to be deleted **D-E** in fields **D-E**.

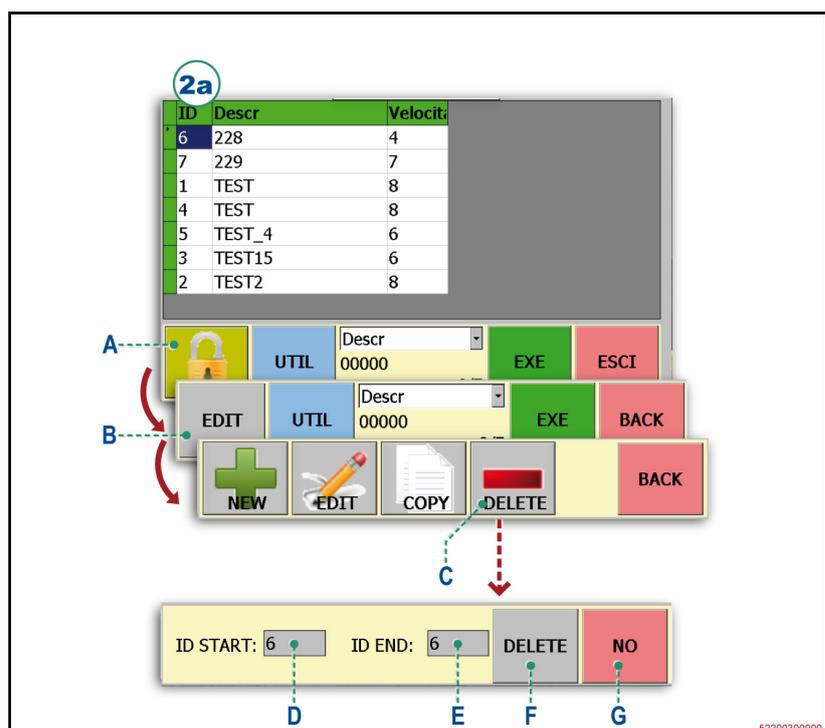
Note

It is possible to delete more recipes simultaneously.

7. Press the key **F** to confirm.
 - The selected recipe is permanently deleted from the memory.

Note

To exit without saving, press key **G**.



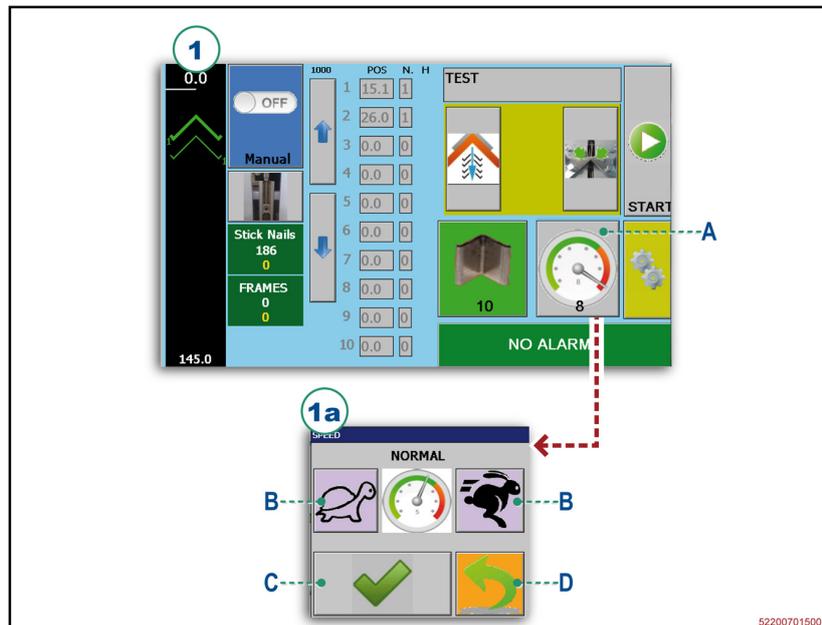
How to programme the stapling speed

Follow the procedure below.

1. Access the HOME screen (1)
2. Touch area A.
3. Press one of keys B to change the value.
4. Press the key C to confirm.

Note

To exit without saving, press key D.



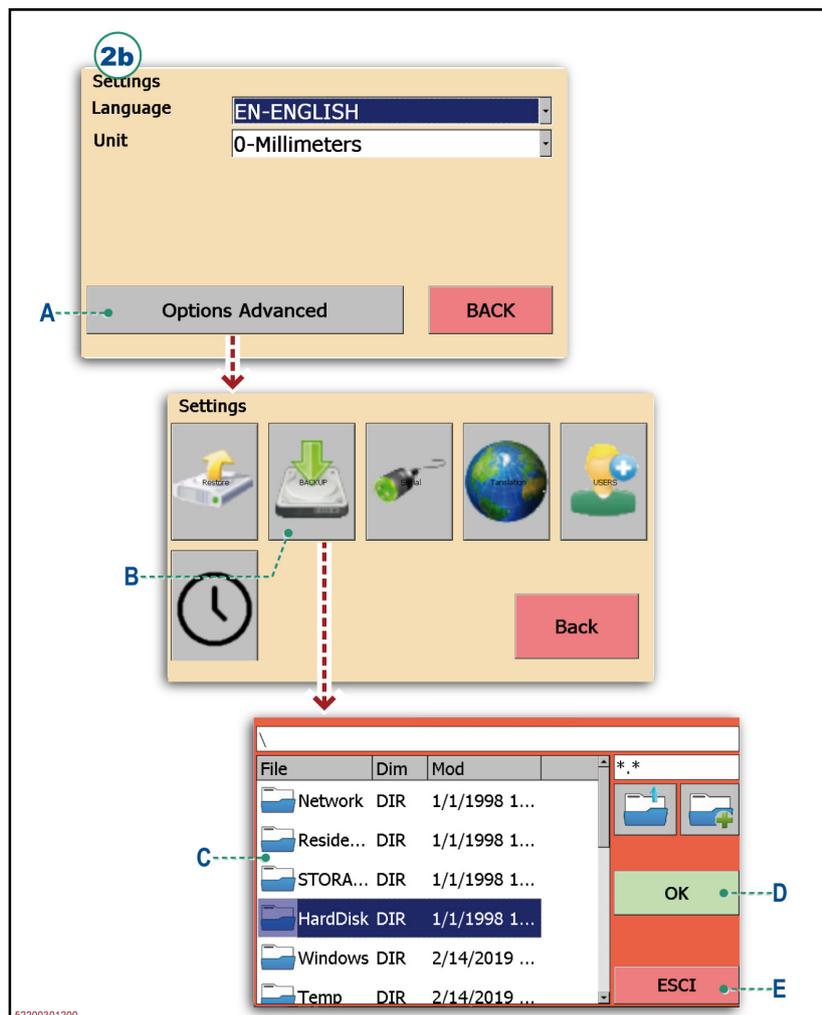
How to export files on an external memory

Follow the procedure below.

1. Connect the USB key to the connector available on the control console.
2. Display the SETTINGS screen (2b).
3. Press key A.
4. Press key B.
5. Select the folder where the files are to be exported in area C.
6. Press key D to export all work programmes.
 - At the end of the operation, window appears indicating that the operation has been completed successfully.

Note

To exit without saving, press key E.



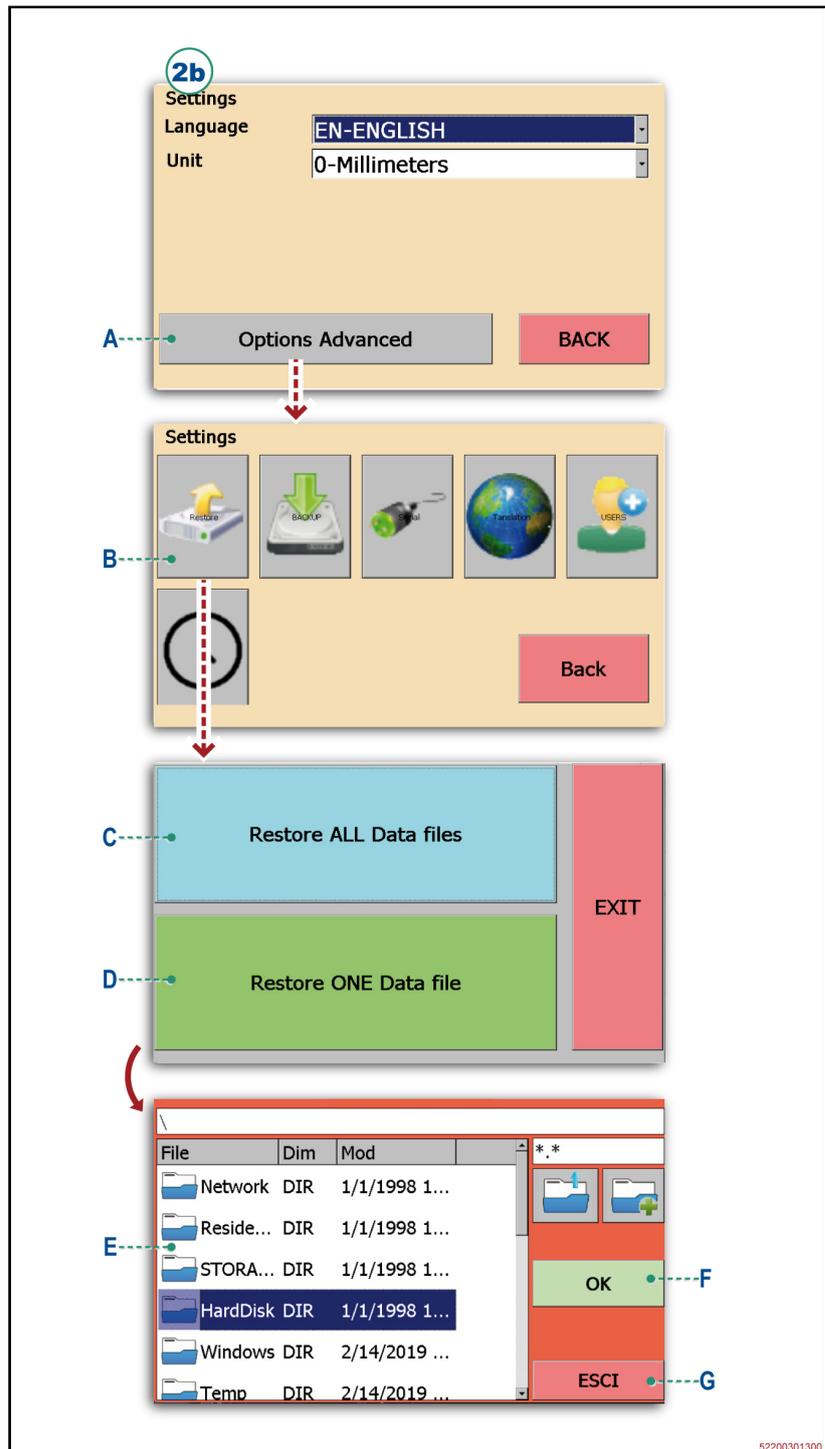
How to import files from an external memory

Follow the procedure below.

1. Connect the USB key to the connector available on the control console.
2. Display the SETTINGS screen (2b).
3. Press key **A**.
4. Press key **B**.
5. Press key **C** to copy all files of a folder or press key **D** to copy one single file.
6. Select the folder from which the files are to be imported in area **E**.
7. Press key **F** to import the selected files.
 - At the end of the operation, window appears indicating that the operation has been completed successfully.

Note

To exit without saving, press key **G**.



How to change the work parameters

During the production cycle the parameters of the recipe being processed can be temporarily changed.

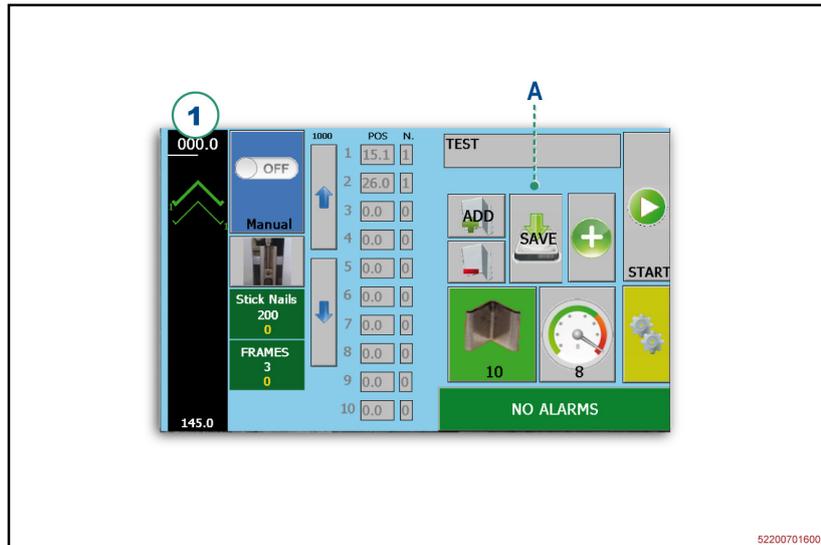
1. Access the HOME screen (1)
2. Touch the field of which you want to modify the parameter.
3. Enter the new parameter.
4. Press "ENTER" key to confirm.

Important

Press key A to save all changes made in the recipe being used.

Important

When loading a new recipe or deactivating the power supply, the changed parameters are automatically deleted and the original ones are reset.



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