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MB 200

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## 1. INTRODUCTION

It is essential for operator safety and correct use of the machine reading this manual of use and maintenance.

Thank you for purchasing our product. This machine, specially designed for use in your work with the use of a single operator, provides a high quality of production and a wide range of functions.

This manual describes how to use the machine, the configuration of the basic operations work. This manual was written so as to be easily understandable even to those users who have never used this type of machine. To ensure that the machine provides maximum performance read this manual carefully before using it. After reading, keep this manual in a safe place and consult it as needed.

## 1.1 Declaration of Conformity



DICHIARAZIONE DI CONFORMITÀ CE CE CONFORMITY DEC**I** ARATION DIRETTIVA CE PER MACCHINE 2006/42/CE, DIRECTIVE FOR MACHINES 2006/42/CE, E SEGUENTI DIRETTIVE EUROPEE (ALLEGATO IIA) AND FOIIOWING EUROPEAN DIRECTIVES (ANNEX IIA)

FCOSTRUTTORE, MANUFACTURER: K.G.S.SRI Via Binaschi 2/A – 20082 Binasco (Mi) Italy

RESPONSABILE DELLA COSTRUZIONE DEL FASCICOLO TECNICO / RESPONSIBIE FOR pREPARING THE TECHNICAL DOSSIER: RACCANELIO ROBERTO

CON LA PRESENTE DICHIARIAMO CHE LA FABBRICAZIONE DEI / WE HEREWITH DECLARE THAT THE MANUFACTURE OF:

MODELLO TIPO / MODEI TYPE : PERFECTBINDER MASTERBOOK 200
 MATRICOLA / SERIAL : XXXXXXXXXXX
 ANNO DI COSTRUZIONE / MANUFACTURED IN 2014

CORRISPONDE ALLE SEGUENTI DISPOSIZIONI NELLA VERSIONE ATTUALMENTE VALIDA / IS IN ACCORDANCE WITH THE FOIIOWING DIRECTIVES AS IT IS :

Direttiva CE per Macchine 2006/42/CE / Directive 2006/42/CE
 Direttiva EMC 2004/108/CE / EMC Directive 2004/108/CE
 Direttiva sulla Bassa tensione 2006/95/CE / Iow Voltage Directive 2006/95/CE

NORME ARMONIZZATE APPLICATE , IN PARTICOLARE HARMONIZED STARDARDS, IN DETAIL:

₱ EN 1010 ₱ EN 60 204-1 ₱ EN 61 000-6-2, EN 61 000-6-3, EN 61 000-6-4

Assago , (MI) Italy

XX/XX/2014

Dott. Marco Alfredo Tumaini Amministratore unico

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C.F. / P. IVA n. 07011970964 – R.E.A MI - 1929278 – Capitale Sociale € 10.000,00 i.v.

### 1.2 Warning Labels

During the manual and applied to the machine uses the following symbols to alert of any danger to persons and / or property damage.

In extreme cases of non-compliance can cause damage to persons or property.

	Look out Vou place before cortain precedures. His failure to comply may
Λ	Look out! You place before certain procedures. His failure to comply may
	cause damage to the machine.
$\sim$	WARNING! You place before certain procedures. His failure to comply may result in injury to the
	operator, maintainer, installer or the machine.
	WARNING! Sharp blades! Cut Risk
4	WARNING! Electrical voltage! Risk of electric shock
	WARNING! Hot surfaces! Risk of burns.
	WARNING! Risk from rotating parts! Risk of crushing.
	WARNING! Risk from rotating parts! Risk of crushing.

### 1.3 Safe Operation

#### 1.3.1 General

The manufacturer guarantees that the contents of this manual are in accordance with the procedures required by the machine. The manufacturer shall not therefore be liable for any use of the machine in a manner inconsistent with the information contained in this manual.

#### 1.3.2.1 User Qualification

This machine is intended to be used by a single operator!

The operator must be fully trained on how to act in the occurrence of possible faults, malfunctions or hazards to themselves or others, and must meet the following requirements:

- Immediately stop the machine in case of emergency by acting on / on / button the emergency (red button installed on board of the same). Do not attempt to go beyond the tasks and technical knowledge.
- Immediately inform their superior responsible in case of problems, and avoid taking personal initiatives.

It is assumed that the operator has at least the following requirements:

- General culture and specific enough to level, each for its expertise, to read and understand the contents of the manual in the parts that concern him, including the correct interpretation of the drawings and diagrams electrical, pneumatic and hydraulic systems.
- Ability to correctly interpret the symbols and video messages
- Experience in the use of binding technology
- Ability and knowledge to take action in case of an emergency and uses protective equipment

#### 1.3.2 Guidelines for safe operation

The application of procedures other than those specifically described in this manual may cause operational errors. Carefully read the safety instructions in this manual.

The manufacturer is relieved from any liability arising from an arbitrary and improper use of the machine, such as:

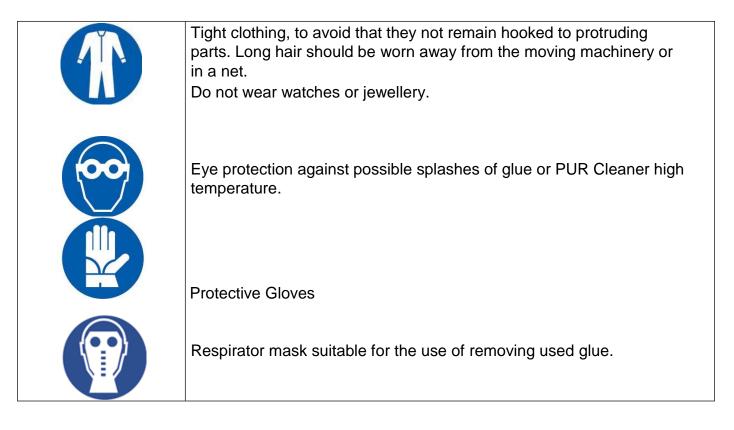
- Use of the machine by untrained personnel;
- Use contrary to the applicable law;
- Incorrect Installation;
- Defective power supply and / or pneumatic supply;
- Total or partial disregard of the instructions of use;
- Changes or other actions not authorized by the manufacturer.

And 'forbidden to remove or render inoperative the guards provided for the safety of persons, as well as tampering with and / or modify, even partially, the safety devices installed on the machine. In case of alarm due to the intervention of the safety, the operator must request the immediate intervention of the qualified maintenance personnel.

The manufacturer declines all responsibility in case of any damage to persons, animals or property, caused by the tampering of the protections.

### 1.3.4 Personal Protective Equipment

Safety clothing is not supplied with the machine and must be procured by the user. In the various sections of the manual will be shown the symbols of personal protection equipment to be in the different operations to be carried out.



### 1.4 RESIDUAL RISKS

These are the risks that cannot be completely eliminated either by protective devices or the design of the machine.

	Glue Head. WARNING! Hot surfaces! Risk of burns. Use protective gloves.
	Glue Tank. WARNING! Hot surfaces! Risk of burns. Use protective gloves.
	Milling Area. WARNING! The disc cutter contains several types of cutting tools. Use protective gloves, in case you want to remove the roughening.
	Press Area WARNING! Danger of crushing between the frame and the grip. WARNING! Danger of crushing on the press.

### 1.5 Intended Use

The machine has been designed to make the book binding using the following materials:

• Signatures or single sheets of paper (printed or not) to the book block

The machine must be used by a single operator within the limits and in the manner provided in this manual.

Any other use is prohibited, such as:

- Milling / ribbed backs already bound book (eg. Bound with glue, staple, sewing, seal point);
- Use of materials other than those specified in the preceding paragraph;
- Operations beyond the specifications of the machine.

The user is solely responsible for any damage to persons or property resulting from improper use, outside of their intended use.

Use of the equipment is forbidden in an explosive atmosphere, in a flammable atmosphere or in an area with excessive dust.

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## 2. TRANSPORT

$\underline{\bigwedge}$	WARNING! DO NOT pass under any suspended load during transport.
$\underline{\bigwedge}$	WARNING! Transport should be carried out by qualified personnel only.

The binder must be moved by means of a forklift. It can only be forked in the 2 guides, front and back.

For final positioning or for small movements a pallet truck can be used.



#### IMPORTANT

- a) Tools are not provided for the hooking and lifting.
- b) The disposal of packaging materials is the responsibility of the recipient and must be performed in accordance with the regulations of the country in which it will be disposed.
- c) Remove any dust and dirt accumulated during transport.

## 3. STORAGE

The information contained in this section shall be observed during periods of temporary storage of the machine that may occur, eg., In the following situations:

- Installation of the machine immediately after its delivery.
- Decommission of the machine.
- Machine in storage.

The machine must be stored and transported under conditions of safety as indicated in the table below.

Conditions for Storage		
Temperature range	-5/+55°C	
Humidity range	30/90%	
Lighting	Natural and / or adequate artificial lighting	
Weathering	Adequate protection	
Space required	Sufficient to perform the operations of lifting and safe transport.	
Location	The bearing surface must have a capacity greater than the total mass of the machine.	
Unused for less than 30 days	Never open the glue tank otherwise it accelerates deterioration creating serious permanent damage to the glue application. This failure to comply will void the warranty of the group glue.	
Unused for more than 30 days	Empty the system of glue and insert inside the protective cleaner. This failure to comply will void the warranty of the group glue.	
	Protect against corrosion of the parts subject to wear and work plans. See Maintenance section.	
Note	Do not stand or place any object on top of the machine.	

## 4. GENERAL DESCRIPTION

## 4.1 Technical Specifications

Features of the machine: Cycles per hour Spine Length Book height Cover dimensions Book thickness Cover Thickness Control panel	200 Cycles 120 / 380 mm 110 / 320 mm 700x380/222x120 mm 2 -50 mm 120 a 400 g/m <sup>2</sup>
Touch-Screen Copy count Glue change counter Diagnosis and controls Setting format, temperature control, car Book Loading	riage speed.
Adjusting the grip	Automatic
Opening Clamp	Automatic
Spine Preperation	
Milling disk	Ø 110 mm (optional)
Roughening (roughening devices)	2 per disk
Adjustable milling	Mechanical type with position control
Milling thickness	Variable
Milling waste removal	Internal vacuum
Glue Application System	
Tank PUR/Hot-Melt	3 Kg hermetically sealed
Extruder nozzle PUR / Hot-melt	Integrated and sealed
Head adjustment	Automatic
Stop glue	Set from Touch-Screen
Cleaning/sealing	Yes
Press	105
Press	Electric servo-assisted
Adjustment	Press time
Mechanical adjustment	
Adjusting back stop of cover	Automatic via touch screen
Cover placement	Manual
	manual
Dimensions & Weight	
Length x Width x Height	1770 x 910 x 1280 mm
Weight	250 Kg

### 4.2 Electrical Specifications

Power Supply	220 – 230 V 50/60 Hz, 1 ~ + N + PE
Max Power Consumption.	3,5 Kw
Fuse Protection	16 A

#### 4.3 Pneumatic Specifications

Ensure that the equipment and pneumatic circuits can operate reliably, efficiently and safely, it is necessary that the compressed air used to power the pneumatic system has the following quality requirements in accordance with DIN ISO 8573-1:

- Quality of the supplied air CLASS 3,
- Dust: 5 micron 5 mg/m3
- Water: -20°C 0,88 g/m3
- Oil: 1 mg/m3

The compression system air upstream of the binding machine must be of the type with dryer. Periodically check the quality of the compressed air supplied to the machine and operating values.

#### Supply pressure

The pneumatic air supply of the user must ensure, to the inlet fitting of the compressed air in the binder, the following values:

- 7 bar;
- ensure a consumption of air equal to 160 NI/min
- Air Quality: Class 3

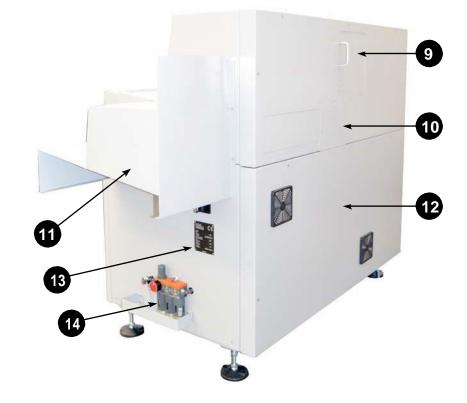
Pneumatic features: Air consumption 100 NI/min Gauge input 6 bar Minimum pressure 5.5 bar Input gauge6 mm

The connecting pipe to the compressor diameter of 6 mm is not supplied with the machine. We recommend a compressor with automatic condensate drain. To avoid the weekly check of the presence of water inside the tank of the compressor.

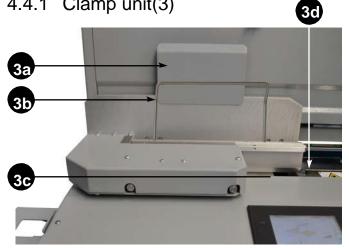
### 4.4 PARTS IDENTIFICATION



- 1. Glue tank compartment access;
- 2. Milling unit;
- 3. Clamp unit;
- 4. Table of measurement;
- 5. Front left cover;
- 6. Press unit;
- 7. Glue unit
- 8. Front right cover;
- 9. Rear access door;
- 10. Upper rear cover;
- 11. Book holder;
- 12. Lower rear cover;
- 13. Serial plate;
- 14. Pneumatic unit.



## 4.4.1 Clamp unit(3)



- 3a. Rear book support3b. Front book support
- 3c. Moveable clamp
- 3d. Stop glue sensor

Milling guard

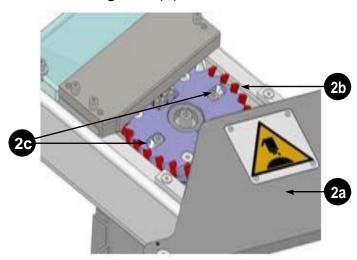
Notching & roughening

Milling tool

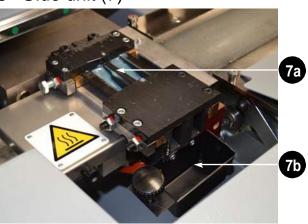
2a. 2b.

2c.

4.4.2 Milling unit (2)

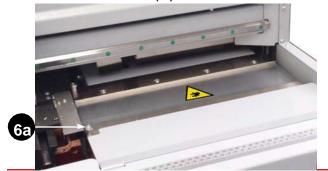


4.4.3 Glue unit (7)



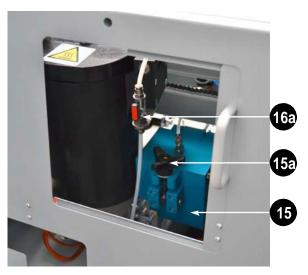
- 7a. Glue head
- Waste collector 7b.

4.4.4 Press unit (6)

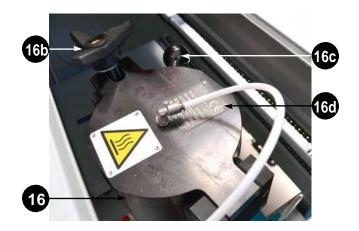


Square Adjusters 6a.

#### 4.4.5 Glue & Cleaner Tanks



- 15. Cleaner tank
- 15a. Opening/Closing knob
- 16a. Air valve tap (glue)



- 16. Glue tank
- 16b. Opening/Closing knob
- 16c. Handgrip
- 16d. Serial label

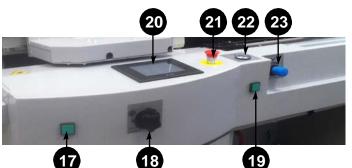
### 4.4.6 Waste vacuum



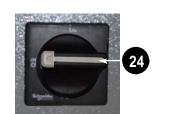
The extractor is contained in the left side of the binder and is electrically connected to it.

Upon delivery of the binder, the extractor is ready, and connected both electrically and mechanically (suction tube), turns on and off simultaneously with the cutter.

### 4.4.7 Controls and Indicators



- 17. Control button left
- 18. Milling height adjuster
- Control button right 19.
- Display 20.
- Emergency stop button 21.
- 22. Air pressue gauge
- air pressure adjuster 23.
- On/Off switch. 24.



#### 4.4.8 Accessories



- Glue protection C.
- Cleaning hook 0.5mm (2x) D.
- Cleaning spatula (2x) Ε.
- Cleaning wire 0.5mm F.

- I. Protective gloves
- Low book support J.
- High book support K.
- Maintenance oil L.
- Μ. Allen key set

### 4.5 Operation Panel

The operator panel contains the configuration parameters of the machine and allows editing of These.

4.5.1 Main page



- 1. Preset page icon
- 2. Carriage page icon
- 3. Glue tank & nozzle page icon
- 4. Press unit page icon
- 5. Job memory icon
- 6. Tools page icon
- 7. Display of current job
- 8. Nozzle status icon glue/cleaner
- 9. Carriage Speed icon
- 10. Alarm indicator

- 11. Start glue indicator
- 12. Press time indicator
- 13. Book type indicator
- 14. Book counters icon
- 15. Press disabled indicator
- 16. Milling disabled indicator
- 17. Clamp parameter changed icon
- 18. Nozzle parameter changed icon
- 19. Temperature indicator icon
- 20. Position of book to cover indicator
- 21. Book thickness indicator
- 22. Cover position indicator;
- 23. Present measurement from the table.

4.5.2 Preset Icon (1)



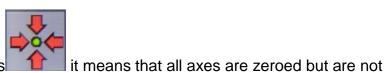
This icon / button indicates that you need to run a preset machine.

In order to perform the preset you must press the icon, it will begin to flash, press and hold the dual control security side of the machine until the end of the operation. This task is complete when all axes of the machine are cleared. If the group is not glue temperature in the zeroing of this axis will not run. the operation will then be controlled once they reach the set temperature.

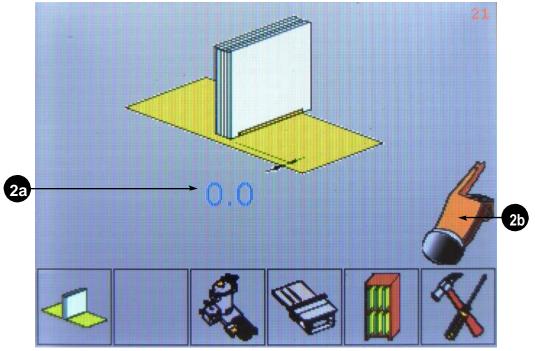
If at the end of the preset the icon is replaced by this **the icon** it means that all axes are zeroed but ar in the working position. To bring the machine in working position is need to press the left dual control

security.

When all units are in working position the icon disappears

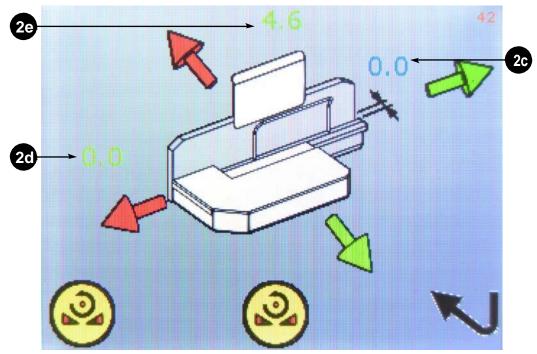


#### 4.5.3 Carriage parameters (2)



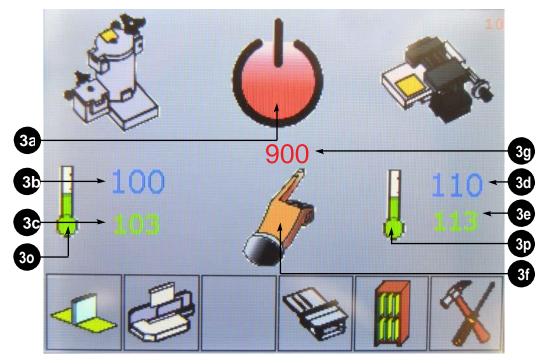
The value (2a) is editable from -10 mm to +10 mm, this makes the clamp move forward (positive sign) with respect to the cover or backward (negative sign) during the machine cycle. The result is that the cover may protrude or fall compared to the book block.

Pressing on the hand (2b) will go to the page for the manual movements.



In order to make movements forward, backward or to preset the carraige you need to select the direction (a checkmark will appear) and press the left dual control of security to the desired position. The value (2d) indicates the current position of the clamp.

The preset of the clamp can also be performed from this page by selecting the left hand icon and press the left dual control security until the end of the operation. Pressing the icon to the right of the preset will reset the axis of the vise. The value (2c) sets a correction value to the opening of the clamp (0 – 5 mm). The value (2e) displays the present value of opening clamp.



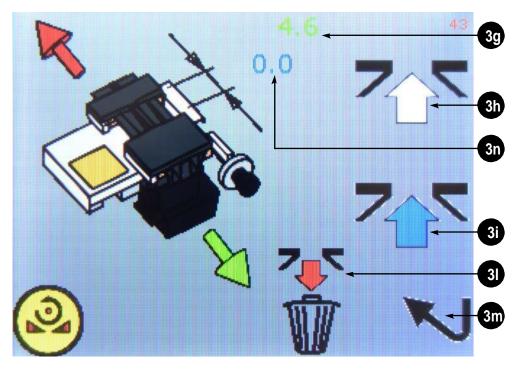
The figures 3b and 3d are the values attributable to temperature for the tank and glue to the extruder. The numbers 3c and 3e are the values of the actual temperature. The indicators 3o and 3p will be red if the temperature is outside the tolerance threshold, greens are within the threshold. Threshold temperature currently set(-2°C +5°C).

The temperature should be set according to the type of glue that is used, refer to the temperature recommended by the adhesive manufacturer.

The temperature of the pre-melting unit to be kept from 5 ° to 15 ° less than that of extrusion. During the heating phase, the indicators appear in red and the machine will highlight the message "Temperatures not OK".

When the measured temperatures correspond to those set indicators appear in green; the machine at this point will wait for a timer to stabilize of the temperature (3g), at the end of this process the machine will be ready for use.

Pressing on the hand (3f) gains access the page of the manual movements of the extruder.

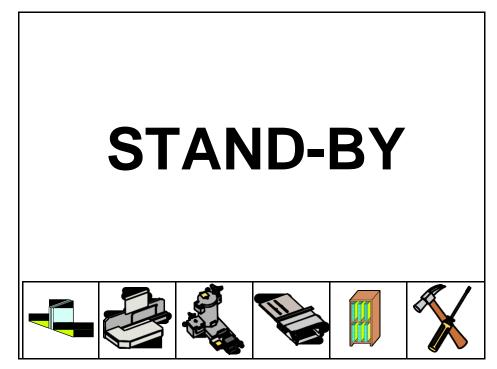


- 3g. Current values (green) and set values (blue)
- 3h. Dump glue icon
  - Holding down the button for less than one second to open and close the valve on the glue.
  - Holding down the button for less than two seconds, but more than one:
    - Open & close glue valve
    - Puts the tank glue under pressure. This pressure is maintained for 10 sec Max.
  - Holding the button down for more than 2 seconds
    - Open and close the valve of the glue
    - Put pressure on the glue tank.
      - Open the valve on the glue until you release the button.
- 3i. Icon with the blue arrow: controls the opening of the cleaner until you release the button;
- 3I. Icon to dump glue
- 3m. Icon to return to previous page
- 3n. Correction value for the coating head (- 0,5mm 1mm).



You can also preset the extruder from this page by selecting the icon

### 4.5.5 STAND-BY

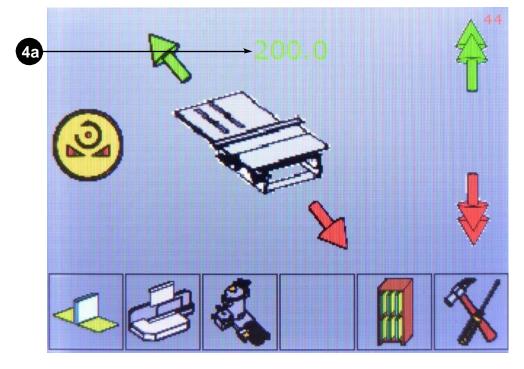


Standby decreases the temperatures by 30 °, and if closes the coating head 30 minutes after the last book was produced in order to protect the glue from unnecessary prolonged heating.

When the machine is in STAND-BY, you can navigate to the display using the icons below. If you do not browse the pages for more than 15 seconds, the machine returns to the STAND-BY. The STANDBY mode is activated from the page glue unit (3) holding the icon (3a) for more than a second.

To return to the normal condition hold the display for more than a second, and wait until the glue unit reaches the set temperature.

4.5.6 Press unit (4)



4a. Indicates the current position of the back cover stop.

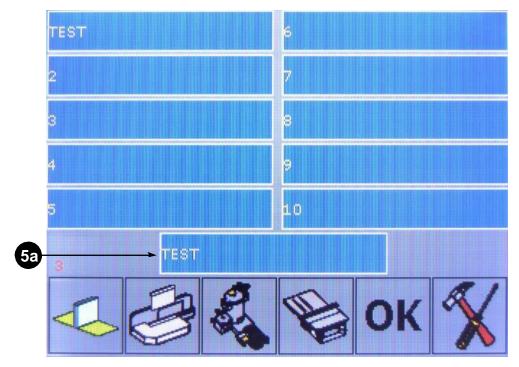
#### MANUAL OPERATION OF PRESS

Select the direction of movement of the press by selecting the double arrow (under the selection made will appear checkmark) and press the left dual control of security to the desired position.

#### MANUAL OPERATION OF BACK STOP

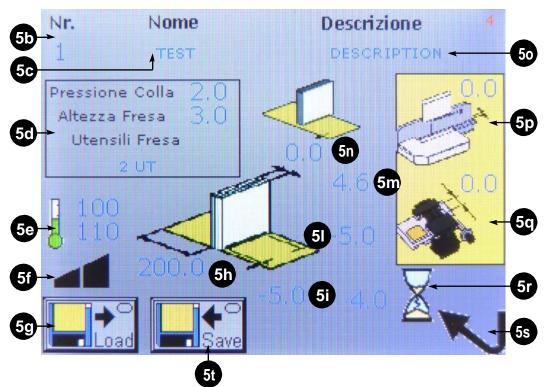
Select the direction of displacement of the cover stop by selecting the arrow. You can run the preset of the bar of the cover also from this page by selecting the preset icon.

### 4.5.7 Job Memory (5)



On this page you can store up to 10 working configurations. The field 5a displays the selected recipe. To enter a tab you need to select it and press OK.

Stored job page.



- 5b. Job memory ID
- 5c. Job Name
- 5d. Memory detail of the glue pressure, height of the cutter and number of tools installed
- 5e.\* Temperature settings
- 5f.\* Speed setting
- 5g. Memory load icon
- 5h.\* Cover crease length
- 5i.\* Stop glue front setting
- 5l.\* Stop glue rear setting;
- 5m.\* Book thickness;
- 5n.\* Offset placement of the book to the cover
- 50. Job description
- 5p. Displays the opening value of the clamp
- 5q. Displays the opening value of the glue head
- 5r. Press timer
- 5s. Previous page icon
- 5t. Job save

#### \*Current setting

This page displays the parameters currently set on the machine in the various configuration pages regardless of the selected recipe. To save the selected recipe, just press next to "SAVE" (5t).

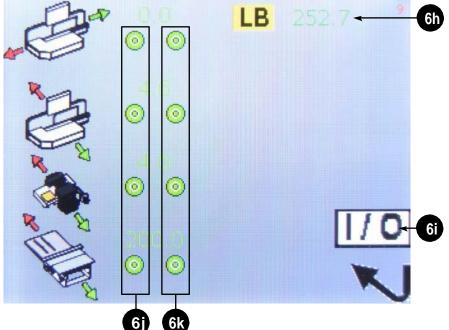
The modification of a recipe is done by changing the parameters in the pages of settings and saving 5t from the page with the button above explained.

To load a previously created recipe simply load the data with the button icon 5g.



- 6a. Available Languages
- 6b. Activate the waste vacuum
- 6c. Disable speed setting warnings
- 6d. Time & date setting
- 6e. Technical parameters
- 6f. Language selected;
- 6g. Screen brightness adjust

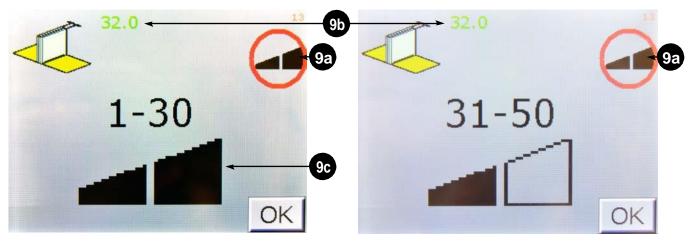
Pressing the icon 6e (INFO SERVICE) leads to the following page.



The 6j column shows whether the associated group has been cleared. (GREEN = RESET) The column 6k shows whether the associated group is in working position. (GREEN = IN POSITION) The field 6h shows the length of the last book run.

Pressing the sixth field opens the page I / O, for machine diagnostics.

### 4.5.9 Machine speed warning (9)



This page opens when the working speed of the machine is not compatible with the thickness of the book to be machined. The value (9b) indicates the current set thickness in the clamp. For books from 1 to 30 mm to select the speed shown in the screenshot on the left, while books

from 31 to 50 mm to select the speed shown in the screenshot on the right.

By pressing icon (9c) you can change the working speed of the machine, once you have selected the desired speed, press OK.

You can disable the warning message through the icon button 6c of the page settings from the icon or button (9a).

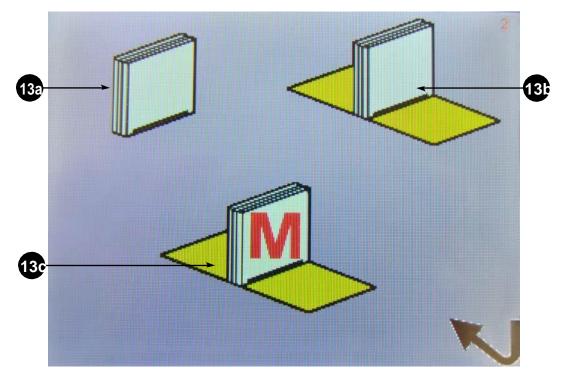
#### 4.5.10 Alarm page (10)

The alarm page shows the status of the alarm.



Press ALARM RESET to reset the alarms. Enter this page by pressing the icon button 10a.

### 4.5.11 Type of book (13)



13a. In this configuration the machine excludes the operation of the press and of the table port covers.

By simultaneously pressing the buttons on the machine performs the following tasks:

- Air is supplied to the glue tank for 10 seconds.
- Clamp will close and start moving to the right
- Milling motor and vacuum will start (if enabled)
- The clamp arrives in position on the press. The operator releases the two buttons and presses the left dual control button to return the clamp to the loading position:

13b. In this configuration, the machine performs a normal book with cover.

By simultaneously pressing the buttons on the machine performs the following tasks:

- Air is supplied to the glue tank for 10 seconds.
- Clamp will close and start moving to the right.
- Milling motor and vacuum will start (if enabled).
- Press activates.
- The clamp opens.
- If the dual buttons are still depressed the clamp returns to home position.
- When the clamp starts its return the press timing is activated.
- Press releases the book and returns to home position.

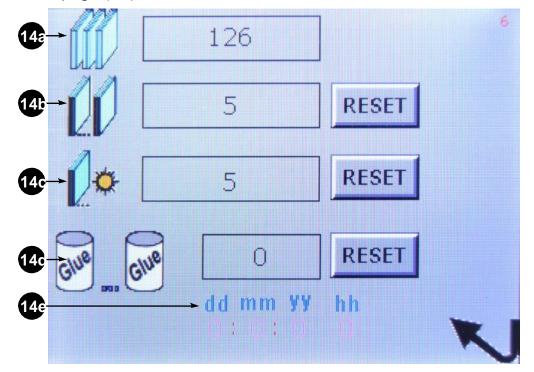
#### MB 200

13c. In this configuration, the machine performs a book cover with delicate cover.

By simultaneously pressing the buttons on the machine performs the following tasks:

- Air is supplied to the glue tank for 10 seconds.
- Clamp will close and start moving to the right.
- Milling motor and vacuum will start (if enabled).
- Press activates for the desired time set
- The clamp and the press both open simulteanously
- If the dual buttons are still depressed the clamp returns to home position.

4.5.12 Counters page (14)



- 14a. Total counter.
- 14b. Job Counter.
- 14c. Day counter.
- 14d. Counter of books since glue change.
- 14e. Counter of actual time since last glue change.

The counters 14b and 14c are reset by pressing the RESET button.

The counters 14d and 14e are reset by pressing the RESET button for more than one second.



WARNING! The machine must be installed by technicians KGS or by personnel authorized by K.G.S.

### 5.1 Physical location

In the vicinity of the location for the machine must be suitable power sources for electric and pneumatic power in accordance with the requirement labels. Allow sufficient space for normal use, for the maintenance of the machine, and any commands to any connected equipment (see table in section positioning). The location should not be close to deposits of combustible materials, or to local processes that can create flammable or explosive atmospheres.

The machine must be placed indoors and protected from direct contact with the elements.

For the installation you need to prepare an area for maneuverability appropriate to the size of the machine parts and lifting equipment selected, paying attention to the presence of obstacles (other machines, walls, or the like) along the road ahead.

#### 5.2 Floor requirements

The machine requires no special foundations. It must be ensured the availability of an industrial floor. The binder rests on 4 feet diameter 100 mm and its weight is 250 kg.

### 5.3 Lighting

To carry safe maintenance of the machine good lighting is required. The ambient lighting should have a normal value which should allow work without extra lighting requirements.

### 5.4 Ambient conditions

The values of temperature and humidity must be within the values shown in the table below.

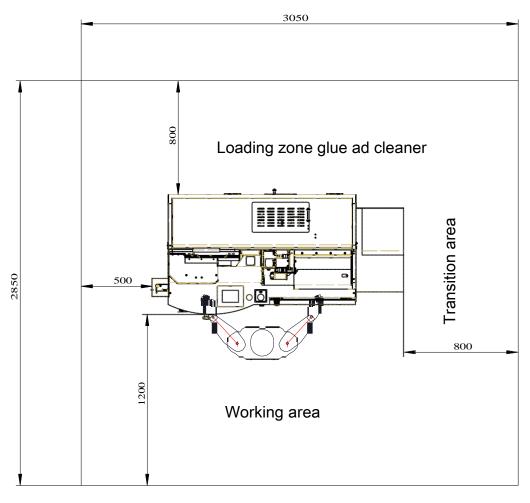
In the case where it uses the installation in environments to a corrosive atmosphere is important to intervene in the maintenance of the machine with the appropriate times so as to prevent excessive wear of the components.

	MIN	MAX
RoomTemperature	5°C	40°C
Relative humidity	20%	80%

### 5.5 Space requirements

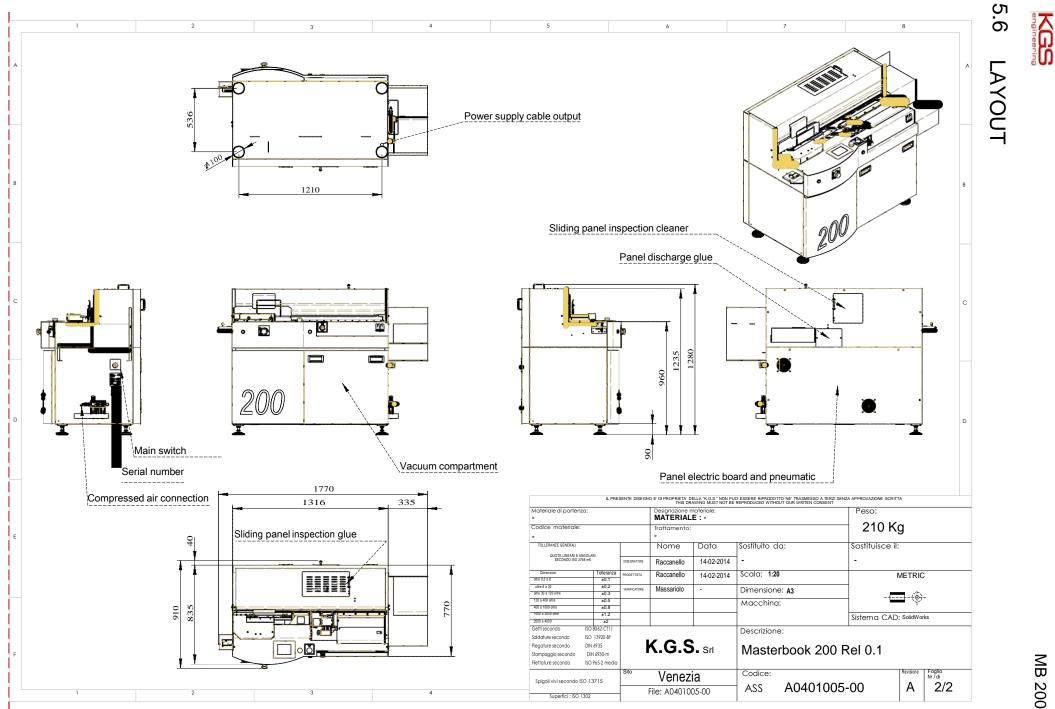
The binder must be positioned so as to have a free space of at least around 80 cm and the working area at least 120 cm.

The room where the machine is installed must be properly ventilated with air exchange law.



#### Areas of work

Loading of glue area	The user has access to this area to load the glue and / or cleaner in the machine. Service requires access to the electrical panel and air fittings.
Transition zone	Space to move to and from the loading zone
Working zone	Normal operation workspace
Left side	Non work area



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## 5.7 Electrical connection



WARNING! The cables should be run in cable ducts in order to avoid tripping and / or falling

Electrical cable

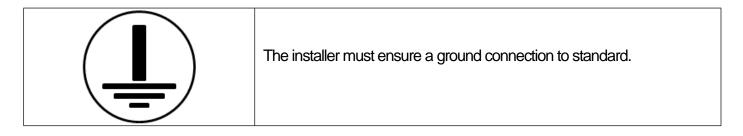
The connection of the electrical cable is prepared according to the destination of the binder.

The cable has a length of 3 meters with sectioned end, with the earth conductor (PE).

It is the responsibility of the user to adjust the cable to connect to the site in accordance with the applicable regulations.

#### 5.7.1 Earth connection

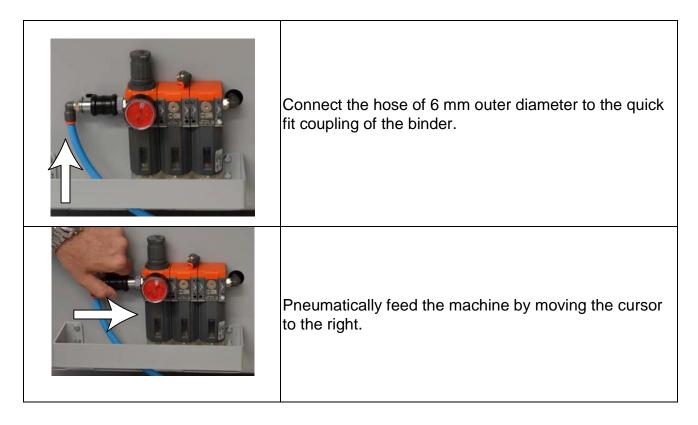
The binder is provided with protective earth (PE).





# 5.8 Pneumatic connection

Connect the air supply according to the following procedure:





# 6. OPERATION

### 6.1 Preparing the machine

### 6.1.1 Loading the glue

The glue tank must be filled in the case where the quantity of glue is less than the minimum level marked on the tank.

$\overline{\mathbb{N}}$	WARNING! Wear protection for the face, for the hands, masks suitable for the use of glue used and goggles.
$\underline{\bigwedge}$	ATTENTION! Never open the tank when it is COLD. Possibility of breakage of the seals and aging (curing) of the glue with probable premature clogging and maintenance requirements.
$\triangle$	ATTENTION! Ensure you are loading the tank with glue of the same Type and Brand. A new type of glue should be inserted only when the glue unit is completely empty and clean with Blu-Cleaner.
$\bigwedge$	ATTENTION ! Do not leave the tank open more than 10 minutes.
$\underline{\bigwedge}$	ATTENTION! Never fill the tank with more than 3kg of glue.

To access the glue tank (1) you need to open the sliding door using the handle. The opening of this doors discharges the pressure of the glue tank. The cleaner tank r at a pressure of about 2 bar. The machine will not run with the doors open.





01	Turn on the machine by putting the switch in position ON.
02	Check to see if the pressure indicated on the input pressure gauge. MIN 6 BAR
03	Open the valve on the premelter: The tap with the lever positioned vertically indicates that it is open.
04	Set the temperature of the tank and glue unit from the page section (3) based on the glue on your machine or you want to use.
05	Wait for the heating and temperature stabilization. The timer icon located under the stand-by time will start. When the timer goes out, the stabilization is complete and you can proceed to the next step.



06		Open the sliding door (1) top of the machine, equipped with a handle. The machine goes into a state of emergency and takes the pressure off the glue tank, while the tank cleaner remains under pressure to 2 bar.
07		Loosen the lock knob by rotating it counterclockwise.
08		Tilt the locking knob to its rest position. The lid is now free to open.
09	<image/>	Lift the cover up to its maximum opening by grasping the lifting knob.



10	Pur MeLT QR 331/FBR	Read and follow instructions of use on the glue manufacturers Material Safety Data Sheets (MSDS). Take a pack of glue, and verify the integrity of the aluminium packaging. Also make sure that the date of expiry in the package is not passed.
11		Cut the protective film.
12		Completely remove the film.
13		Insert the glue candle into the tank



14	Close the cover.
15	Lift the handle, be careful of the high temperature of the components. Turn the knob clockwise to tighten the tank vigorously.
16	Close the sliding doors at the top and rear of the machine.



6.1.2 Loading the cleaner.

$\underline{\bigwedge}$	WARNING! Wear protection for the face, for the hands, masks suitable for the use of glue used and goggles.
$\overline{\mathbb{N}}$	WARNING! Wear face shield, masks suitable for the use of glue used and goggles
$\underline{\bigwedge}$	WARNING! Carefully read the safety data sheets of the cleaner used, and follow all the instructions of the adhesive manufacturer.

To load of the cleaner carefully follow the sequence below:

01	Turn on the machine by putting the switch in position ON.
02	Check to see if the pressure indicated on the input pressure gauge. MIN 6 BAR
03	Open the valve on the premelter: The tap with the lever positioned vertically indicates that it is open.



04	Set the temperature of the tank and glue unit from the page section (3) based on the glue on your machine or you want to use.
05	Wait for the heating and temperature stabilization. The timer icon located under the stand-by time will start. When the timer goes out, the stabilization is complete and you can proceed to the next step.
06	Open the access cover for the cleaner tank (9) using the handle.
07	Loosen the knob on the tank cleaner. You will notice an air leak as the air continues to provide air to the tank.
08	Fill to about 3/4 of its volume.



09	Close the lid using the knob. Beware the high temperature of the components. Tighten the knob until the sound of escaping air disappears.
10	Close the access cover (9) using the handle.

# 6.1.3 Adjustment of notching according to the machine speed





WARNING! Wear protection for the hands and body.

If the machine must work books of thickness greater than or equal to 31 mm is necessary to slower speed of the wagon in this mode is not recommended to use both the roughening (roughening devices) but only one of the two, to do this run the procedure below.

01	Press the emergency stop
02	Open the guard of the milling: rotate the head of the cutter with the 5mm Allen wrench always turning clockwise as indicated by the arrow.
03	Remove the screw, indicated,
04	Insert the screw supplied (M6x30) into the threaded hole of the roughening, then pull to remove the tool.



05	Once removed reinsert it upside down as shown in the figure and secure it to the body of the cutter. This operation allows the cutter to be balanced
06	Release the emergency stop

When using the higher speed of the machine it is recommended to use both the notching devices (roughening), if it appears that one of them had previously filmed remove and reinsert it as done previously.





# 6.1.4 Adjustment of milling height



WARNING! Wear protection for the hands and body.

Under the notching tool are placed spacers to vary the height of the tools, if you want to decrease the height you can remove them, in this way it is possible to reduce the processing tool itself, to do this follow the steps below .

01	Press the emergency stop.
02	Open the guard of the milling: rotate the head of the cutter with the 5mm Allen wrench always turning clockwise as indicated by the arrow
03	Remove the screw, indicated,



04	Insert the screw supplied (M6x30) into the threaded hole of the roughening, then pull to remove the tool. Remove the shim (spacer) and reinsert the notching tool.
05	Repeat the above procedure for the 2 <sup>nd</sup> tool
06	Release the emergency stop



#### MB 200

### 6.1.6 Mesurement of the book block

The measurement of the book to be bound is required to set in an automatic way the opening of the vice and the group glue.

01	<image/>	Insert the book block to be measured. The probe will automatically close to the book to take the measurement. When the value becomes stable it will transfer to the machine.
02		After the measurement remove the book block and place the probe in the fully open position.
03		If you perform continuous measurements, such as inserting or removing parts of the book block, once you find the correct size simply by pressing the left dual control button to acquire the measurement.

N.B. If the table of measurement does not work it is necessary to reset. To do this close the stop the probe against the vertical wall of the machine then place the probe in the fully open position.



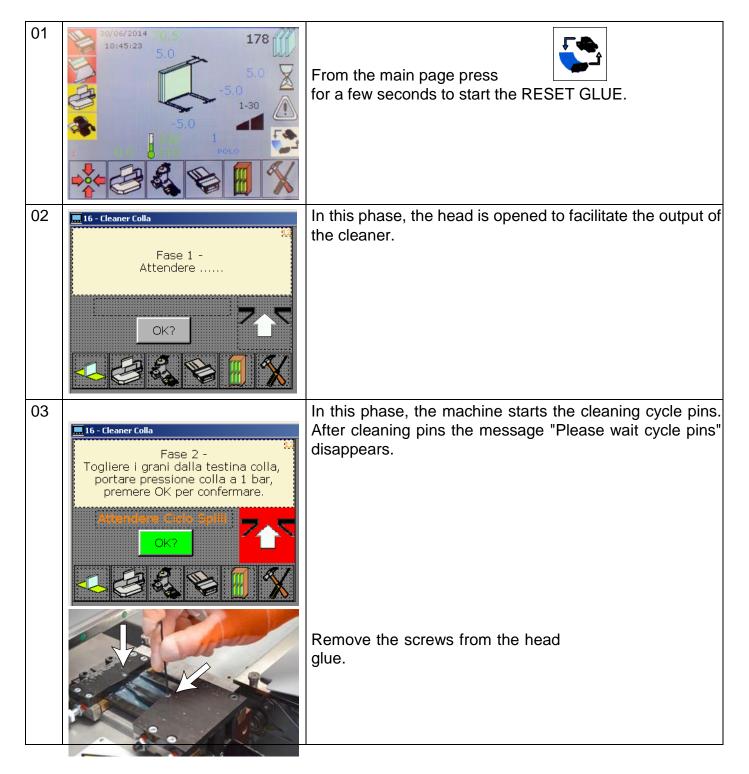
6.2 Start up

6.2.7 Glue loading procedure



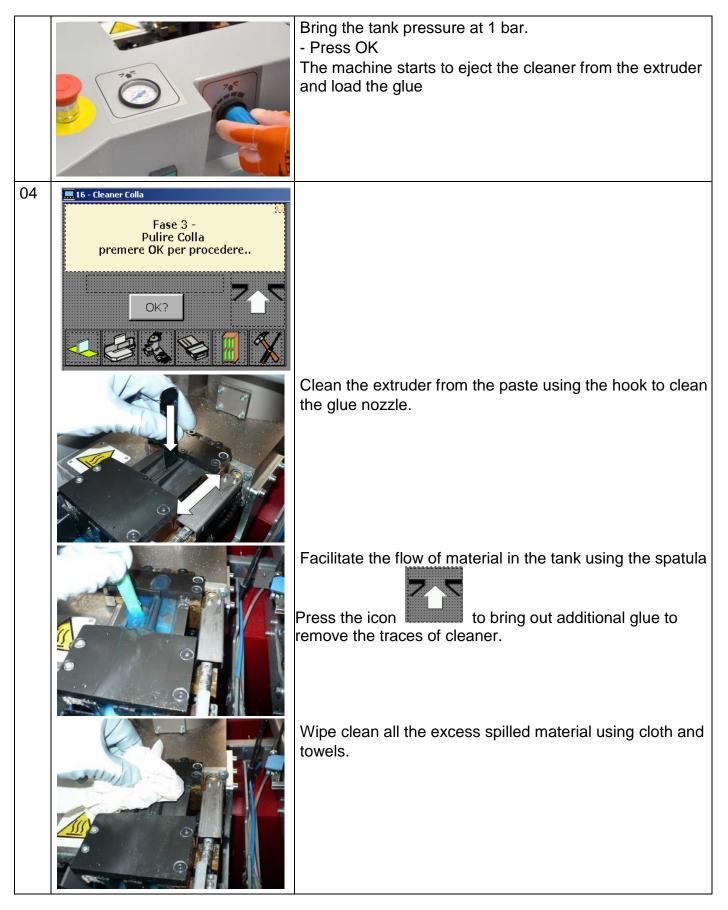
WARNING! Wear protection for the face, for the hands, masks suitable for the use of glue used and goggles.

A cleaning process must be done every time the machine is turned off. When the machine displays an error "Cleaner present" in the glue head. You will need to perform this procedure to load glue to the glue head.



#### MB 200







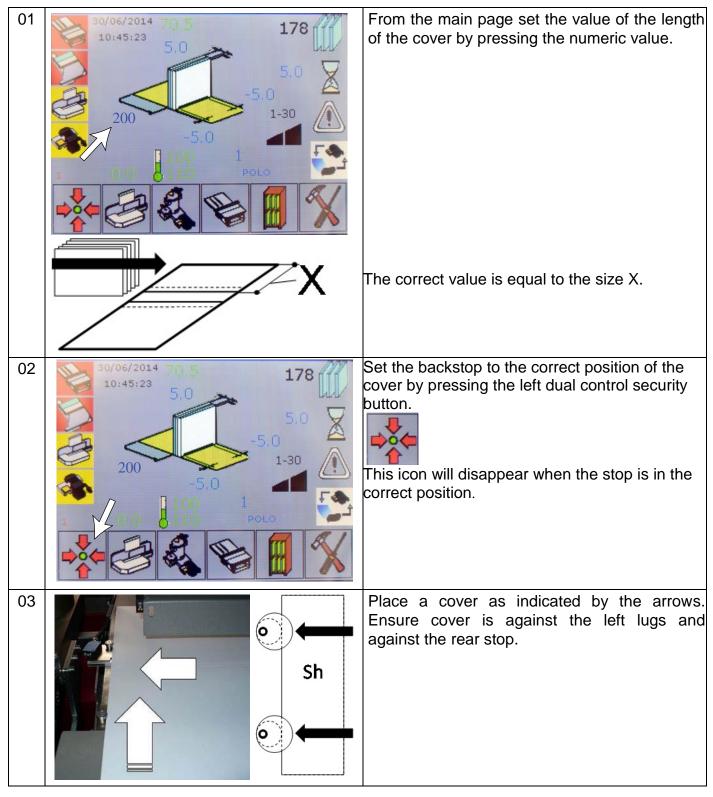
05	Fase 4 - attendere completamento ciclo colla, e testina aperta premere OK per proseguire	Wait for the closing and opening of the extruder and press OK.
06	Fase 5 - Ciclo eseguito, rimettere i grani nella testina colla, premere OK per uscire	Replace screws using the Allen key supplied (pay attention to temperature), press OK. Attention screws should only protrude max. 1 mm Press OK



### 6.2.8 Positioning of the cover

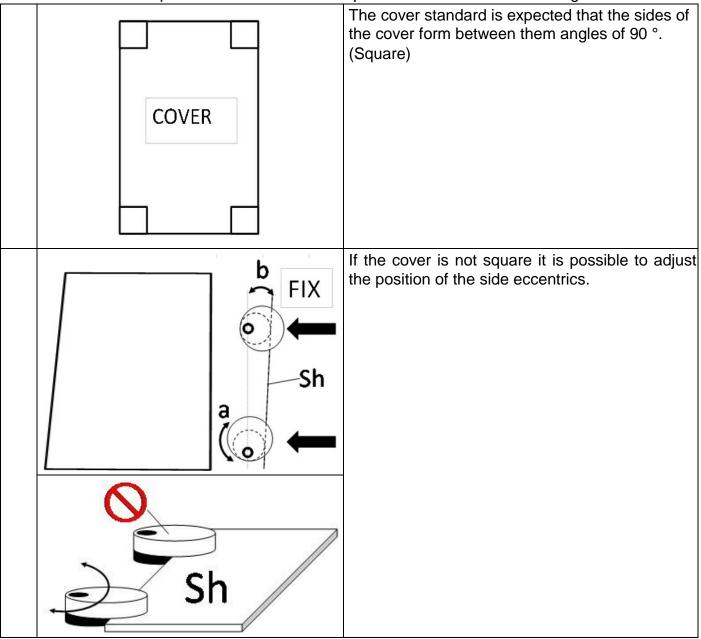


WARNING! Wear hand protection and suitable clothing.

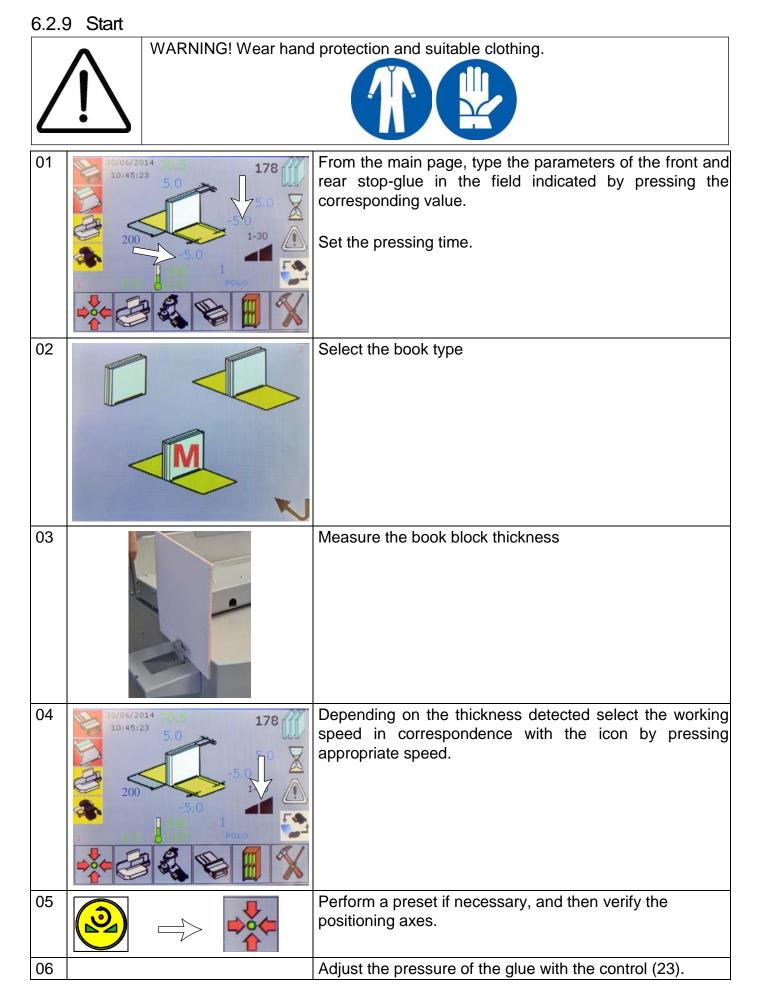




La taratura standard prevede che i lati della copertina formino tra di loro angoli di 90°









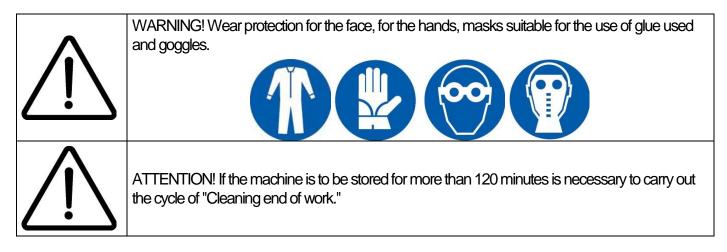
07	Milling	Adjust the working height of the miling: Turn the knob clockwise to increase the removal of material. Turn counterclockwise to decrease the removal. Turning the knob clockwise until it stops switches off milling and the vacuum.
08		Place the cover on the press placing it to the stops.
09	HILL MILL	Load the book block into the clamp
10		<ul> <li>Start working by pressing and holding the dual control of security until the machine reaches the position of the extreme right.</li> <li>The machine closes the clamp and start the processing of the book, the clamp will start moving through the cutter and glue head, and arrived in the press position to apply the cover (if selected).</li> <li>If the buttons are released during the forward stroke, the clamp will stop immediately. With a press of the left dual control the clamp is opened. With a further and continued pressure the clamp will return to the load position.</li> </ul>



11	Retrieve the book
12	Check the sizing of the book. If necessary, correct the values of the stop glue, the position of the cover and the pressing time.



# 7. CLEANING THE MACHINE



When the machine is used with PUR it is MANDATORY to completely remove the glue From the glue head.

The residues of glue that are cross linked may cause obstructions and obstruct the head causing incorrect and ununiformed extrusion of the adhesive.

The glue head must be kept clean and free from deposits of glue, glue residues.

The final cleaning work must be carried out within 120 minutes from 'use of the machine. After making the final cleaning job you can hold off the machine with PUR glue inside for 2 weeks.

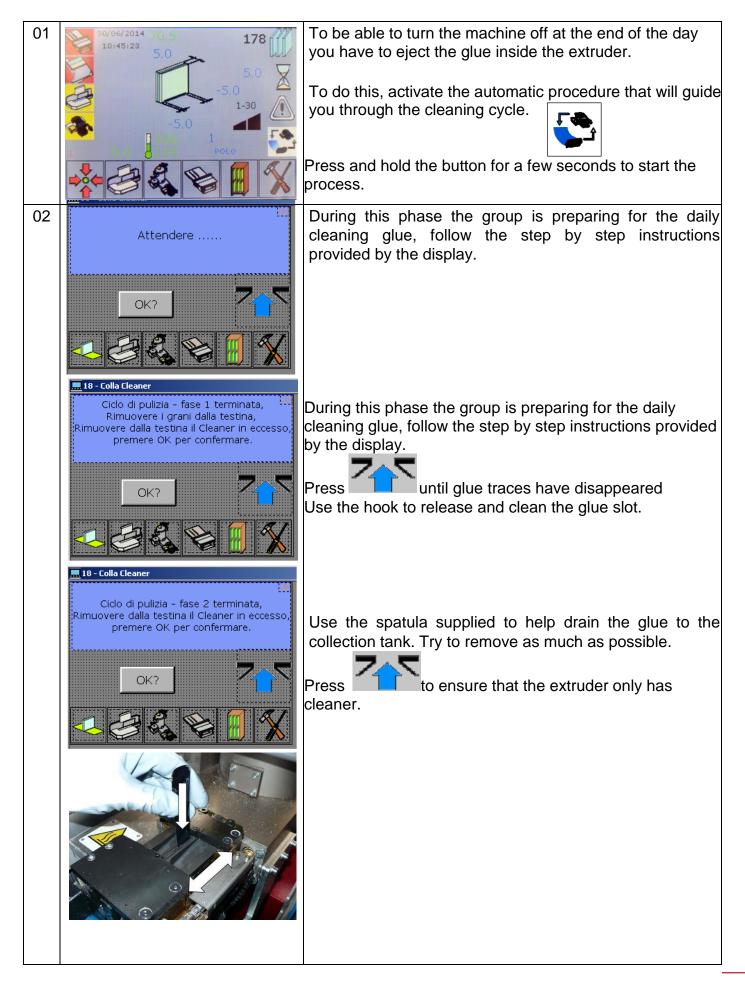
### OTHER CLEANING REQUIRED:

DAILY:	EMPTY THE VACUUM AND CLEAN THE FILTERS
WEEKLY:	CLEAN SIDE EXTRUSION CLEANING CLEANING CLEANING THE BACK DETAILS

1 EVERY 2 WEEKS:

OIL GLUE HEAD PINS

## 7.1 Cleaning Cycle





	Wipe clean all the excess spilled material using cloth and towels.
03	Once you have finished the cleaning procedure turn off the air input valve. The tap is closed when in the horizontal position.



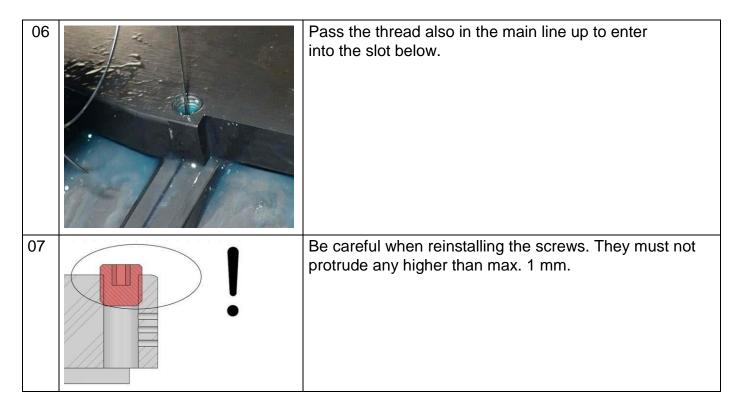
· · · · · ·		Г
01	50/06/2014 10:45:23 5.0 5.0 5.0 5.0 1-30 1-30 1-30 1-30 1-30 1-30 1-30 1-3	Press the button corresponding to the glue unit.
02		Press the button dedicated to manual operation.
03		Fully open the extruder by pressing on the green arrow.
04		Insert the hook into the extrusion slot and move it along the slot to remove or unlock or any possible obstructions.
05		Set the tank pressure at 1 bar.



05	Press and hold the glue icon, indicated by the arrow for a few seconds until you see the leak glue. Check to see if the extrusion of the adhesive is uniform and continuous. Otherwise, enter the hook and repeat the cleaning process. The pressure of the tank will be turned off after 10 sec. if not in use.
06	Thoroughly clean the hook after use. When the glue is completely cross linked it causes The hook to be unusable.



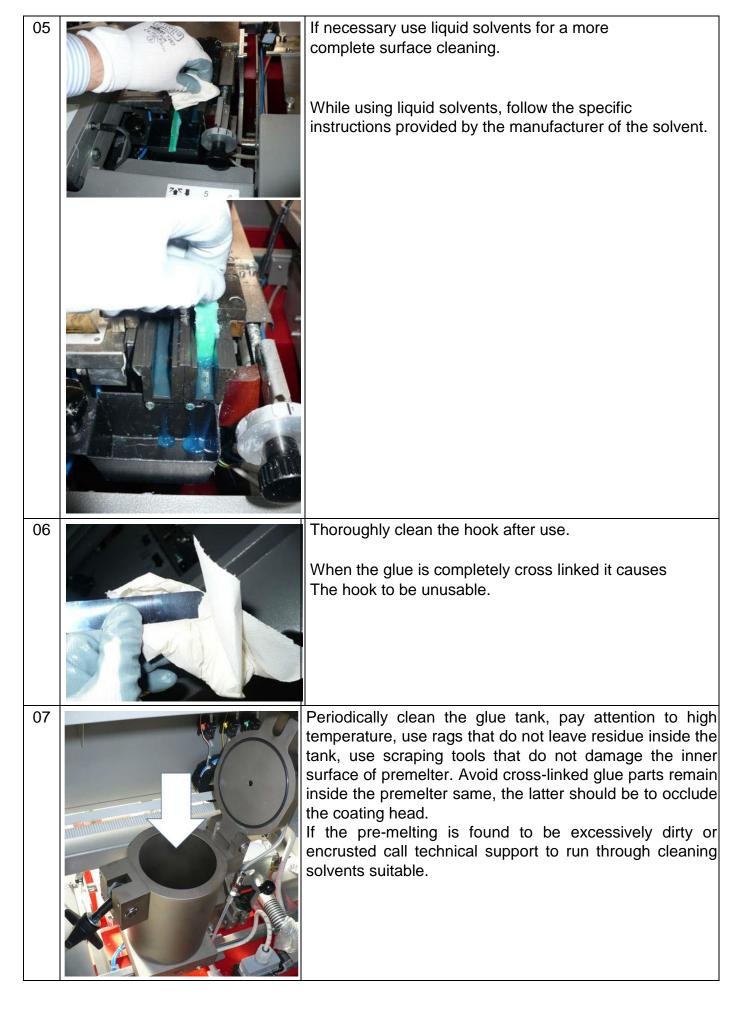
01	30/06/2014 70 5	Press the button corresponding to the glue unit.
	30/06/2014 10:45:23 5.0 5.0 5.0 5.0 1-30 1-30 1-30 1-30 1-30 1-30 1-30 1-3	
02		Press the button dedicated to manual operation.
03		Fully open the extruder by pressing on the green arrow.
04		The glue smeared on the side of the book is extruded through 3 small plates containing channels placed on the book.
05		For a correct extrusion of the side glue you need to remove the allen screw and clean the 3 holes using the wire as supplied. Repeat this process on both front and rear plates.





01	30/06/2014 TO 5 178 10:45:23 5.0 5.0 ∑ 5.0 1-30 0 5.0 1-30 0 5.0 100 0 5.0 ∑ 5.0 ∑ 5	Press the button corresponding to the group glue.
02		Press the button dedicated to manual movements.
03		Fully open the extruder by pressing on the green arrow.
04		Use the hook to remove all visible traces of glue residue.

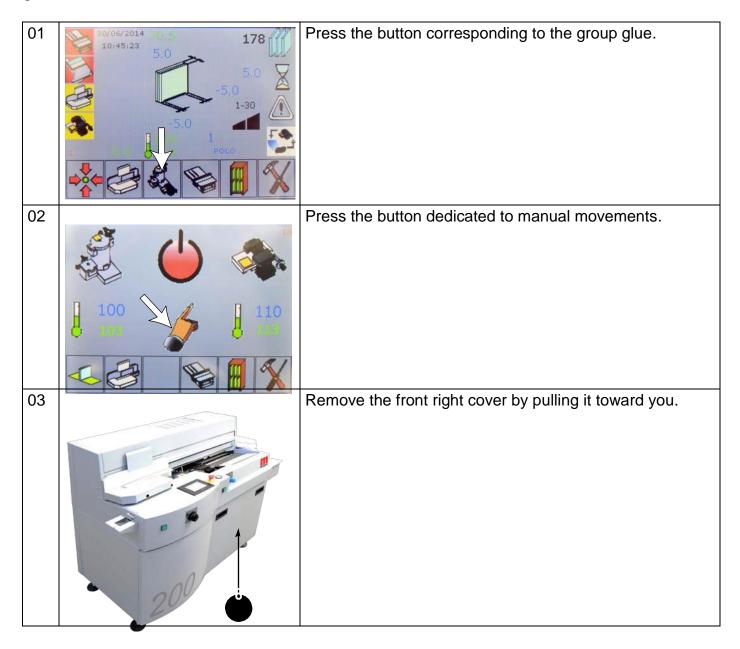




## 7.5 Draining the glue tank



When changing glue types the tank and glue must be flushed thoroughly to remove the existing glue.





04	Remove the screw that locks the right crankcase place under the grip and remove.
05	Install drain chute.
06	Place an empty container under the chute to collect the output material;
07	Open the drain cock glue placed over the cover you just installed.

08		Press and hold the red arrow.
09	<b>МАХ 1 Ваг</b>	Page appears reminder for setting the maximum pressure at 1 bar.
10		Regulate the air pressure to 1 bar.
11	MAX 1 Bar	Press and hold in correspondence with the icon indicated until all the material flows from the tank. When the material is to finish the machine ejects air and material; when the head expels only air drop the icon.
12		Open the sliding door (1) top of the machine. The machine goes into a state of emergency and takes the pressure off the glue tank, while the tank cleaner remains under pressure to 2 bar.



13	Loosen the lock knob (turn it counterclockwise).
14	Tilt the locking knob to its rest position.
15	Open the rear drain panel.
16	Place the waste collector under the tap.

17	Open the tap and allow the emptying of the tank. When finished, close the two exhaust valves glue, wipe with a rag to remove all traces of glue and lubricate valves with high temperature grease.
18	Remove the chute and reassemble the two cover plate and place the right front guard.

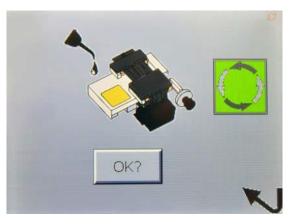


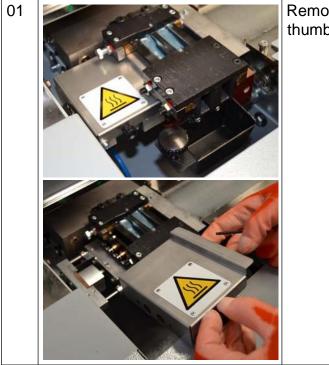
# 8. MAINTENANCE

Ŵ	WARNING! Wear protection for the face, for the hands, masks suitable for the use of glue used and goggles.
$\triangle$	WARNING! These operations must be performed by a qualified service technician.

### 8.1 Lubrication of pins

Every 15 days, the machine displays a screen when you try to run the glue cycle or the cleaner cycle. It is therefore necessary to perform the lubrication of pins





Remove the protection cover by unscrewing the locking thumb screw.

02		Apply oil to the two pins.
03	CK?	Touch the icon shown to cycle the pins so as to distribute the oil. Press OK when finished.
04		Refit the cover and secure using the thumbscrew.



# 8.2 Deep cleansing of the glue head

The cleaning of the glue head is needed in the case of heavily soiled. Cleaning should only be performed with the machine at the working temperature.

01	Dross the emergency step
01	Press the emergency stop.
02	Remove the two screws indicated by the arrow with an Allen wrench.
03	Lift the front plate and remove.
04	Remove the brass guide.
05	Thoroughly clean the plate in all its points using a scraper (hook), the calibrated wire and paper. Remove the side glue screw to thoroughly clean the canals of side extrusion. During assembly of the screw be careful not to extend more than 1 mm from the top surface.

	<image/>	
06		Lubricate the entire plate with grease at high temperature and in particular the slide pins of the brass guide. Replace the guide in the jaw.
07		Mount the plate by placing the left side in the guide and lowering it to the contact.
08		Push firmly against the plate to the right and tighten the two screws with the Allen key.



# 9. TROUBLE SHOOTHING

N°	Alarm	Description
1	Machine in Emergency	The emergency stop button is pressed or one of the doors is open.
2	Drive Fault Press	The press has not reached the position in time. Verify movement in tools menu. Reset the alarm does not reset if you turn off and on the machine waiting for 2min. If the problem persists, contact Technical Support.
3	Drive Fault Clamp Unit	Verify that along the traverse of the clamp carraige there are no obstructions you have not milled a thick book at high speed. Reset the alarm and run presets.
4	Motor Cutter Problem	Check and if necessary replace the fuse FU13.01
5	Emergency button pressed	Verify that the emergency stop button is not pressed
6	Rear door open	Close rear door
7	Upper door open	Close upper door
9	Carriage Encoder Error	Verify that there are no impediments to the movement of the carriage. Reset alarm and run presets.
10	Clamp Encoder Error	Verify that there are no impediments to the movement, of the clamp opening & closing. Reset alarm and run presets.
11	Glue Head Encoder Error	Verify that there are no impediments to the movement, Reset alarms and run presets.
12	Press Encoder Error	Verify that there are no impediments to the movement, Reset alarm and run presets.
17	High temperature Glue	Temperature outside of tolerance (max. +5°C)
18	Low temperature Glue	Temperature outside of tolerance (min. -2°C)
19	Glue Head high temperature	Temperature outside of tolerance (max. +5°C)
20	Glue Head low temperature	Temperature outside of tolerance (min. -2°C)
21	No Air	Check that the pressure gauge is calibrated input or 6 Bar the compressor of adequate size.
22	Missing Cover	The cover is not in place
23	Missing book	The book is not in position
24	Glue sensor obstructed	Clean the Stop glue sensor and reflector

25	Glue sensor problem	The sensor has detected two or more pulses. Do not insert two books or clean the clamp.
26	Book thickness to large	
33	Wait - Heating	
34	Machine with cleaner	Glue head has cleaner Use the load glue cycle to enable book production

#### EXTRACTOR – NO VACUUM:

- Make sure the drum is empty aspires chips.
- Make sure the plexiglass inspection, located on the cutter, it is empty.
- Check that the suction pipe is not full.
- Check that the suction filter is clean.
- Make sure that the hose is connected.

#### CLAMP – NOT MOVING:

- Verify that the emergency button is disabled.
- Make sure that all doors are closed.
- Check the air pressure of the machine.
- Verify that the carraige has returned to the correct position.
- The display is on the main page.

#### START STOP GLUE IRREGULAR:

- Clean the glue head.
- Make sure that the temperature of the glue is correct with that of the glue used.
- Check the status of the glue. The glue must not be too long i in the machine or used in the wrong working temperature. This increases the viscosity of the glue itself.

#### CUTTER – MILLING AND NOTCHING IRREGULAR:

Make sure that the teeth and the tips of the cutter notching are not broken or damaged. This can be caused by
passages of books already bound with glue. <u>BOOKS T THAT ARE MILLED BOOKS WITH GLUE, IS VOID
THE WARRANTY.</u>

#### MILLING GUARD NOT OPENEING:

• Clean the contact surfaces of the cover.

### HEAD - OUT OF OR TOO LITTLE GLUE:

- Check the air pressure.
- Verify that the shutter of the head is free, clean with the hook.
- Make sure that the side glue holes are free, clean with the steel wire supplied
- Check that the injectors are working properly (they must move back and forth with a run of 3-4 mm).
- Verify that the presence of glue in the tank.
- Make sure the glue is not cross linked into the tank.
- Make sure the tank valve is open.
- Check that the position of the inner side is 0.15 tenths back from the edge of the vise.



#### PRESS

- Book damaged, clean the plates with suitable solvents and without the use of abrasives.
- The edge is pinched, please contact technical support.
- The book block is damaged laterally
- Make sure you have entered the correct thickness of the book.
- Clean the contrast rear of the cutter.

DB 200

NOTE:



MB 200

