

INSTRUCTION MANUAL

SUBLIMAX 1812



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I. CONDITIONS OF GUARANTEE

- The guarantee period starts the day of putting the equipment into service at the user's place, materialized by the return of the guarantee bill for a duration of two years, 8h per day meaning about 3000 hours.
- The guarantee is strictly limited to our equipments, against the defects of matter and execution, with the buyer's responsibility to prove the known defects.
- Our responsibility is limited to the obligation to rectify or replace free of charge the parts acknowledged as faulty by ourselves, and there will no claim for any indemnity whatever the reason given.
- Parts replaced under the guarantee:
 - remain our property
 - are the subject of an invoicing of deposit
- A credit of cancellation is activated as soon as the faulty parts are returned.
The return will have to occur ONE MONTH MAXIMUM after the intervention

THE GUARANTEE DOES NOT COVER :

- The retail consumables such as:
 - Fuses, bulbs, joints, flexible devices, covers, nozzles, filters.....
 - The supplies, which are not our own manufacturing, undergo the guarantee of their manufacturer.

THE GUARANTEE DOES NOT APPLY :

- To replacements, nor repairs which would result from normal wear and tear of apparatus and machines, of deteriorations and accidents coming from negligence, defect of monitoring and maintenance, defective use or modifications without our written agreement.
- In case of vice coming from the material supplied by the buyer, or a design imposed by the latter.
- To repairs which would result from deteriorations or accidents occurred during transport.
- To operations of maintenance and adjustments inherent in the use of the machine, and indicated in the maintenance manual, such as:
 - adjustments of intermediaries
 - screwing of piping, etc...



For the pneumatic machines, any trace of detergent oil in the pneumatic circuit inhibits the conditions of guarantee previously mentioned.

**For any technical information or spare parts orders,
please give the reference number of the machine as well as its serial number**

II. SPECIFICATIONS

Weight in running order	1000 kg
Height	1370 mm
Depth	2990 mm
Width	1970 mm
Dimension of the heating plate	1800 x 1200 mm
Electric power supply	400 V + neutral and earth connections 50/60 Hz
Power	30 KW
Amperage	46 A
Working pressure	
Mini	4 bars
Maxi	8 bars
Thermoregulator	
Accurate to	+/- 5%
Range of control	0 à 220°C
Timer	
Accurate to	+/- 2%
Range of control	1 à 30 mn

Non contractual document: according to the technical progress, we reserve the right to modify the characteristics of our products.

Some of these characteristics are recalled on the nameplate you will find on the machine.

S.E.F.A®

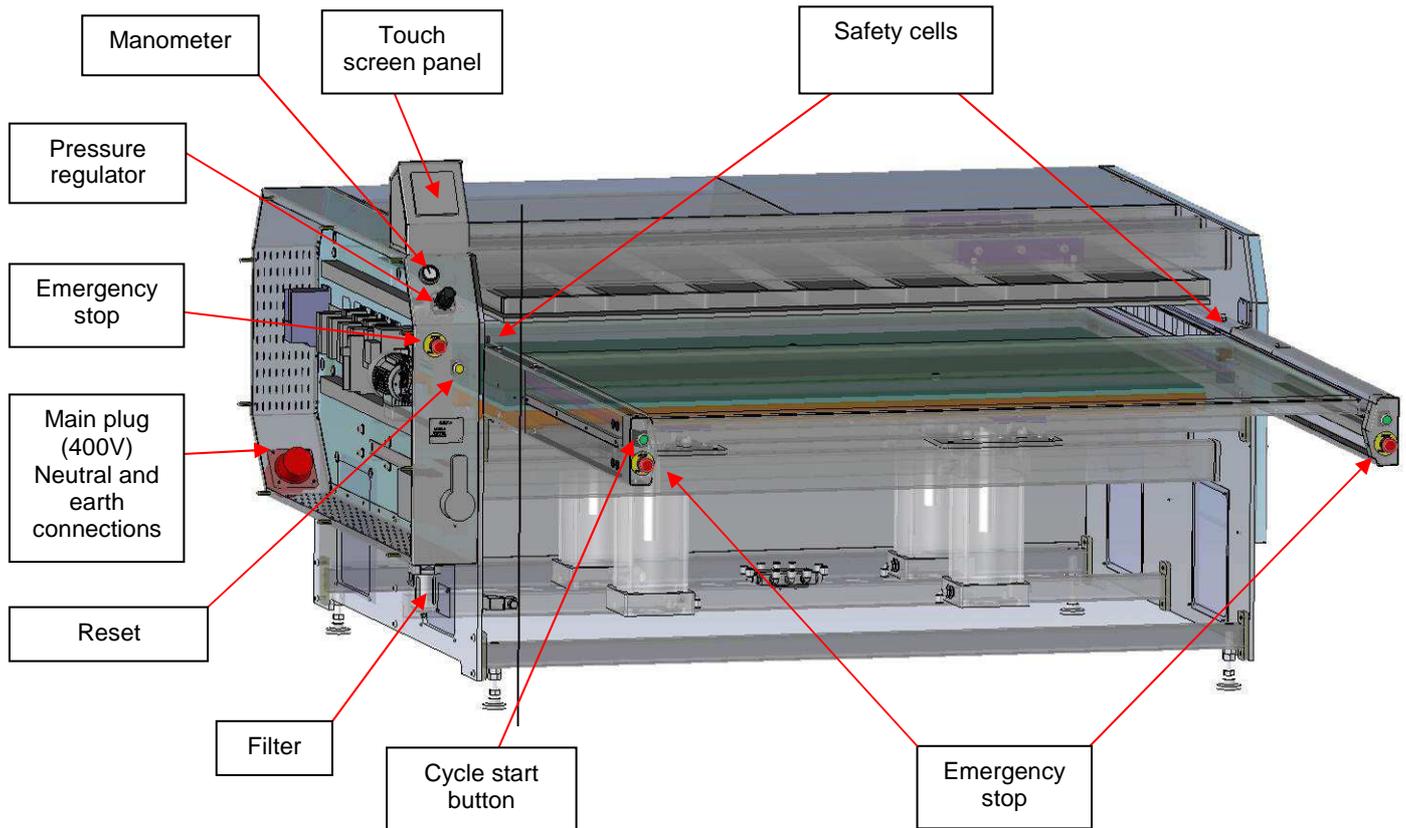
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N° de Série

Année de Fab.



III. OVERVIEW



This heat press machine is standard to the labour laws to ensure the security of the user. It is designed to ensure the production with total reliability.

This press was designed for an operator working in front of the machine.

IV. USING THE MACHINE

The press SUBLIMAX 1812 was designed for the application of transfers of all grades. This equipment has been tested in our workshops to get a one year warranty against manufacturing defects.

Power settings, mechanical and pneumatic submitted by our technicians in the workshop as well as the security established on the machine should never be changed. Otherwise, the SEFA ® company will deny all responsibility on potential problems associated with said machine.

Before starting any pressing operation, it is recommended that you read the safety instructions and the instructions for use.

The press should be used by an authorized person and having been informed of the risks that may be caused by improper use of the equipment

1. SAFETY

THIS EQUIPMENT IS DESIGNED FOR SINGLE USE ONLY

USE BY QUALIFIED STAFF ONLY

International Symbols	
 OFF	 HOT SURFACE
 ON	 ELECTROCUTION RISK
 DANGER, WARNING	

You will find most of these symbols on the SEFA equipment.

- Important point for security :
-  *Don't touch the hot parts of the equipment while in use.*
 -  *During handling action, ensure the operator does not take any risk in terms of burns, electrocution or other.*
 -  *Proceed with a daily inspection of the machine before starting the production .*
 -  *Make sure nobody is around or near the machine before you start it up.*
 -  *If the machine does not work properly, shut down immediately all energy supplies and search for the cause by using the book's « Maintenance » chapter.*

Security devices installed on the machine



***The protections and security devices should not be modified.
They should be restored in case of removal for maintenance work.
They must be maintained in good running order during the production.***

The press SUBLIMAX 1812 is equipped with security systems preventing from pinching risk.
The main security devices are:

The emergency off

Located on the left side of the console of the machine as well as on both arms by pressing one of them the machine is switched off and the cold plate goes down.

The photocell

Situated to the front of the heating plate, it ensures that the operator is remote from the heating plate during the rise of the pressing plate.

Checking the operation of the safety device :

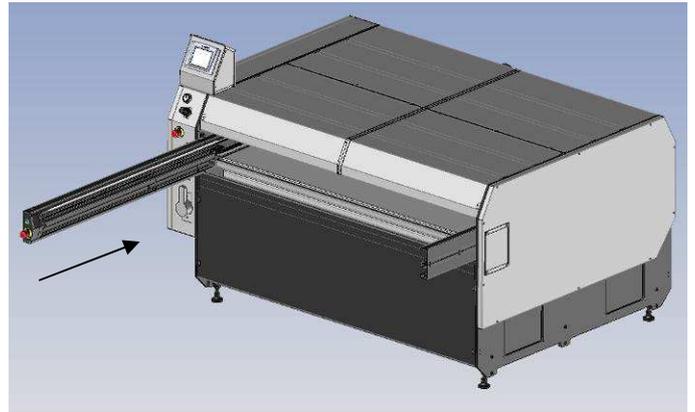
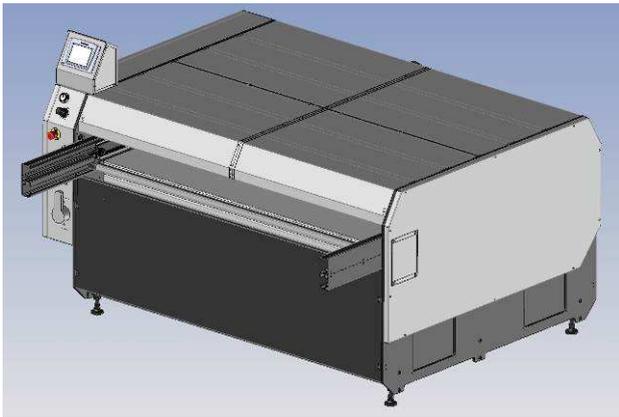
- Users have to verify the proper functioning of the various safety devices daily.

2. INSTALLATION

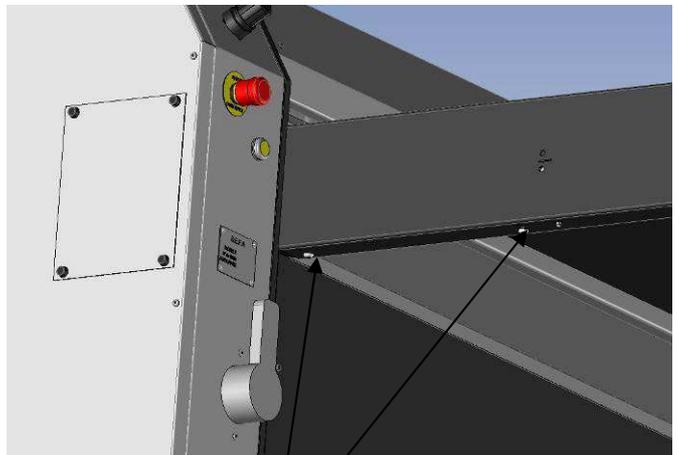
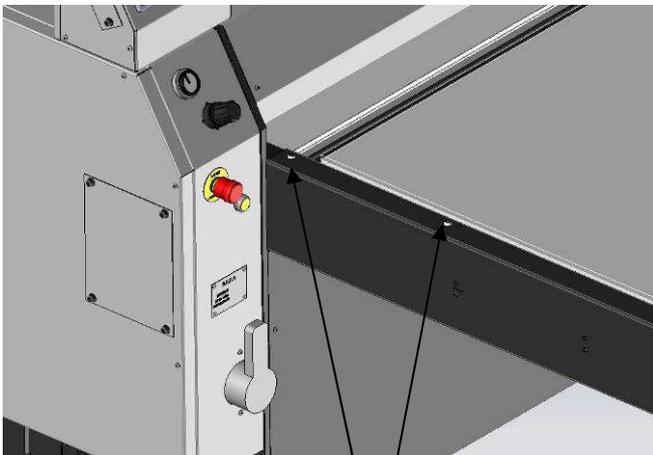
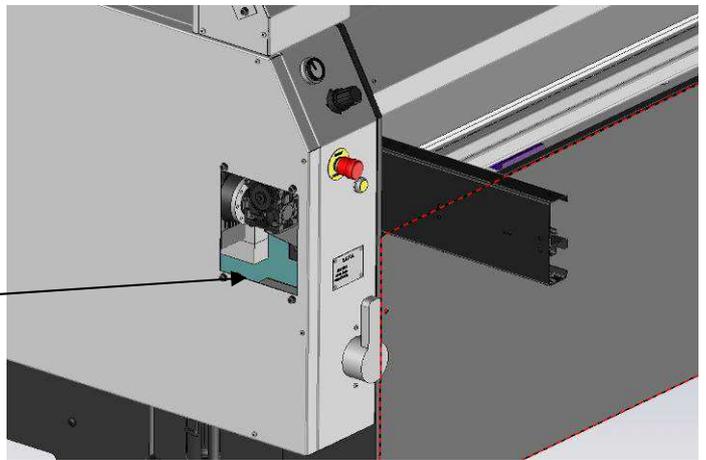
USE BY QUALIFIED STAFF ONLY

- Lower the machine from its packaging with a forklift
- Place the machine on its operating location.
- Remove all items related to packaging: paper, cardboard, plastic film, wood, etc. ...
- Put the machine level (if necessary) by turning the adjustable feet in height.
- Mount the machine as shown below

A. Mounting arm assembly left

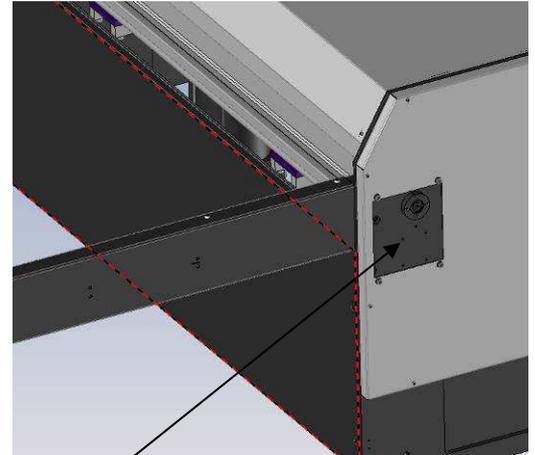
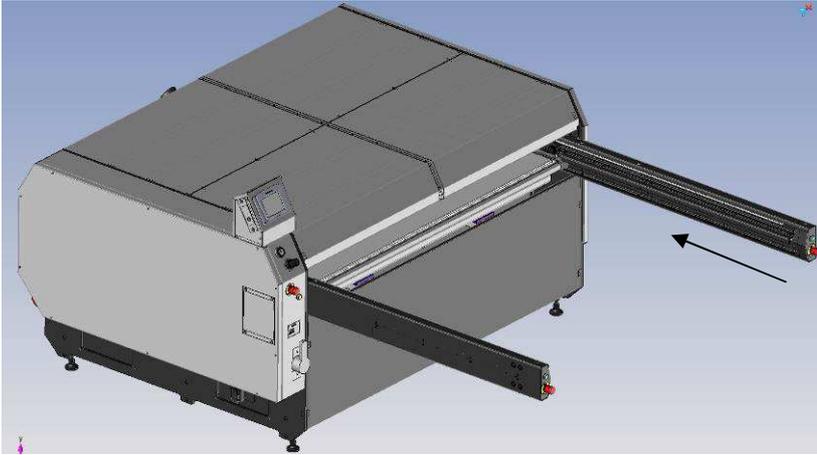


Handing over the hatch for the arm support cables within the enclosure

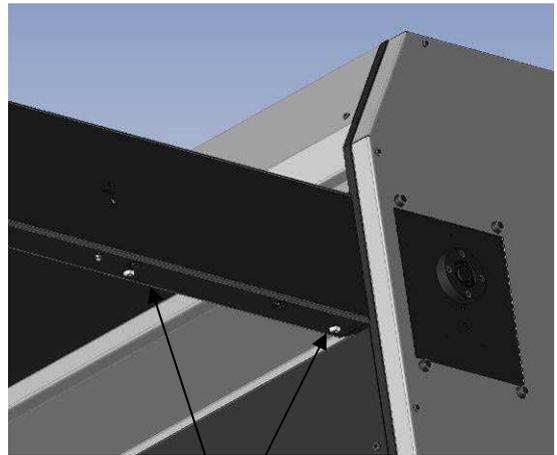
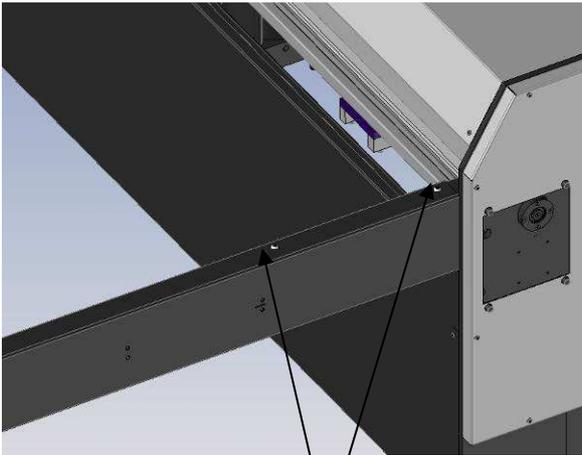


Screw and tighten the 4 screws M8-12 curved

B. Mounting arm assembly right

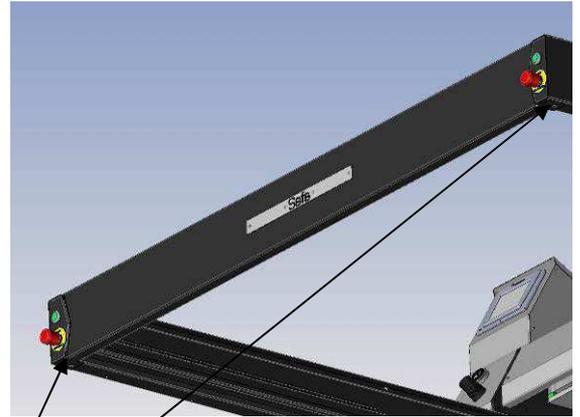
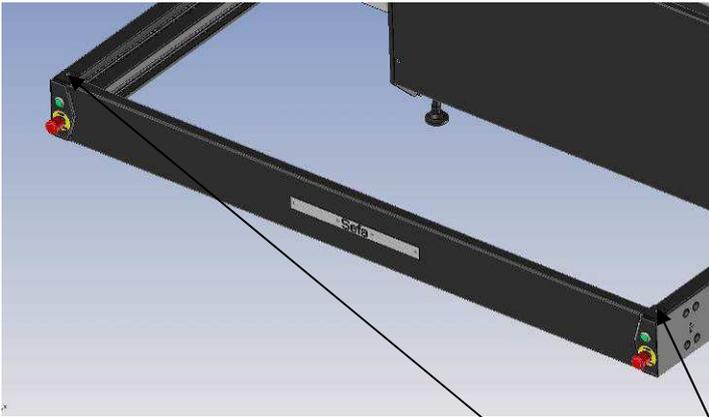


Handing over the door to accompany the cables to the arm inside the cap.



Screw and tighten the 4 screws M8-12 curved

C. Mounting the support bar



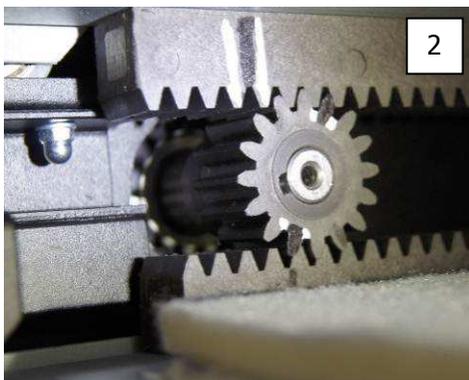
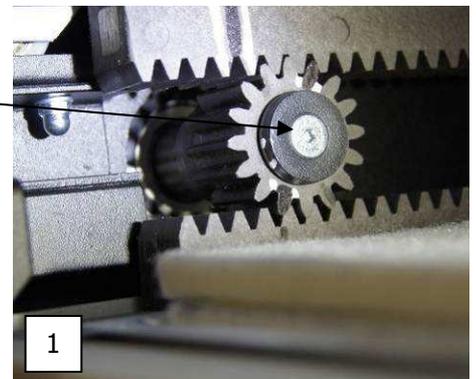
Screw and tighten the 4 screws curved M5-12



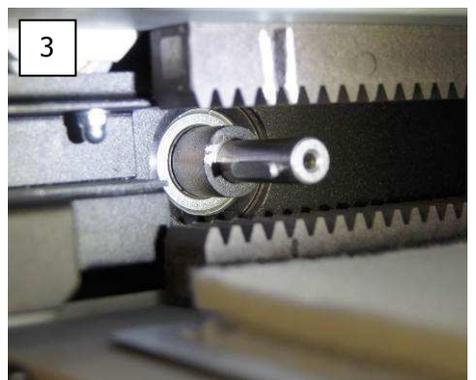
D. Removing motor pinion



Unscrew and remove the screw TFM5-12 + Washer.



Remove the motor pinion pulling. If necessary, relieve the weight of the upper frame by slightly raising.

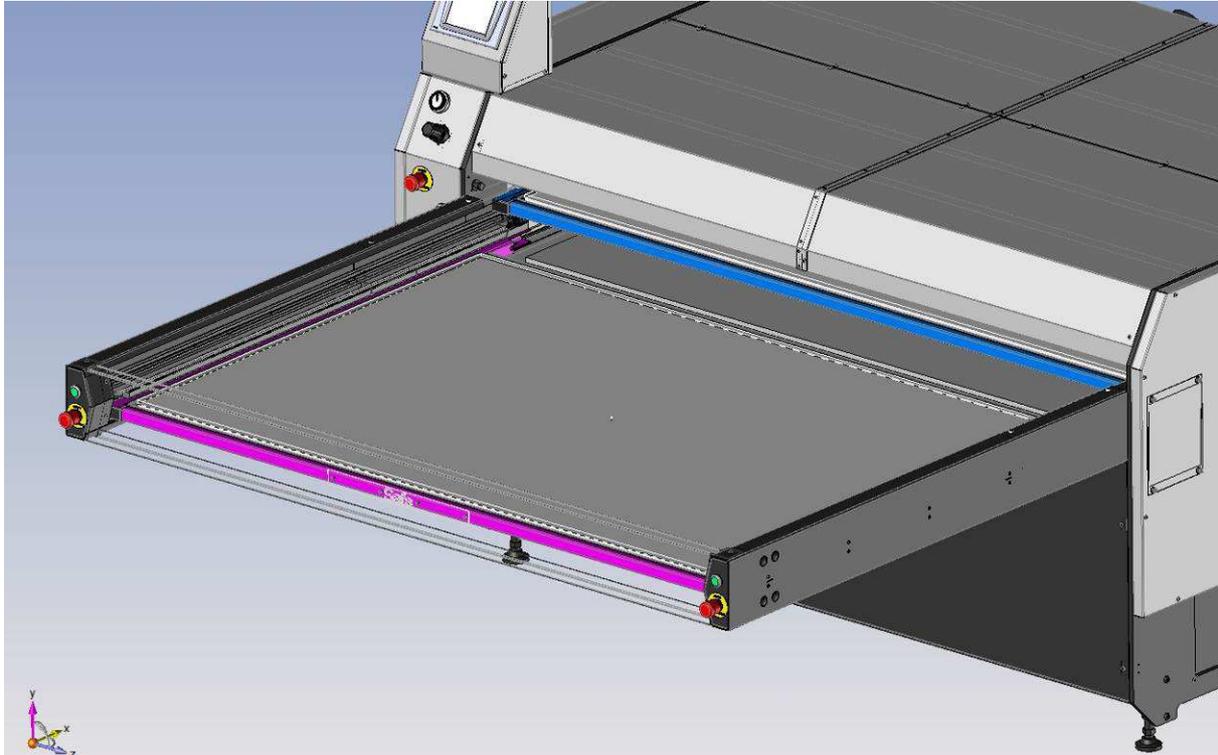


The frames are now free to move. Manually move the frame over the entire course to ensure that they slide properly.

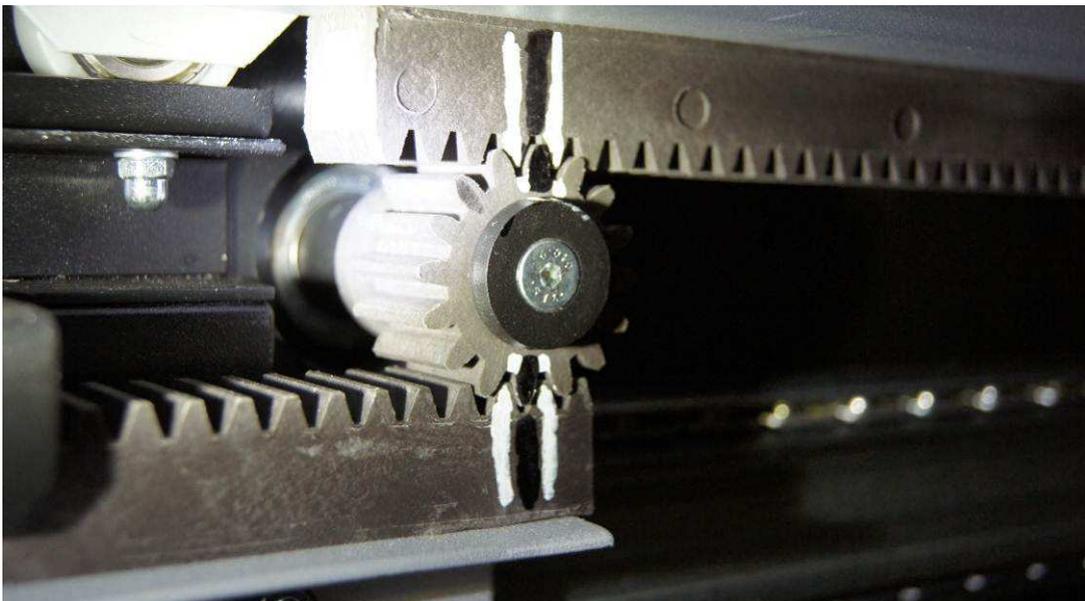
E. Reassembly motor pinion

Position

The upper rear frame (blue in the figure)
And the lower frame at the front (in pink on the drawing)

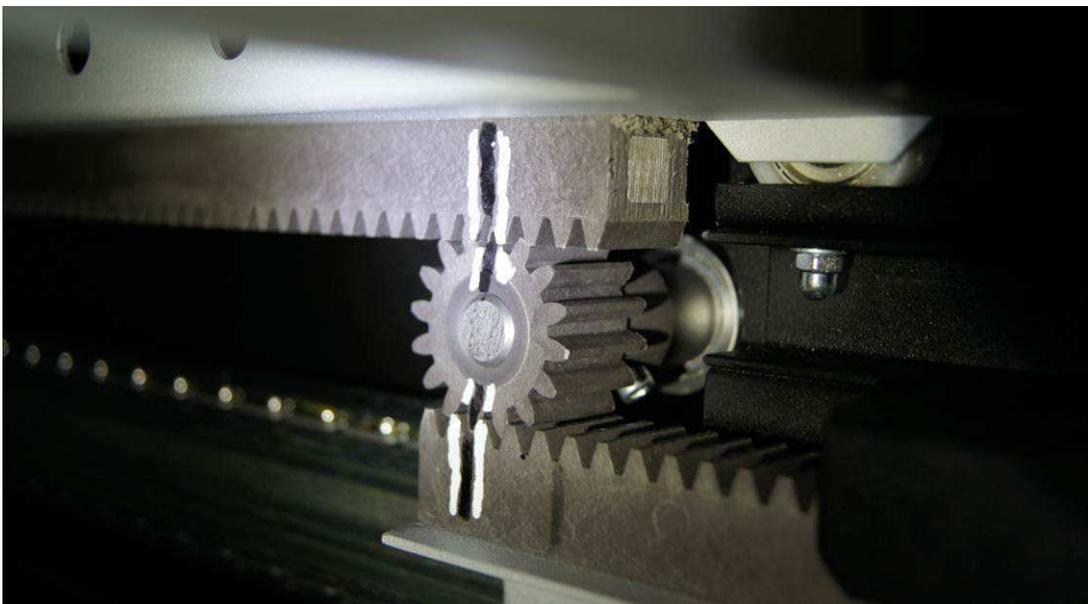
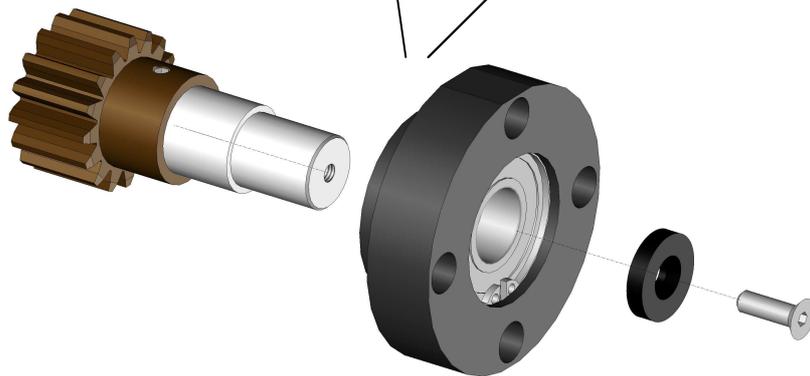
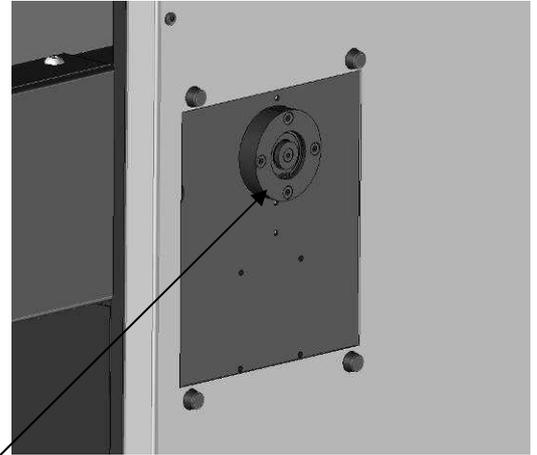
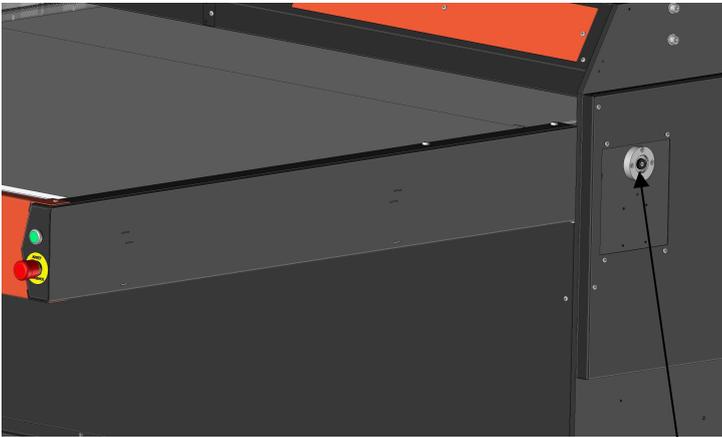


Reassemble the motor pinion ensuring continuity pins made on both the pinion and the rack. If necessary, relieve the weight of the upper frame by lifting slightly.
Then screw and tighten the screw TFM5-12 + washer (removed in step 4).



F. Mounting free pinion set

Reassemble the free pinion set through the right door. Ensure continuity marks made on both the pinion and rack.
And screw the screw TF M5-16.



G. Mounting extraction fan



Place the fan on the flange and screw the 3 screws curved M5-12

Connect the ventilator plug

HAVING DONE CORRECTLY THE ASSEMBLY AND POSITIONING OF EQUIPMENT ON THE PLACE OF OPERATIONS :

- Electrically connect the press (380 Volt + Neutral + Earth / 50 or 60 Hertz). The red jack is located on the left side of the machine.
- Connect pneumatic press your compressed air system (3 mini bar, 10 bar). Connect the air filter on the controller (left side of the machine).

V. DESCRIPTION OF THE OPERATING CYCLE

1. COMPLETE CYCLE

1. Turn the machine by flipping the power switch located on the left side of the chassis. Press the push button reset (screen lights up and displays the home page)
2. Press "control" to enter the temperature and time setting.
3. To start a cycle, carts must always lie in the extreme position, if that is the case, see SETTING MACHINE.
4. Set the temperature on the touch screen (to define the following type of application),
See § the TEMPERATURE ADJUSTMENT page 18
5. Set time pressing on the touch screen (to be defined for the type of application)
See § SETTING TIME page 18
6. Adjust the pressure by the regulator on the front of the electrical box (reading on the pressure gauge)
7. Place the item to be marked on the bottom plate,
8. Adjust the transfer sheet,
9. Press the "Cycle Start" and hold off the truck green button : the carriages move,
10. The cold plate rises and presses the heating, activating the timer board.
11. At the end of the timer countdown, cold plate descends down position.
12. Repeat the process from 6 if the settings do not change (except No. 3)

During the cycle: On the touch screen "**Stop pressing**" allows interrupt pressing and lowers the pressure plate

Pressing the button "**cycle start**" stops the pressing, lowers the pressure plate and reverse the tray carts.

2. OPERATING WITH THE TOUCH SCREEN



Summary	Dimensions of the 4 areas
	<p>1810</p> <p>1520</p> <p>1250</p> <p>970</p> <p>Zone 4: 970x370mm</p> <p>Zone 3</p> <p>Zone 2</p> <p>Zone 1</p> <p>1210</p> <p>930</p> <p>650</p> <p>370</p>

Control

2

Pressing time adjustment

controle

999 zone 1 -999

999 zone 2 -999

999 zone 3 -999

999 zone 4 -999

arret pressage echange chariot retour

1

T° adjustment area 1

T° adjustment area 2

T° adjustment area 3

T° adjustment area 4

interrupt the pressing cycle without moving decks

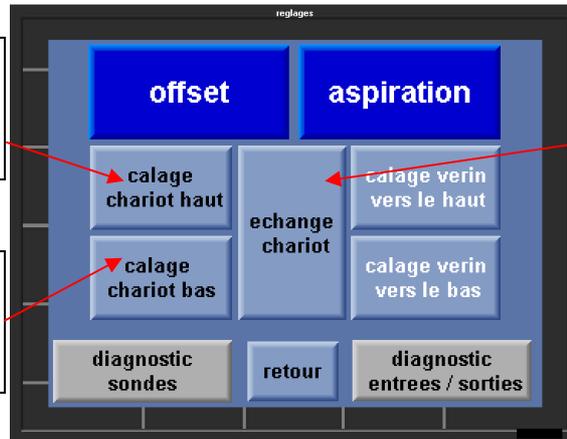
During pressing: interrupts the press and trade decks.
Off pressing: exchange decks.

Settings

Allows to correctly reposition the deck up under the heating plate

3

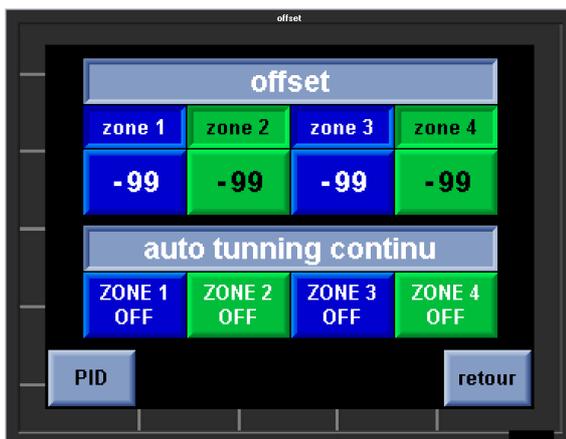
Allows to correctly reposition the deck down under the heating plate



During the pressing : stops the pressing cycle and switches decks.

Off pressing : switches decks.

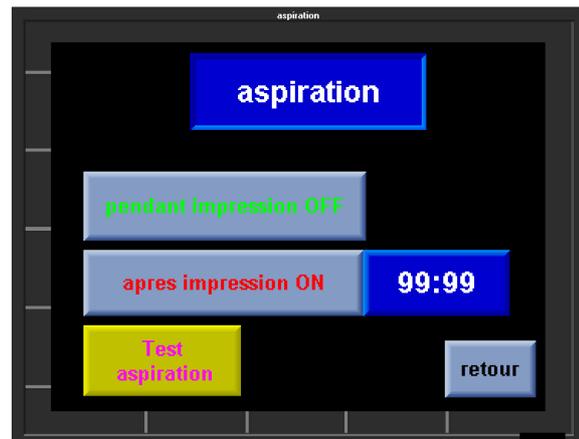
Offset



Allows the offset of each zone.

Aspiration

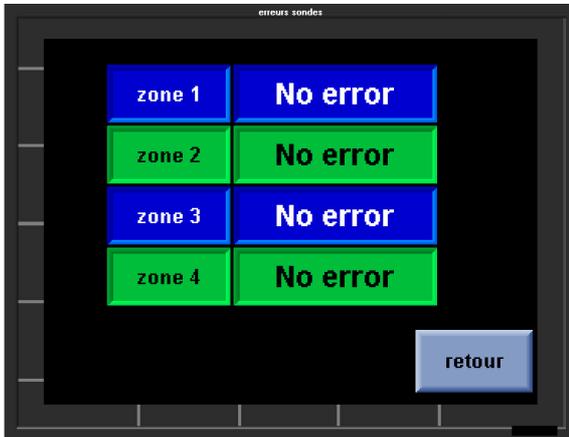
4



Allows the aspiration motor test and adjust its operation during the cycle

Diagnostics

Probe diagnostic

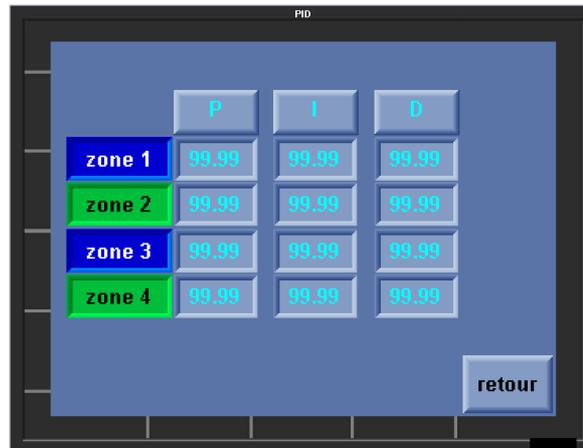


Indicates the faulty probe and the type of error

I/O diagnostic



Indicates the status of sensors and actuators



Shows the parameters used to control each area

3. PRESS SETTINGS

USE BY QUALIFIED STAFF ONLY

A. TEMPERATURE SETTING

Set the temperature for each area, refer to the operation of the touch screen, § Controls, note 1
 Pressing the control button brings up the following temperature display :



Nota : This screen is the same for all digital input.

B. TIME SETTING

Set the pressing time, refer to the operation of the touch screen, § Controls, note 2
 Pressing the control key pressing time that appear identical to that of the temperature setting screen.

4. PROPPING THE PRESS FOR START CYCLE CONFIGURATION

Refer to the operation of the touchscreen § Settings, note 3
 When first unpacking or after pressing one of the safety devices, the following points need to be validated before a restart cycle :

Unlock 3 emergency stop buttons (if required) :

If an emergency stop button is pressed, you must unlock it by turning in the clockwise direction.

Reset button :

After pressing one of the safety devices, the machine is in "default position", it must be reset by pressing the (bright yellow) reset button.

Prop the press :

To start a cycle, the decks must be in extreme position. On the touch screen, adjust the buttons "deck up" and "deck down" for correctly reposition decks.

Nota : Return-is then made at a slow speed to avoid the risk of damage to the machine.

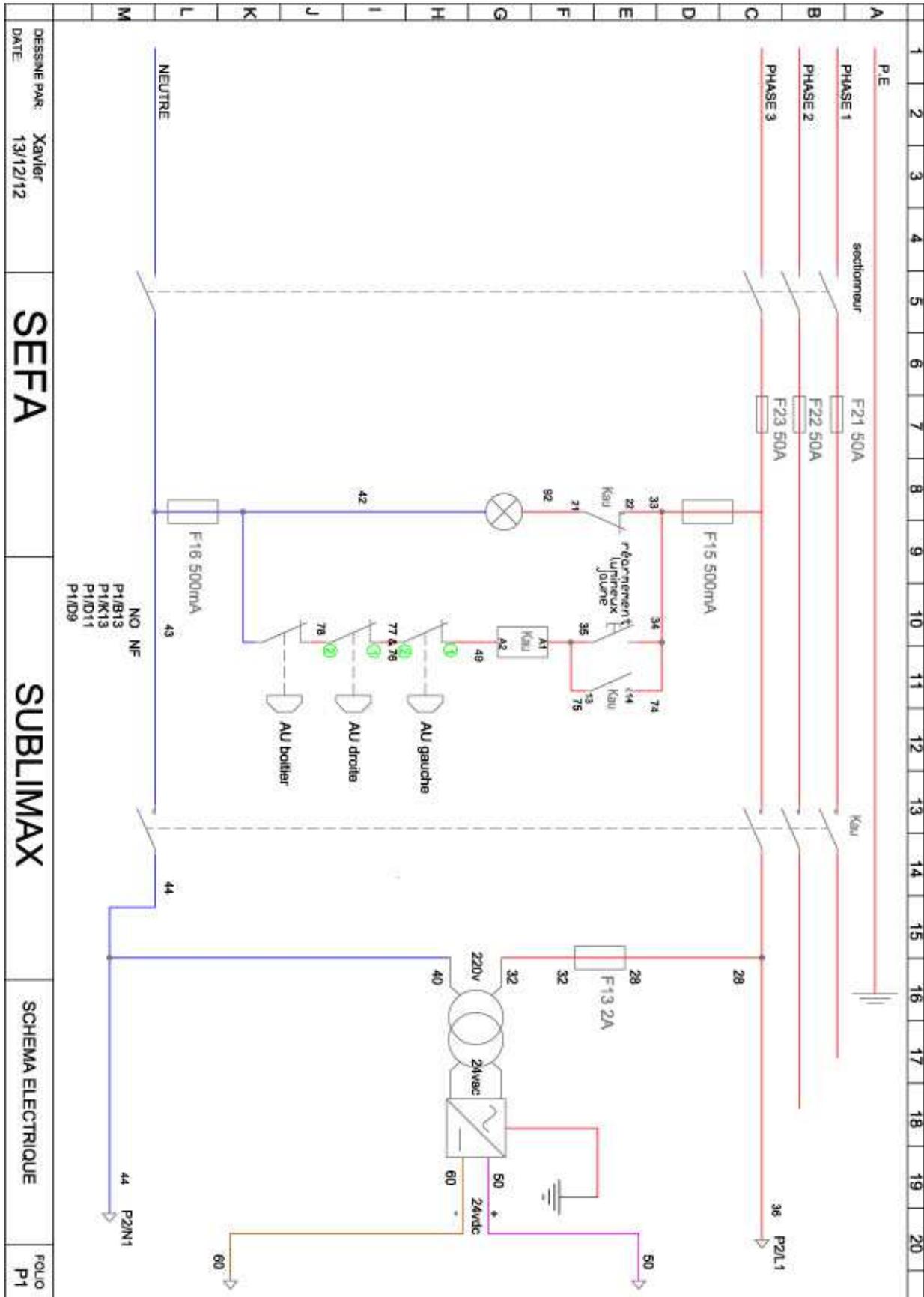
If these three points are validated, the machine is now in "start cycle" configuration.

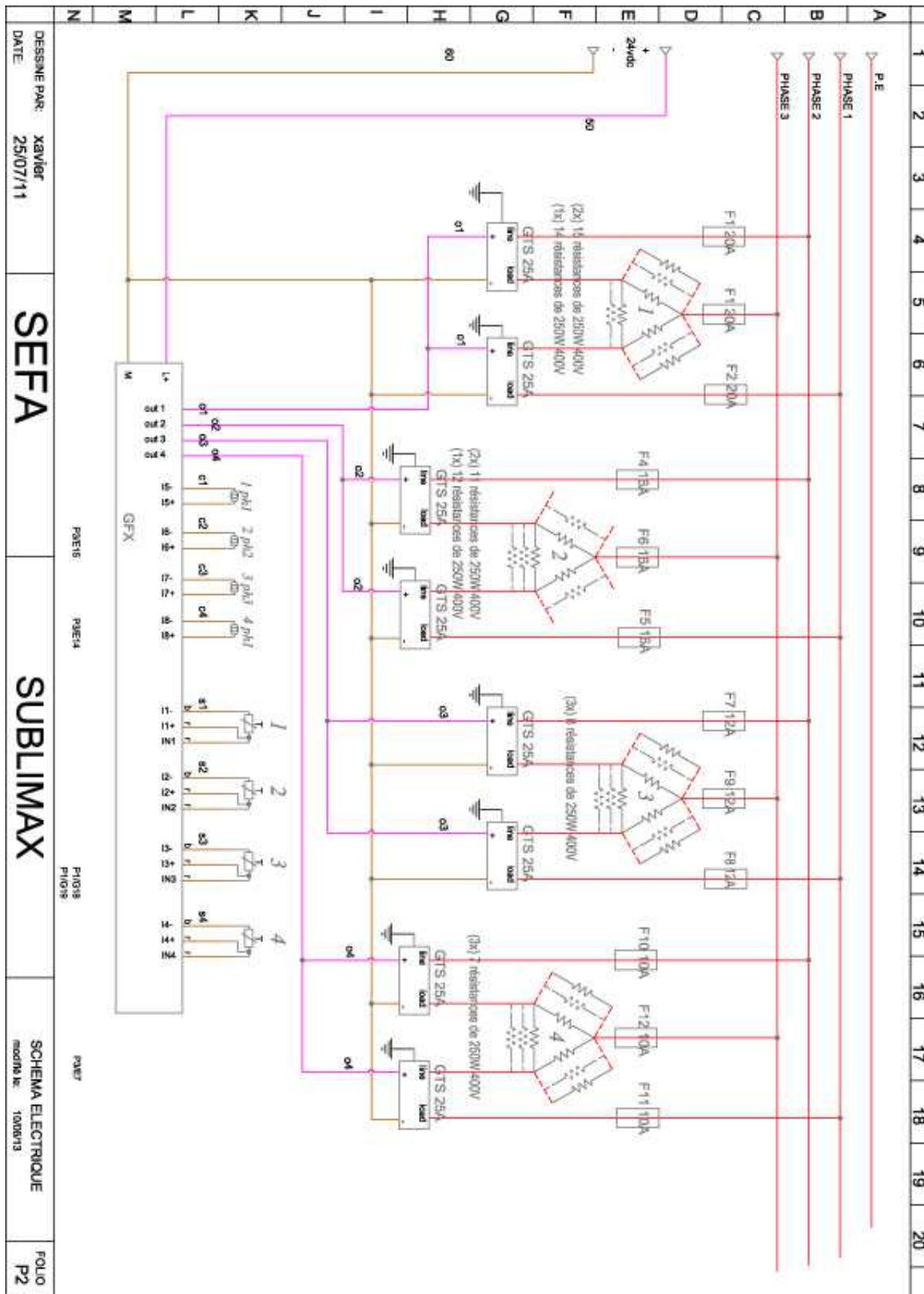
5. ASPIRATION TIMER SETTING

Refer to the operation of the touch screen, § Aspiration, note 4.

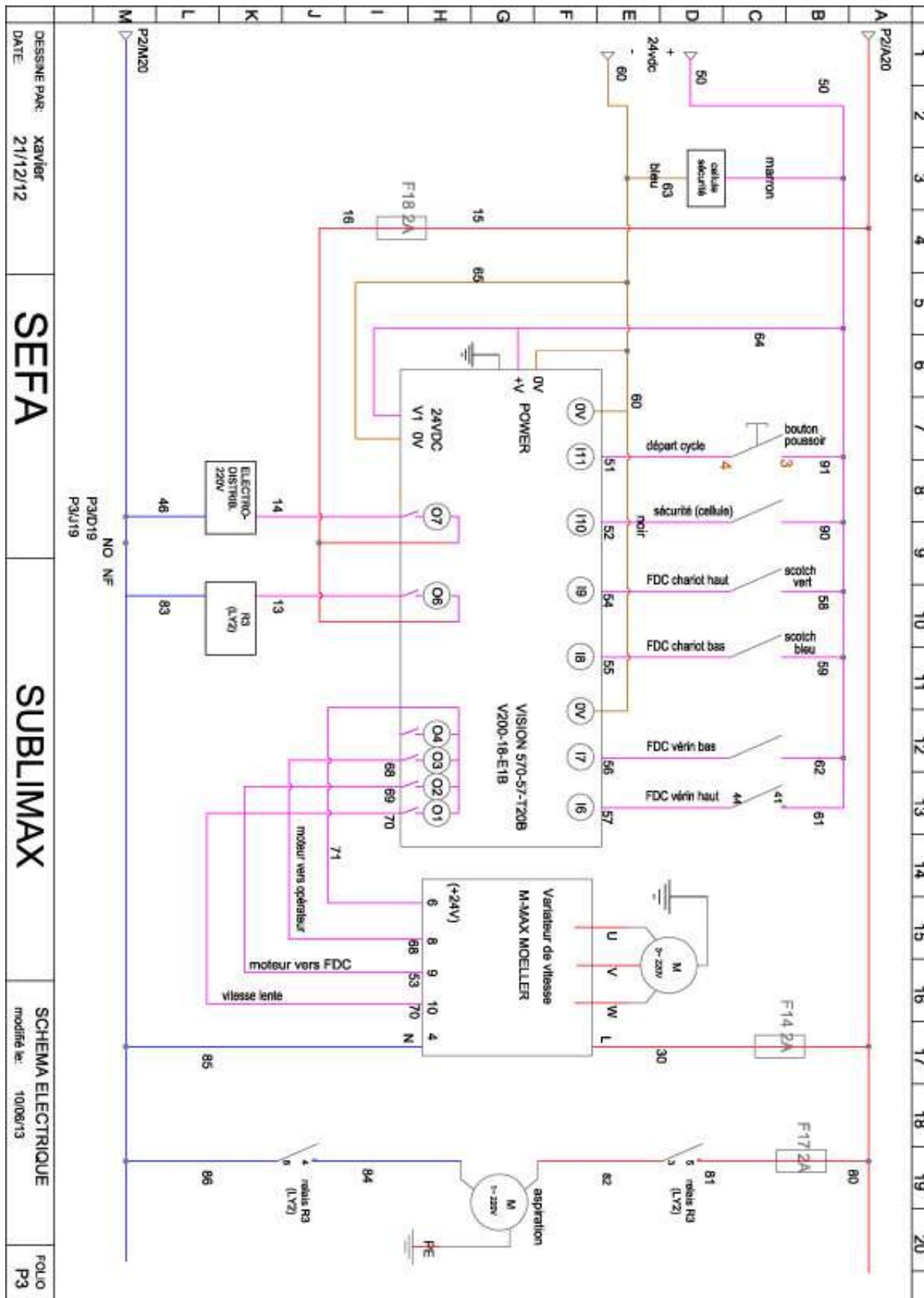
The aspiration can be activated during the pressing cycle and / or for a time selected at the end of pressing.

VI. ELECTRIC DIAGRAM

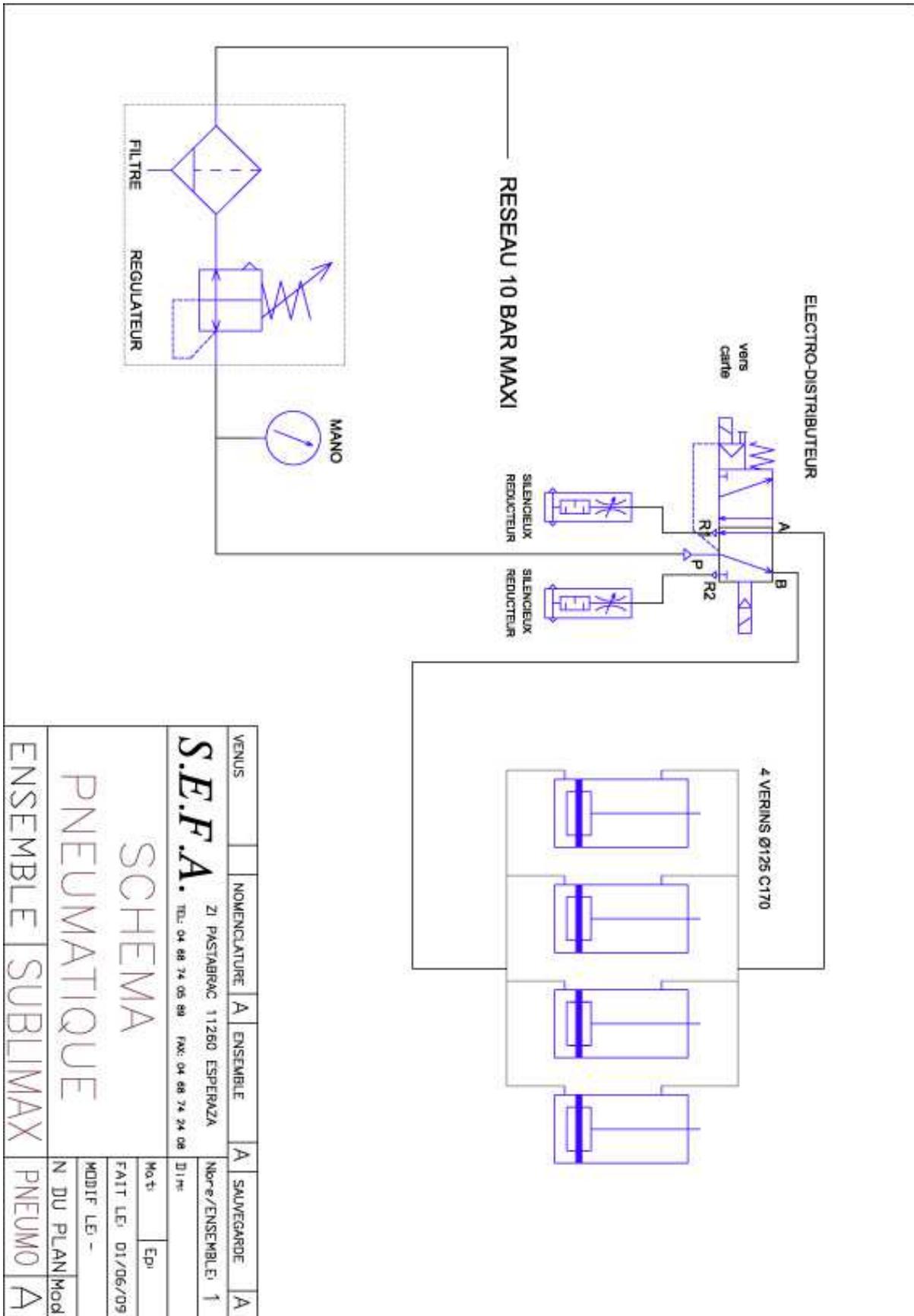




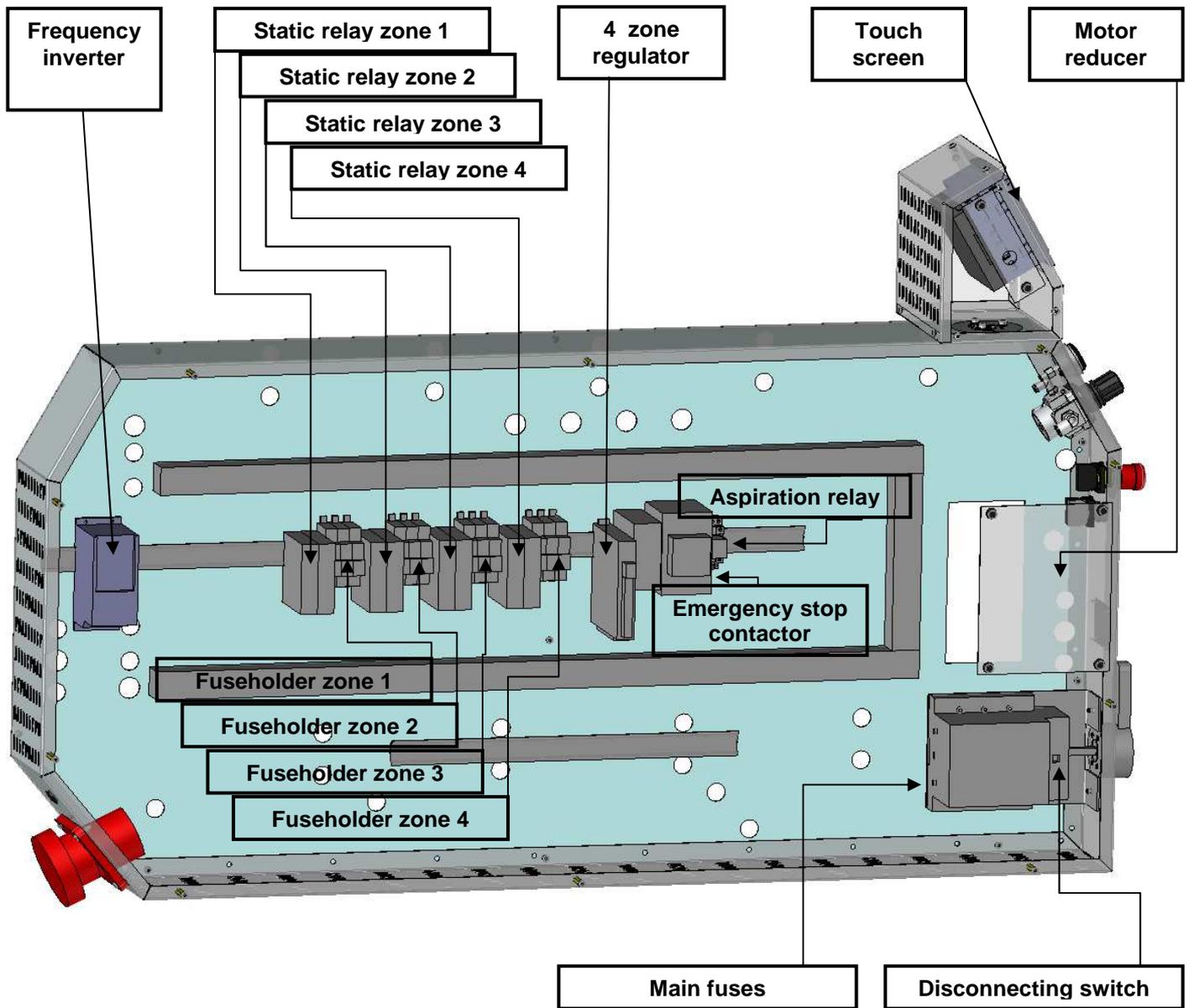
DESSINE PAR: **Xavier**
 DATE: **25/07/11**



VII. PNEUMATIC DIAGRAM



VIII. ELECTRICAL PANEL



IX. MAINTENANCE

USE BY QUALIFIED STAFF ONLY

**ANY SERVICING INTERVENTION MUST BE DONE WHEN THE MACHINE IS OFF AND LOCKED
(ELECTRIC AND PNEUMATIC ENERGIES UNPLUGGED)**

1. SERVICING

Heat transfer press SEFA ® require little maintenance. To ensure proper operation, follow the preventive guidelines listed below.

Do not heat objects that could damage or even cut the silicon rubber or damaging the Teflon surface

- DAILY :** Check the air intake on the right side, the purge filter if there is too much condensation.
- MONTHLY :** Check and lubricate the axes if necessary.
- ACCORDING TO THE USE :** Change felt every 6 months.

2. PARTS SUBJECTED TO WEAR AND TEAR

For all orders: specify the reference, description and the quantity you want.

Reference	Description	Quantity
FEU-006	NOMEX FELT Ep. 9mm width 2M 1600gr/M ²	sold by ML
FEU-030	NOMEX FELT Ep. 6mm width 2M 4000gr/M ²	sold by ML
TOI-001	NOMEX FABRIC 230gr/M ² width 1,65M (ecru color)	sold by ML
SON-PT100	PT100 CONTACT PROBE special Sublimax (fixing eyelet)	1

3. QUICK REPAIR ADVICES

**ANY SERVICING INTERVENTION MUST BE DONE WHEN THE MACHINE IS OFF AND LOCKED
(ELECTRIC AND PNEUMATIC ENERGIES UNPLUGGED)**

SYMPTOMS	POSSIBLE BREAKDOWNS	REPAIRS
The machine will not switch on	<ul style="list-style-type: none"> ➤ The plug is not connected ➤ The switch is not on ➤ Fuse out of order ➤ Fuse board out of order ➤ There is a fault in the display unit 	<ul style="list-style-type: none"> ➤ Check the mains and see if the machine is connected. ➤ Put the main On/Off switch on 1. ➤ Check the fuses in the fuse-holders located on the bottom left of the control board (80mAT) ➤ Check that the cabling is connected. In that case, the display unit is out of order
The plate does not heat	<ul style="list-style-type: none"> ➤ Faulty resistances ➤ Problem with static relay ➤ Temperature set too low 	<ul style="list-style-type: none"> ➤ Check the connections and the state of the electrical wiring. Contact your distributor for disassembling the heating plate. ➤ Check connections and the state of electrical wiring. Contact your distributor. ➤ In order to change this value, see Chapter "Settings"
The plate is overheating	<ul style="list-style-type: none"> ➤ Problem with the probe or the mainboard 	<ul style="list-style-type: none"> ➤ See the messages displayed on the touch screen. Contact your distributor.
The timer does not work	<ul style="list-style-type: none"> ➤ The « plate up » magnetic detector has not been actuated or is faulty 	<ul style="list-style-type: none"> ➤ Check state on touch screen « I/O ». Check connections.
The cold plate does not rise	<ul style="list-style-type: none"> ➤ Leak on the cylinders ➤ The electro-distributor is faulty ➤ Compressed air pressure is insufficient 	<ul style="list-style-type: none"> ➤ Check its state on the « diagnostic » screen. Contact your distributor. ➤ Check connections. Contact your distributor for changing if it's necessary. ➤ Check if the pressure on your network is upper than 2 bars.
The cycle does not start. The carriages do not move.	<ul style="list-style-type: none"> ➤ The carriages are not set in correct position 	<ul style="list-style-type: none"> ➤ Press the setting button until the carriages come to a complete standstill.

4. MAINTENANCE LOG

The control and maintenance operations indicated in this table must be done regularly so as to check the functioning state and the reliability of the press.

Date	Number of hours	Pressure control	Air filter control	Air Cylinder control	Rubber state	Resistors control	Changed parts	Observations

In order to facilitate the filling of the table, it may be useful to use the following code:
 C: Control N: Clean R: Replace