Model C410

METAL PLATE EMBOSSER

Matica SYSTEM

OPERATOR MANUAL

Revision 2.04

CE

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Chapter 1 – Introduction

1.1 Warnings

Respect these warnings and follow the indications labeled on the system.
Power the system through the electrical power supply indicated on the related label.
Connect the system to plugs-in provided with a grounding device. Avoid using plugs-in placed on the same circuit in connection with machines starting up and stopping periodically.
Take care of the power supply cable, in order to avoid damaging or wearing out.
The system has never to be installed near heat or cooling sources.
When the cover is open the system automatically stops all the motors; this kind of safety is useful when cleanings and changing of consumables have to be performed.
Only perform the adjustments reported in this manual: a wrong adjustment may cause serious damages.

1.2 Specifications

Speed	350 plates/hour (40 chars/plate).
Plate Format	Width from 30 mm (1.18”) to 120 mm (4.72”) Height from 20 mm (0.78”) to 90 mm (3.54”). Thickness from 0.4 mm (0.015”) to 0.9 mm (0.035”)
Input Hopper Capacity	350 plates/thickness 0.5 mm (0.019”)
Output Hopper (FIFO) Capacity	Height 130 mm (5.11”)
Size	Width: 91 cm (35.8”) Depth: 60 cm (23.6”) Height: 42 cm (16.5”)
Weight	70 Kg (155 lbs)
Communication Interface	RS232 serial port
Electrical Requirements	110V, 120V, 220V, 240V; 50/60 Hz
Operational Environment	Temperature: 13/35°C (55/95°F) Humidity: 20% to 80% non-condensing

1.3 Choice of site

Follow the instructions reported below to choose the site where you want to place the C410 embosser and to remove the package.

Before starting the installation, choose a wide and functional area with the following requirements:

- A level and rigid surface. Yielding surfaces, like pre-manufactured platforms or floors covered with a fitted carpet, don't guarantee the right alignment of the modules making up the C410 embosser.
- A good accessibility. Leave free spaces all around the machinery, in order to allow access to inspection and maintenance areas, and a right ventilation of the system. Also leave at least one meter in front of the machine, so that the operator using the front panel has got a proper working area.
- Favorable environment conditions. Install the C410 embosser in a cool and dry place; avoid too cold or too warm temperatures; keep the machinery far from humidity, dust and smoke. Don't directly expose to heat or sunlight. No electromagnetic interferences.
- Proper electrical power supply. Connect the system and its devices with cables fit to your electrical power supply net. When using extensions or multiple plugs-in, be sure that the total absorption doesn't exceed the maximum allowed value.

1.4 Removal of the package

The C410 system is delivered into a wooden case.
It's necessary to pay attention to the infrastructures' size (doors, hoists, etc.) through witch the machine must be passed to be definitively settled in its site.

To dismantle the case, carry out the following procedure:

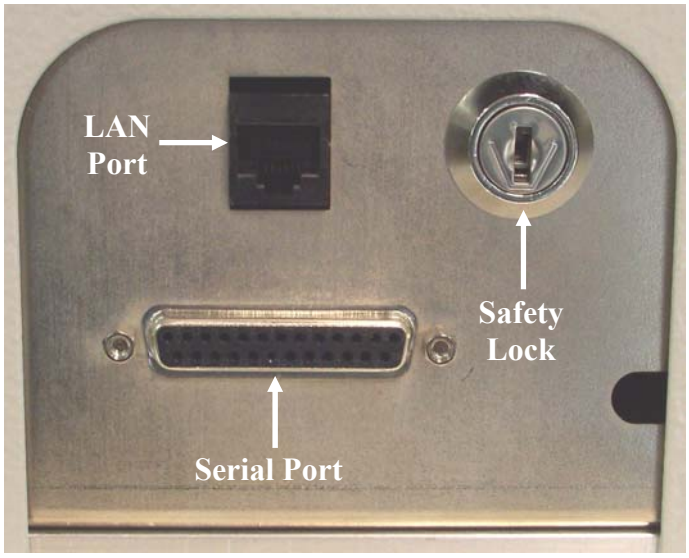
- Unscrew the side upper screws to remove the top cover.
- Remove the accessories: cables, keyboard, documentation, etc.
- Remove the top polyurethane shell.
- Unscrew the bottom screws to remove the side cover.
- Extract the machine or the support from the bottom polyurethane shell (using at least four persons).
- Remove the middle polyurethane shell and the film protection.

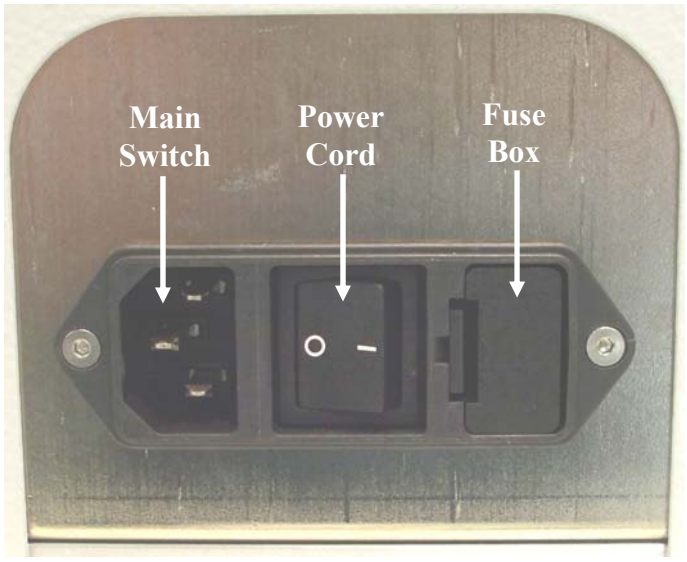
It is advisable to keep the box, the pallet and the protective materials for possible reuse.

In addiction to the machine, the following components are also packed inside: Power cord, Serial cable, Keyboard, CD containing MatiCard® Card Design Software, Operator Manual and other documentations.

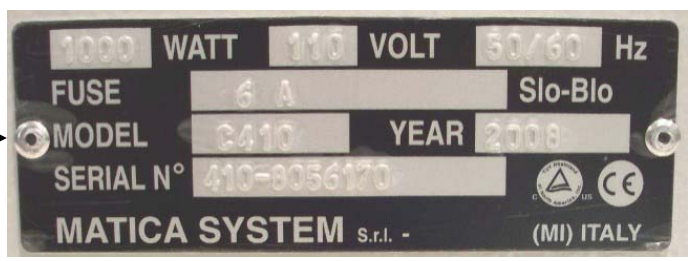
1.5 Installation

Now you have to connect the power cord and the interface cable on the back side of the system. On the same side you'll find the machine label containing the specifications of the system; verify that the voltage marked on the label corresponds with your country voltage supply.





Label →

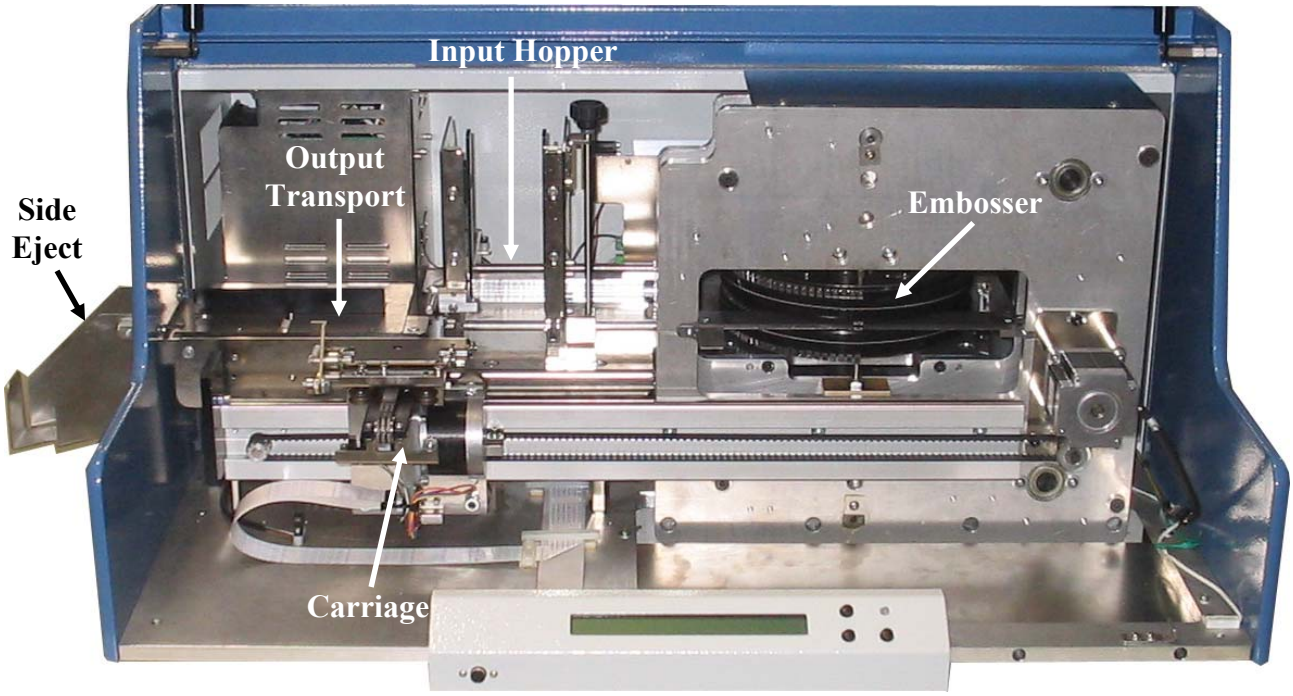


Chapter 2 – Start up

2.1 Configuration

The C410 system is provided with the following features:

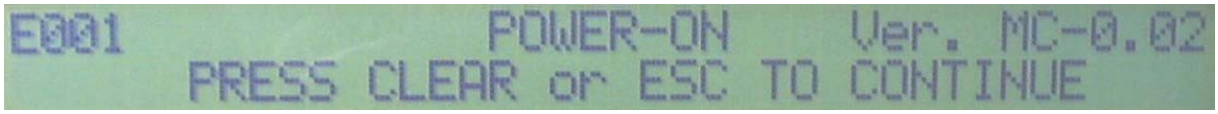
- Input Hopper
- Carriage Module
- Embosser Module
- Side Eject (standard) or FIFO Output Hopper (optional)



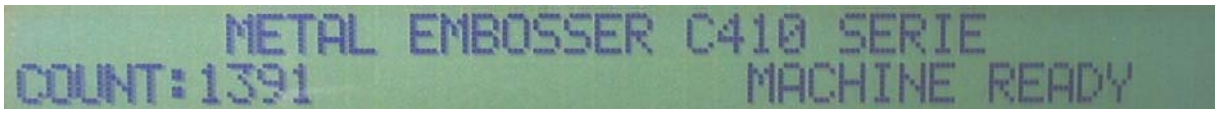
Refer to paragraph 2.4 for details.

2.2 Power On

Power on the machine switching the main switch in the **I** position and the LCD display will show:



Press CLEAR on the console (or ESC on the keyboard) to restore the machine and the LCD display will show:



Now the system is ready to work.

2.3 Console

The C410 console is made by:

1. LCD display (2 lines per 40 characters)

2. Three function keys:
   - key CLEAR to clear the error condition
   - key PAUSE to enter in pause mode
   - key SET to personalize the tag in pause mode one module per time.

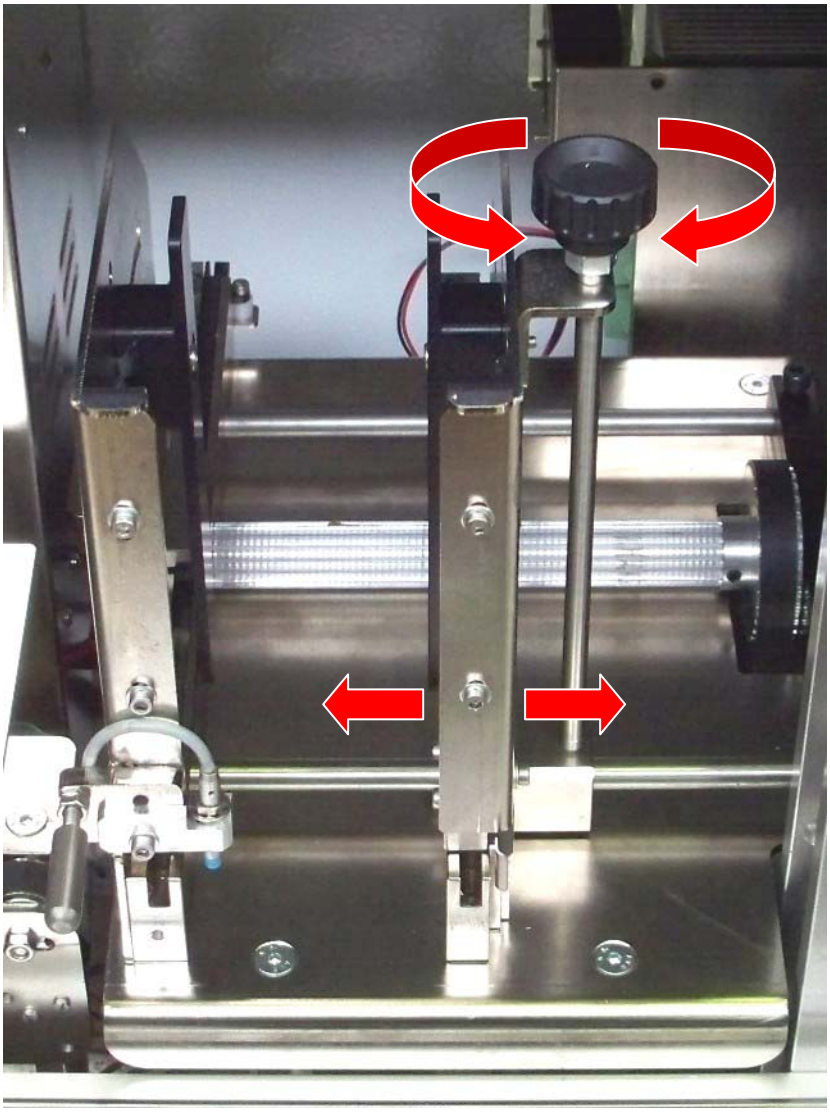
Pressing the PAUSE key the RED LED will blink. Now use the CLEAR key to have a “Step to Step” motor motion (only in the embosser module). When finished, press the PAUSE key again.

3. Two colors LED with the following meaning:
   - GREEN color  : when the machine is READY
   - RED color  :when standing the machine is BUSY
     when blinking the machine is in ALARM

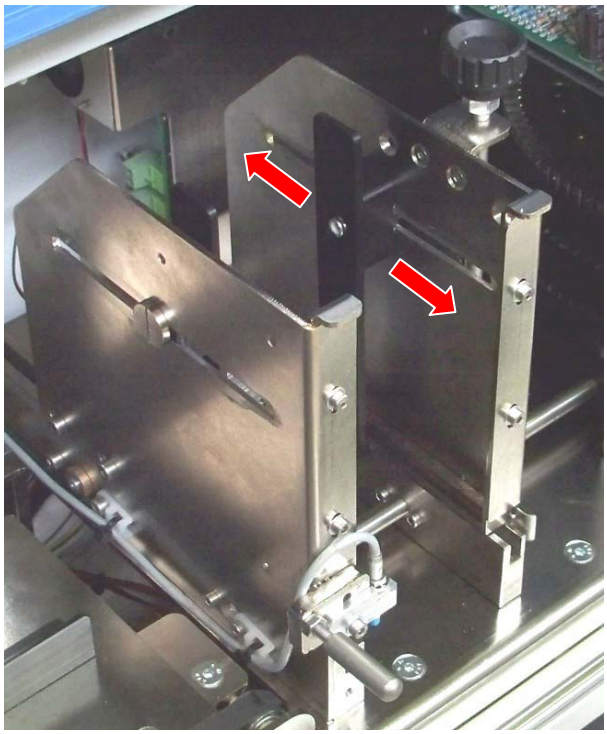
4. One connector for the keyboard 

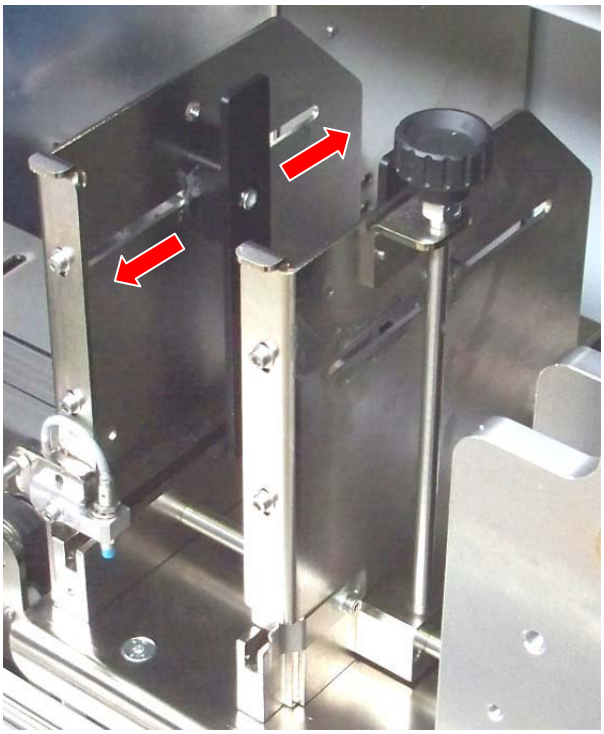
2.4 Working Cycle

To perform a working cycle the Input Hopper must be adjusted to the desired plate size.
To adjust the Hopper in order to fit the plate width, loosen the pin screw knob and move the Hopper right shoulder to the left or to the right, leaving a tolerance of about 1 mm; then tighten the pin screw knob.

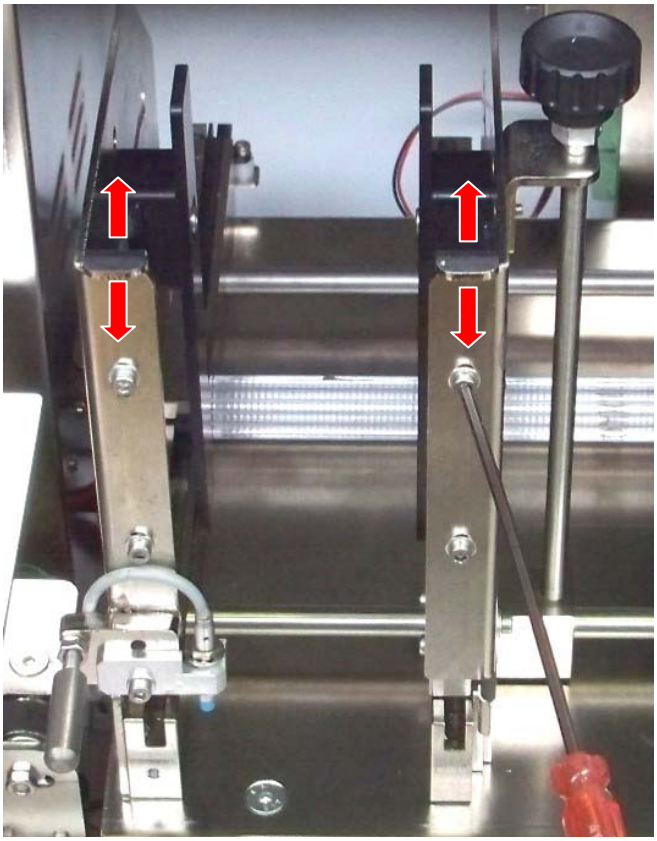


To adjust the Hopper in order to fit the plate depth, move forward or backward the two Hopper rear guides leaving a tolerance of about 1 mm.

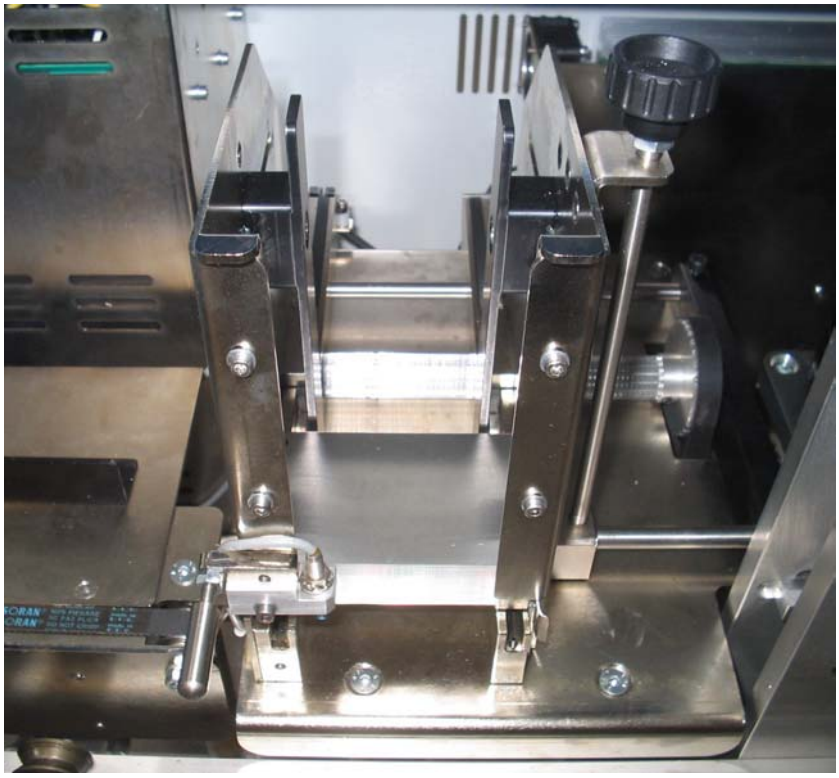




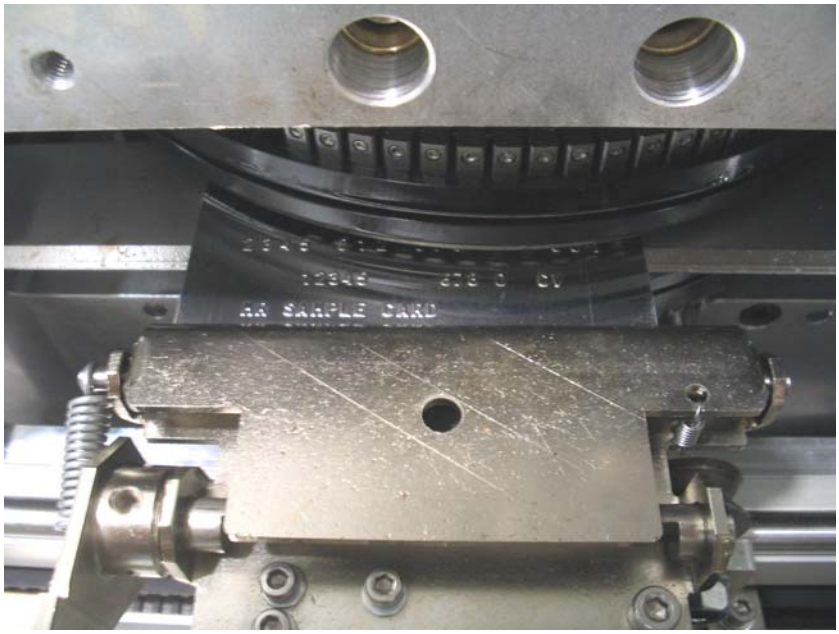
To adjust the Hopper in order to fit the plate thickness, loosen the two screws on each shoulder and move upward or downward the Hopper shavers to get a thickness of about 0.2 mm higher than the plate; then tighten the four shoulders screws.



Insert the plates to emboss into the adjusted Input Hopper.
Now you had to run the desired job with the MatiCard® software.

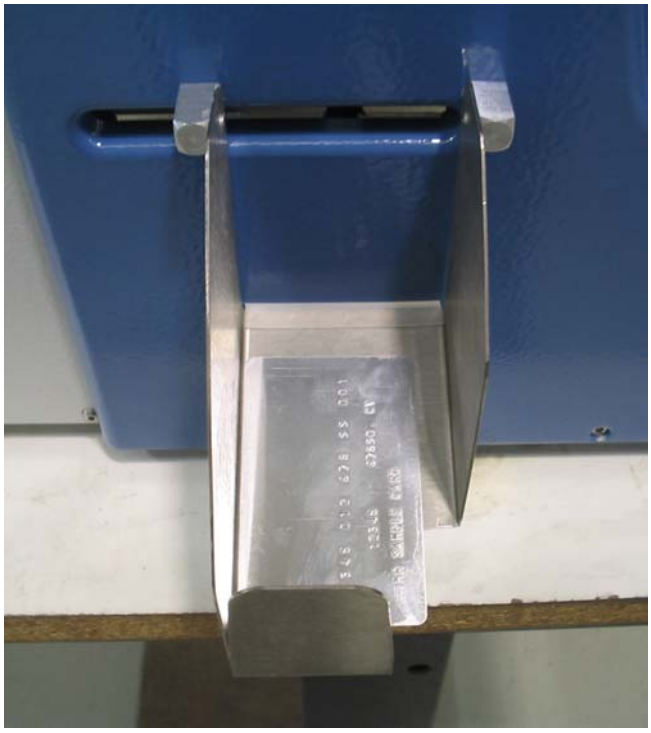


The plate is taken by the Clamp and moved by the Carriage under the Drum to be embossed.



If the system is provided with a FIFO Output Hopper, the embossed plate is finally moved by the Carriage into this Hopper, under the other plates already stored.

Otherwise, if the system is provided with a Side Eject, the embossed plate is moved by the Carriage on the Output Transport and finally ejected out of the machine side slot.



Chapter 3 – Keyboard Operating Mode

3.1 OFF LINE mode keyboard function

The C410 embosser is equipped with a very powerful keyboard operating mode.
Using the keyboard is possible to:

- Create and store up to 10 formats with fixed and variable data
- Edit text based on the 10 stored formats
- Run the embossing of single or multiple tags
- Run several Card Tests which allow an easy control of the machine status
- Change the LCD mode to control
  1. Power supply level
  2. All the sensors status (real time change)
  3. The absolute motors position
  4. The data serial line analyzer
- Fully configure the C410 (password needed)

3.1.1 Emboss a tag

Assuming that format_0 is the default format stored into the machine, press F1 to enter the Off Line mode and the LCD will show:

```
Format  0  FORMAT_0
01      --------------------------------
```

now you can type Numeric data:

```
Format  0  FORMAT_0
01      1234567890----------------------
```

Press *Enter* to go to next line and type a name

```
01      1234567890----------------------
02      MATICA SYSTEM-------------------
```

Press *Enter* to go to next line and type the telephone number:

```
02      MATICA SYSTEM-------------------
03      TEL. 0039 0233261027------------
```

Press F10 and C410 will load a new tag (in case that no tag is already in the clamp), emboss and unload it.
If an error occurred during the cycle, the LCD display will show:

```
E02 - OUT OF CARD
    PRESS CLEAR or ESC TO CLEAR
```

Press CLEAR or ESC and the embosser will try to recovery the error condition.
If the display error is ‘OUT OF CARD’ or ‘CARD MISFEED’, the embosser will try to load the tag until it works out.
In case that different errors occurred, the tag will be unload and NOT repeat (unless it’s different specified in the machine configuration).

3.1.2 Keyboard Function during the Text Editing and the Format Editing

These are the keys and function available during the 'Text Editing' mode:

ESC Press 'ESC' on the keyboard or 'CLEAR' key on the console to restore the error status.

During any function press ESC to return to the editing mode

↑↓←→	use the arrows to move around the text
Home	moves the cursor to line 1 / column 1
End	moves the cursor to the last line 1 / column 1
Enter	moves the cursor to the next line 1 / column 1
Back Space	deletes the character at the left of the cursor and shift the text
Del	delete the character on the cursor and shift the text
Ins	set and reset the insert mode status
F8	clear the full text in editing mode

The following functions are available only during the format editing mode:

Shift+Enter	insert a new line below the current one, shifting the other lines
Shift+Del	delete the current line shifting up the other ones

3.1.3 F1 – Off Line

F1 Press F1 to enter and exit from the OFF LINE Editing mode: this won't clear the current editing.
The following functions are available exclusively in Off Line Editing.

3.1.4 F2 – Format Selection

F2 Press F2 to select the needed format:

```
            SELECT FORMAT
    NUMBER: 0       NAME: FORMAT_0
```

Type the needed format number (from 0 to 9) and then Enter to gain access directly to the editing mode.

←→	Use the arrows to scroll the available formats and then Enter to confirm
ESC	Return to the editing mode

3.1.5 F3 – Edit Format

F3 Press F3 to select the format that has to be create or modified:

```
              EDIT FORMAT
    NUMBER: 0        NAME: FORMAT_0
```

←→ Use the arrows to select the needed format that has to be created or modified and then Enter to confirm

Creating a new format the LCD will show the empty buffer:

```
                                                  01
                                                  02
```

If the format already exists, the LCD will show:

```
F0 FN=FORMAT_0 U0                                 01
Y070 X060 F0 CI10                                 02
```

Now is it possible to edit the format following the rule explain in the next chapter.

F3 Press F3 to store and exit from the format editing procedure.

In case of syntax error the LCD will show the appropriate message like:

```
    FORMAT NUMBER ERROR
          PRESS ESC TO EXIT
```

Press ESC and the cursor will stop were the error is detected ; correct the error and press F3 again.

ESC Press ESC to exit the format creation.

3.1.6 F5 – Card Test

F5 Press F5 to run the Card Test

```
            CARD  TEST
    CARD TEST NUMBER ?  0
```

Select one of the following Card Test and press ENTER:

1 To emboss four L's on a tag (use it to set embossing alignment)
2 To emboss a text containing it's X-Y coordinates(use it to verify embossing height)
3 To emboss all the drum characters and embosser serial number

F10 Press F10 or F11 to emboss the Card Test, then F1 to exit from it.

3.1.7 F8 – Clear Text

F8 Press F8 to clear the full text in editing mode.

3.1.8 F10 – Emboss One Tag

F10 Press F10 to emboss one tag.

3.1.9 F11 – Emboss Multiple Tags

F11 Press F11 to emboss multiple tags

```
          EMBOSSING CARD
    HOW MANY CARDS ?
```

Input the number of tags to be embossed and ENTER to confirm.
Then press **F11** to run the embossing cycle.

3.1.10 F12 – Machine Configuration

F12 Press F12 to enter the Machine Configuration menu.

Input the password and press Enter:

```
          PASSWORD xxxxxx
```

Password list:

111111	Operator password which allows the basic setup.
******	Technical password; call Matica System Technical Support.

Chapter 4 – Embossing Format

4.1 Embossing Format definition

The Embossing Format allows to define the following parameters for each field:

- X and Y coordinate positions
- Font type
- Character spacing
- Variable data
- Fixed data

The format can accept up to 50 fields and it's possible to store up to 10 formats (from 0 to 9) in the EEPROM.

4.1.1 Format Header

The format must begin with format number

Fn Format Number **(compulsory)**
The format MUST BEGIN with Fn (n=0 to 9)
It's the ONLY necessary parameter for the format header

FN=name Format Name (8 digits) (***is not compulsory***)
The format name can be up to 8 digits. **NO SPACES are allowed**

U=n Unit of Measure (***is not compulsory***)
If not specified the system uses the Unit of Measure U1
U0 = STEP
U1 = 10/mm (default)
U2 = 100/inch
U3 = 1000/inch

In case of STEP the C410 embosser uses the following ratio:
- one step X = 0,181 mm → 1/140 inch
- one step Y = 0,181 mm → 1/140 inch

SYnnn Vertical Plate Dimension **(compulsory)**
The nnn value can be up to 4 digits and it's expressed in the Unit of Measure defined.

SXnnn Horizontal Plate Dimension **(compulsory)**
The nnn value can be up to 4 digits and it's expressed in the Unit of Measure defined.

4.1.2 Format Field Definition

N=name Field Name (7 digits) (***is not compulsory***)
The field name can be up to 7 digits. **NO SPACES are allowed**
If not specified, the field number (01, 02 ….) will be automatically assigned.

Ynnn Vertical Coordinate (**compulsory)**
Set the embossing field position measured from the top edge of tag to the bottom edge of the character.
The nnn value can be up to 4 digits and it's expressed in the Unit of Measure defined.

Xnnn Horizontal Coordinate (**compulsory)**
Set the embossing field position measured from the left edge of tag to the left edge of the character.
The nnn value can be up to 4 digits and it's expressed in the Unit of Measure defined.

Editing Y and X coordinate. It's not important the sequence of them (X and Y or Y and X): both ways are accepted.

Fn Font Type
Set the type of character to emboss:
F0 = First series
F1 = Second series

If not specified it will be used the same value of previous field. Default is F0.

CInn Character per Inch
Set the characters spacing; common suggested settings are as following:
CI10 for Simplex 2
CI9 for USA Block
CI7 for Block
CI5 for Double Block / Double Long Block
CI4 for Maxi Block

If not specified it will be used the same value of previous field. Default is CI10.

CSnn *Character Spacing* (use it in alternative of CI parameter)
Set the character spacing were nn is the number of steps; common suggested settings are as following:
CS14 for Simplex 2
CS16 for USA Block
CS20 for Block
CS28 for Double Block / Double Long Block
CS40 for Maxi Block

Bnn Variable Field (**suggested)**
Define the length of the field (nn= 1 to 32)
If not specified the field will be set at the maximum length of 32 characters.

"FIXED DATA" Fixed Data
A text included between the double quote (") is considered protected data.

It's possible to combine Variable Field and Fixed Data in order to make an user friendly input mask. For example:
B4 " " B4 " " B4 " " B4 To input the 16 digits of the tag number
B2 "/" B2 "/2000" To input a data

The total length of field is the sum of the Variable and Fixed data.

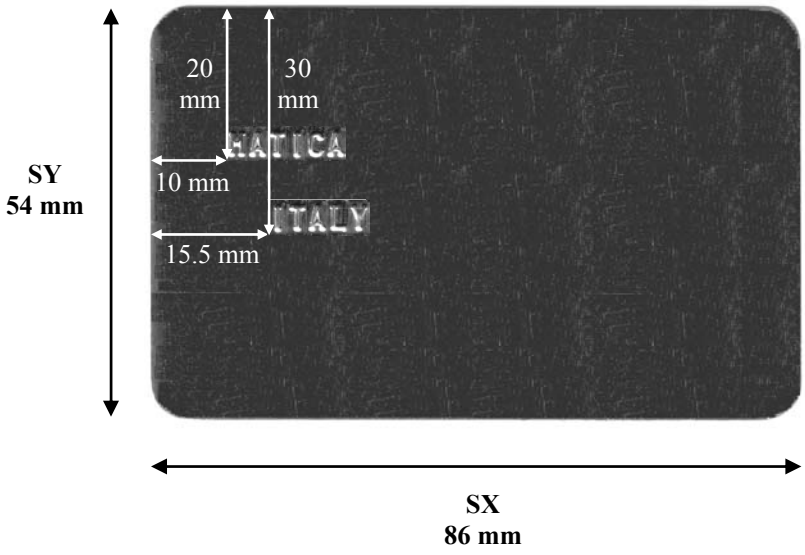
The program recognize the beginning of next field as soon as it find out the N= , the Y or the X parameter.

4.1.3 Format Sample

☞ NOTE: Use SPACES between the parameters for an easy reading of the formats.

Format 0 sample:

```
F0 FN=TestC410                          01
SY540 SX860                             02
Y200 X100 F0 CI10                       03
Y300 X155 F0 CI10                       04
```



Chapter 5 – On Line

5.1 Prepare the embosser

When C410 is linked up to a PC or Host, it's suggested to set the machine in order to make an easier job.
In the menu 'Error Handling' set to Yes the following parameters:

IGNORE OVERF.CHAR (Y-N):	Y
ILLEGAL CHAR=SPACE (Y-N):	Y

In this way the machine will emboss whatever is possible to, and it will allow an easier diagnosis in case of problems.

5.2 Matica Xon-Xoff Standard Protocol

5.2.1 General Information

At power on, after the restore procedure, the machine send **XON** character (DC1, 11 hex, 17 dec.) to the host.

The host can now send to the machine a message with:
< (060 hex) MESSAGE > (062 hex)

It is possible to send to the machine a TEXT message as well as FORMAT message.

When the machine receives the message it stops the communication by sending the **XOFF** character to the host (DC3, 13 hex, 19 dec.).

When the message is processed and there is no error, the **XON** character is sent again.

The machine can be programmed to accept **"<"** (60 dec.) or **STX** (02 dec.) as *Start of Message*

The machine can be programmed to accept **">"** (62 dec.) or **ETX** (03 dec.) as *End of Message*

For an easy test it is suggested to set the STX and ETX code in Protocol menu as:

VALUE OF STX (nnn) :	060	Set the STX value (060 = <)
VALUE OF ETX (nnn) :	062	Set the ETX value (062 = >)
VALUE OF CR	010	Set the CR value (010)

5.2.2 Send a Text

Sending a text is very easy:

< Line 1 **LF** Line 2 **LF** ….. Line n >

For example:

< 1234567890/0 [LF]
MATICA SYSTEM [LF]
0039 02 33261027 >

5.2.3 Send a Format

The syntax format is like the one in Off Line mode.
To send a format it is requested to start the message with the "]" character just after the STX; in this way the machine is able to understand that a Format String is following.

< **]** Format-String >

For example:

<]F0 FN=TestC410
N=CARDN Y350 X100 F1 B20
N=NAME Y410 X60 F0
N=TEL X100Y480 "TEL. " B25 >

If a wrong format is sent, the relative error will be shown on the LCD.
The XON will be sent to the host when the operator press the CLEAR button to acknowledge the error.

5.3 Install the Windows Driver

The Z series embosser is compatible with the Generic Printer Driver which is available with all Windows versions.

The printer driver installation is easy:

- Press Start → Setup → Printer to open the Printer folder
- Add Printer
- Select the **Generic / Text Only** printer
- Select the Serial Port **COMx**
- Configure the port as: Baud 9600, 8 bit, 1 stop bit, No Parity, Flux Control **Hardware**
- Give a name to the printer like "C410 Embosser"
- Select as default printer
- Do not print the test page because it won't be embossed
- Press End and the embosser is ready to be used as a common printer in Windows.

5.4 Emboss a tag using Windows Notepad

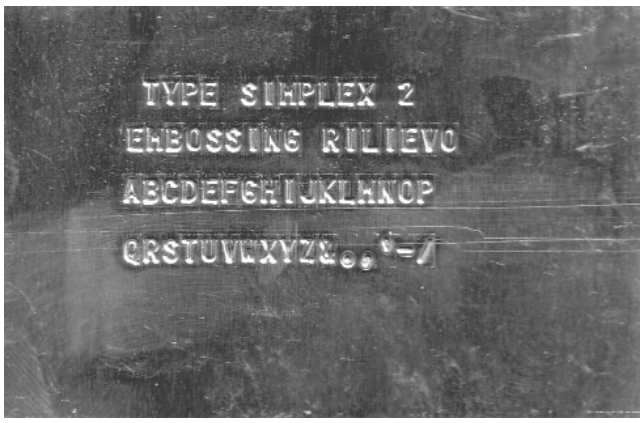
It's possible to use Windows Notepad (available with every version of Windows) to emboss tags. Write a text as the following one:

```
<1234 5678 9000
MATICA SYSTEM
VIA PRINTER DRIVER
>
```

Select now the "C410 Embosser" printer as default and set to 0.1 cm the page Left Margin. It's very important to remove the left spaces to have the right layout embossed on the tag.

☞ NOTE: Using MS Word, the best conditions of working consists in setting the page size at 9 cm horizontal and 6 cm vertical, with all the margins (Top, Bottom, Left, Right) set to 0.1 cm.

5.5 Fonts samples



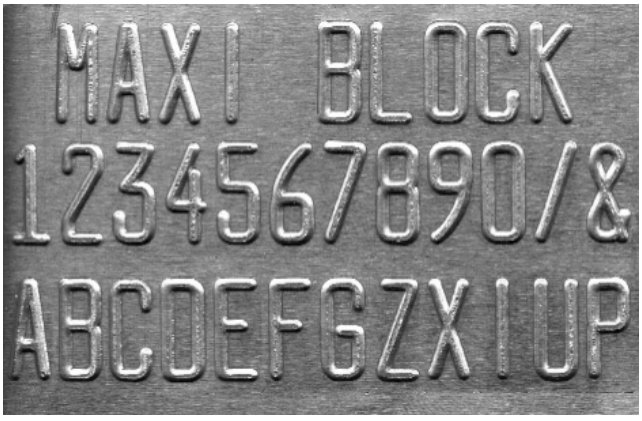
SIMPLEX 2 height 3mm

USA BLOCK height 4mm

BLOCK height 5mm

DOUBLE BLOCK height 6mm

DOUBLE LONG BLOCK height 8mm



MAXI BLOCK height 12mm

Chapter 6 – Error Codes

When an error occurred the LCD will show the messages listed below.

Apply the proper procedure to remove the error condition and then press CLEAR to continue (please read carefully the corrective actions).

ERROR CODE AND DESCRIPTION	SYMPTOM AND CORRECTIVE ACTION
E001 POWER-ON	At the power on the machine will show this message. Press CLEAR to continue.
E002 CONFIGURATION LOST	**Hardware error:** the mechanical parameters of the machine are lost. This can happen when a new version is downloaded.
E003 RAM ERROR	**Hardware error:** the RAM is defect. Power Off and On the machine again, if the error persist is necessary to change the logic board.
E004 WORKING TIME LOST	**Hardware error:** the working time and counters are lost.
E005 FORMAT AREA DATA LOST	**Hardware error:** the stored format is lost.
E006 TOTAL CLEAR DONE	The four DIP Switch of the Main Logic Board are in ON position; move it all to OFF position.
E012 **PROTOCOL:** FORMAT NUMBER ERROR(F0-F9)	Format error, check the embossing format error. The format number must be from 0 to 9 for the embossing.
E013 **PROTOCOL:** FORMAT NAME RROR	Format error, check the embossing format error. The Format name is max 8 digit. A SPACE or CR must separate the format name to the next command: F1 FN=TEST1 Y100X100 → OK F1 FN=TEST1Y100X100 → WRONG F1 FN=TEST 1 Y100X100 → WRONG
E014 **PROTOCOL**: CARD DIMENSION ERROR	Format error, check the embossing format error. Wrong SX or SY command.
E015 **PROTOCOL**: UNIT MEASUREMENT ERROR	Format error, check the embossing format error. Wrong Un command.
E016 **PROTOCOL**: FIELD NAME ERROR	Format error, check the embossing format error. The Field name is max 7 digit. A SPACE or CR must separate the Field name to the next parameter: N=LINE1 Y100X100 → OK N=LINE1Y100X100 → WRONG N=LINE 1 Y100X100 → WRONG
E017 **PROTOCOL**: Y COORDINATE ERROR	Format error, check the embossing format error. Is OK: Y100 X100; Y50 X50; Y050 X050 Is WRONG: Y10 0 X100; Y 50 X50; Y 050 X050
E018 **PROTOCOL**: X COORDINATE ERROR	Format error, check the embossing format error. Is OK: Y100 X100; Y50 X50; Y050 X050 Is WRONG: Y100 X10 0; Y50 X 50; Y050 X 050
E019 **PROTOCOL**: TOO MANY FIELDS (max 50)	Format error, check the embossing format error. You exceed the maximum number of fields (50 max).
E020 **PROTOCOL**: FONT ERROR	Format error, check the embossing format error. Use font 0 (F0) or font 1 (F1).
E021 **PROTOCOL**: CHARACTER SPACE ERROR	Format error, check the embossing format error. Wrong Cinn or CSnn parameters.
E022 **PROTOCOL**: VARIABLE FIELD SYNTAX ERROR	Format error, check the embossing format. Check the syntax.
E023 PROTOCOL: FIX FIELD SYNTAX ERROR	Format error, check the embossing format. Check the syntax.
E024 PROTOCOL: FORMAT WITHOUT FIELDS	Format error, check the embossing format. The format needs at least 1 field to be used.

ERROR CODE AND DESCRIPTION	SYMPTOM AND CORRECTIVE ACTION
E025 **PROTOCOL**: FIELD NOT COMPLETE	Format error, check the embossing format. Check the field.
E026 **PROTOCOL**: FIELD COMMAND ERROR	Format error, check the embossing format. Command or Parameter wrong.
E027 **PROTOCOL**: FORMAT MEMORY OVERFLOW	Format error, check the embossing format. The format memory is over. Reediting the stored format and remove not needed Spaces in order to reduce the used memory.
E028 **PROTOCOL**: FIELD-BUFFER OVERFLOW	Format error, check the embossing format. You exceed the maximum number of characters.
E029 **PROTOCOL**: ILLEGAL CHARACTER	Format error, check the embossing format. A wrong character is received and cannot be emboss.
E030 **PROTOCOL**: ERROR IN SEP PROTOCOL	Protocol generic error.
E032 **PROTOCOL**: OVERFLOW ERROR – DATA CORRUPTED	Too large buffer error.
E034 **PROTOCOL**: CARD ID ERROR	Cad ID error in readback mode, chip personalization or card ID field.
E035 **PROTOCOL**: MACHINE STATUS ERROR	Machine status error when the setup is coming via SEP protocol.
E101 **FEEDER**: FEEDER EMPTY	No card enters the magnetic module. If the hopper is empty add cards. If the hopper isn't empty, check if: a) Cards are stuck together; b) Cards are bowed; c) Mechanical impediments; d) Alignment between modules; e) The DC motor moves correctly; f) Check for correct connection of the motor on the board; g) Replace the motor.
E102 **FEEDER**: FEED SENSOR HOME	Check the Feeder Home sensor.
E103 **FEEDER**: FEED CARD JAM	Feeder card error; remove manually the card.
E104 **FEEDER** LOADED MOTOR ERROR	Check the Feeder Home sensor and the Feeder Motor.
E301 **EMBOSSER**: X-HOME MOTOR ERROR	Check for X home sensor: a) X home sensor is dirty: clean it with compressed air or lint free cloth; b) X home sensor isn’t connected correctly on the board. Check that all pulleys are fixed on the shaft. Check X motor connection. Check the belt’s state.
E302 **EMBOSSER**: Y MOTOR ERROR	Card is embossed in a wrong way. Remove any impediments along the embossing Y travel.
E303 **EMBOSSER**: X-END MOTOR ERROR	Card is picked by embossing clamp and is taken to the embosser’s exit. Check for X end sensor: a) X end sensor is dirty: clean it with compressed air or lint free cloth; b) X end sensor isn’t connected correctly on the board; c) Remove any impediments along the X embossing travel; d) Check that all pulleys are fixed on the shaft; e) Check X motor connection; f) Check the belt’s state.

ERROR CODE AND DESCRIPTION	SYMPTOM AND CORRECTIVE ACTION
E304 **EMBOSSER**: DRUM MOTOR ERROR	The card can even be picked or not by the embosser's clamp and the embossing sequence isn't completed correctly. If the clamp picks the card but doesn't start punching and the drum keeps on moving: a) Check drum motor home sensor; b) Drum motor home sensor is dirty: clean it with compressed air or lint free cloth; c) Drum motor home sensor isn't connected correctly on the board. If the card is picked, but it is embossed in a wrong way check: a) Belt tension; b) If pulleys are fixed on the shafts; c) If the motor is moving correctly or it stalls. If the card is picked by the clamp but the drum doesn't move check: a) Drum motor connection on the board.
E305 **EMBOSSER**: CARD LOST	Card isn't present in the picker position: a) Card has been mistakenly removed; b) Card jams in the previous module.
E306 **EMBOSSER**: CARD MISFEED-POSITION CARD	The clamp holds the card, but the embossing cycle doesn't start. Check the entry sensor: a) Entry sensor is dirty: clean it with compressed air or lint free cloth; b) Entry sensor isn't connected correctly on the board. The clamp moves straight to embossing area without a card or after having made a bad noise: a) Check for Y home sensor; b) Y home sensor is dirty: clean it with compressed air or lint free cloth; c) Y home sensor isn't connected correctly on the board; d) Check Y motor electrical connections; e) Check if the pulley is fixed on Y motor shaft; f) Check belt state.
E308 **EMBOSSER**: PUNCH MOTOR ERROR	The embossing clamp picks the card but the embossing sequence isn't completed correctly. Check for any mechanical impediments along the embossing leverage. If the card is picked by the embosser's clamp but just one character is embossed: a) Check punch motor home sensor; b) Punch motor home sensor is dirty: clean it with compressed air or lint free cloth; c) Punch motor home sensor isn't connected correctly on the board. If the card data aren't embossed correctly check: a) Belt status; b) All pulleys are fixed on the shaft correctly. The card is picked correctly by the embosser's clamp and it is placed correctly under the drum, but the embosser mechanism doesn't start, check: a) If the embossing motor is connected correctly on the board; b) replace the motor.
E309 **EMBOSSER**: RIBBON INFILLER ERROR	Card not punched in infill way. If ribbon is finished replace it. If ribbon isn't finished: a) Check if ribbon is installed correctly; b) check if ribbon advance sensor is working correctly.

ERROR CODE AND DESCRIPTION	SYMPTOM AND CORRECTIVE ACTION
E311 **COVER OPEN**	Machine cover open.
E312 **EMBOSSER**: DRUM MOTOR ERROR	Drum movement error.
E313 **EMBOSSER**: Y MOTOR ERROR	Y-axis movement error.
E314 **EMBOSSER**: X-END MOTOR ERROR	Movement error on the end sensor.
E315 **EMBOSSER**: CARD MISSING	The card goes out from the previous module but doesn't reach the Embosser.
E316 **EMBOSSER**: CARD LOST	Card correctly loaded and then lost by the Embosser card guide.
E318 CHANGE PLATE	The machine stops and waits the plate to be loaded (only for manual feeder option).
E319 **OUTPUT**: STACKER FULL	The machine stops. If the stacker is full unload it. If the stacker isn't full: a) check if the micro is working correctly.
E320 **OUTPUT**: UNLOAD NOT READY	The machine didn't unload the previous plate when the next plate has to be unload.