

QUICK START GUIDE

S-6000E

CIGARETTE MACHINE MAKER



FOREWORD

Notes About Documents

This description is intended only for use by trained specialists in the field of control and automation engineering who understand the applicable national standards. The following documents, notes, and explanations must be followed when installing and operating components. It is the duty of technical personnel to use the documents issued at the time of each installation and commissioning.

Responsible staff must ensure that the application or use of the described product meets all safety requirements, including all relevant laws, regulations, guidelines and standards.

Statement

This document has been carefully prepared. However, the described product is still being developed. We reserve the right to revise and amend this document at any time and without prior notice. Claims for product modifications that have been provided should not be made based on the data, diagrams and descriptions in this document.

TABLE OF CONTENTS

FOREWORD	2
TABLE OF CONTENTS	3
LIST OF IMAGES	4
SUMMARY	6
CONTROL PANEL	7
1. Control Panel S-6000E	7
2. Control Panel M-7000	9
3. Control Panel F-80	13
DISPLAY FUNCTIONS S-6000E	15
1. Home Screen	17
2. Settings	19
2.1 S-6000E Set	20
2.2 M-7000 Set	27
2.3 Festo S-6000E	30
2.4 Festo M-7000	31
2.5 Temp Set	32
3. Alarm	34
3.1 List Error S-6000E	35
4. Report	50
4.1 Weights Report	50
4.2 Error Report	51
4.3 Production Report	52
5. Shift	54
6. Ethercat	55
6.1 Device Link	55
6.2 I/O S-6000E	56
6.3 I/O M-7000	57
7. Shutdown	58
CLOSING	59

LIST OF IMAGES

Figure 0.1 S-6000E Cigarette Making Machine.....	6
Figure 1.1 Control Panel S-6000E.....	7
Figure 1.2 M-7000 Control Panel	9
Figure 1.3 Cleaning Button M-7000.....	11
Figure 1.4 Drum M-7000 Placement	12
Figure 1.5 Panel Control F-80	13
Figure 2.1 Main Menu Display.....	15
Figure 2.2 Home Screen	17
Figure 2.3 Settings button	19
Figure 2.4 Settings View	19
Figure 2.5 Tumble S-6000A Set	20
Figure 2.6 Display S-6000E Speed Setting	21
Figure 2.7 Display S-6000E Servo Setting.....	23
Figure 2.8 Display of S-6000E Bobbin Setting	24
Figure 2.9 Tumble M-7000 sets.....	27
Figure 2.10 Display M-7000 Bobbin Set.....	27
Figure 2.11 Display M-7000 Timing Set.....	28
Figure 2.12 Tampilan M-7000 Inspection Set	29
Figure 2.13 Tumble Festo S-6000A.....	30
Figure 2.14 Festo S-6000E Display.....	30
Figure 2.15 Tumble Festo M-7000	31
Figure 2.16 Display Festo M-7000	32
Figure 2.17 Tumble Temp Set	32
Figure 2.18 Display Temp Set	33
Figure 2.19 Alarm Button.....	34
Figure 2.20 Alarm Display	34
Figure 2.21 S-6000E Overload.....	35
Figure 2.22 Emergency Stop.....	36
Figure 2.23 Tobacco Return Jams.....	36
Figure 2.24 Fan S6000E OFF	37
Figure 2.25 Oil Presure low.....	37

Figure 2.26 Main motor door open	38
Figure 2.27 Air pressure low	38
Figure 2.28 Paper broker	39
Figure 2.29 Max not ready	39
Figure 2.30 Rod break.....	40
Figure 2.31 Ladger broke	40
Figure 2.32 Servo Not Enable Yet	41
Figure 2.33 Inverter Fault	41
Figure 2.34 Max Overload.....	42
Figure 2.35 Max Fan Of	43
Figure 2.36 Max Motor Glue Off.....	43
Figure 2.37 Rolling Block Not On Position	44
Figure 2.38 Tipping Break	44
Figure 2.39 Hcf Not Ready.....	45
Figure 2.40 Roll Press Not On Position.....	45
Figure 2.41 Rolling Block Jams.....	46
Figure 2.42 Max Guard Open.....	46
Figure 2.43 Max No Glue On Glue Pot.....	47
Figure 2.44 Filter Jams.....	47
Figure 2.45 Servo Error	48
Figure 2.46 Cut Off Open	48
Figure 2.47 knife cut off empty please changes	49
Figure 2.48 Report button	50
Figure 2.49 Weights Report View	50
Figure 2.50 Error Report View	51
Figure 2.51 Production Report View.....	52
Figure 2.52 Shift key	54
Figure 2.53 Shift View	54
Figure 2.54 EtherCAT button.....	55
Figure 2.55 Device Link Display.....	55
Figure 2.56 S-6000E I/O Display.....	56
Figure 2.57 M-7000 I/O Display	57
Figure 2.58 Tumble shutdown	58

SUMMARY



Figure 0.1 S-6000E Cigarette Making Machine

The S-6000E machine is an automatic cigarette making machine that can produce high-quality cigarettes, with a production speed of up to 6,000 cigarettes per minute. This machine arranges various cigarette materials such as tobacco, cloves, tobacco wrapping paper, filters, tipping paper, and tipping adhesives into cigarette sticks through a mechanical system.

The S-6000E engine is an ideal choice for cigarette production in smaller cigarette brands. Operation is very simple through an integrated industrial PC equipped with a touch screen, making it easy to monitor and control the functions of the machine. The entire control system is connected to the modular unit using PLC, thereby increasing the efficiency of the production process. This machine technology has been tested and is the basis for ensuring optimal quality in cigarette production.

CONTROL PANEL

1. Control Panel S-6000E

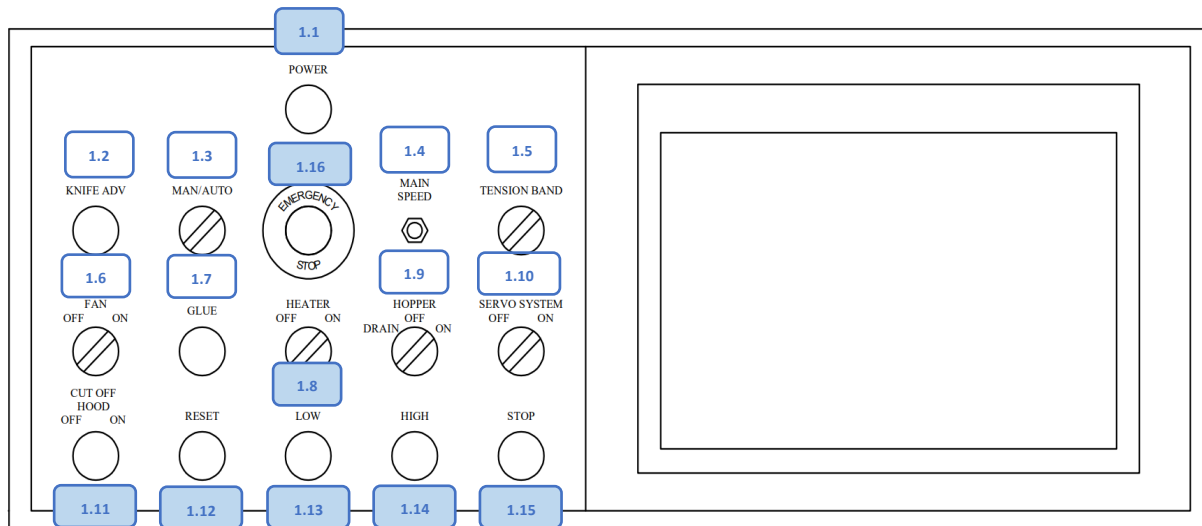


Figure 1.1 Control Panel S-6000E

A control panel equipped with buttons and selectors is one of the key elements in machine operations, designed to give the operator the ability to manage and control various aspects of machine performance. With these buttons, the operator can easily make adjustments to parameters such as speed, temperature, and others, depending on the complexity and function of the machine. Physical buttons offer quick and intuitive tactile feedback, ensuring changes can be made efficiently without the need to dive into complicated digital menus.

Position Function	Description
<i>PANEL CONTROL S-6000E</i>	
1.1	An indicator light indicating if the power is on.
1.2	The button that serves to do knife <i>adv</i> on the cut off knife.
1.3	Selector that functions to set the running mode of the machine to manual / auto.
1.4	Potentiometer that serves to adjust the value of engine speed.
1.5	Selector to turn nylon tape on/off in section.
1.6	Selector to turn the vacuum fan on/off.

1.7	A button that serves to turn on glue.
1.8	Selector that functions to turn on / off the heater.
1.9	Selector that functions to set the mode on the hopper machine.
1.10	Selector to turn on/off the servo system.
1.11	Selector that functions to open / close the <i>cut off door</i> .
1.12	The button that serves to reset the contactor to turn on turns on the MCB again.
1.13	A button that serves to run the machine at <i>low speed</i> .
1.14	The button that serves to run the machine at high speed .
1.15	A button that serves to stop the running of the engine.
1.16	<i>Emergency Switch.</i>

2. Control Panel M-7000

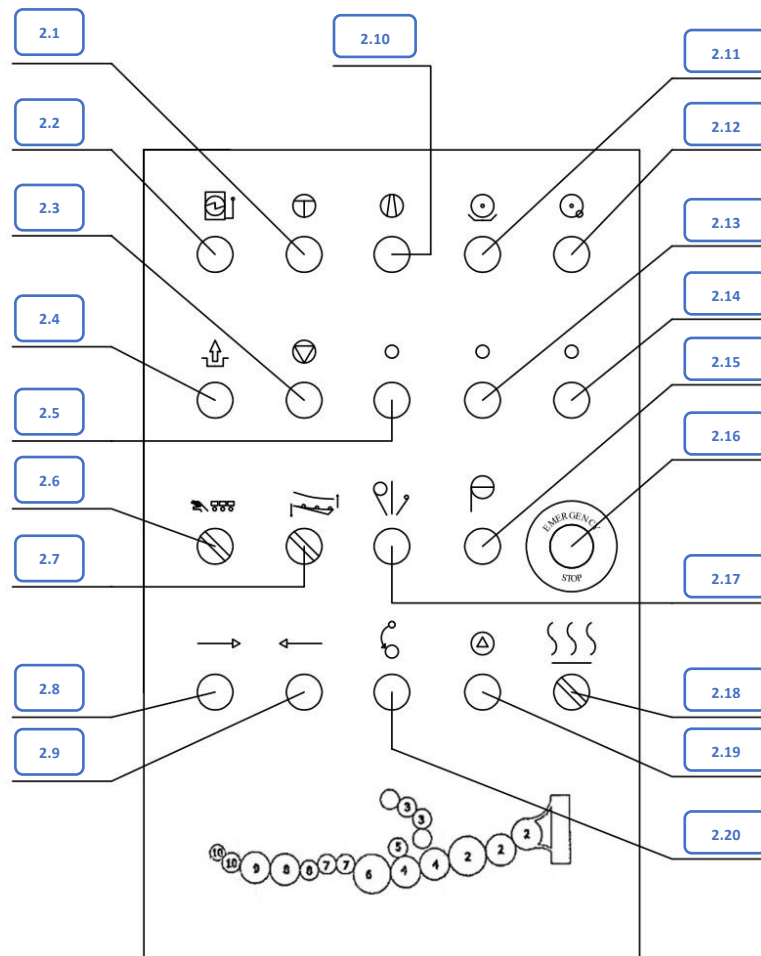


Figure 1.2 M-7000 Control Panel

Position Function	Description
M-7000 CONTROL PANEL	
2.1	A button that serves to start the M-7000 engine.
2.2	An indicator light indicating if <i>the power</i> is on.
2.3	The button serves to stop the running of the M-7000 engine.
2.4	Indicator light indicating when the M-7000 engine is <i>ready</i> .
2.5	A button that serves to turn off the M-7000 vacuum fan.
2.6	Selector that functions to select manual / auto in lowering the filter.

2.7	The selector that functions to turn the <i>rolling block</i> position on or off is above or below.
2.8	The button that serves to adjust the print to the right.
2.9	The button that serves to adjust the print to the left.
2.10	A button that serves to turn on the M-7000 vacuum fan.
2.11	A button that serves to turn on the stirrer on the M-7000 engine.
2.12	A button that serves to turn on the rotation of the knife on the M-7000 engine.
2.13	A button that serves to turn off the stirrer on the M-7000 machine.
2.14	The button that functions to turn off the rotation of the knife on the M-7000 engine.
2.15	A button that functions to lock/open the <i>bobbin holder</i> .
2.16	<i>Emergency Switch.</i>
2.17	The button that serves to perform manual <i>bobbin splice</i> on the M-7000 engine.
2.18	Selector that functions to turn on / off the <i>heater</i> .
2.19	The button that serves to turn on <i>the inch</i> .
2.20	The button that serves to perform a manual <i>bobbin turn</i> on the M-7000 engine.

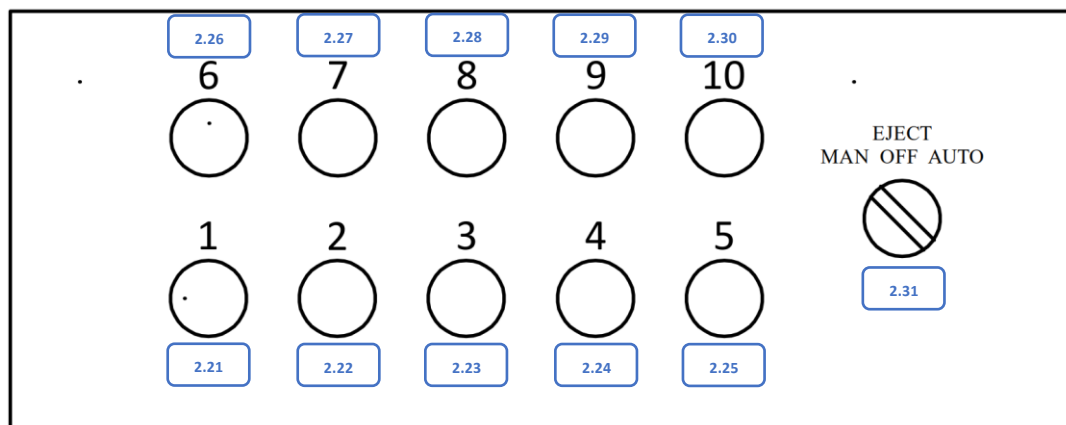


Figure 1.3 Cleaning Button M-7000

Position Function	Description
CLEANING BUTTON M-7000	
2.21	Button that serves to turn on the drum cleaning wind 1.
2.22	Button that serves to turn on the drum cleaning wind 2.
2.23	Button that serves to turn on the drum cleaning wind 3.
2.24	Button that serves to turn on the drum cleaning wind 4.
2.25	Button that serves to turn on the drum cleaning wind 5.
2.26	Button that serves to turn on the drum cleaning wind 6.
2.27	Button that serves to turn on the drum cleaning wind 7.
2.28	Button that serves to turn on the drum cleaning wind 8.
2.29	Button that serves to turn on the drum cleaning wind 9.
2.30	Button that serves to turn on the drum cleaning wind 10.
2.31	<p>Selector that serves to set the eject mode.</p> <p>MAN (Manual) : Eject mode that allows all cigarettes to go to the next route.</p> <p>OFF: Eject mode that lets all cigarettes fall into the trash.</p> <p>AUTO : Eject mode that activates inspection that allows good cigarettes to go the next route and those detected damaged, will be thrown into the trash.</p>

The previous drum numbering can be seen in the picture below.

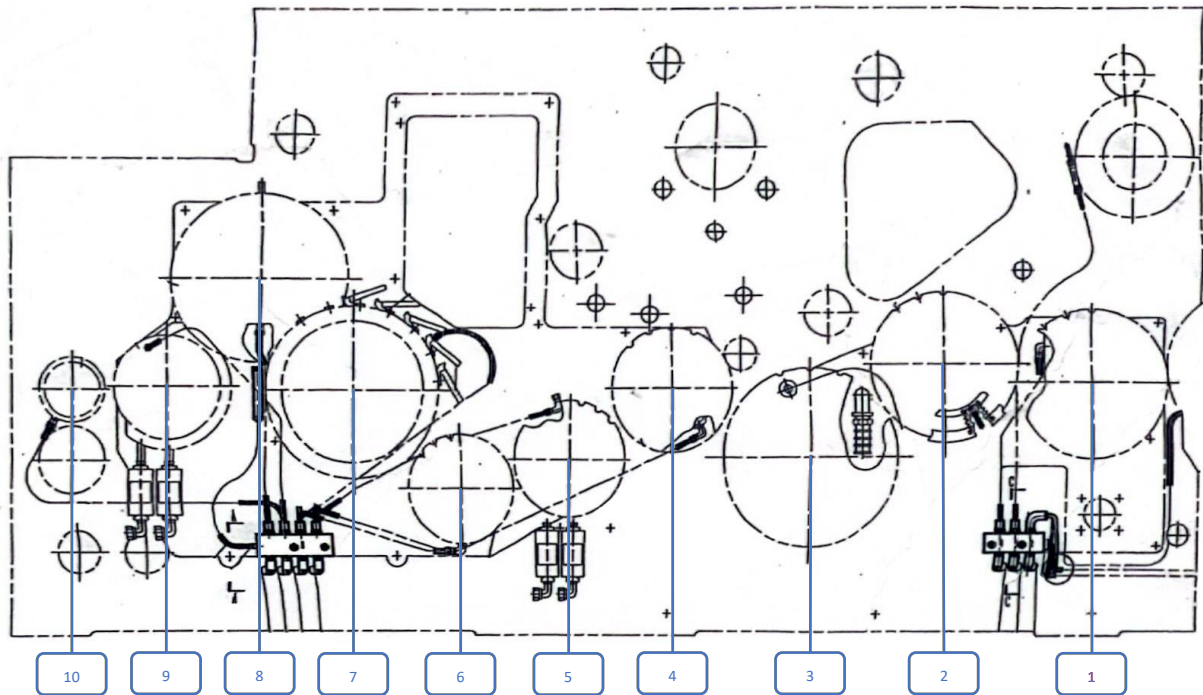


Figure 1.4 Drum M-7000 Placement

3. Control Panel F-80

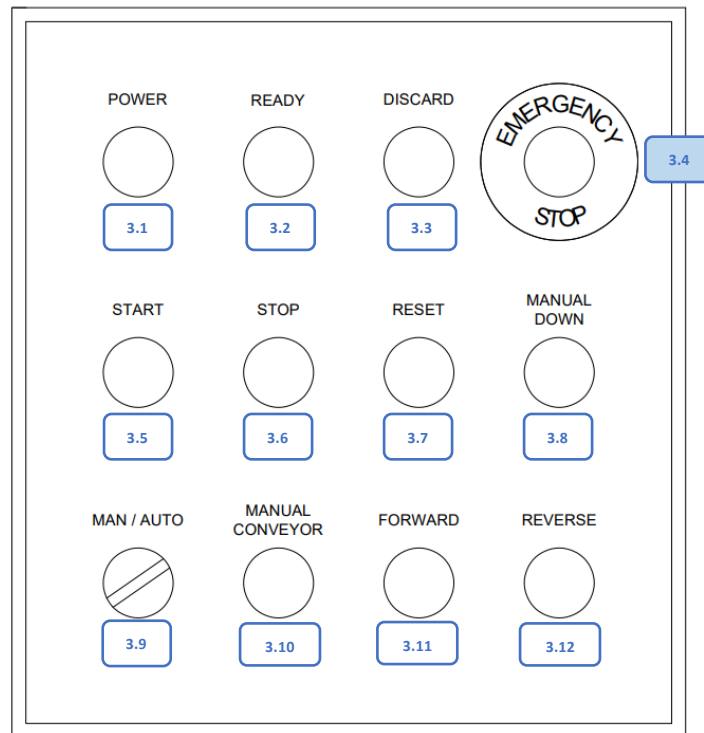


Figure 1.5 Panel Control F-80

Control panels that have a wide range of functions are designed to improve efficiency and ease of use in a variety of applications, allowing users to quickly access various features or operations by pressing specific buttons. Each button on this panel is usually created to perform a specific task so that users can operate the device or system more intuitively and effectively.

Position Function	Description
F-80 PANEL BUTTON	
3.1	Indicator light that indicates if <i>the power</i> is on.
3.2	Indicator lights indicating when the F-80 engine is <i>ready</i> .
3.3	Indicator light that indicates when there is a cigarette entering.
3.4	Emergency Switch.
3.5	The button that serves to start the machine.

3.6	A button that serves to stop the running of the engine.
3.7	A button that serves to reset data on the HCF machine.
3.8	A button that serves to lower the tray manually. Only when manual mode.
3.9	Selector that functions to select manual/auto mode of running HCF machine.
3.10	A button that serves to run the cigarette conveyor manually. Only when manual mode.
3.11	The button serves to run the forward conveyor tray manually. Only when manual mode.
3.12	A button that serves to manually run the reverse conveyor tray. Only when manual mode.

DISPLAY FUNCTIONS S-6000E

When the device is turned on, the screen displays various interactive menus. Users can explore a more comprehensive menu section to access various features and functions such as, home screen, settings, alarms, *shifts*, reports, device and links. Users can easily see the number of products that have been produced, including information on the number of good items, missing filters, imperfect cigarette tips, and *exit trays*.

Through detailed menu presentation, it gives users the ability to control specific S-6000E operations, and monitor engine performance.



Figure 2.1 Main Menu Display

Position Function	Description
<i>TOP OF SCREEN</i>	
0.1	Displays the alarm status on the machine.
0.2	Displays the number of products produced by the machine every one minute.
0.3	The button that serves to reset the display display on the main menu of the S-6000E engine.
0.4	Displays the total amount of production.
0.5	Displays the number of failed products because there is no filter.
0.6	Displays the number of failed products because the tobacco at the end of the cigarette is not completely filled.
0.7	Displays the working shifts of the machine.
0.8	Displays the date and time.
0.9	Displays the number of failed cigarette products.
<i>BOTTOM OF THE SCREEN</i>	
1	The button that serves directs to the home screen display.
2	The button that serves directs to the settings display.
3	The button that serves directs to the alarm display.
4	The button that serves to direct to the display of production results.
5	The button that serves directs to the shift settings view.
6	The button directs to the network display of the device, input and output addresses.
7	A button that functions to turn off the screen or device.

1. Home Screen

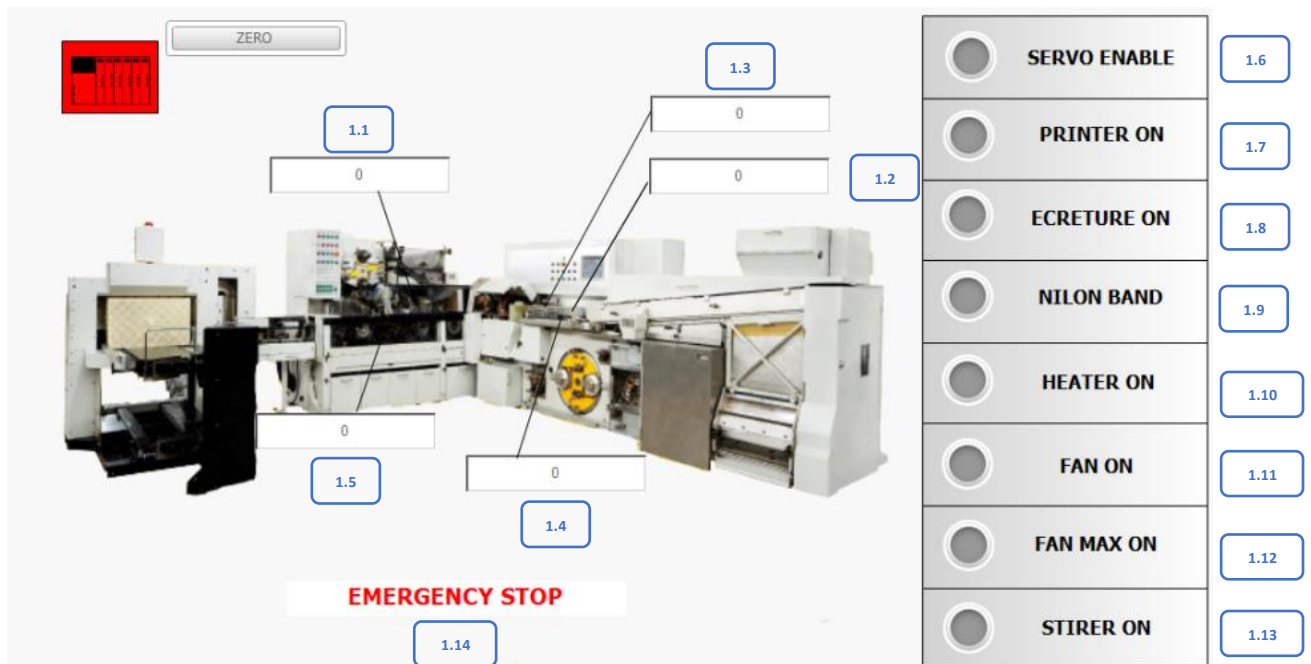


Figure 2.2 Home Screen

Position Function	Description
1.1	Displays the temperature of the heater tip.
1.2	Display heating temperature 1.
1.3	Displays heater temperature 2.
1.4	Displays <i>garniture temperature</i> .
1.5	Displays the temperature of <i>the rolling block heater</i> .
1.6	Active servo indicator.
1.7	The printer indicator is active.
1.8	Active Ecreture Indicator.
1.9	Active Nylon Band Indicator
1.10	The Heater indicator is active.
1.11	The Fan indicator is on.
1.12	The Fan M-7000 indicator is on.

1.13	The Stirrer indicator is active.
1.14	Emergency Stop Button.

2. Settings

By pressing the "settings" button, the screen will switch to the display of the settings menu. With easy navigation, users can explore the available options in the settings menu.



Figure 2.3 Settings button

The settings menu on the S-6000E engine presents a number of customizable features, giving the user control over various aspects of the machine. Some of these include configuration options S-6000E Set, M-7000 Set, Weight Control, Festo S-6000E, Festo M-7000, Trimmer, and temperature settings. These overall features are designed with the aim of providing the maximum level of flexibility, allowing users to customize the machine as per the user's specific needs and preferences.

Homing Speed	1500	Cig/min
Start Speed	0	Cig/min
working Speed	0	Cig/min
Cigarette Length	0	mm
Ratio Speed Glue	0	
Ratio Speed Elevator	0	
Splicing Speed	0	Cig/min
Knife ADV Set	0	Rod
Knife ADV Act	0	Rod
Piston Ink Set	0	Rod
Piston Ink Act	0	Rod

SPEED SETTING

SERVO SETTING

BOBBIN SETTING

SERVO CECK

Knife Empty Set: 1000

Knife Empty Act: 0

reset

MANUAL PISTON

MANUAL ALKOHOL

S6000e Set
M7000 Set
Weight Control
festo S6000e
Festo M7000
TRIMMER
Temp. Set

2.1
2.2
2.3
2.4
2.5
2.6
2.7

Figure 2.4 Settings View

Position Function	Description
2.1	The button that serves directs the screen to the display of the S-6000E engine configuration.
2.2	The button that serves directs the screen to the display of the M-7000 engine configuration.
2.3	The button that directs the screen to the Weight Control configuration display
2.4	The button that serves to direct the screen to the Festo S-6000E configuration display.
2.5	The button that serves to direct the screen to the Festo M-7000 configuration display.
2.6	The button that directs the screen to the Trimmer configuration display
2.7	The button directs the layer to the <i>temperature set display</i> .

2.1 S-6000E Set

By pressing the "S-6000E Set" button, the screen will switch to the *S-6000E Set* display. On the display, there are four settings menus, namely "*speed setting*", "*servo setting*", "*bobbin setting*" and "*servo ceck*".



Figure 2.5 Tumble S-6000A Set

After pressing the "S-6000E Set" button, the screen will switch to the *S-6000E Set* display, in the "*speed setting*" menu. The display on the "*speed setting*" menu has several features that can be used by users.

SPEED SETTING

2.1.1	Homing Speed	1500	Cig/min						
2.1.2	Start Speed	0	Cig/min						
2.1.3	working Speed	0	Cig/min						
2.1.4	Cigarette Length	0	mm						
2.1.5	Ratio Speed Glue	0							
2.1.6	Ratio Speed Elevator	0							
2.1.7	Splicing Speed	0	Cig/min						
2.1.8	Knife ADV Set	0	Rod	Knife Empty Set	1000			2.1.12	
2.1.9	Knife ADV Act	0	Rod	Knife Empty Act	0			2.1.13	
2.1.10	Piston Ink Set	0	Rod					2.1.14	
2.1.11	Piston Ink Act	0	Rod					2.1.15	
				MANUAL PISTON		MANUAL ALKOHOL		2.1.16	

SPEED SETTING

SERVO SETTING

BOBBIN SETTING

SERVO CECK

Figure 2.6 Display S-6000E Speed Setting

Position Function	Description
MENU S-6000E SET	
2.1.A	The button serves to display all speed settings contained in the S-6000E engine.
2.1.B	The button serves to display all <i>servo</i> settings contained in the S-6000E engine.
2.1.C	The button serves to display all <i>bobbin</i> settings contained in the S-6000E engine.
2.1.D	The button serves to display all <i>servo ceck settings</i> contained in the S-6000E machine.
SPEED SETTING	
2.1.1	Setting the engine speed in slow conditions. This condition occurs when the <i>cover cut off</i> is open and the inc button is pressed.
2.1.2	Regulation of engine speed when the engine starts working. This condition occurs when <i>the cover cut off</i> has been closed.
2.1.3	Speed regulation on the engine in the running engine position.

2.1.4	Setting Cigarette length in millimeters.
2.1.5	Regulation of the speed of the glue pump motor. The speed of the glue pump motor will affect the amount of glue that comes out when the engine runs.
2.1.6	Regulation of the speed of the elevator motor at the time of tobacco filling.
2.1.7	Machine settings at the time of paper splicing. When the diameter of the paper has reached the specified limit, then from the maximum speed position, the speed will decrease according to the predetermined number.
2.1.8	Setting the value that is used as a benchmark for the blade to advance to grind. When the knife has cut the cigarette stick with a predetermined amount, the knife will advance towards the grind so that the sides of the knife are honed and the knife remains sharp.
2.1.9	Displays the calculation (<i>counter</i>) of the number of cigarettes (rods) that have been detected after being cut in the <i>cut off</i> section. when the number of cigarettes has reached the target that has been set in the " <i>Knife ADV Set</i> " section, the <i>cut off knife</i> will advance slightly.
2.1.10	Setting the value that is used as a benchmark for refilling ink before ink runs out. The ink will be automatically refilled after printing the number of cigarettes according to the predetermined settings.
2.1.11	Displays the calculation (<i>counter</i>) of the number of cigarettes (rods) that have been printed.
2.1.12	Setting a value that is used as a benchmark to stop the machine when the knife has reached its maximum limit to advance and sharpen. When the knife has reached a predetermined number, the machine will stop and send an alarm for the technician to replace the knife on the <i>cut off part</i> .
2.1.13	Displays the calculation (<i>counter</i>) of the number of cigarettes (rods) that have been detected after being cut in the cutoff section. when the number of cigarettes has reached the target set in the " <i>Knife Empty Act</i> " section, the machine will stop and the value will be reset automatically.
2.1.14	Reset button to restart the value in the " <i>Knife Empty Act</i> " section. This reset button is used when there is a new cut off knife change. The machine will not start if the value is not reset.
2.1.15	The button that serves to perform tests on the piston.
2.1.16	The button that serves to perform the test inserts alcohol.

SERVO SETTING

After pressing the "servo setting" button, the screen will switch to the S-6000E Set display, on the "servo setting" menu. The display on the "servo setting" menu has several features that can be used by users.

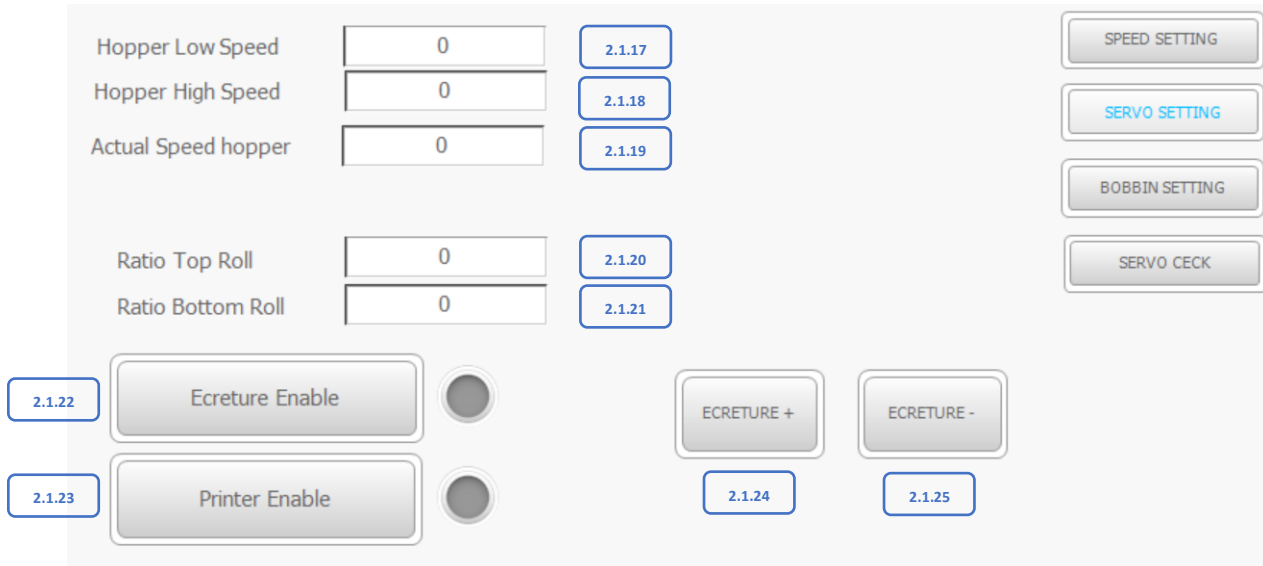


Figure 2.7 Display S-6000E Servo Setting

Position Function	Description
SERVO SETTING	
2.1.17	Hopper speed regulation, when the machine is working at low speed.
2.1.18	Hopper speed regulation, when the machine is working at high speed.
2.1.19	Displays a number that shows the actual speed of the Hopper in <i>real time</i> .
2.1.20	Setting the ratio of the rotation speed of the paper on the top roll.
2.1.21	Setting the ratio of the rotation speed of the paper at the bottom of the roll.
2.1.22	A button that serves to turn the ecreture on and off.
2.1.23	A button that serves to turn the printer on and off.
2.1.24	The button used to raise the ecreture. The goal is to add incoming tobacco to cigarettes.
2.1.25	The button used to lower the ecreture. The goal is to reduce tobacco that enters cigarettes.

BOBBIN SETTING

After pressing the "*bobbin setting*" button, the screen will switch to the S-6000E Set display, on the "*bobbin setting*" menu. The display on the "*bobbin setting*" menu has several features that can be used by users.

Figure 2.8 Display of S-6000E Bobbin Setting

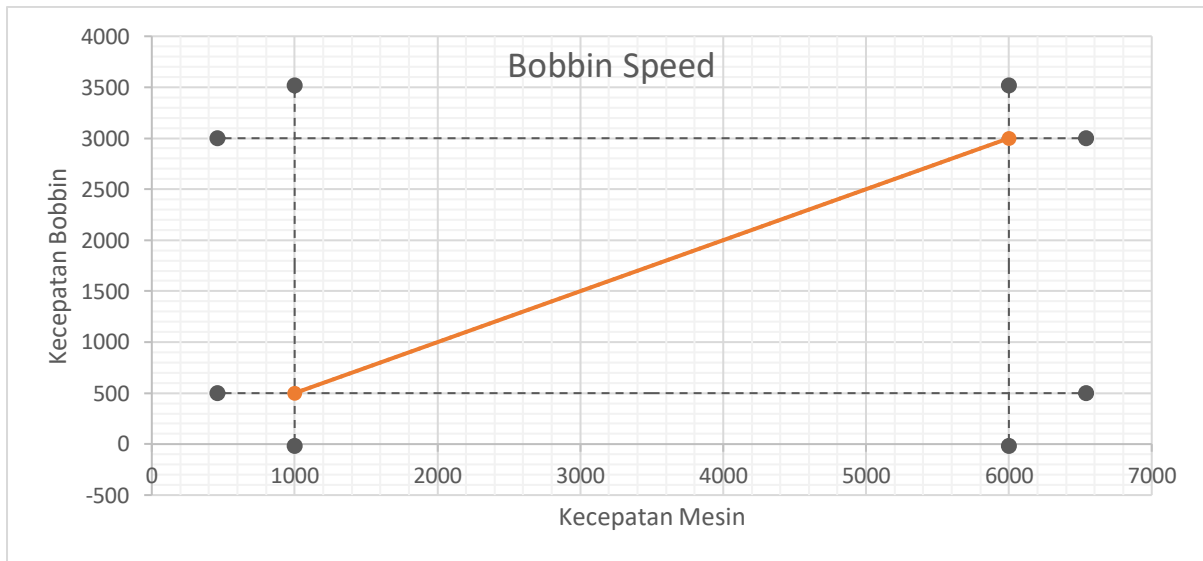
Position Function	Description
BOBBIN SETTING	
2.1.26	Setting the big bobbin <i>speed value</i> that is sought to adjust the big bobbin diameter for the machine can bobbin <i>turn</i> on the <i>maker machine</i> when the machine is in low speed conditions.
2.1.27	Setting the big bobbin <i>speed value</i> that is sought to adjust the big bobbin diameter for the machine can bobbin <i>turn</i> on the <i>maker machine</i> when the machine is in high speed conditions.
2.1.28	Displays a number that shows the actual speed of <i>the big bobbin</i> on the maker machine in <i>real time</i> .
2.1.29	Displays a number that shows the reference value of <i>the big bobbin</i> speed to bobbin <i>turn</i> on the maker machine. This value will adjust to the set engine speed.
2.1.30	Setting the <i>small bobbin</i> speed value that is sought to adjust the size of <i>the small bobbin</i> diameter for the machine can perform <i>bobbin splicing</i> on the maker machine when the machine is in low speed conditions.

2.1.31	Setting the small bobbin <i>speed value</i> that is sought to adjust the size of the <i>small bobbin diameter</i> on the maker machine for the machine can perform <i>bobbin splicing</i> when the machine is in high speed conditions.
2.1.32	Displays a number showing the actual speed of <i>the small bobbin</i> in <i>real time</i> .
2.1.33	Displays a number that shows the reference value of <i>the small bobbin</i> speed to perform <i>bobbin splicing</i> on the <i>maker</i> machine. This value will adjust to the set engine speed.
2.1.34	The button used to start the motor is used to pull the replacement paper.
2.1.35	The motor speed setting is used to pull the new paper to be in sync with the movement of the previous paper.
2.1.36	The button used to perform the disconnect accompanied by the paper connection (<i>bobbin splicing</i>) manually.
2.1.37	The button used to start the motor is used to pull the replacement paper.

To get the *LOW* and *HIGH* values, a search for the corresponding value is performed first. It is said to be appropriate if the *LOW* or *HIGH* value matches the desired bobbin diameter both when the machine performs a "*bobbin turn*", or "*bobbin splicing*".

This equation can be described as follows:

$$\frac{Kec. Bobbin - LOW Y}{HIGH Y - LOW Y} = \frac{Kec. Mesin - LOW X}{HIGH X - LOW X}$$



Example: *LOW X* = 1000 (Usually this value is already set in the program)
HIGH X = 6000 (Usually this value is already set in the program)
LOW AND = 500 (This value is obtained from the result *trial run*)
HIGH Y = 3000 (This value is obtained from the result *trial run*)
Engine District = 4000 (This value is the speed of the machine when working normally)

$$\frac{Kec. Bobbin - 500}{3000 - 500} = \frac{4000 - 1000}{6000 - 1000}$$

$$\frac{Kec. Bobbin - 500}{2500} = \frac{3000}{5000}$$

$$Kec. Bobbin - 500 = \frac{3000 \cdot 2500}{5000}$$

$$Kec. Bobbin = 1500 + 500$$

$$Kec. Bobbin = 2000$$

The *Kec. Bobbin* value for turn/splicing is 2000 at an engine speed of 4000 cpm. Bobbin turns and splicing will be different when working for real.

2.2 M-7000 Set

By pressing the "M-7000 Set" button, the screen will switch to the M-7000 Set display. On the display, there are three settings menus, namely "*timing*", "*inspection*" and "*bobbin*".



Figure 2.9 Tumble M-7000 sets

After pressing the "M-7000 Set" button, the screen will display the "M-7000 bobbin set" configuration. There are several configurations that can be set by the user.

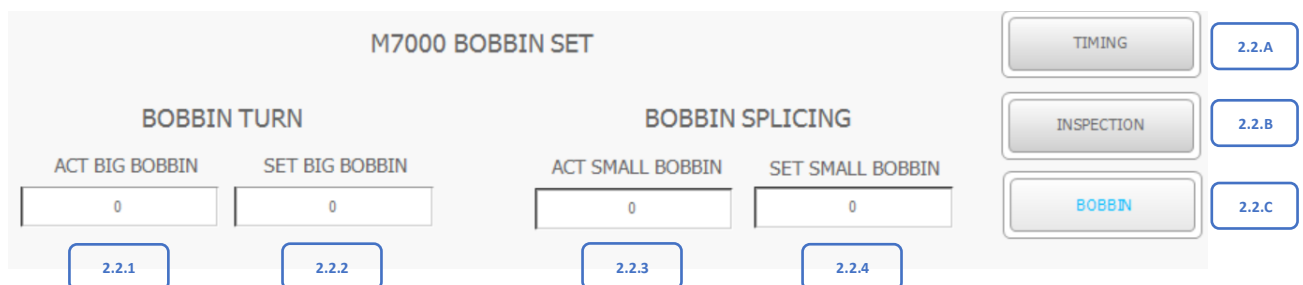


Figure 2.10 Display M-7000 Bobbin Set

Position Function	Description
MENU M-7000 SET	
2.2.A	A button that serves to display all timings contained in the M-7000 machine.
2.2.B	The button serves to display all <i>inspection</i> settings contained in the M-7000 engine.
2.2.C	A button that serves to display all <i>bobbin</i> settings contained in the M-7000 engine.
M-7000 BOBBIN SET	
2.2.1	Displays numbers showing the actual speed of <i>the big bobbin</i> in <i>real time</i> .
2.2.2	Displays a number that shows the reference value of <i>the big bobbin</i> speed to make a <i>bobbin turn</i> . This value will adjust to the set engine speed.
2.2.3	A number that shows the actual speed of <i>the small bobbin</i> in real time.
2.2.4	Displays a number that shows the reference value of the small bobbin speed to perform <i>bobbin splicing</i> . This value will adjust to the set engine speed.

After pressing the "Timing" button, the screen will display the "M-7000 timing set" configuration. There are several configurations that can be set by the user.

M7000 TIMING SET		
2.2.5	REJECT DRUM SET	0
2.2.6	REJECT SPLICING MAKER SET	0
2.2.7	REJECT SPLICING MAKER QTY	0
2.2.8	REJECT SPLICING MAX SET	0
2.2.9	REJECT SPLICING MAX QTY	0
2.2.10	TIMING FILTER	0
2.2.11	TIMING TIPPING	0

Figure 2.11 Display M-7000 Timing Set

Position Function	Description
M-7000 TIMING SET	
2.2.5	Setting the value of the number of cigarettes to be discarded the first time the machine combines tobacco and filters.
2.2.6	Setting the value in the form of counting is used as a benchmark on the machine to reject <i>the drum</i> after <i>bobbin splicing</i> occurs on the maker machine.
2.2.7	Setting the value of the number of cigarettes to be discarded after <i>bobbin splicing</i> occurs on the <i>maker machine</i> .
2.2.8	Setting the value that is used as a benchmark on the engine to <i>reject</i> after <i>bobbin splicing</i> occurs on the M-7000 engine part.
2.2.9	Setting the value of the number of cigarettes to be discarded after <i>bobbin splicing</i> occurs on the M-7000 engine part.
2.2.10	The timing is used as a benchmark on the machine to start lowering the filter. The comparison value will begin to calculate as the sensor on the <i>link up</i> has detected that the tobacco stem has entered.

2.2.11	The timing is used as a benchmark on the machine to start running the tipping paper. The comparison value will begin to calculate as the sensor on the link up has detected that the tobacco stem has entered.
--------	--

After pressing the "inspection" button, the screen will display the "inspection setting" configuration. There are several configurations that can be set by the user.

Figure 2.12 Tampilan M-7000 Inspection Set

Position Function	Description
M-7000 INSPECTION SET	
2.2.12	Button to activate "Inspection Setting Mode" mode
2.2.13	Button to activate the sensor "Filter Miss". The sensor will detect cigarette sticks that do not have a filter.
2.2.14	Button to activate the "Cigarette Miss" sensor. The sensor will detect missing cigarettes while the process is in progress.
2.2.15	Button to activate the "Lose End" sensor. The sensor will detect the tip of the cigarette stick that is not filled properly.
2.2.16	Button to activate the sensor "Presure Drop". The sensor will detect torn cigarettes.
2.2.17	Setting the calculation of the time needed to dispose of the windray cigarettes that experience "Lose End". When the Rejek product is detected, the program

	will calculate the pulse according to the settings, after arriving at the timing calculation the Rejek product will be wasted.
2.2.18	Setting the calculation of the time needed to dispose of the project cigarette that experienced a "Pressure Drop". When the Rejek product is detected, the program will calculate the pulse according to the settings, after arriving at the timing calculation the Rejek product will be wasted.

2.3 Festo S-6000E

By pressing the "Festo S-6000E" button, the screen will switch to the Festo S-6000E menu display. This menu has the purpose of testing festo in certain parts.

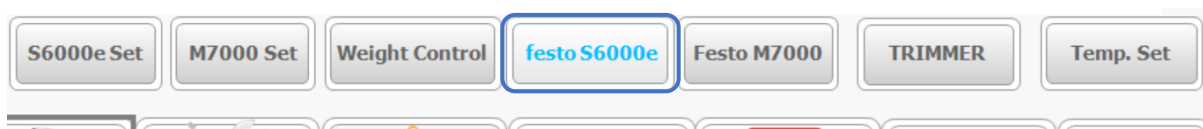


Figure 2.13 Tumble Festo S-6000A

After pressing the "Festo S-6000E" button, the screen will display the "Festo S-6000E" configuration. There are several configurations that can be set by the user.

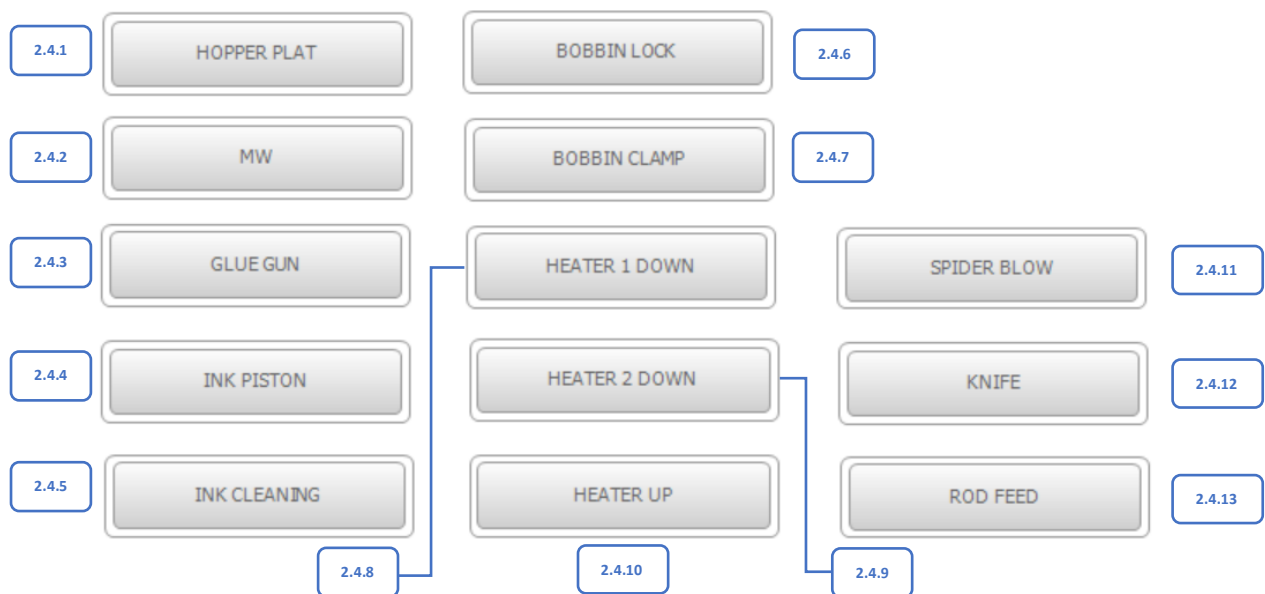


Figure 2.14 Festo S-6000E Display

Position Function	Description
<i>Festo S-6000E</i>	
2.4.1	Button to activate "Hopper Plate" manually.
2.4.2	Button to activate "MW" manually.
2.4.3	Button to activate the "Glue Gun" manually.
2.4.4	Button to activate "Ink Piston" manually.
2.4.5	Button to activate "Ink Cleaning" manually.
2.4.6	Button to activate "Bobbin Lock" manually.
2.4.7	Button to activate "Bobbin Clamp" manually.
2.4.8	Button to activate "Heater 1 Down" manually.
2.4.9	Button to activate "Heater 2 Down" manually.
2.4.10	Button to activate "Heater Up" manually.
2.4.11	Button to activate "Spider Blow" manually.
2.4.12	Button to activate the "Knife" manually.
2.4.13	Button to activate "Rod Feed" manually.

2.4 Festo M-7000

By pressing the "Festo M-7000" button, the screen will switch to the Festo M-7000 menu display. This menu has the purpose of testing festo in certain parts.



Figure 2.15 Tumble Festo M-7000

After pressing the "Festo M-7000" button, the screen will display the "Festo M-7000" configuration. There are several configurations that can be set by the user.

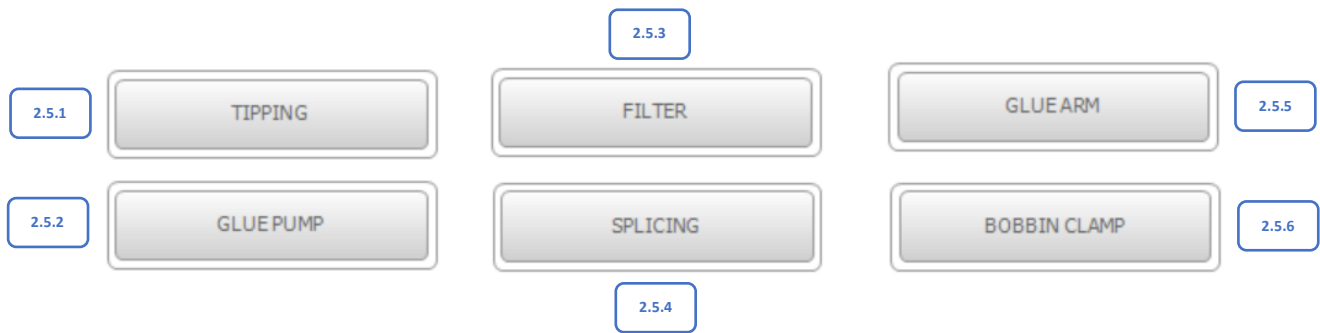


Figure 2.16 Display Festo M-7000

Position Function	Description
<i>Festo M-7000</i>	
2.5.1	Button to enable "Tipping" manually.
2.5.2	Button to activate "Glue Pump" manually.
2.5.3	Button to activate "Filter" manually.
2.5.4	Button to enable "Splicing" manually.
2.5.5	Button to activate "Glue Arm" manually.
2.5.6	Button to activate "Bobbin Clamp" manually.

2.5 Temp Set

By pressing the "Temp Set" button, the screen will switch to the *Temperature set* display. On the display, there are several settings menus, namely "heater 1", "heater 2", "garniture", "tipping" and "rolling block"



Figure 2.17 Tumble Temp Set

After pressing the "Temp Set" button, the screen will display the "Temp set" configuration. There are several configurations that can be set by the user.

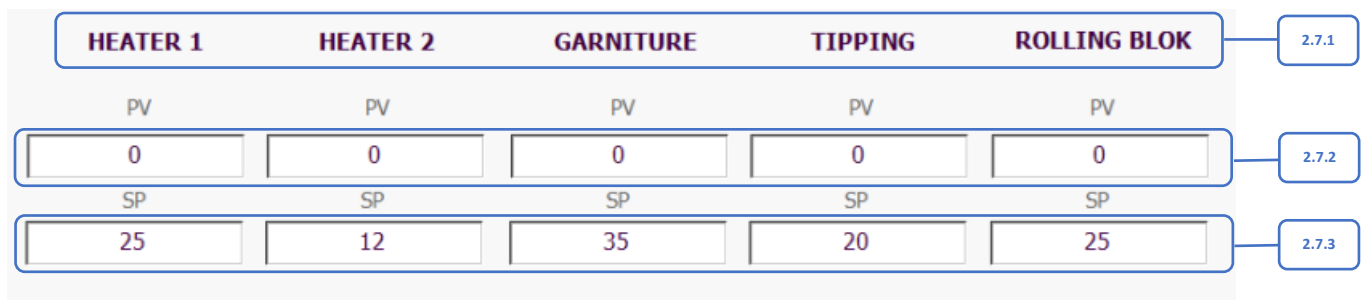


Figure 2.18 Display Temp Set

Position Function	Description
<i>Temp Set</i>	
2.7.1	Displays a description of the <i>temperature</i> value to be set
2.7.2	Displays the value of each <i>heater</i> . The value is the actual value detected in <i>real-time</i> in celsius.
2.7.3	Displays the value that is the maximum value of each <i>temperature</i> . This value can be set.

3. Alarm

By pressing the "alarm" button, the screen will switch to the alarm menu display.



Figure 2.19 Alarm Button

The alarm display will display a description of *the error* detected on the machine "S-6000E" as shown below.

3.1		3.2	
	TIME	DISCRIPTION	
0	2024-02-07-08:58:48.315	S6000E OVERLOAD	
1	2024-02-07-08:58:48.315	EMERGENCY STOP	
2	2024-02-07-08:58:48.315	FAN S6000E OFF	
3	2024-02-07-08:58:48.315	MAIN MOTOR DOOR OPEN	
4	2024-02-07-08:58:48.315	AIR PRESURE LOW	
5	2024-02-07-08:58:48.315	MAX NOT READY	
6	2024-02-07-08:58:48.315	SERVO NOT ENABLE YET	
7	2024-02-07-08:58:48.315	INVERTER FAULT	
8	2024-02-07-08:58:48.315	MAX OVERLOAD	
9	2024-02-07-08:58:48.315	MAX FAN OFF	
10	2024-02-07-08:58:48.315	MAX MOTOR GLUE OFF	
11	2024-02-07-08:58:48.315	ROLLING BLOCK NOT ON POSITION	
12	2024-02-07-08:58:48.315	TIPPING BREAK	
13	2024-02-07-08:58:48.315	HCF NOT READY	
14	2024-02-07-08:58:48.315	ROLL PRESS NOT ON POSTION	
15	2024-02-07-08:58:48.315	MAX GUARD OPEN	

Figure 2.20 Alarm Display

Position Function	Description
ALARM	
3.1	Indicates the time when an error occurred or was detected on the machine.
3.2	Shows a description of <i>the error</i> that occurred on the machine.

3.1 List Error S-6000E

The following Error List was detected on the "S-6000E" machine, accompanied by the specific location inside the machine where the error occurred.

1. S6000E Overload

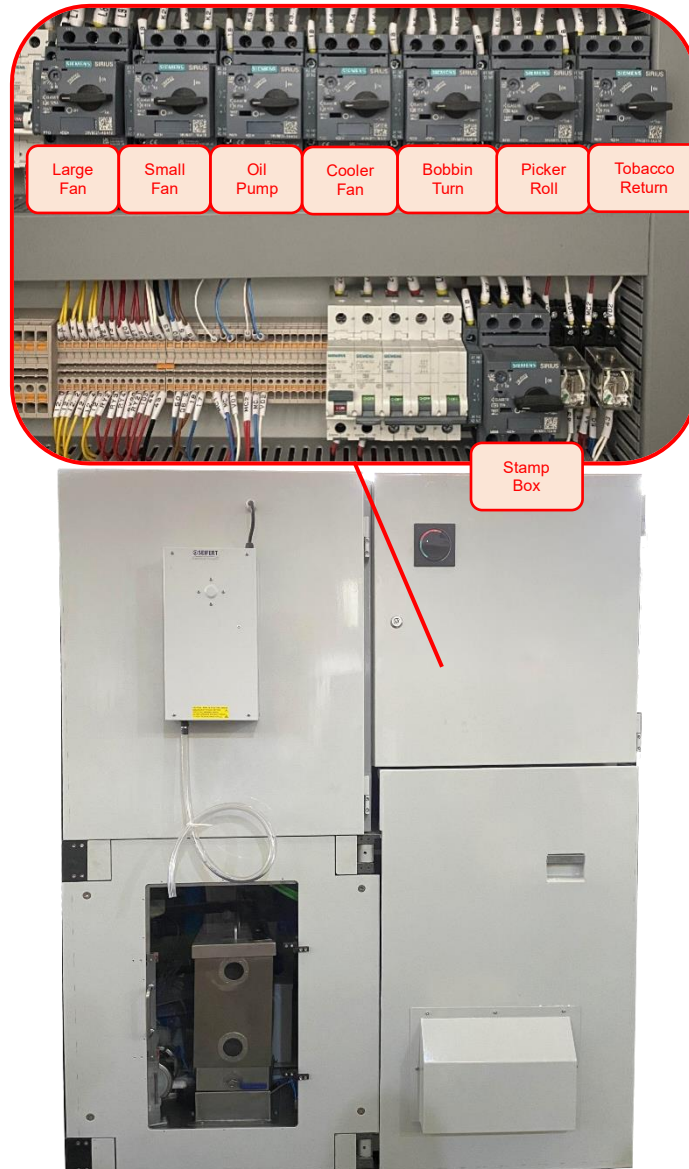


Figure 2.21 S-6000E Overload

If an overload condition occurs in the system, the first step that must be taken is to carry out a thorough check of the overload safety device on the control panel. This process involves several important steps to ensure that all components operate in optimal conditions and that nothing is damaged due to excessive workload.

2. Emergency stop

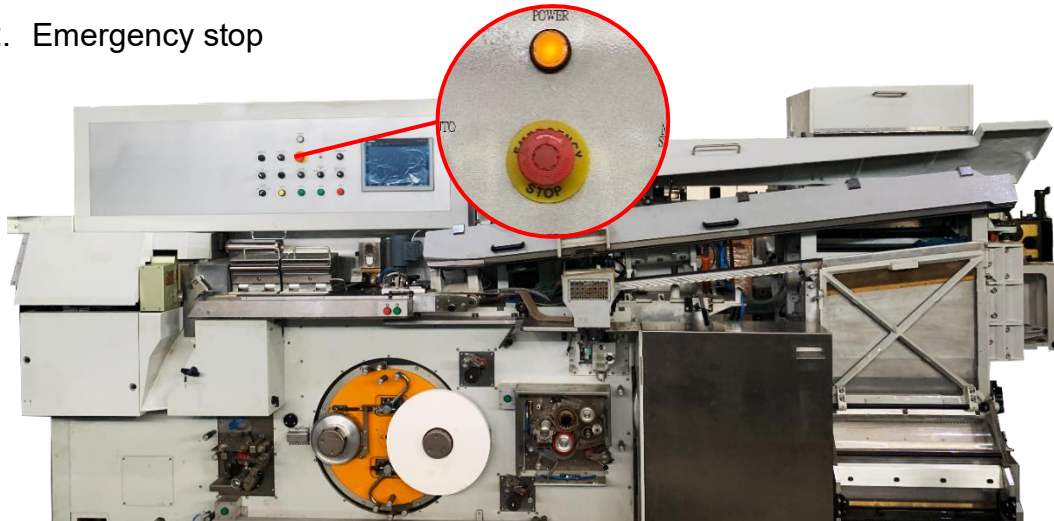


Figure 2.22 Emergency Stop

3. Tobacco Return Jams

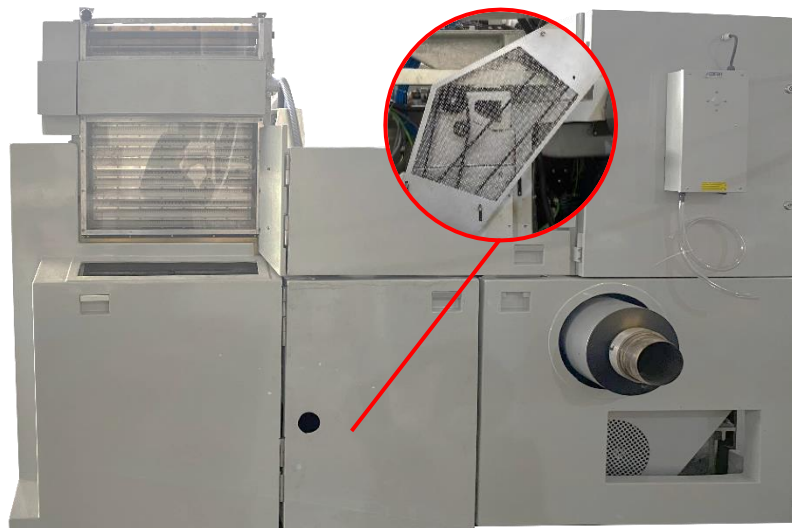


Figure 2.23 Tobacco Return Jams

4. Fan S6000E OFF

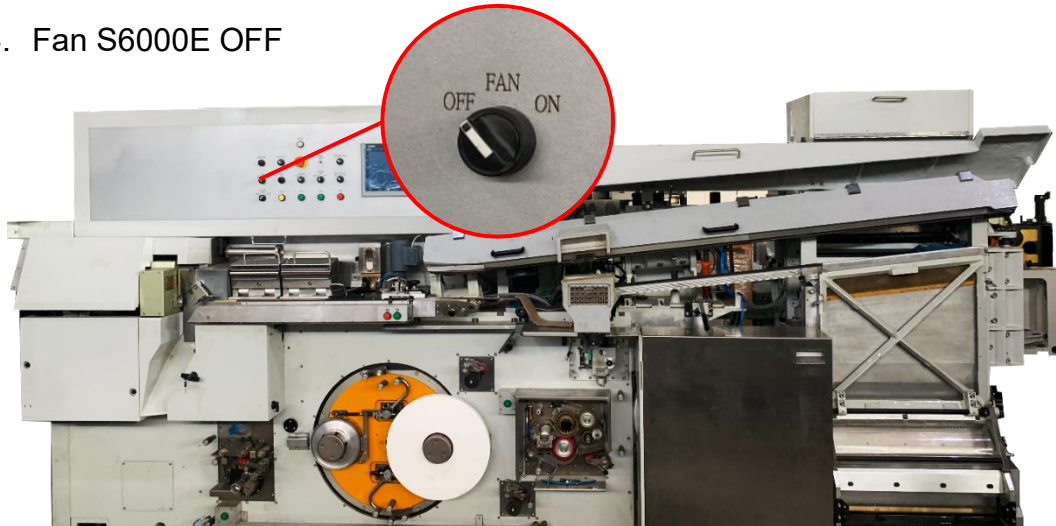


Figure 2.24 Fan S6000E OFF

5. Oil Presure low

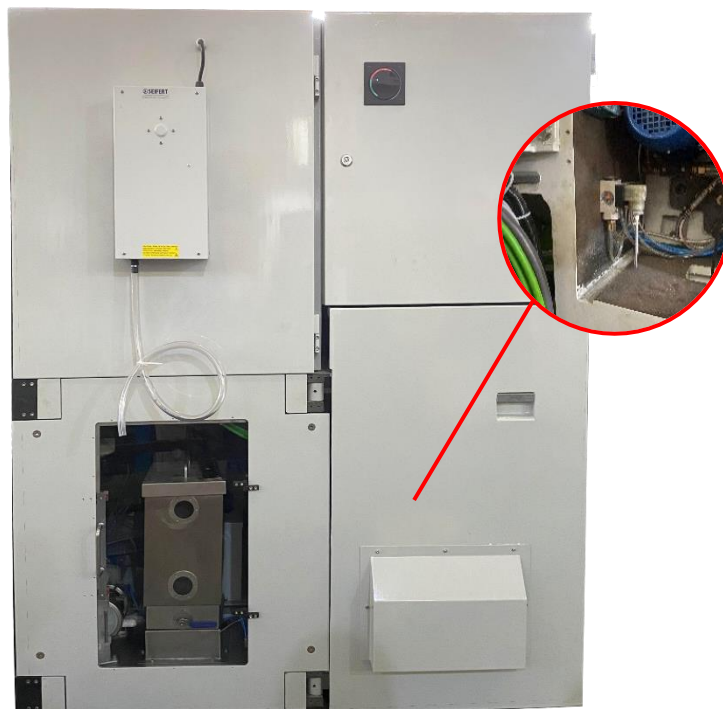


Figure 2.25 Oil Presure low

6. Main motor door open



Figure 2.26 Main motor door open

7. Air pressure low

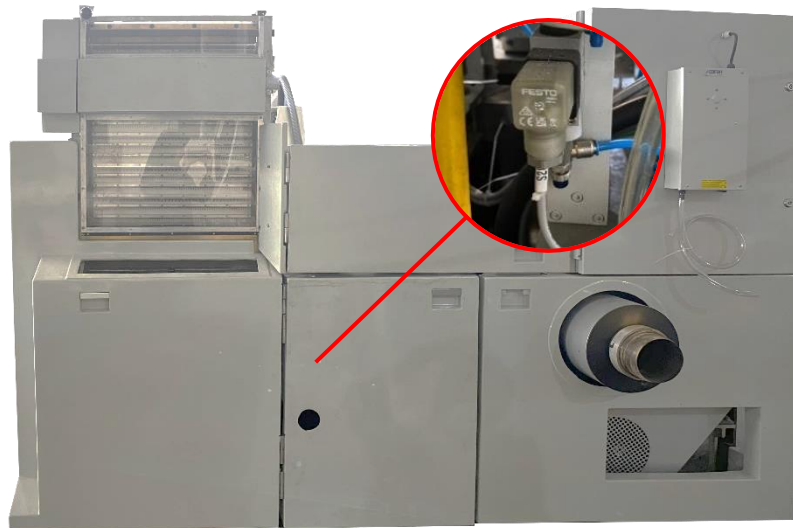


Figure 2.27 Air pressure low

8. Paper broker



Figure 2.28 Paper broker

9. Max not ready

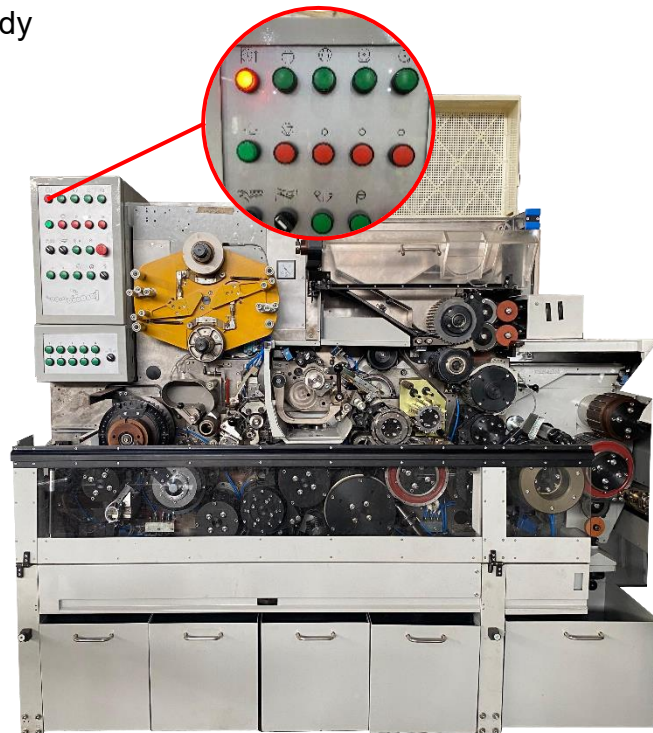


Figure 2.29 Max not ready

10. Rod break

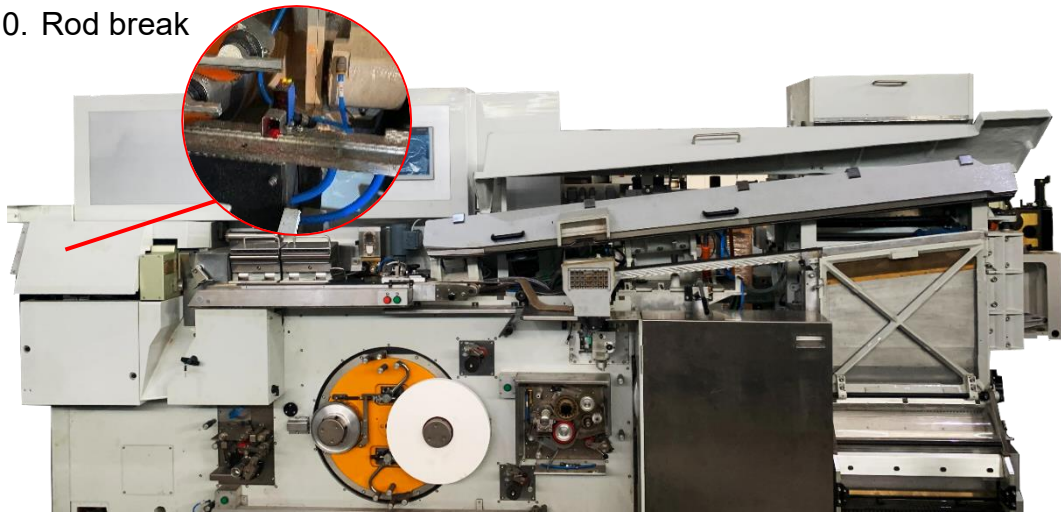


Figure 2.30 Rod break

11. Ladger broke

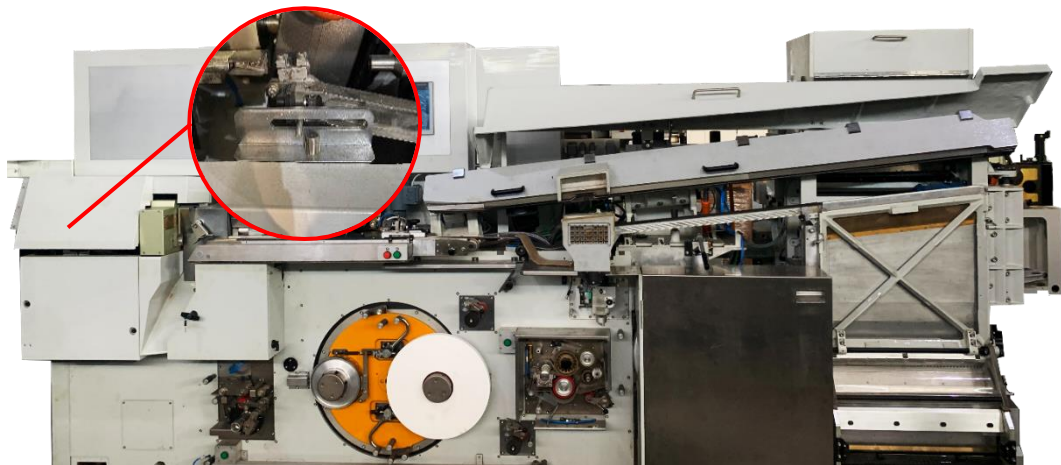


Figure 2.31 Ladger broke

12. Servo Not Enable Yet



Figure 2.32 Servo Not Enable Yet

13. Inverter Fault



Figure 2.33 Inverter Fault

14. Max Overload

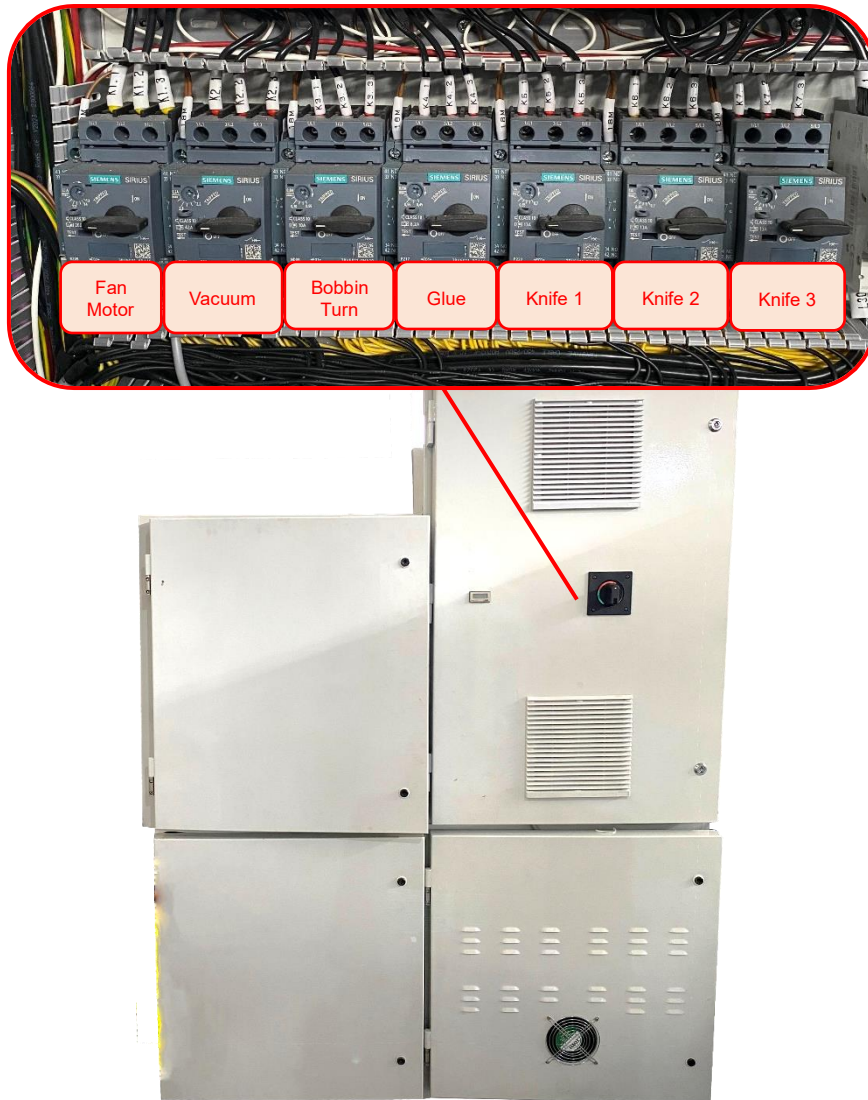


Figure 2.34 Max Overload

If an overload condition occurs in the system, the first step that must be taken is to carry out a thorough check of the overload safety device on the control panel. This process involves several important steps to ensure that all components operate in optimal conditions and that nothing is damaged due to excessive workload.

15. Max Fan Off



Figure 2.35 Max Fan Of

16. Max Motor Glue Off

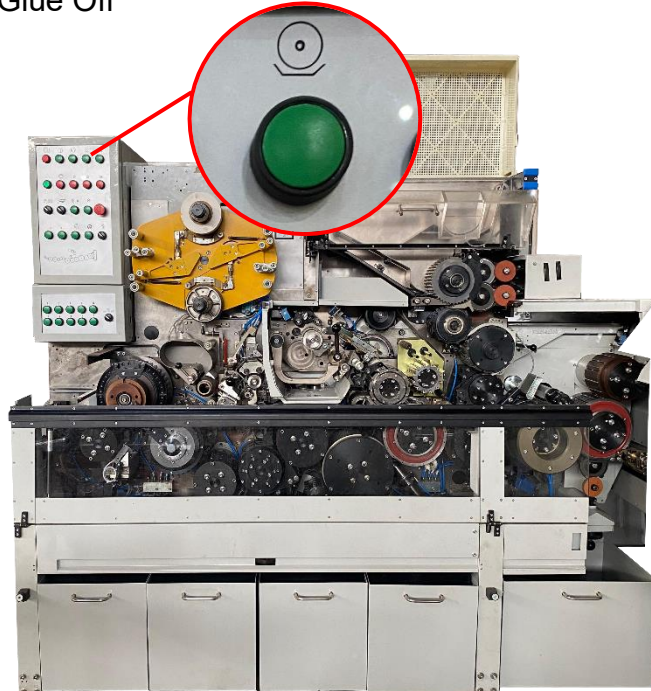


Figure 2.36 Max Motor Glue Off

17. Rolling Block Not On Position

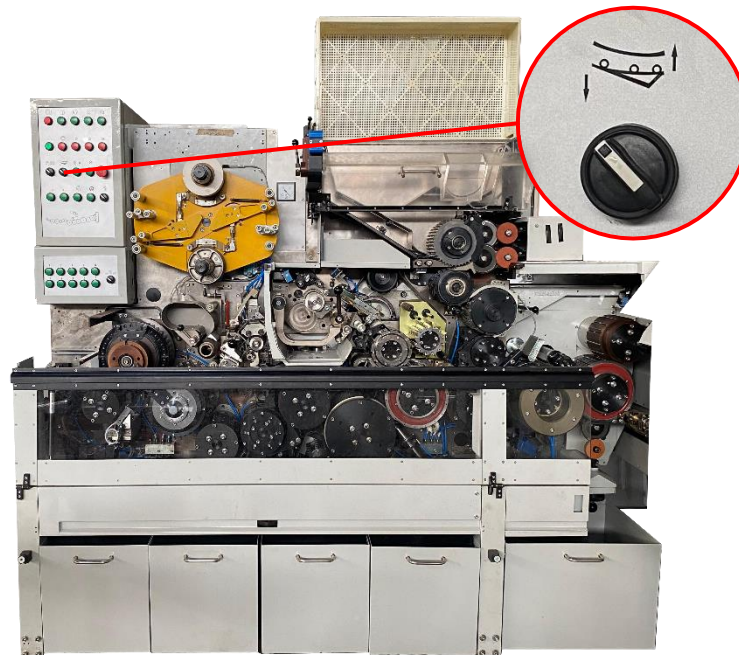


Figure 2.37 Rolling Block Not On Position

18. Tipping Break

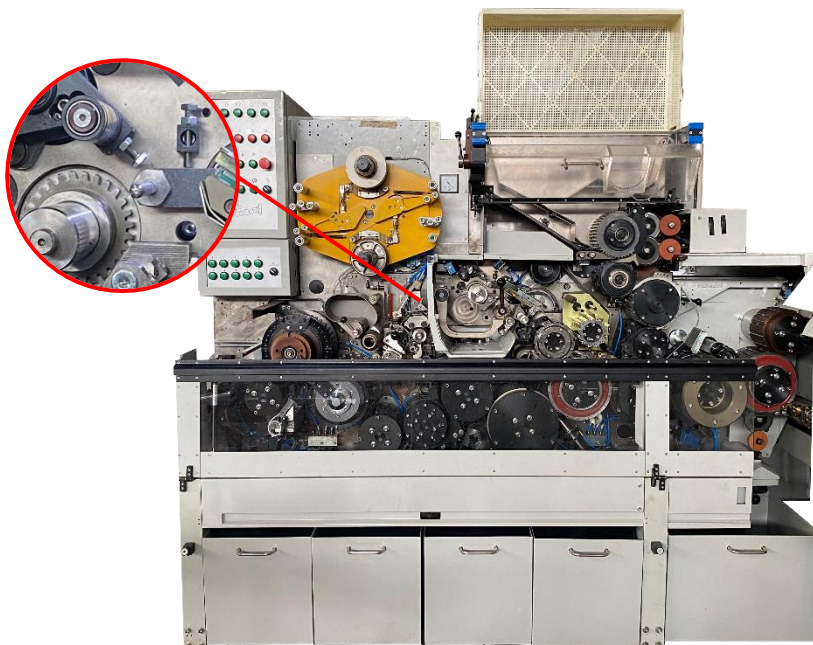


Figure 2.38 Tipping Break

19. Hcf Not Ready

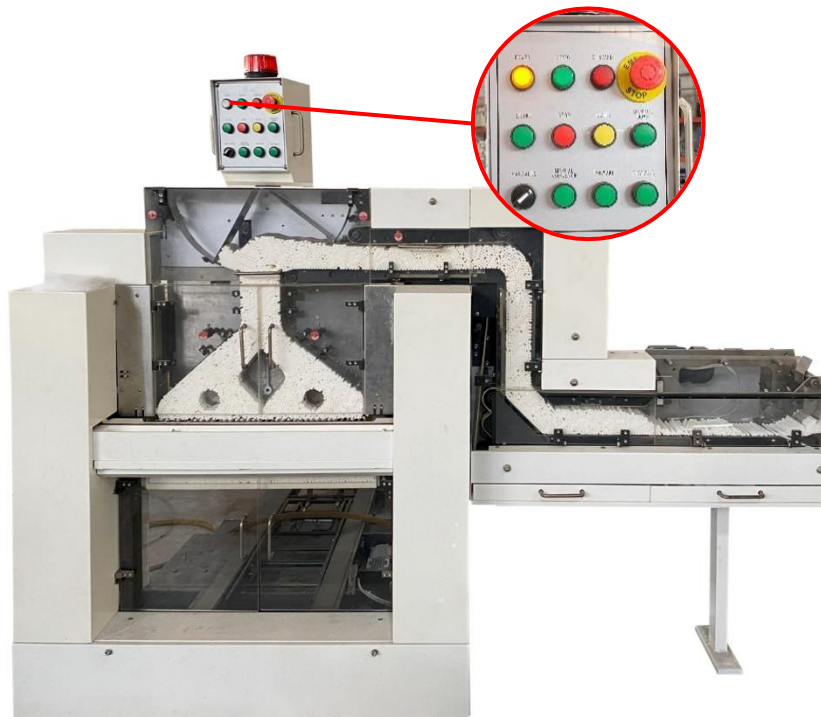


Figure 2.39 Hcf Not Ready

20. Roll Press Not On Position

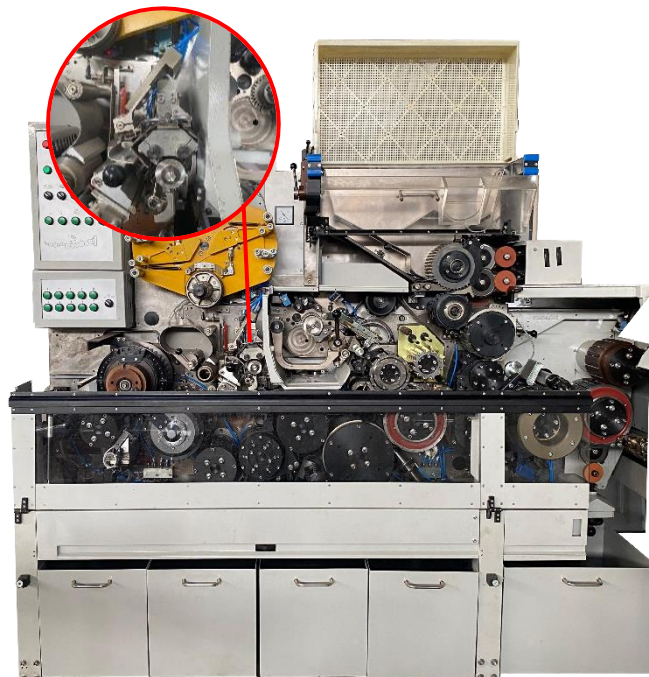


Figure 2.40 Roll Press Not On Position

21. Rolling Block Jams

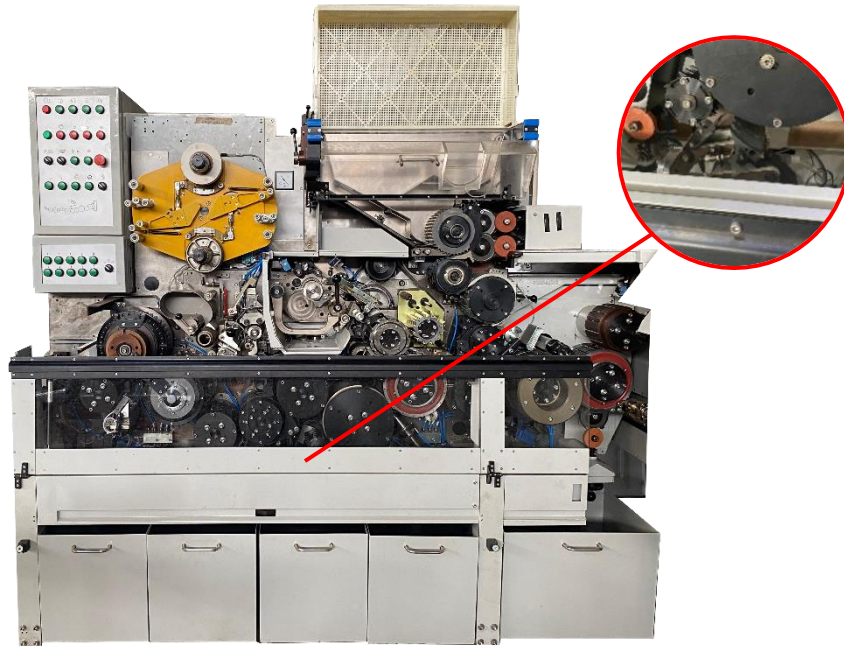


Figure 2.41 Rolling Block Jams

22. SMax Guard Open

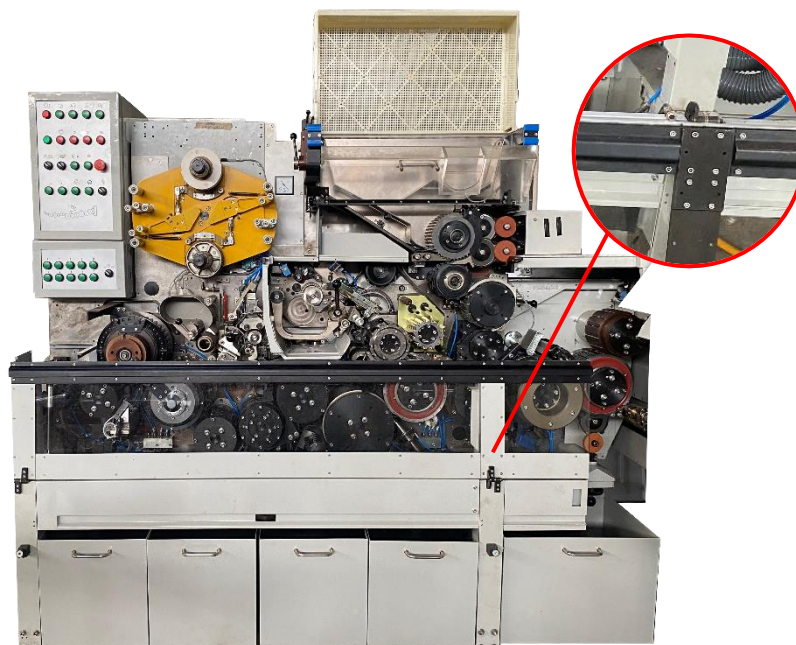


Figure 2.42 Max Guard Open

23. Max No Glue On Glue Pot

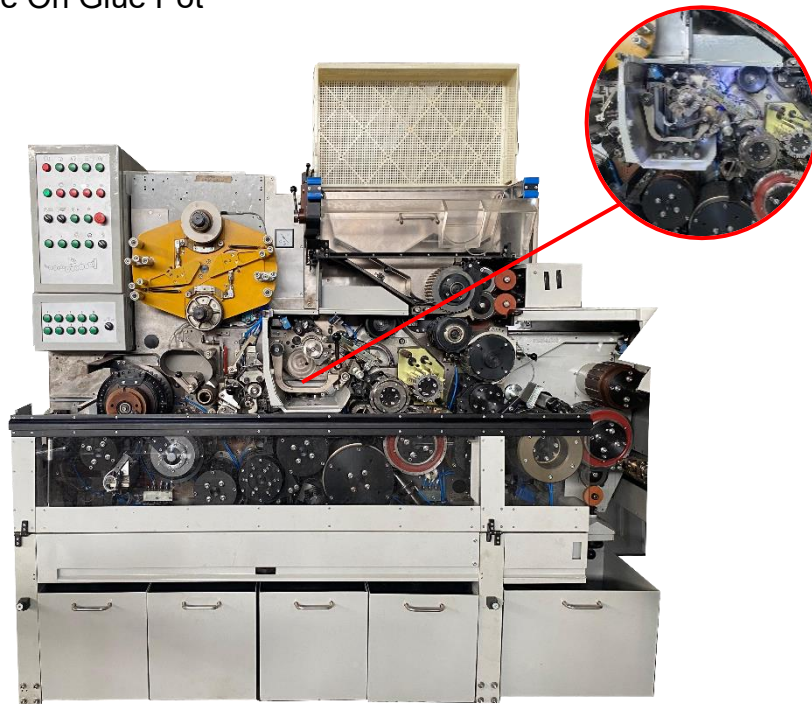


Figure 2.43 Max No Glue On Glue Pot

24. Filter Jams

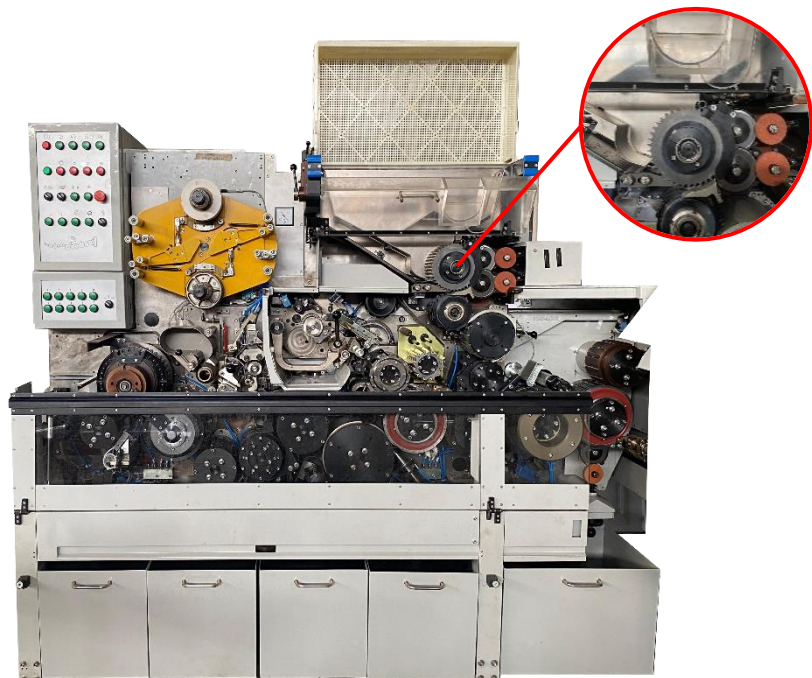


Figure 2.44 Filter Jams

25. Servo Error

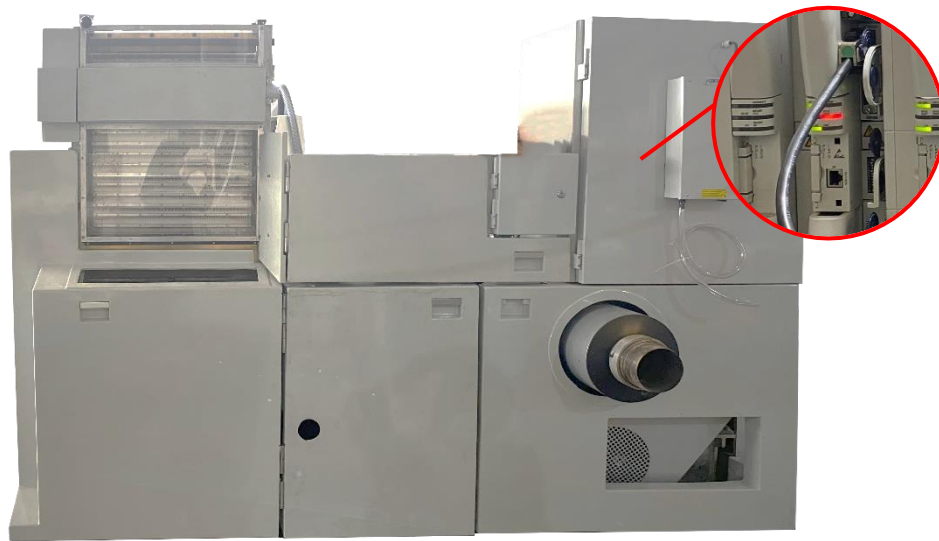


Figure 2.45 Servo Error

26. Cut Off Open

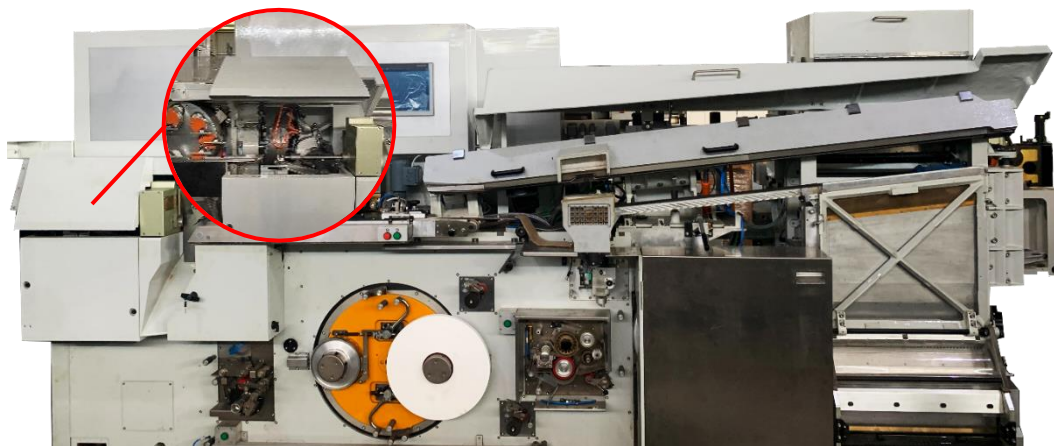


Figure 2.46 Cut Off Open

27. Knife Cut Off Empty Please Changes



Figure 2.47 knife cut off empty please changes

4. Report

By pressing the report button, the screen will switch to the report menu display, on that display there are three menus namely "weight", "error", "production".



Figure 2.48 Report button

After pressing the "report" button, the screen will display the report screen on the "weight" menu. The menu display on *this weight* displays a description of the cigarette weight report graph

4.1 Weights Report



Figure 2.49 Weights Report View

Position Function	Description
REPORT MENU	
4.1	The button that serves to display the weight report screen in the "REPORT" menu section.
4.2	The button that serves to display the error report screen in the "REPORT" menu section.
4.3	The button that serves to display the production report screen in the "REPORT" menu section.

WEIGHT REPORT	
4.1.1	Displays a report on the weight of cigarettes produced and displayed in graphic form.

4.2 Error Report

By pressing the "Error" button, the screen will display a counter description of *the error that occurred on the machine.*

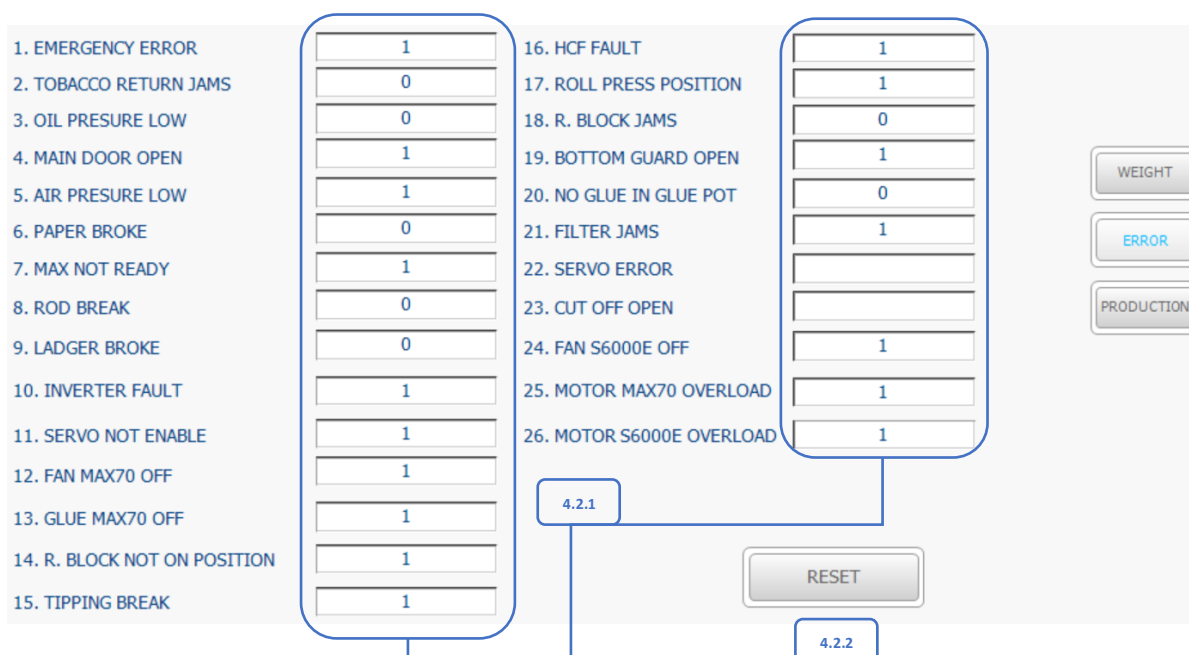


Figure 2.50 Error Report View

NOTE: THE ERROR DESCRIBED IN THE PREVIOUS CHAPTER

Position Function	Description
ERROR REPORTS	
4.2.1	Displays the number of <i>errors</i> that occurred on the machine.
4.2.2	Button to reset the number of <i>errors</i> that occur on the machine.

4.3 Production Report

By pressing the "*production*" button, the screen will display a description of the machine's production information.

4.3.1

TARGET (cpm)

6000

	SHIFT 1	SHIFT 2	SHIFT 3
4.3.2 MACHINE RUN	00:00:00	00:00:00	00:00:00
4.3.3 MACHINE STOP	00:00:00	00:00:00	00:00:00
4.3.4 QTY GOODS PRODUCT	0	0	0
4.3.5 QTY TRAY OUT	0	0	0
4.3.6 QTY TOTAL REJECT	0	0	0
4.3.7 QTY REJECT FILTER MISS	0	0	0
4.3.8 QTY REJECT CIG MISS	0	0	0
4.3.9 QTY REJECT LOOSE END	0	0	0
4.3.10 QTY REJECT PRESS DROP	0	0	0
4.3.11 % REJECT	0	0	0
4.3.12 EFFICIENCY MACHINE	0	0	0

WEIGHT

ERROR

PRODUCTION

4.3.13

Figure 2.51 Production Report View

Position Function	Description
<i>PRODUCTION REPORT</i>	
4.3.1	Displays the number of cigarette production targets to be achieved per minute.
4.3.2	Displays the amount of time the machine is running.
4.3.3	Displays the amount of time the machine stopped.
4.3.4	Displays the total amount of production output on the machine.
4.3.5	Displays the number of <i>trays</i> that have exited
4.3.6	Displays the total number of failed products in the production process.
4.3.7	Displaying the overall number of products failed because the filter on the cigarette was missing.

4.3.8	Displays the number of cigarettes lost during the journey on the drum.
4.3.9	Displays the number of products that failed because the tip of the cigarette was not completely filled
4.3.10	Shows the number of products that failed due to torn cigarettes.
4.3.11	Displays the total percentage of cigarette products that fail.
4.3.12	Displays the percentage of production efficiency of working machine. This percentage is obtained through a comparison of the number of cigarettes produced with 100% of the target value of the amount of production to be achieved during the machine work.
4.3.13	Displays the value report of each production report that occurs during 3 shifts in a day.

5. Shift

By pressing the "shift" key, the screen will switch and display the *shift* screen.



Figure 2.52 Shift key

Screen *shift* on the S-6000E machine displays the time schedule of the machine's work shift, on the machine we can set the machine's work schedule.

WORKING SHIFT TIME SCHEDULE

	SHIFT 1	SHIFT 2	SHIFT 3
5.1 START TIME	0 : 0	0 : 0	0 : 0
5.2 END TIME	0 : 0	0 : 0	0 : 0
5.3 BREAK TIME	0 : 0	0 : 0	0 : 0
5.4 ELAPSE TIME	00:00:00	00:00:00	00:00:00

5.5

Figure 2.53 Shift View

Position Function	Description
<i>Working Shift Time Schedule</i>	
5.1	The timing for starting the machine works.
5.2	The timing of the machine stops working.
5.3	The timing of the machine paused for a moment.
5.4	Displays the total running time of the machine.
5.5	Displays the settings and the amount of time the machine runs on all three shifts.

6. Ethercat

By pressing the "EtherCat" button, the screen will switch to the "EtherCat" menu display, on that display, there are three menus, namely "Device Link", "Input S-6000E", and "Input M-7000"



Figure 2.54 EtherCAT button

6.1 Device Link

After pressing the "EtherCat" button, the screen will display the EtherCat screen on the "Device Link" menu. The display on this menu displays connections between commonly used devices.

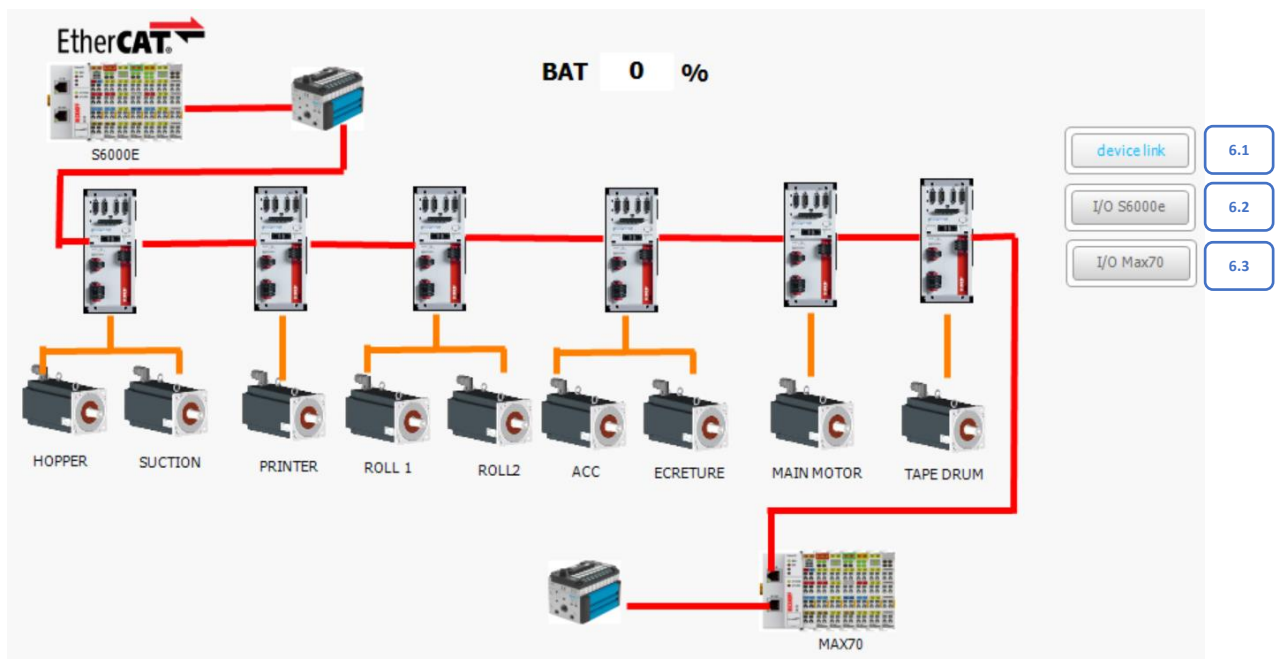


Figure 2.55 Device Link Display

Position Function	Description
<i>EtherCAT</i>	
6.1	The button that serves to display the <i>device link</i> screen on the " <i>ETHERCAT</i> " menu section.
6.2	The button that serves to display the S-6000E input screen on the " <i>ETHERCAT</i> " menu section.

6.3

The button that serves to display the M-7000 input screen in the "ETHERCAT" menu section.

6.2 I/O S-6000E

After pressing the "Input S-6000E" button, the screen will switch to the *EtherAT* display, on the "Input S-6000E" menu. The display on this menu displays the Input address S-6000E, as shown below.

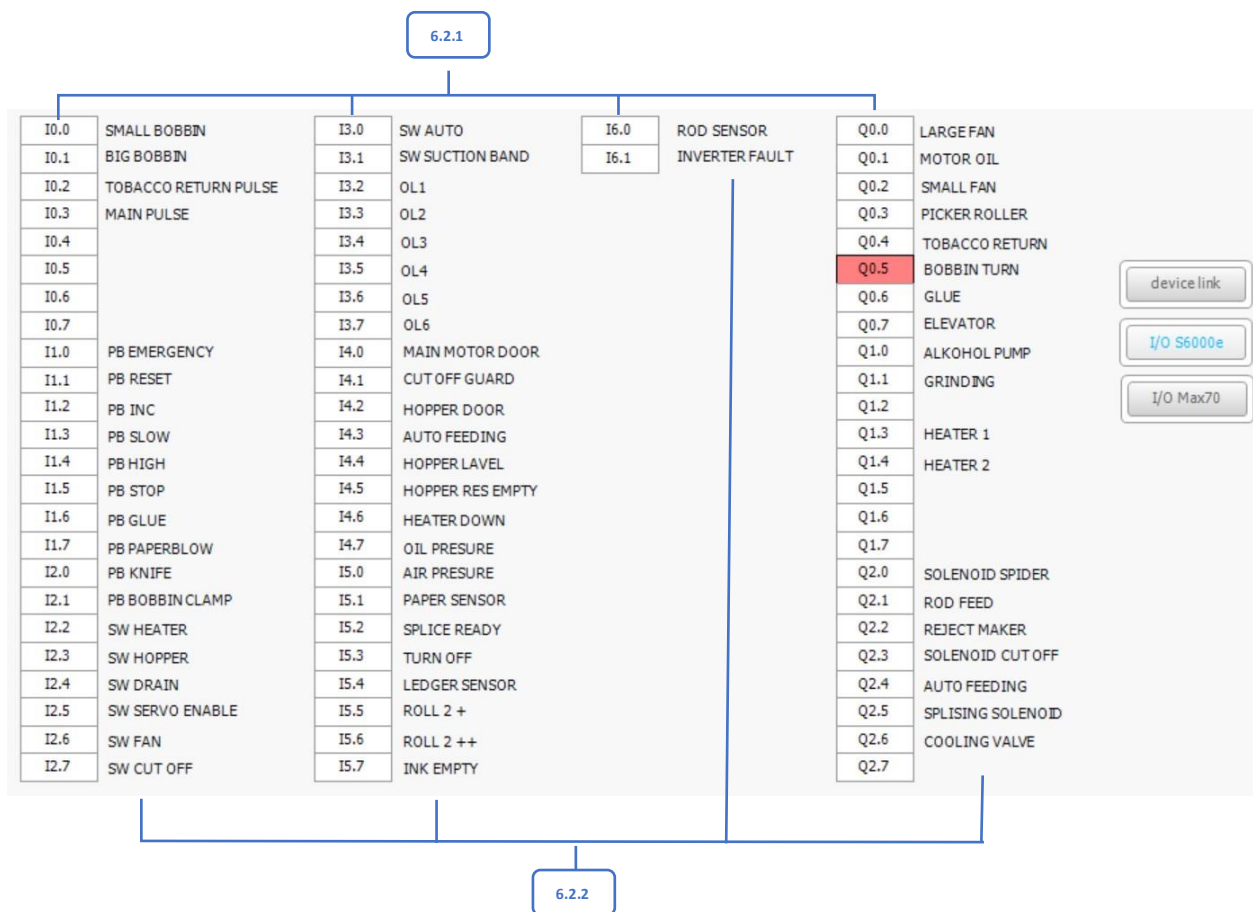


Figure 2.56 S-6000E I/O Display

Position Function	Description
6.2.1	Input Address on S-6000E
6.2.2	Description of the input address on the S-6000E

7. Shutdown

By pressing the "*Shut Down*" button, the screen and device will automatically turn off.



Figure 2.58 Tumble shutdown

CLOSING

Thus, we closed the manual book of the S-6000E cigarette making machine as a complete source of information to ensure efficient operations and optimal production results. We hope that this guide will provide a clear and deep understanding for users to be able to manage this machine well.

For further questions or technical assistance, please contact our customer service team. Thank you for your trust in choosing our products, and hope the S-6000E cigarette making machine makes a positive contribution to the smooth running of your business.