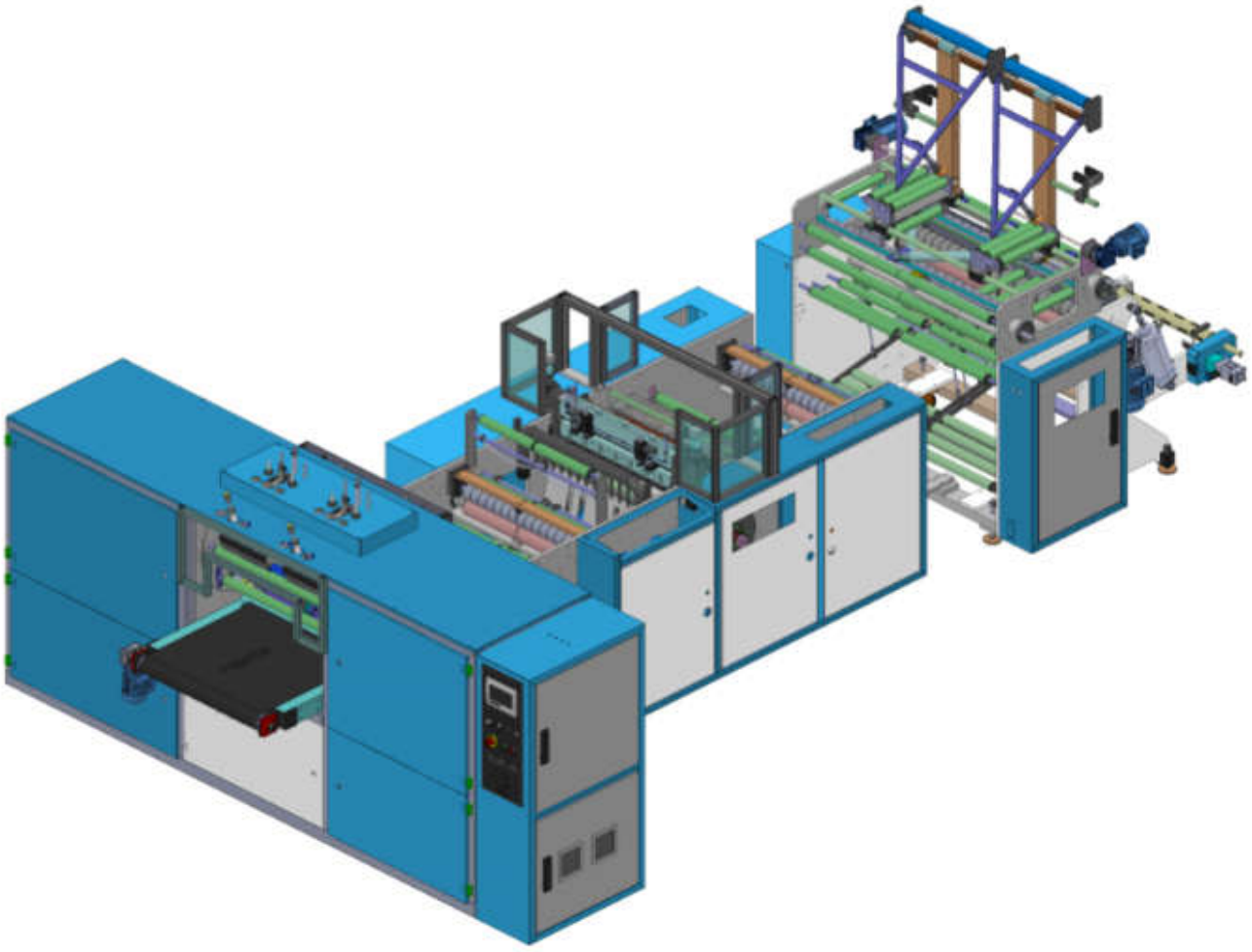
USER MANUAL



1. MACHINE INTRODUCTION:

A) MACHINE NAME :

Multi Type Folding(C,V,Z,G etc) Perforated Garbage Bag on Roll And Perforated Bottom Seal Bag on Roll Making Machine(Coreless)

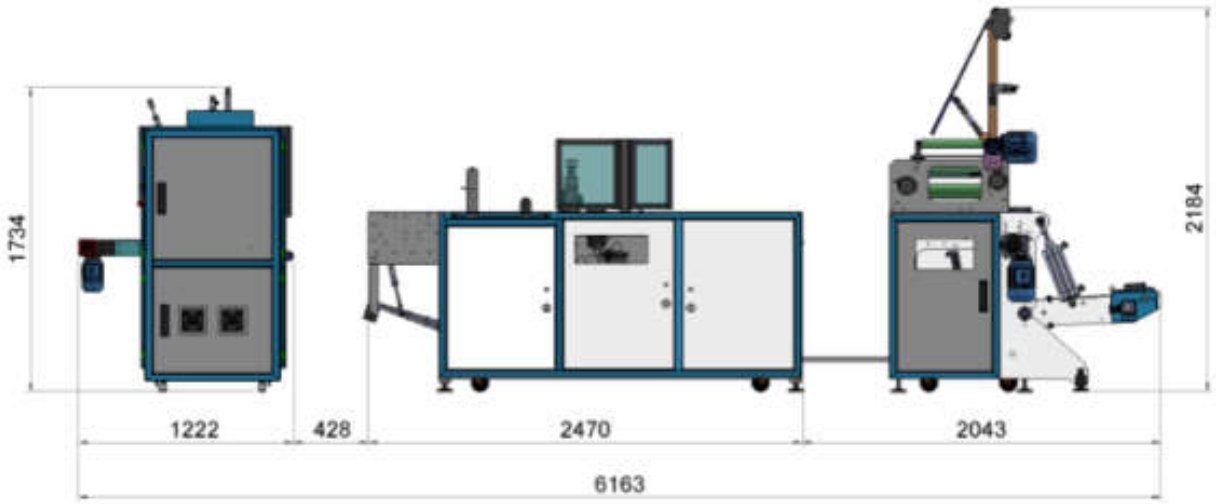
B) MACHINE TYPE:

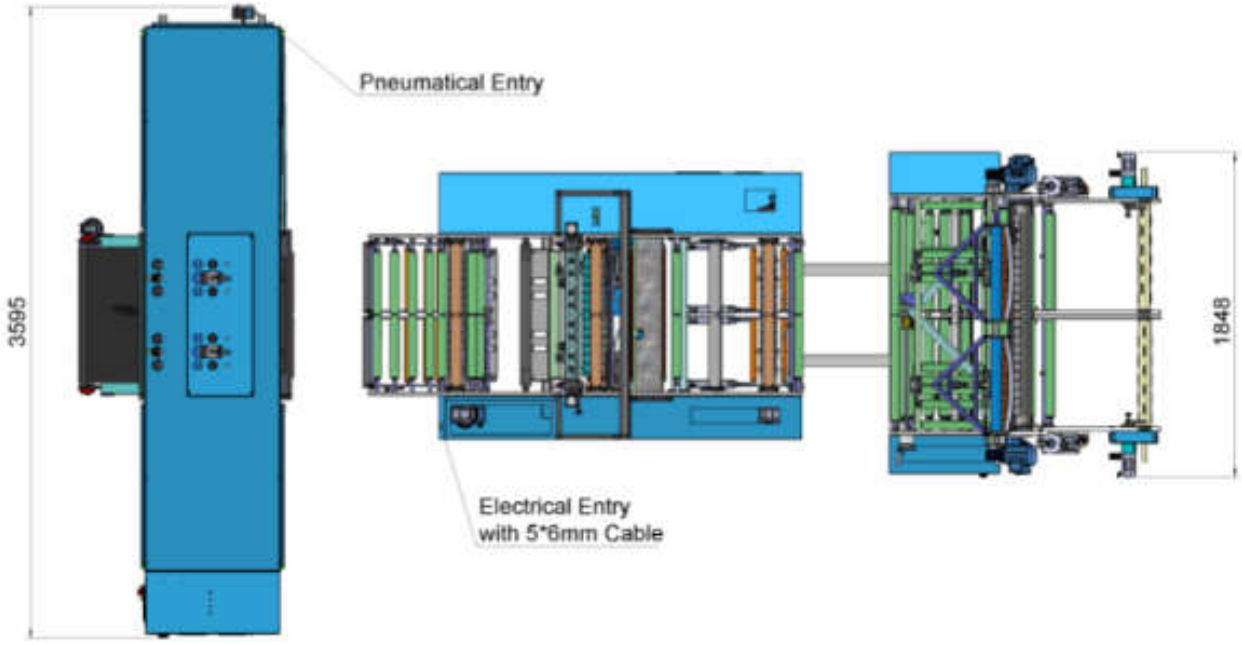
PS ROLL

C) TECHNICAL SPECIFICATIONS:

	PS-ROLL 900 M	PS-ROLL 1100 M
Max. Film Width (mm)	900	1100
Max. Roll Diameter(mm)	1000	1000
Thickness of Film(mm)	0,020-0,240	0,020-0,240
Sealing Width (Max. Bag Width)(mm)	900	1100
Bag Lenght(mm)	280-1500	280-1500
Max. Line Speed(m/min)	80	80
Production Speed (pieces/min)	150	150
Max. Roll Changing Quantity(roll/min)	8	8
Max.Winding Width(mm)	450	450
Max. Roll Diameter(mm)	130	130
Total Air Consumption(liter/min)	300	400
Total Installed Power	15	15

D) MACHINE VIEWS:





2. INTENTED USE:

Machine is used to produce Side Sealed, Bottom Sealed, Double Sealed Bags which is made from Low density polyethene (LDPE) or high density polythene(HDPE) and PP(PP,OPP,CPP,BOPP) raw materials. Courier Bag Making Machine(with or without pocket)

3. USAGE CONDITION:

That user manual consists the informations for PS ROLL Types of GÜR-İŞ MAKİNA SAN.ve TİC. LTD. ŞTİ.

Before using the machine read the user manual carefully . All the terms on the user hand book are written quite clear and expressly. But if you face with unclear points mind it and get info from our technical chef or technical person in charge. Don't forget to use the machine safe, easy,effective and efficient the user manual must be understood and checked well by the user .

PS ROLL Types Bag making machine ; In plastic sector most of the problems in bag cutting are took into consideration to be pratical and useful that the machine is designed to meet all the demands/requerements of the manufacturers.

- After moving the machine to the buyer's factory , first installation and start up will be made by our technician .
- Any attempt at interference on the machine electric connection or electric system must be made by the technic person on charge surely .
- Dont 't rip the stable and moving protectors and don't put them into non-function status .If the the protectors are put into non –function status don't use the machine untel be again function .
- Before run the machine make sure that all the belts and gears etc. covers are closed.
- The parts ripped from the machine out due to the purpose of cleaning ,repairing or etc. must be first reseted on the machine before running the machine .
- The locked panos in the machine must be locked surely . These boxes must just be opened by the technic person who is on charge and the lock key must be just in the technic person . Operator must not be able to reach these boxes .
- Machine runs with 380 V AC, 3 Phase 50 Hz electric. Different voltages or voltage changes due to the main voltage causes the electrical parts to be out of service . In case of finding new voltage values it has to connect to voltage regulators .
- Machine runs with 6-8 bars pressure air .
- The pressure that comes from the air line must be clear and dry . To provide that proper dryer for the compressor it have to be used . Clean the air filter often .
- The staff that will use the machine must be well skilled regarding how to run the machine and maintenance it.
- The machine must be used just by a operator in the same time .
- The staffs must be trusty to local and international security issues . (Safety usage and hygiene rule)
- The glossy of the lighting materials around the machine must be proper to local and international rules.
- The person who has put a tie on or has a cloth with long and width arm must not be allowed to work or repair on the machine .
- Person with long hair should tie his/her hair or put a hat on .
- The machine and around it must always be kept clear . From sliding surfaces and unnecessary barriers it must be avoided .
- If alerting signals falls down or deleted , the signals must be changed with the same one or the user must inform us .
- The person who is not technician must not intervene the machine.
- On the power cable must not be pressed and must be placed as that anything will put over.
- Check the cable from comes out from the main distributing pano and the place entered to the machine . Be careful that there is any flexion and inflection .
- If the machine is out of service due to wrong using or short materials or high heat close it . Never let the machine run with broken cable/s .
- In necessary statusses use just the correct parts if is needed to change the part use an orginal one otherwise the manufacturer is not under responsibility in any case of damage .

- Machine can not be run before setted with fixing screws on a balancer .
- Machine is under noisy limit values.

- Definitely , don't rip the earth cable .
- While maintenancing in case of ripping the protectors out should not touch to the heat parts . If is possible the electrical and air entering must be stopped and after the hot fields become cold maintenance can be made .

- If the machine (position,speed,heat, electric,pressure) running values are not poper the machine must not be let to run .
- Due to these points are injured in any case of problem or danger the manufacturer will not be under responsibility .

4. WARNINGS AND SIGNALS

● During machine works or stops; don't touch and avoid where this signal. This signal means there is electirian risk and could be dangerous. Don't touch if electricty active on machine. Be careful and protect this area from liquid even cleanning time. This area must be izolation always.

Crushing, cutting and machanical risk.Be careful when needs operation on this area.

Over temperature risc, be careful on this area even electricity off

5. PACKING , TRANSPORTING , STORING CONDITIONS:

- For packing , all the moving parts must be fixed .Which materials are in risk to be broken, must be removed and protected well.
- Packing must be made with stretch films and foams nylons on pallets by wrapping completely .
- While rising or landing the center of gravity must be took into consideration . While rising or landing the machine no body should stay nearly or close . While on loading the machine must be over a pallet and must be fixed well on the lorry or transporter
  . Additionally, the machine must be perfectly covered by a canvas.
- Before storing, all the oiled parts must be oiled as defined on the user hand book . Via a protector oil, metal materials must be oiled and so will be avoid to be rusted. Any of materials must not be kept under the press . Under the machine canvas will be put and after the machine will be placed on it. All around the machine will wrap with a strech film that will avoid from air.

6. PUTTING THE MACHINE UNDER PROCESS:

6.1 Mounting and installing

First mounting is made by our company technician .

1-Before installing the machine check it if there is a missing part or a broken part while transportation .

2-If any of a part is took off from the machine due to transportation the part will be put on by our technican again .

3- The machine needs a closed place and a ground .

4- Machine must be kept away from rain etc . wet fields .

5-Check if the machine is put on a balancer . Fixing and the screws must being fasted well. .

6-The air hose which comes from the compressor must be binded to the conditioner entering placed on the machine and the clipsses must be fasted well .

7- The hydraulic storage on the machine is filled with oil by Gür-iş factory. Just in case of oil leakage while on transportation the oil level on the hydraulic storage must be checked if is under limit.

6.2 Electric Connection

First check the main switch if it is closed .

1-Be careful for the electric stage to be 3 phases and 380 Volt 50 HZ. If the voltage values are more then the specified values then voltage rugulator have to be applied . If that is not done, the equipments working with electric can be damaged.

2-Electrical installation and cable laying of the machine must be made by a skilled worker. To run the machine with full capacity , proper nominal cable must be used . (5x6 TTR cable is advised .)The following 5 cables are used ; 3 phases ,1 neutral and 1earth(ground) cable .

3-Make sure that the machine and control cabin is connected to the earth cable .
Don't bind the eart cable as neutral.

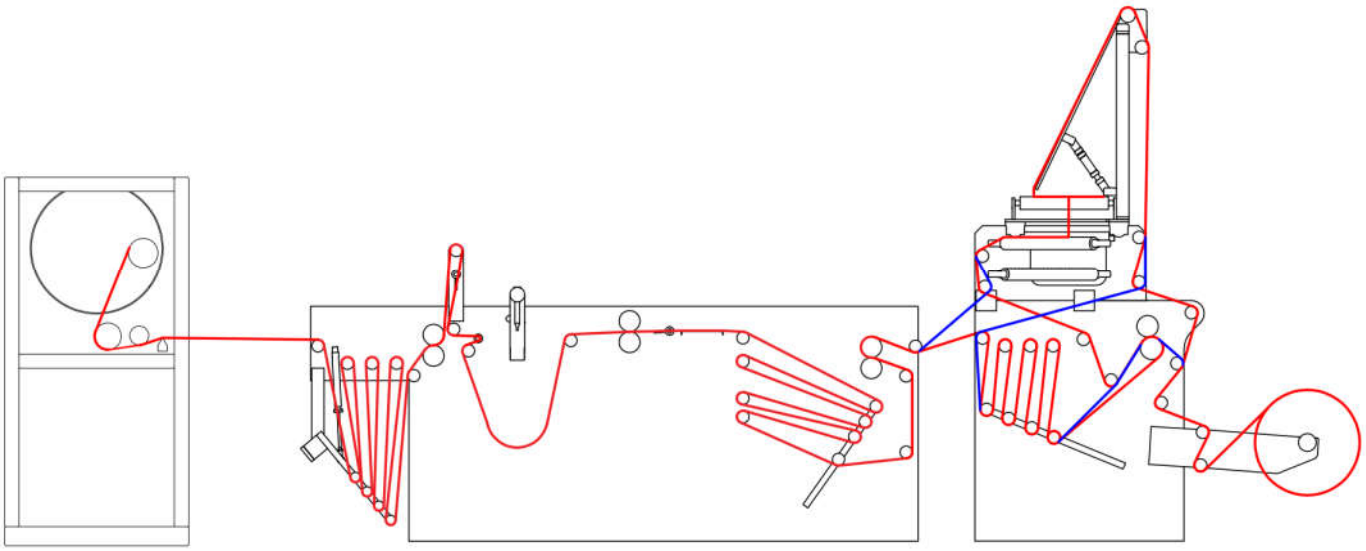
4- Qualified electirician shoul bind the energy cables comming from electrical network to the entering (R,S,T,N,PE) connectors that are placed on control cabin.

5-In the event that the order of the phases on the machine is wrong, the 'phase order relay' is located to the electrical cabinet . If the phase order is correct then the phase order relay light will be on . And the main contactor will be pull and so makes able to distribute the energy to the machine . If phase order is wrong, then cut the main electric on the machine and change the order of the main phases .Check the light of the 'phase order relay' if is on .

6-Make sure that the electric distributor panel in the factory and the cable connections placed between the electric cabinet are correct . Make sure that the cables are well fasted . Don't forget that if the cable is not well fasten there will be contact ohm between the cables and connectors and that will cause voltage decreasing on the line and the connectors can be heated and so dangerous statusses can appear .

7-Avoid to turn any of motor direction on the machine . Don't change cable directions in the electrical cabinet and machine .

6.3 Film Threading:

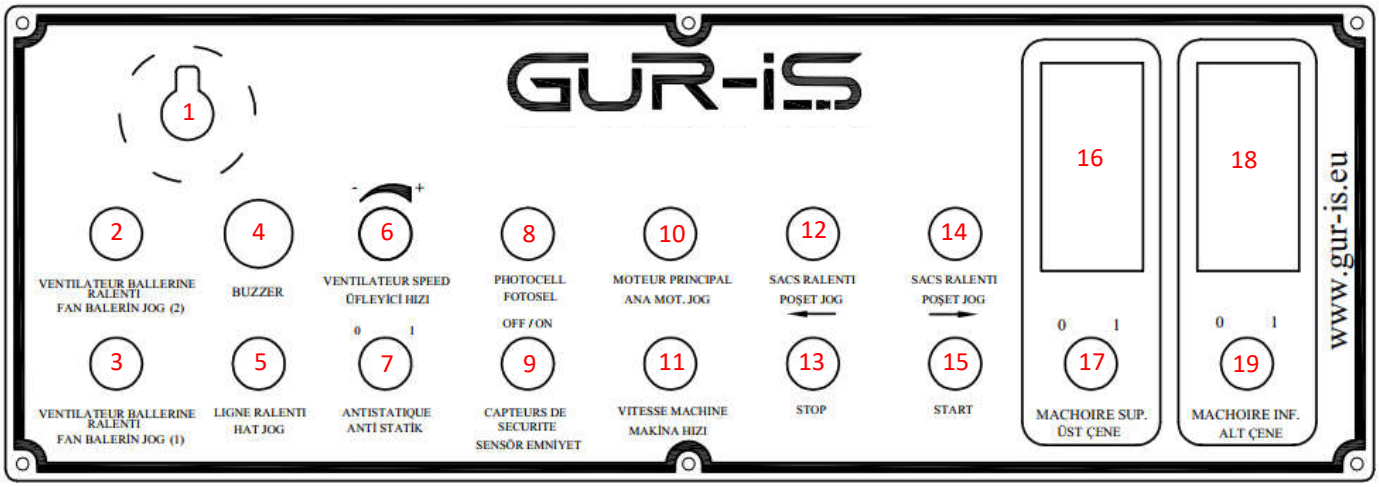


CONTROL PANELS

7. SETTINGS AND CONTROLS

7.1 CONTROL PANEL:

7.1.1 MACHINE CONTROL PANEL:



1. **EMERGENCY STOP :** Is just used while emergency statusses .By pressing on that button all the devices in the machine will stop.
2. **FAN BALERINA 1 JOG :** Fan ballerina 1 motor can move slowly in manual mode as long as press this button.
3. **FAN BALERINA 2 JOG :** Fan ballerina 2 motor can move slowly in manual mode as long as press this button.
4. **BUZZER :** While the drum is rounding then it gives an alert when it stopped the alert will also stop .
5. **LINE JOG :** All line can move slowly in manual mod as long as press this button.
6. **BLOWER SPEED :** By turning the blower speed on right then the speed will be increased and by turning to left will be decreased.
7. **ANTI STATIC :** Is used to open/close the anti static device . To open it turn right . To close it turn left .
8. **PHOTOCELL RESET :** Photocell beginning point can be apply with this button. Print mark gets under the photocell with jog button then press this button.
9. **SENSOR SECURITY (SAFETY) :** When the button is turned to left side and turned on the security sensors on the doors will be on but if the buttom turned to right side and turned off the security sensors on the door will be out of service.
10. **MAIN MOTOR JOG :** As long as is pressed on that button the weld sealing bar will move up and down .
11. **MACHINE SPEED :** By turning the speed of the machine right the speed will be increased and to left will be decreased .
12. **BAG JOG FORWARD :** Main roller (servo roller) can move slowly in manual mode as long as press this button, in this way bag move to forward.
13. **STOP :** While the machine is working automatically then to stop it press one time on the button .
14. **BAG JOG BACKWARD :** Main roller (servo roller) can move slowly in manual mode as long as press this button, in this way bag move to backward.
15. **START :** To start the machine automatically press one time on the button.
16. **UPPER SEALING BAR THERMOSTAT :** That electronical device keeps the upper sealing bar heat on the adjusted value .
17. **UPPER SEALING BAR BUTTON :** Used to open/close the thermostat device . To open it turn right . To close it turn left .

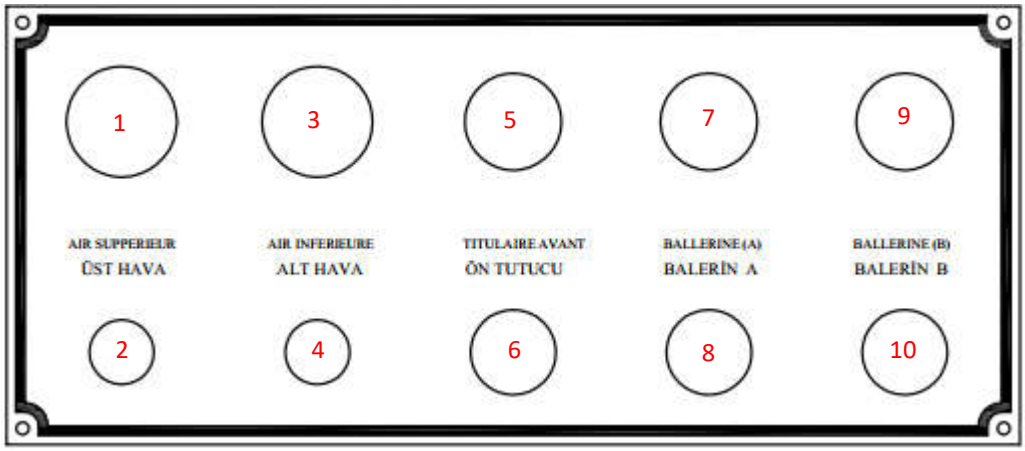
18. **BOTTOM SEALING BAR THERMOSTAT :** That electronical device keeps the heat of the upper sealing bar heat as on the setted value .
19. **BUTTOM SEALING BAR BUTTON :** Used to open /close the thermostat device . To open it turn right and to close it turn left .

7.1.2 WINDER CONTROL PANEL:

1. **OPERATOR PANEL**: Is the touch screen of the machine where the lenght piece etc. datas can be recorded.
2. **MANUEL/AUTOMATIC**: By turning that button to left side the wrapper will be brought to manuel position by turning to right will be brought to automatic position .
3. **MANUEL :** When the machine is on manual position the selected group from the machine is turned right as manual it makes a movement if turned to left and it makes a movement.

4. **RESET** : When pressing one time on that button the wrapping position is resetted .
5. **ETHERCAT :** For service
6. **EMERGENCY STOP** : Used just while emergency statusses . When pressed on that button all the devices on the machine will stop .
7. **START :** To start the machine automatically one time is pressed on.
8. **STOP :** While the machine is working automatically once a time is pressed to stop it.
9. **BLOWER :** This button in order to on or off blower.

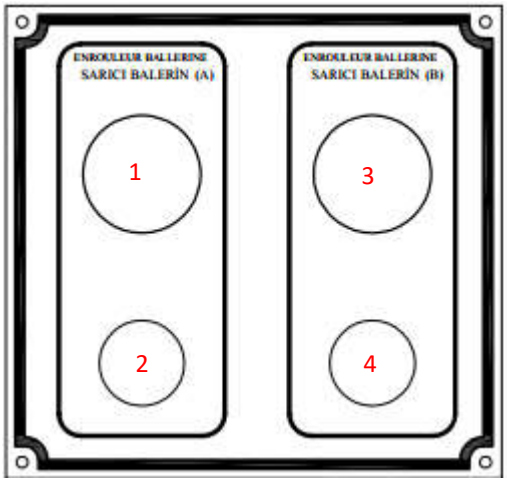
7.1.3 AIR PRESSURE CONTROL PANEL:



1. **UPPER AIR INDICATOR :** Upper air pressure can be watch over this manometer.
2. **UPPER AIR REGULATOR :** Upper air pressure can be adjustable with this regulator. This air makes the bag upper.
3. **LOWER AIR INDICATOR :** Lower air pressure can be watch over this manometer.
4. **LOWER AIR REGULATOR :** Lower air pressure can be adjustable with this regulator. This air pressure makes the bag lower.
5. **FRONT HOLDER AIR INDICATOR :** Fron holder air pressure can be watch over this manometer.
6. **FRONT HOLDER AIR REGULATOR :** Front holder air pressure can be adjustable with this regulator. This air pressure makes the pressure on the material for better sealing.
7. **BALLERINA A AIR INDICATOR :** Balerina a air pressure can be watch over this manometer.
8. **BALLERINA A AIR REGULATOR :** Ballerina b piston air pressure can be adjustable with this regulator. This air makes tension between balerina and main servo roller.
9. **BALLERINA A AIR INDICATOR :** Balerina a air pressure can be watch over this manometer.
10. **BALLERINA A AIR REGULATOR :** Ballerina b piston air pressure can be adjustable with this regulator. This air makes tension between balerina and main servo roller.

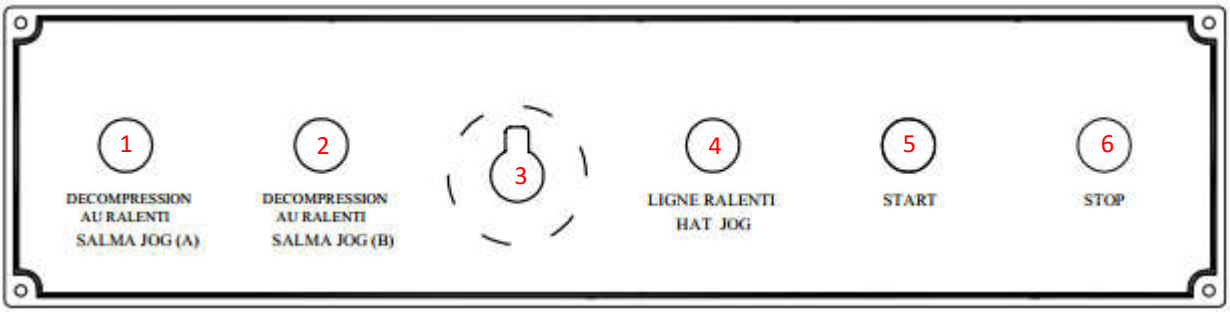
Ballerina cylenders

7.1.4 WINDER BALERINA AIR PRESSURE CONTROL PANEL:



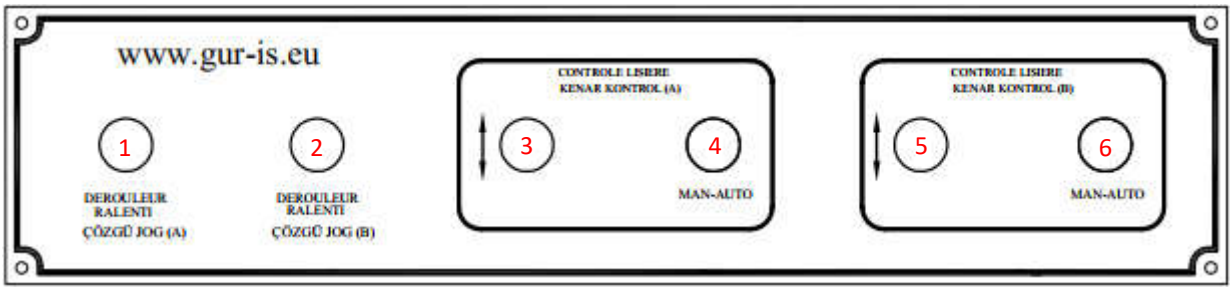
1. **WINDER BALERINA A AIR PRESSURE INDICATOR :** Winder ballerina A air pressure can be watch over this manometer.
2. **WINDER BALERINA A AIR PRESSURE REGULATOR :** Winder balerina A air pressure can be adjust with this regulator.
3. **WINDER BALERINA B AIR PRESSURE INDICATOR :** Winder ballerina B air pressure can be watch over this manometer.
4. **WINDER BALERINA B AIR PRESSURE REGULATOR :** Winder balerina B air pressure can be adjust with this regulator.

7.1.5 LINE CONTROL PANEL:



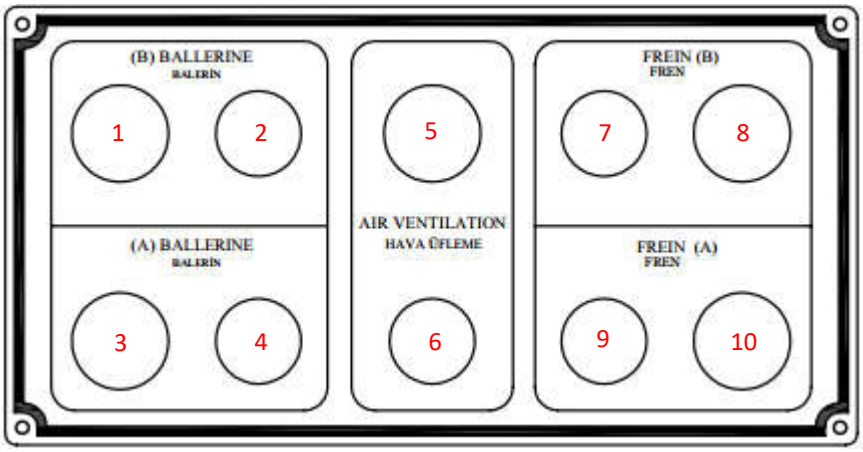
1. **RELEASE A JOG** : Release A motor can move slowly in manual mode as long as press this button.
2. **RELEASE B JOG** : Release B motor can move slowly in manual mode as long as press this button.
3. **EMERGENCY STOP** : Used just while emergency statusses . When pressed on that button all the devices on the machine will stop .
4. **LINE JOG :** All line can move slowly in manual mod as long as press this button.
5. **START :** To start the machine automatically press one time on the button.
6. **STOP :** While the machine is working automatically then to stop it press one time on the button .

7.1.6 UNWINDER CONTROL PANEL:



1. **UNWINDER A MOTOR JOG :** Unwinder A motor can move slowly in manual mode as long as press this button.
2. **UNWINDER B MOTOR JOG :** Unwinder B motor can move slowly in manual mode as long as press this button.
3. **EDGE CONTROL (WEB GUIDE) A LEFT RIGHT BUTTON :** Edge control A unit can move left or right in manually as long as press this button until limit switch.
4. **EDGE CONTROL (WEB GUIDE) A MAN AUTO BUTTON :** This button in order to select man or auto mod edge control A unit.
5. **EDGE CONTROL (WEB GUIDE) B LEFT RIGHT BUTTON :** Edge control B unit can move left or right in manually as long as press this button until limit switch.
6. **EDGE CONTROL (WEB GUIDE) B MAN AUTO BUTTON :** This button in order to select man or auto mod edge control B unit.

7.1.7 UNWINDER AIR PRESSURE CONTROL PANEL:

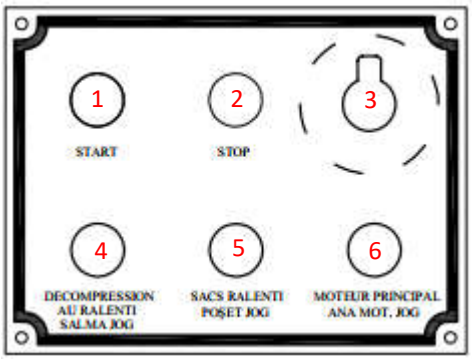


1. **UNWINDER BALERINA B AIR PRESSURE INDICATOR :** Unwinder ballerina B air pressure can be watch over this manometer.
2. **UNWINDER BALERINA B AIR PRESSURE REGULATOR :** Unwinder ballerina B air pressure can be adjust with this regulator. This air pressure makes tension between balerina and roll.
3. **UNWINDER BALERINA A AIR PRESSURE INDICATOR :** Unwinder ballerina A air pressure can be watch over this manometer.
4. **UNWINDER BALERINA A AIR PRESSURE REGULATOR :** Unwinder ballerina A air pressure can be adjust with this regulator. This air pressure makes tension between balerina and roll.

5. **FOLDING DRIVE ROLLER AIR BLOW INDICATOR :** Folding drive roller air blow air pressure can be watch over this manometer.
6. **FOLDING DRIVE ROLLER AIR BLOW REGULATOR :** Folding drive air blow air pressure can be adjust with this regulator. This make drive the material eaiser.

7. **UNWINDER B BREAKE AIR PRESSURE INDICATOR :** Unwinder breake B air pressure can be watch over this manometer.
8. **UNWINDER B BREAKE AIR PRESSURE REGULATOR :** Unwinder breake B air pressure can be adjust with this regulator. This air pressure makes the unwinder shaft hard to turn.
9. **UNWINDER A BREAKE AIR PRESSURE INDICATOR :** Unwinder breake A air pressure can be watch over this manometer.
10. **UNWINDER A BREAKE AIR PRESSURE REGULATOR :** Unwinder breake A air pressure can be adjust with this regulator. This air pressure makes the unwinder shaft hard to turn.

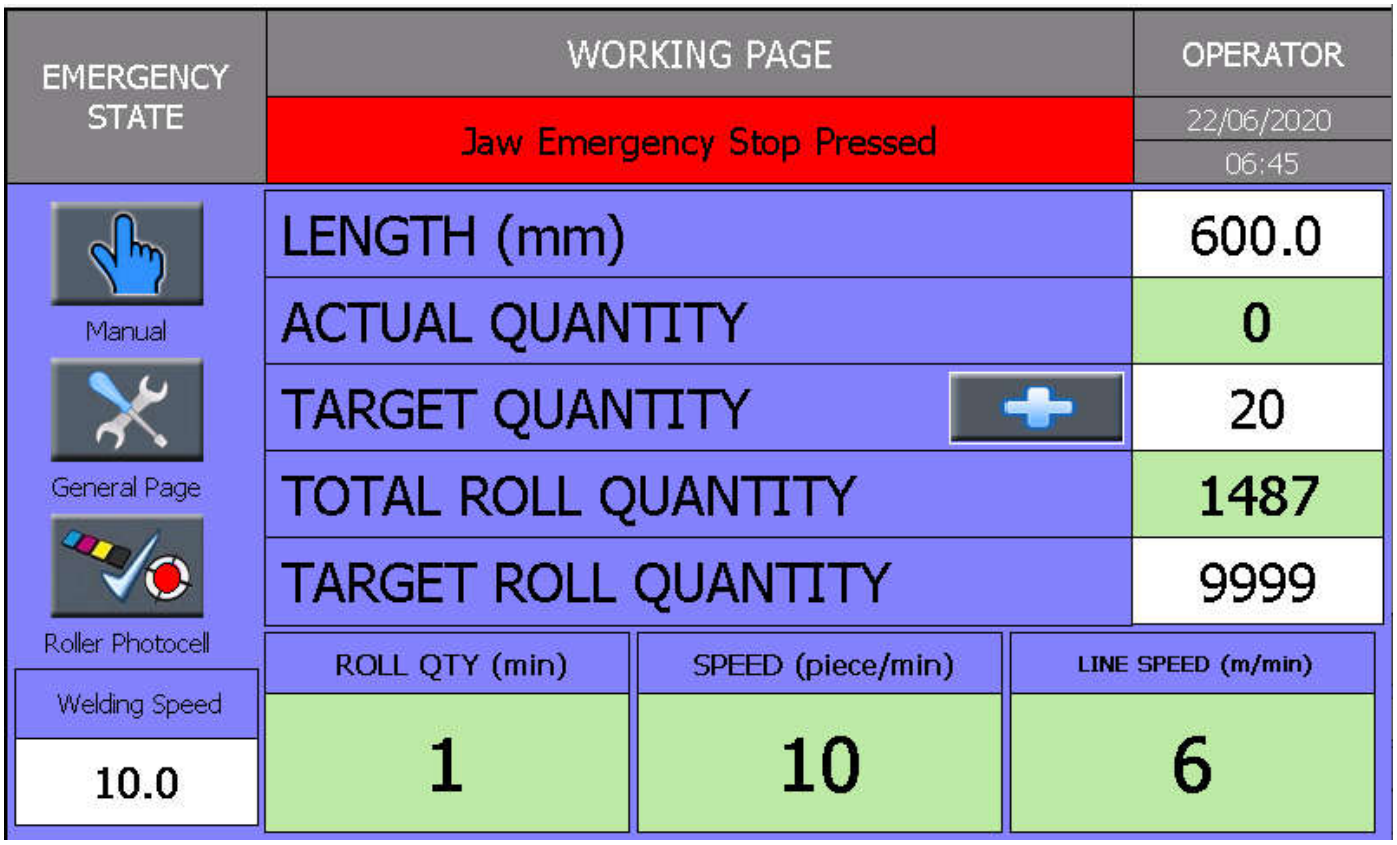
7.1.8 DRIVE SIDE CONTROL PANEL:



1. **START :** To start the machine automatically press one time on the button.
2. **STOP :** While the machine is working automatically then to stop it press one time on the button .
3. **EMERGENCY STOP** : Used just while emergency statusses . When pressed on that button all the devices on the machine will stop .
4. **RELEASE JOG :** Release motor can move slowly in manual mode as long as press this button.
5. **BAG JOG :** Bag can move slowly in manual mode as long as press this button.
6. **MAIN MOTOR JOG :** Main motor (jaw motor) can move slow in manual mod as long as press this button.

7.2 OPERATOR PANEL- TOUCH SCREEN:

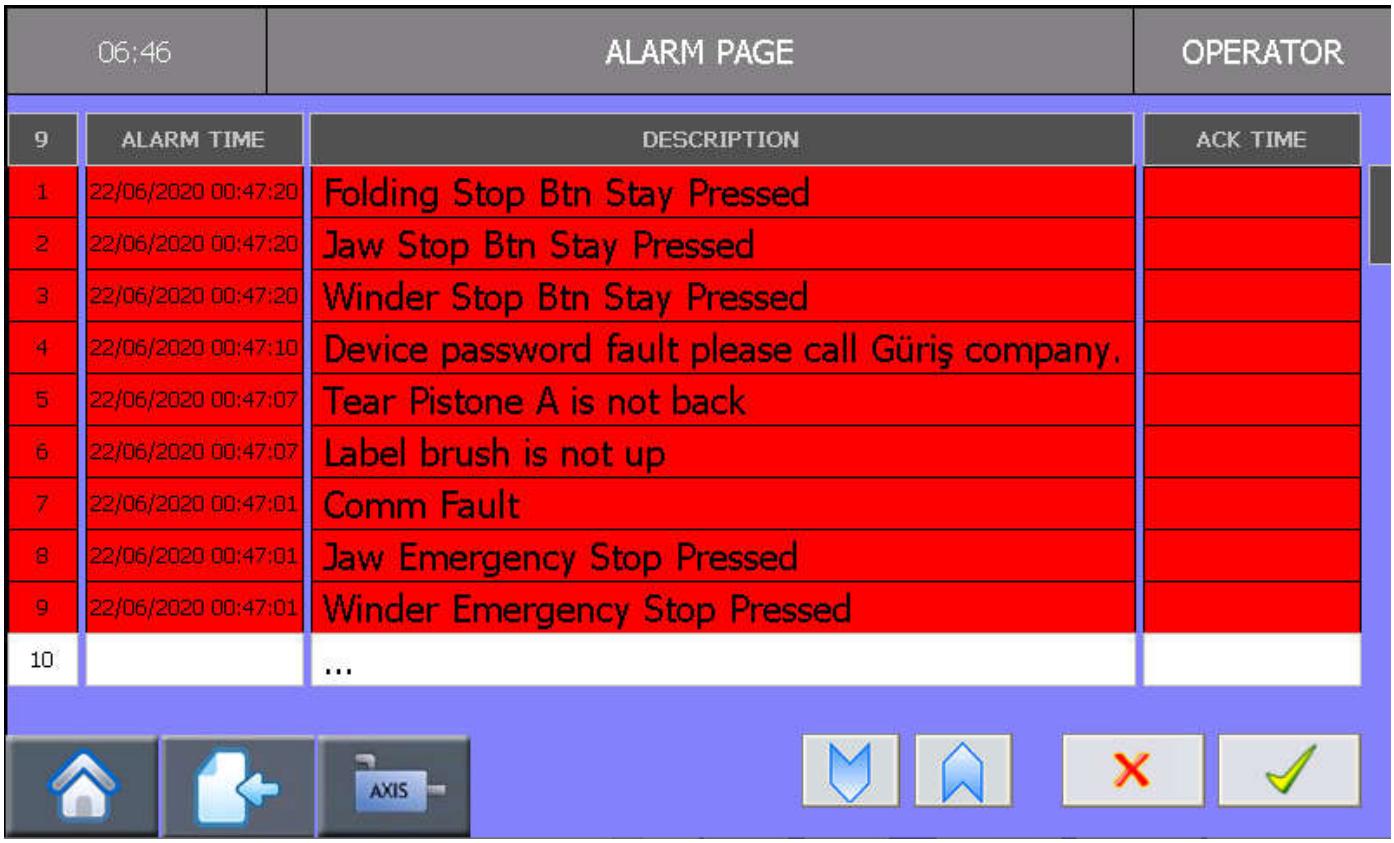
7.2.1 WORKING PAGE:



1. **LENGTH :** Bag length in mm. You should touch the that number on the screen in order to change it.
2. **ACTUAL QUANTITY :** This is for bag counting. In this example, this counter will count bags up to 100 (Target Quantity number). Then It will start to count from zero.
3. **TARGET QUANTITY :** It shows how many bags will be in a package. In this example, It is 100. There will be 100 bags in a package. You should touch the 100 number on the screen in order to change it.
4. **TOTAL ROLL QUANTITY :** It shows how many roll produced.
5. **TARGET ROLL QUANTITY :** It shows how roll will produce. In this example, It is 9999. There will be 9999. You should touch the 9999 number on the screen in order to change it.
6. **ROLL QTY (min) :** It shows machine speed according to roll quantity.
7. **SPEED (pcs/min) :** It shows machine speed according to quantity production.
8. **LINE SPEED (m/min) :** It shows machine speed according to meter production.
9. **WELDING SPEED :** It applies the welding quality if this option active the jaw goes the this speed in the applied jaw angle.

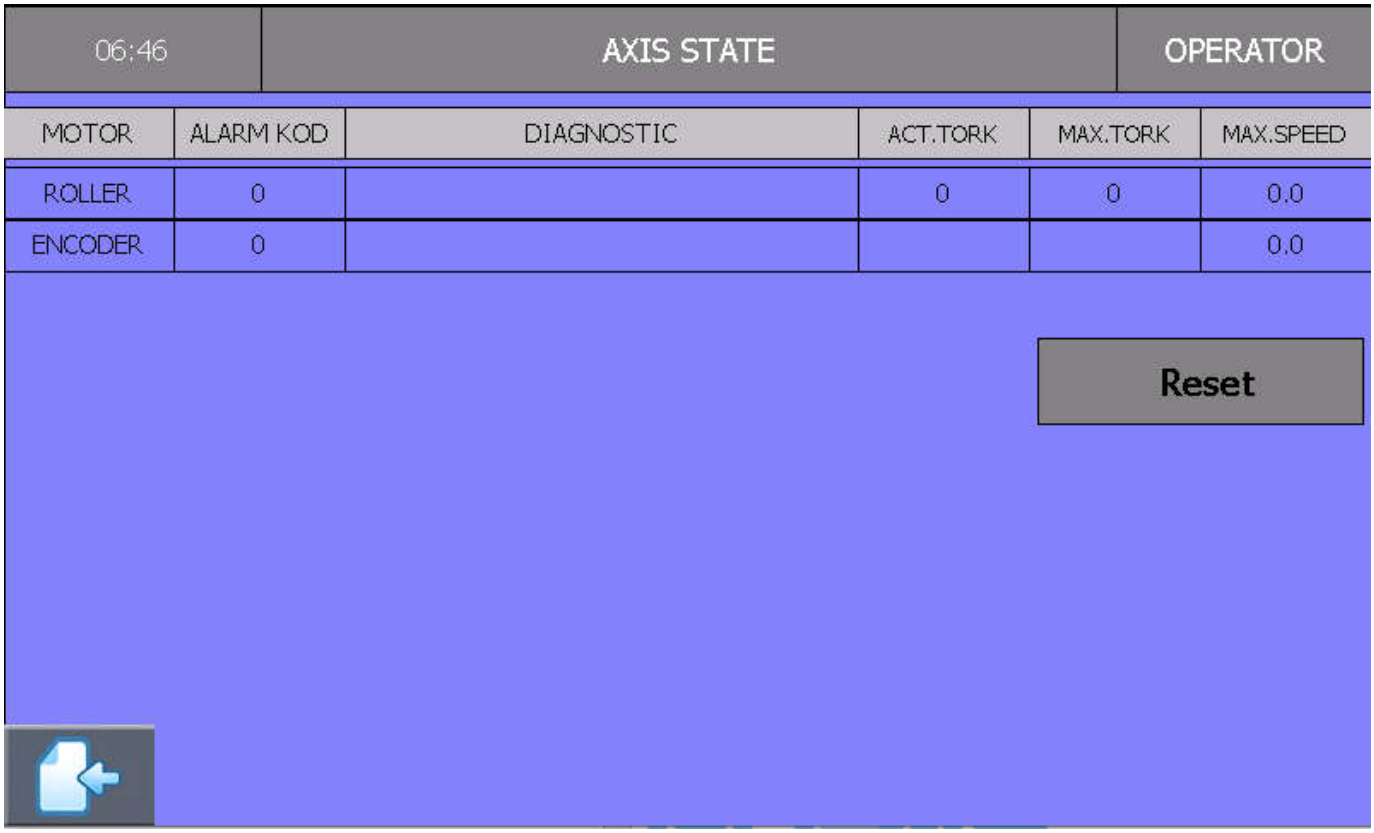
7.2.2 ALARM PAGE:

If press on alarm message alarm page will open



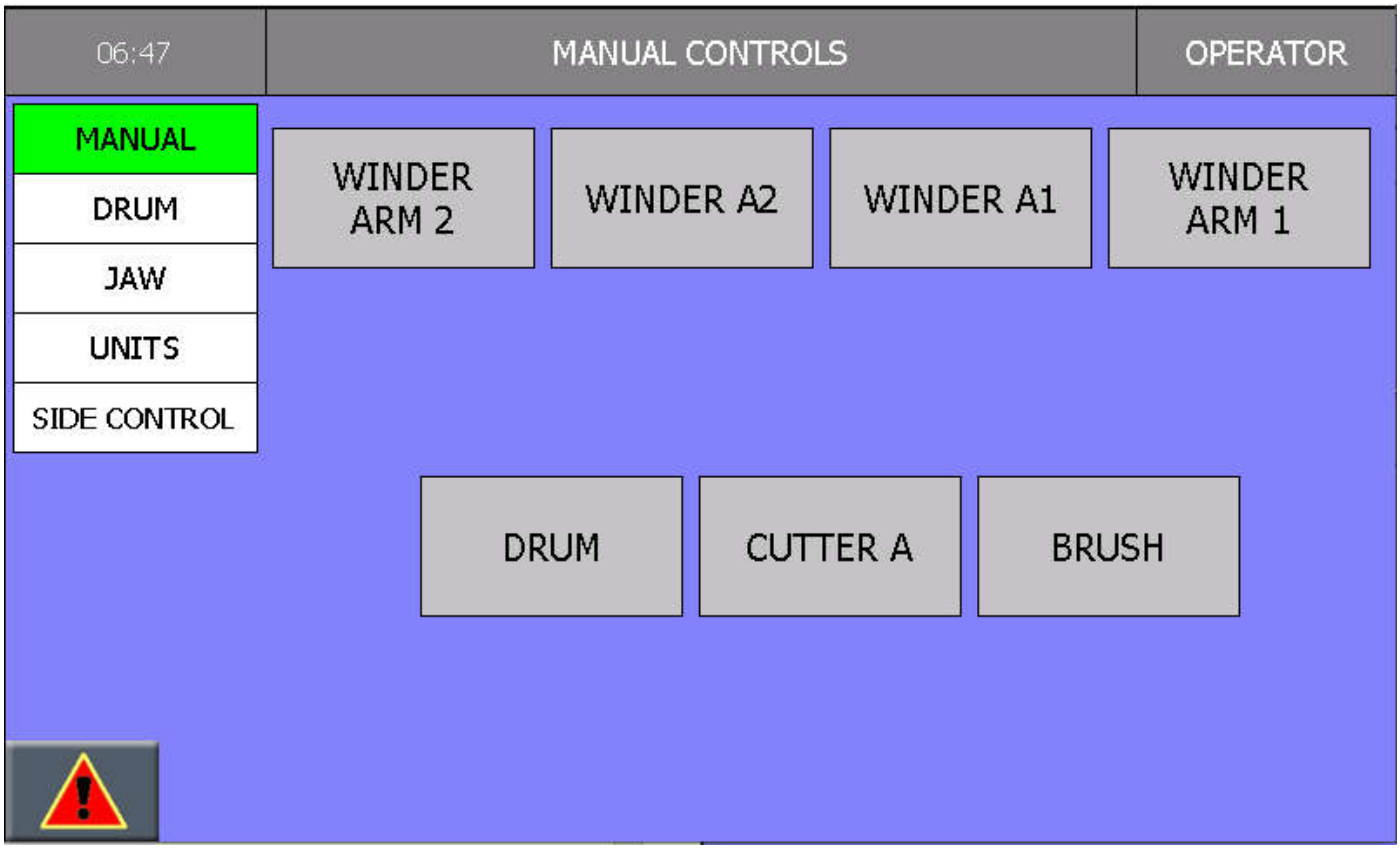
1.  with up and down button all alarm can be Show
2.  with these two buton alarm can be acknowladge and reset

if press this button servo motor detail page will open

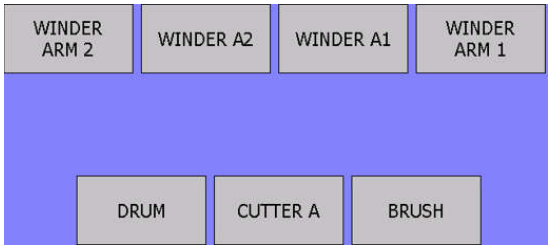


7.2.3 MANUAL CONTROL PAGE:

 if press this button this page will open

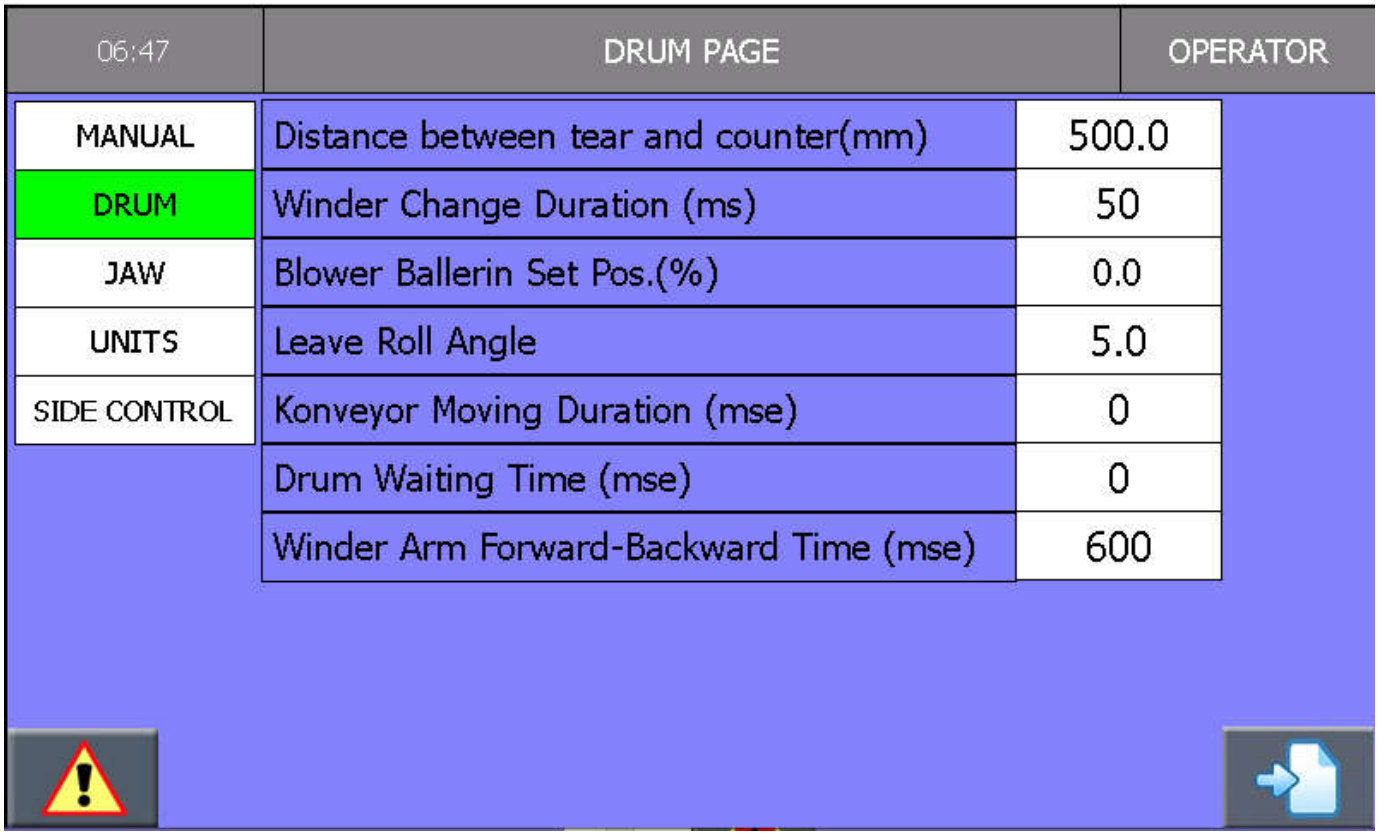


1. Manual mode has to be selected

2. 

axis which is selected with selection button can move in manually.

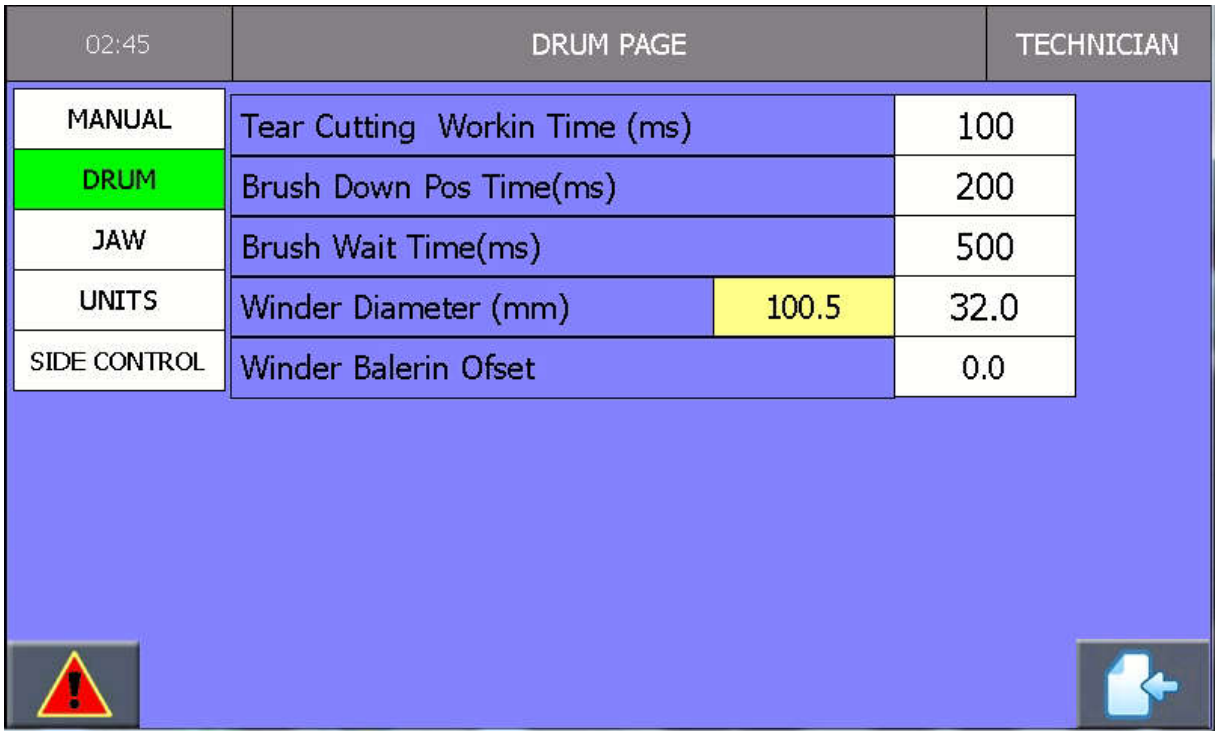
7.2.4 DRUM PAGE:



1. **DISTANCE BETWEEN TEAR AND COUNTER :** Applies the tear position, tear position can get earlier or later with this parameter.
2. **WINDER CHANGE DURATION :** There two winder arm this time applies passing time between two arms.
3. **BLOWER BALLERINA SET POSITION :** There is a puller motor after fan, that motor applies the material accumulation after jaw. This parameter used for how much material there would be.
4. **LEAVE ROLL ANGLE :** It applies the roll leave from fork (winder arm) in which angle, according the drum angle.
5. **KONVEYOR MOVING DURATION :** This applies belt konveyör works time, konveyör works for define time after drop the roll.
6. **DRUM WAITING TIME :** This applies drum waiting time after leave the roll.
7. **WINDER ARM FORWARD-BACKWARD TIME :** This applies winder arm forward time during the reset. Don't make too less this parameter otherwise winders arm can't go forward.

7.2.5 DRUM ADJUSTMENT PAGE:

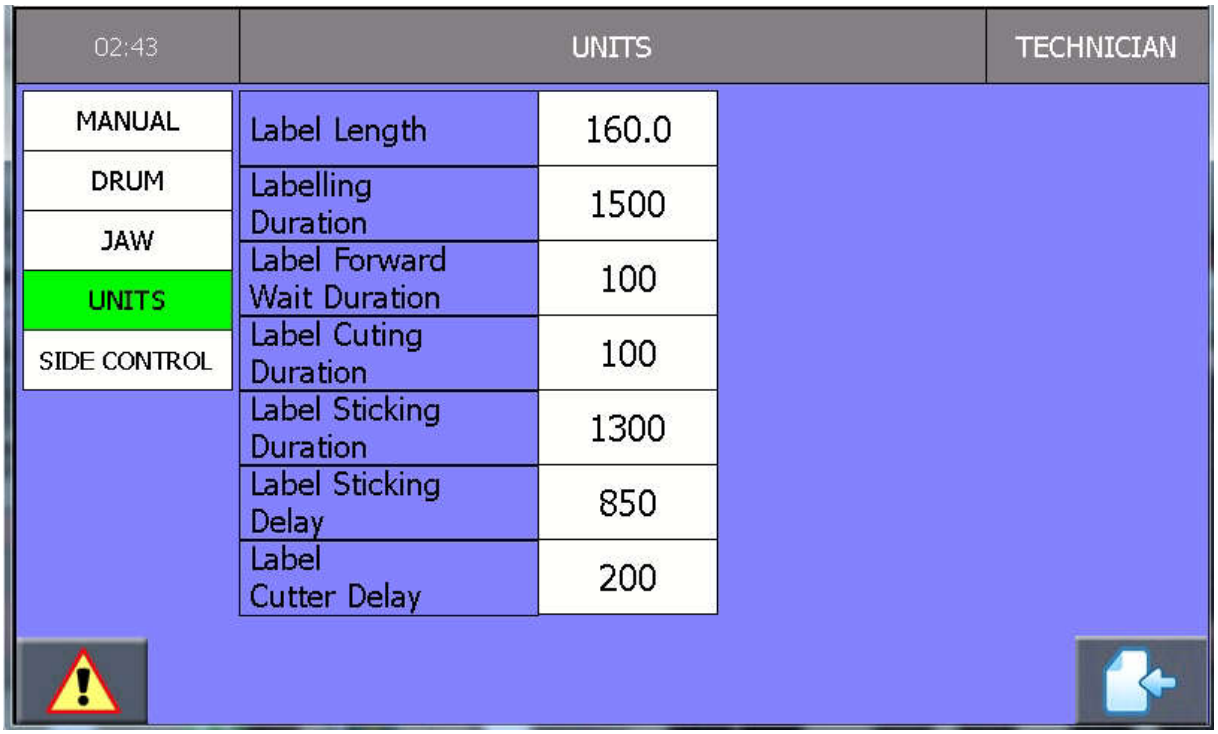
 if press this button this page will open



1. **TEAR CUTTING WORKING TIME :** This parameter determines the tear piston working duration. If this parameter too much tear piston works too much time.
2. **BRUSH DOWN POS TIME :** This parameter determines brush delay after tear piston, if this parameter too much brush work too much delay.
3. **BRUSH WAIT TIME :** This parameter determines how many times wait downside.
4. **WINDER DIAMETER :** 100.5 actual winder diameter, 32.0 minimum winder diameter.
5. **WINDER BALERIN OFFSET :** This parameter added to target winder ballerina position.

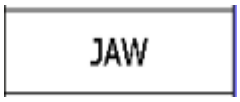
7.2.6 LABELLING ADJUSTMENT PAGE:

 if press this button this page will open

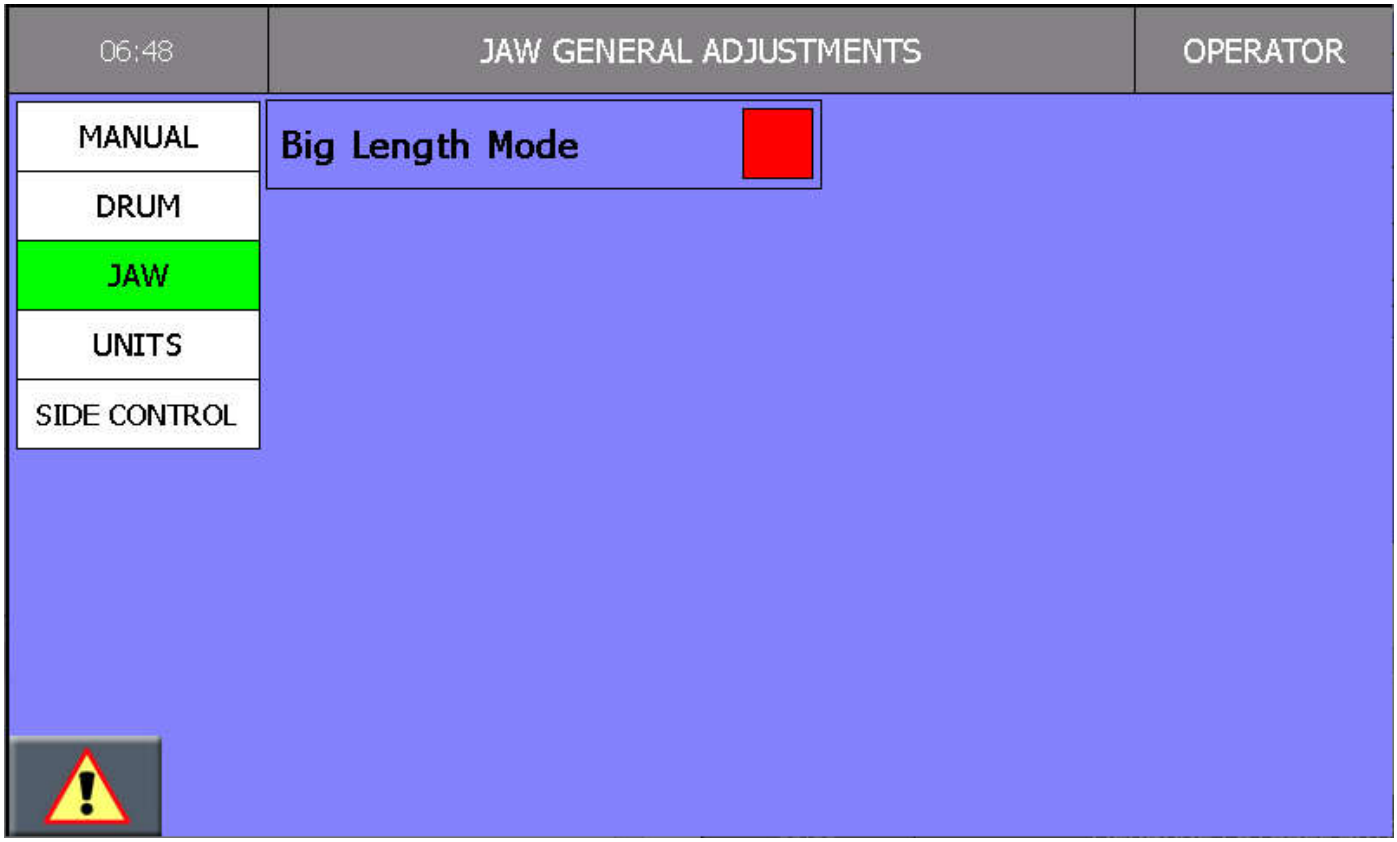


1. **LABEL LENGTH :** This parameter determines the length of the label. It can be longer or shorter according to material.
2. **LABELLING DURATION :** Total labelling cycle time, labelling system go forward according the this time.
3. **LABEL FORWARD WAIT DURATION :** This parameter determines the waiting time until reach the forward labbelling unit. If this is too much labbelling cycle start delay.
4. **LABEL CUTTING DURATION :** This parameter determines label cutter piston working time.
5. **LABEL STICKING DURATION :** This parameter determines label sticking time, label needs time for stacking to roll, tis time for that operation.
6. **LABEL STICKING DELAY :** Time is for labelling system waiting before stick the label.
7. **LABEL CUTTER DELAY :** Time is for labelling system waiting before cut the label.

7.2.7 JAW GENERAL ADJUSTMENTS PAGE:

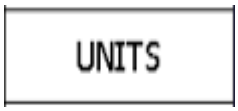


If press this button this will open

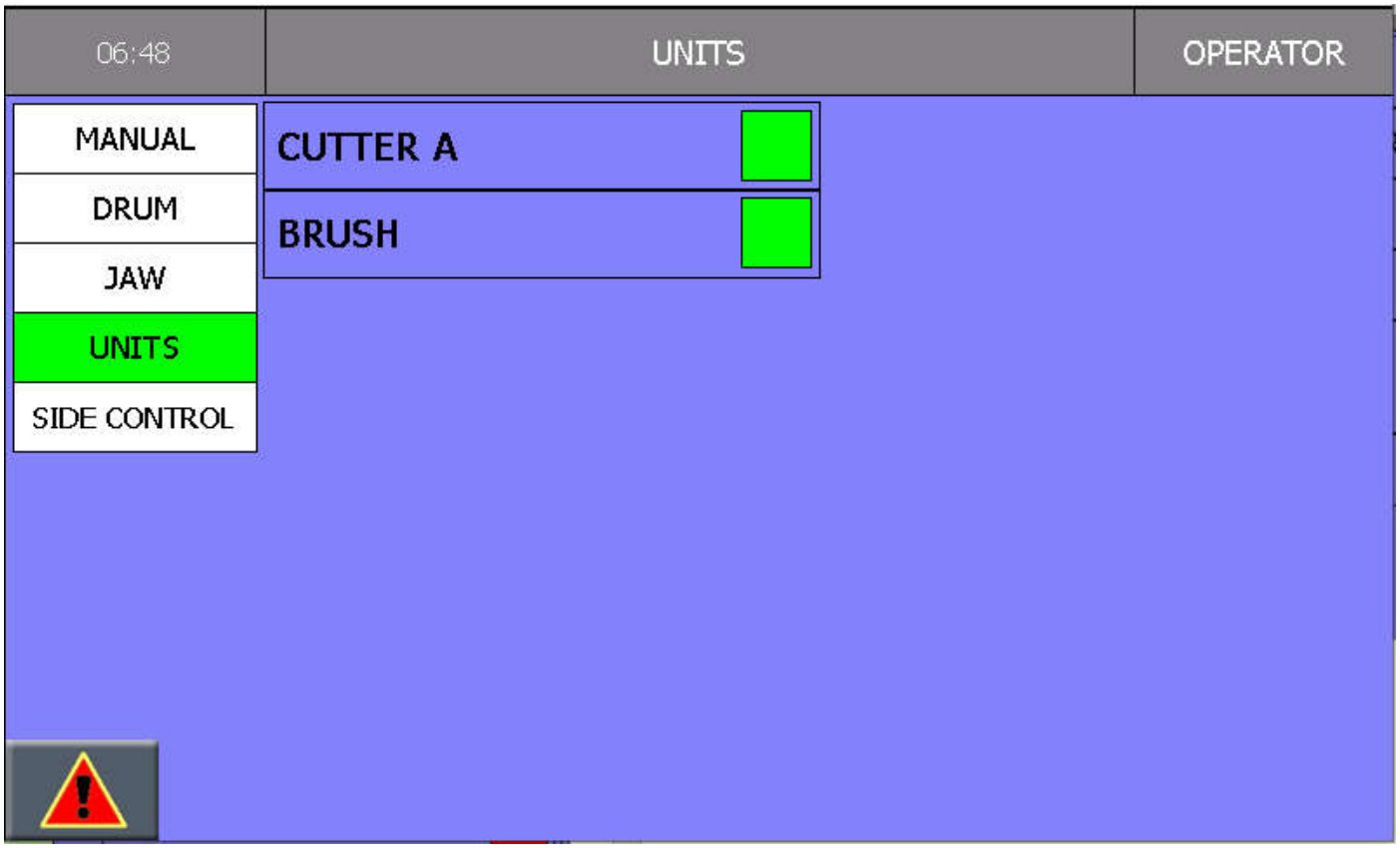


This option applies machine working type, if this option active machine can work with long length.

7.2.8 UNITS PAGE:



If press this button this will open

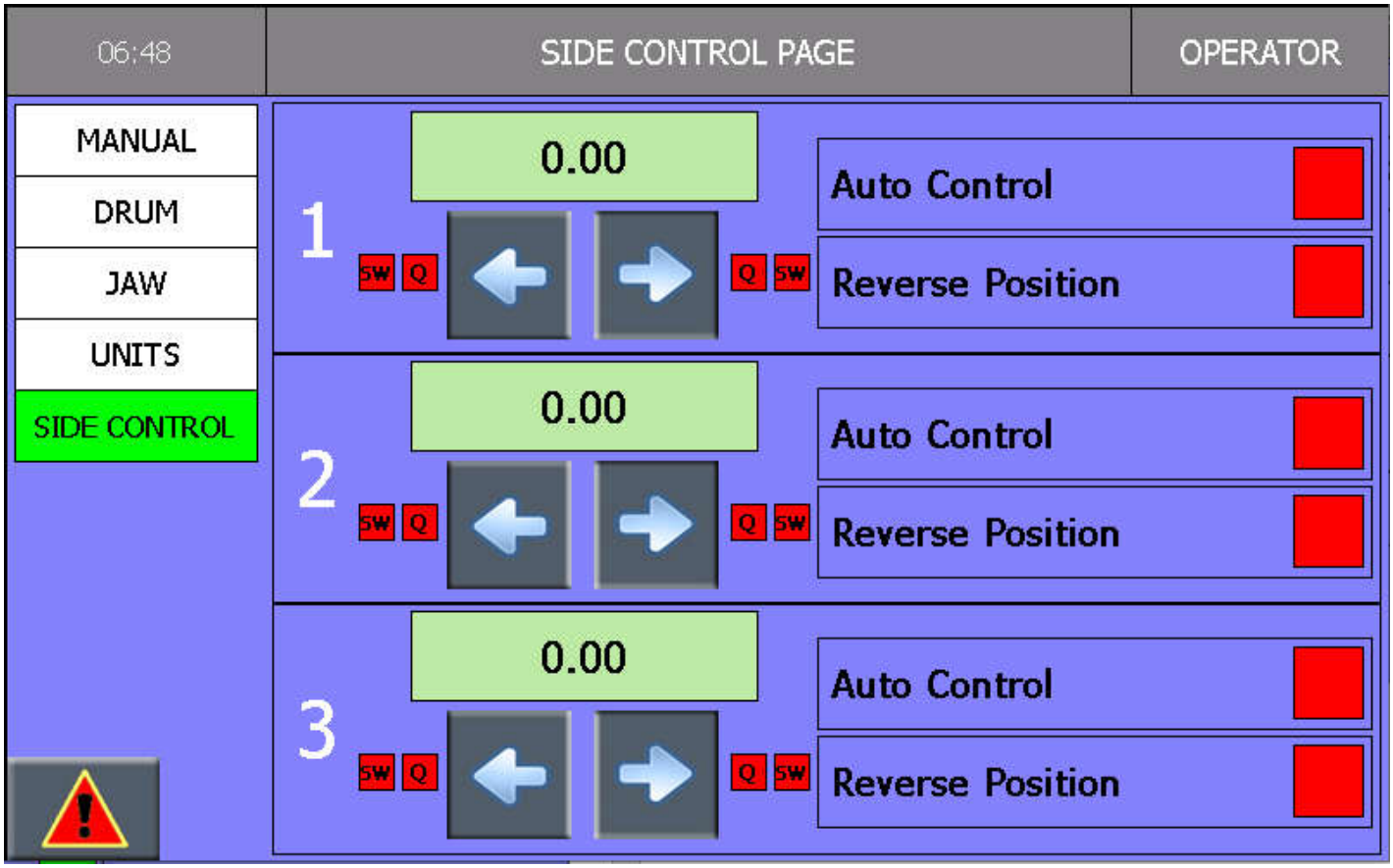


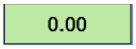
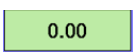
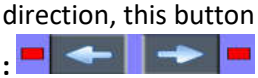
This option can activate the cutter unit, if it is selected it turns the green. If it is unseleceted it is color is red and the cutter piston doesn't work.

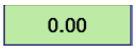
This option can activate brush, brush make roll proper.

7.2.9 SIDE CONTROL PAGE:

If press this button this will open



1. **FIRST SIDE CONTROL MATERIAL SIDE POSITION :**  It shows the material position according sensor feedback.
2. **FIRST SIDE CONTROL AUTO :**  side control can be man/auto with the selection.
3. **FIRST SIDE CONTROL REVERSE :**  side control direction can be selectable, if the side control works with wrong direction, this button should be pressed.
4. **FIRST SIDE CONTROL MANUAL MOVEMENT :**  Side control can move right or left manually with arrow button.
5. **FIRST SIDE CONTROL LIMIT SWITCHES :**  Side control move to left or right until switch of that side.
6. **SECOND SIDE CONTROL MATERIAL SIDE POSITION :**  It shows the material position according sensor feedback.
7. **SECOND SIDE CONTROL AUTO :**  side control can be man/auto with the selection.
8. **SECOND SIDE CONTROL REVERSE :**  side control direction can be selectable, if the side control works with wrong direction, this button should be pressed.
9. **SECOND SIDE CONTROL MANUAL MOVEMENT :**  Side control can move right or left manually with arrow button.

10. **SECOND SIDE CONTROL LIMIT SWITCHES :**  Side control move to left or right until switch of that side.
11. **THIRD SIDE CONTROL MATERIAL SIDE POSITION :** 

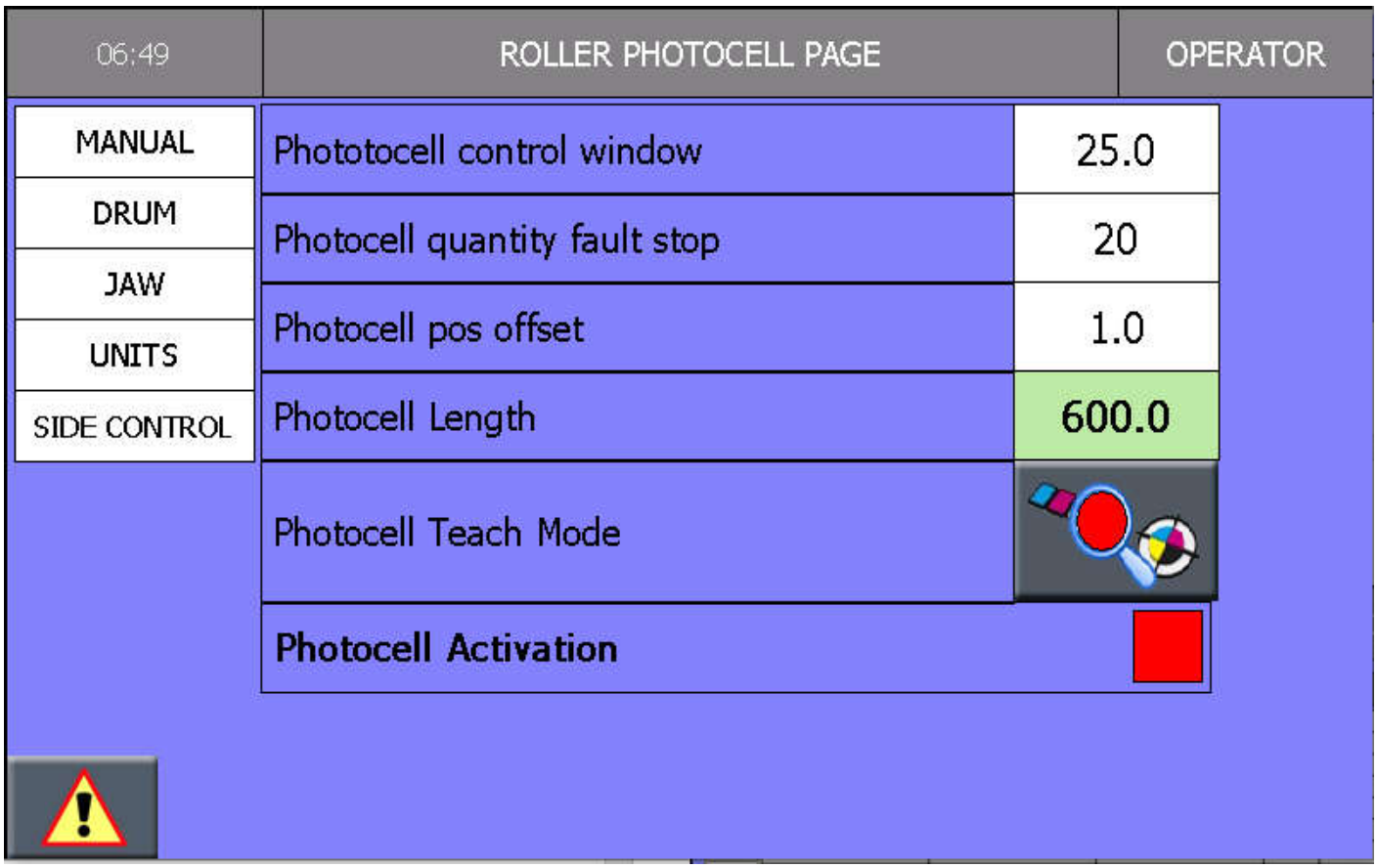
It shows the material position according sensor feedback.
12. **THIRD SIDE CONTROL AUTO :** 

side control can be man/auto with the selection.
13. **THIRD SIDE CONTROL REVERSE :** 

side control direction can be selectable, if the side control works with wrong direction, this button should be pressed.
14. **THIRD SIDE CONTROL MANUAL MOVEMENT :**  Side control can move right or left manually with arrow button.
15. **THIRD SIDE CONTROL LIMIT SWITCHES :**  Side control move to left or right until switch of that side.

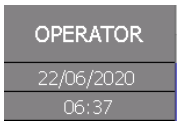
7.2.10 ROLLER PHOTOCELL PAGE:

 If press this button this will open



1. **PHOTOCELL CONTROL WINDOW :** This parameter applies, machine looking for print mark in just little area of bag length
2. **PHOTOCELL QUANTITY FAULT STOP :** This parameter applies photocell signall missing limit, after photocell missing count bigger than limit machine goes to fault.
3. **PHOTOCELL OFSET :** It provide the setting right perforate point.
4. **PHOTOCELL LENGTH :** This shows measured distance between two print mark
5. **PHOTOCELL TEACH MODE :**
   - **a.** Press photocell activation button abd activate photocell mode
   - **b.** Get place print mark under the photocell with bag jog
   - **c.** When the print mark exactly under the photocell,
   - **d.** Press teach mode for open
   - **e.** Get place the bag cutting position with bag jog
   - **f.** press teach mode for close
   - **g.** Start the machine
6. **PHOTOCELL ACTIVATION :** Photocell mode can be activate with this button, when active this button machine search for hole on the material.

7.2.11 USER ACCOUNT PAGE:

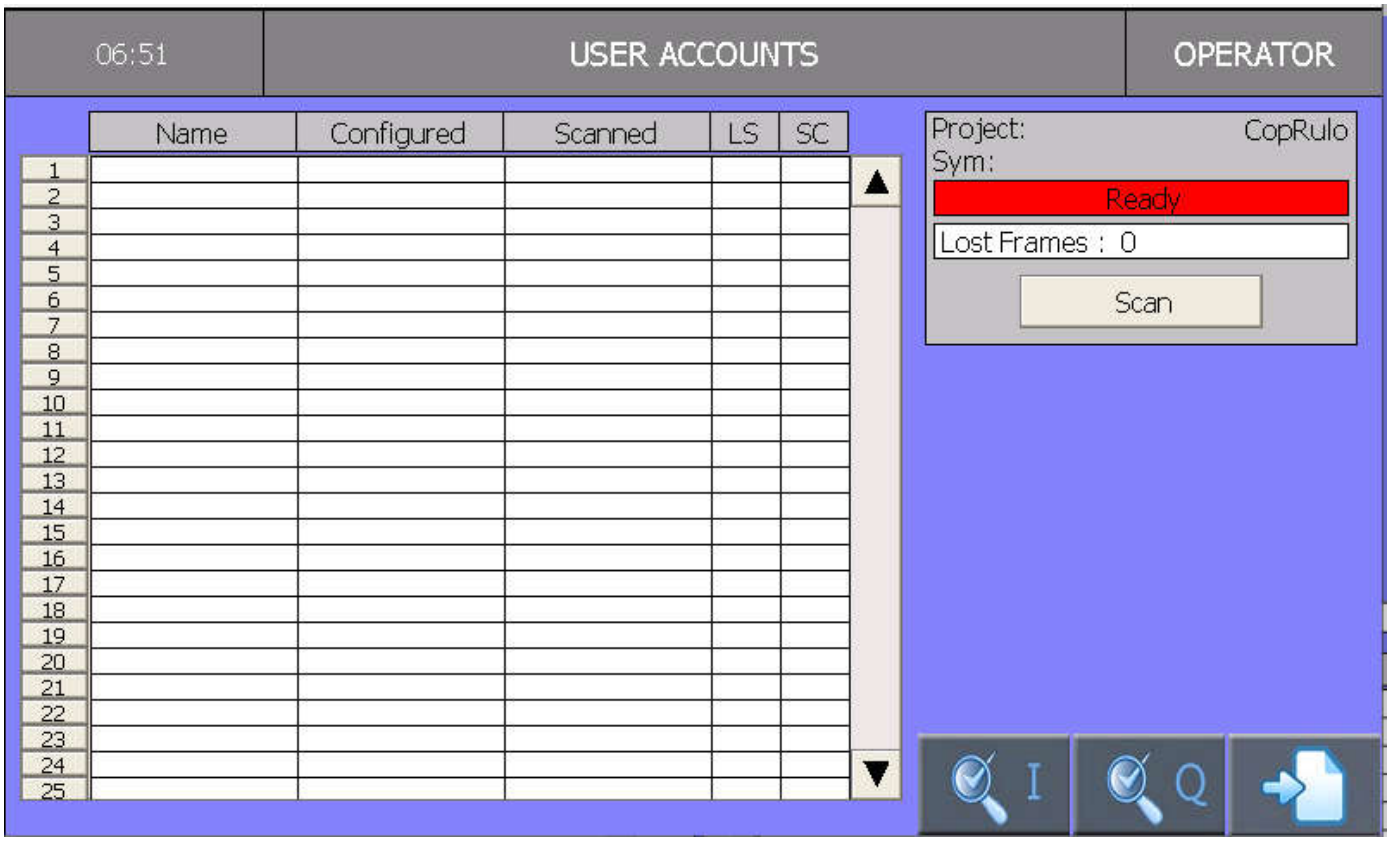


If press this button this will open

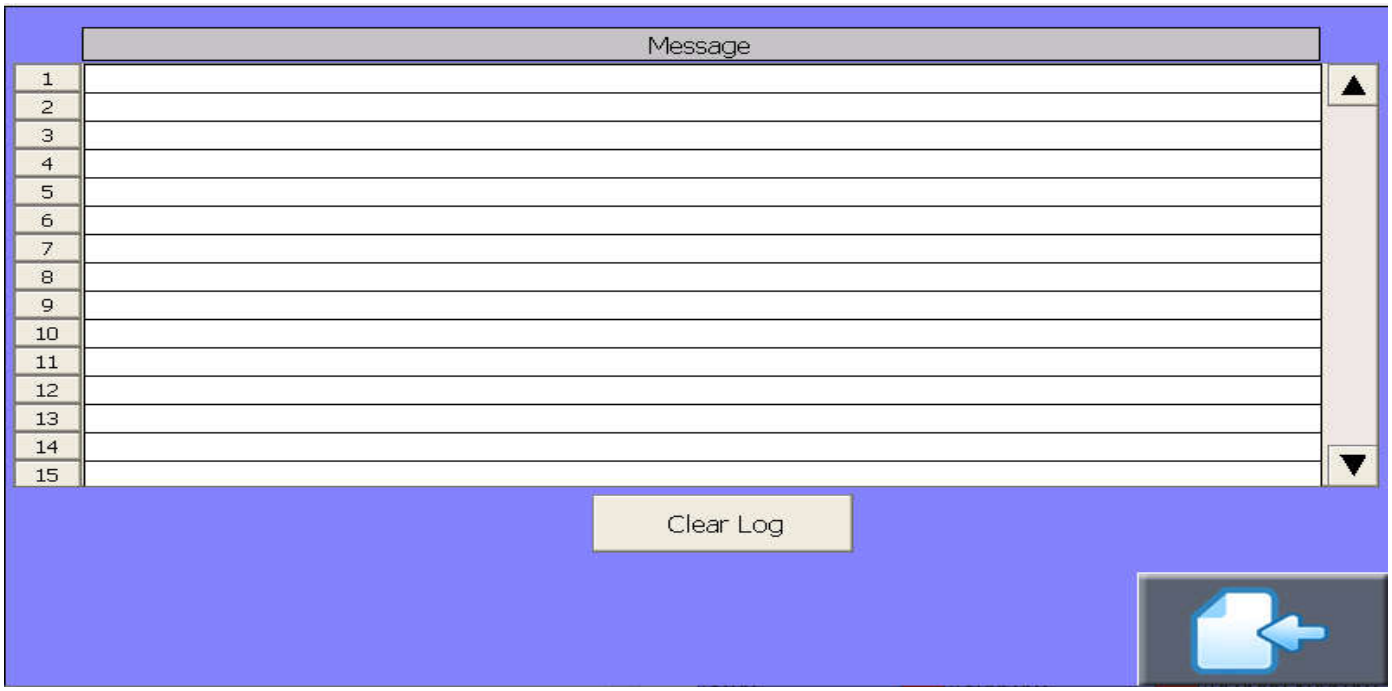
1. User level can change
2. Language can chane

7.2.12 HARDWARE CONFIGURATION PAGE:

If press this button this will open

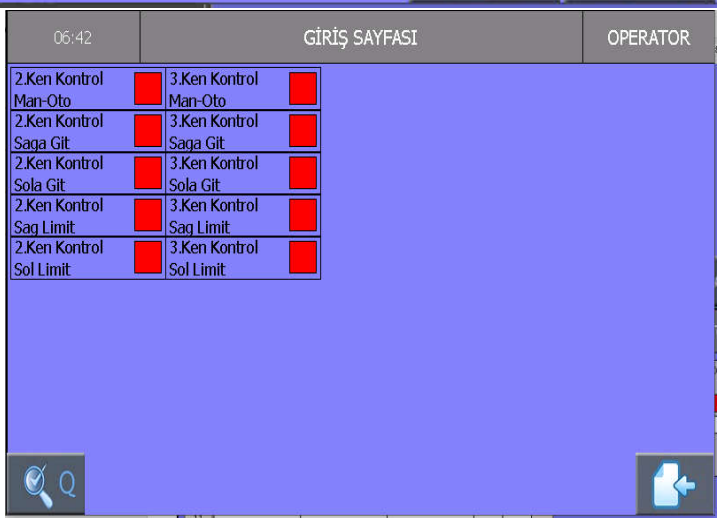


Hardware configuration can be watch in this page  if press this button message log page will open



7.2.13 DIGITAL INPUT PAGE:

If press this button this will open



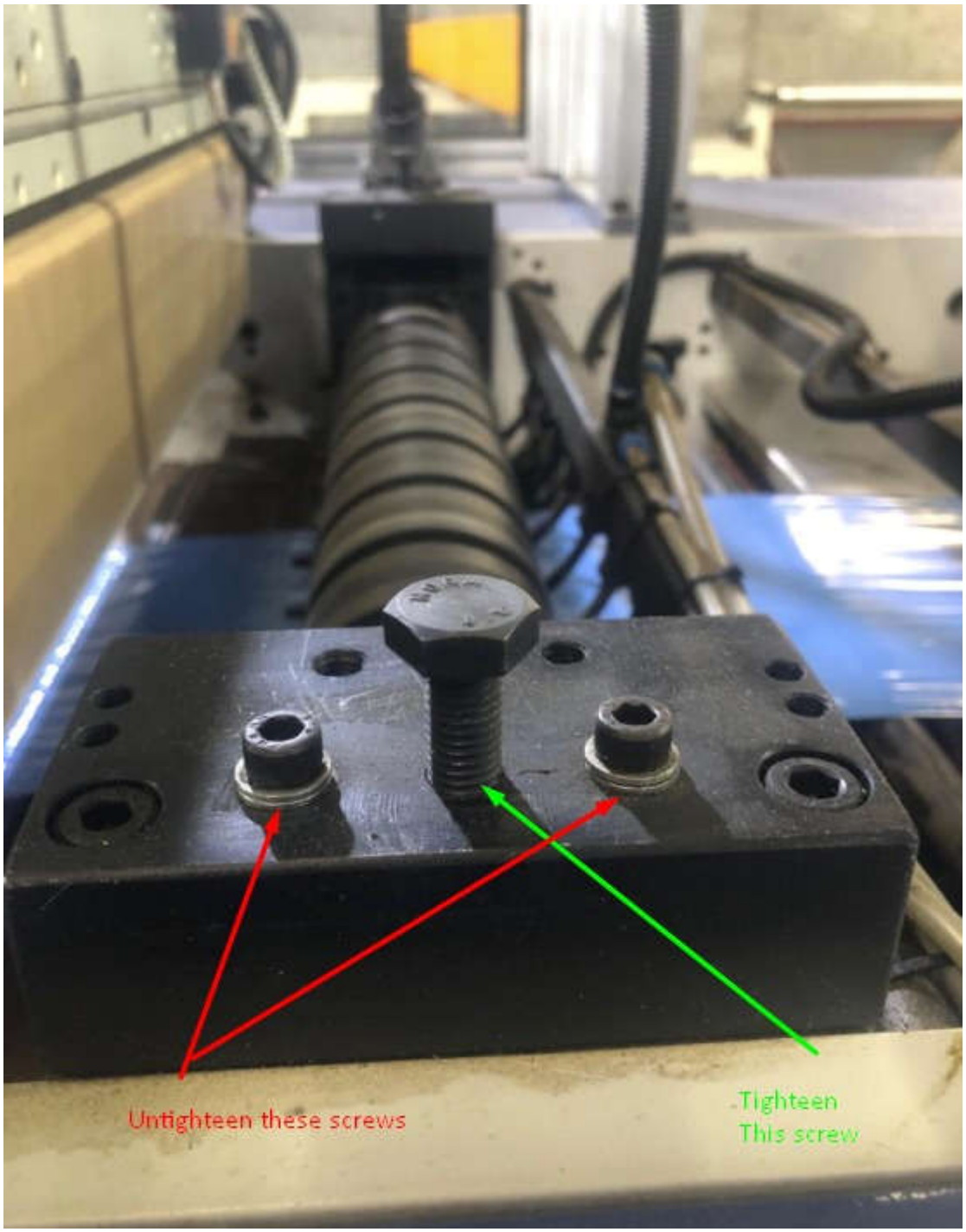
7.2.14 DIGITAL OUTPUT PAGE:

If press this button this will open

8. FIRST MATERIAL INSTALL AND START MACHINE

1. Check the air pressure it has to be between 6 and 8 bars
2. Check the phase control relay and all safety conditions on machine
3. If system has safety system turn of the safety key
4. According to material (thickness material type) adjust the upper and lower jaw temperature.
5. Film coil install the unwinder
6. Film coil must centerring
7. Check the breake gear it ust install properly
8. Check the film threading and install film
9. First install film the unwinder roller by hand then use unwinder, release and bag jog buttons
10. Write bag length and quantity which production order
11. If need open the knife heater
12. Press main motor jog
13. Adjust stacker area according to material witdh
14. Adjust belt time
15. If need drilling on material rarely for air exhaust
16. Check the jaws temperature
17. Make web guide system automatic
18. Start machine and control form unwinder to stacker area

8.1 ROLLER TENSION SETTING



1. If the roller pressure isn't enough the bag length can be longer or not stable
   a. Untighteen nuber 1 screws
   b. Tighteen number 2 screws

!! Check the material tension, pull by hand it shouldn't rid of roller easily.

8.2 ROLL WIDTH SETTINGS

a. **Flag setting video**
https://drive.google.com/file/d/1QBHrLE42ZBXucXBg8g-zONKjkvIhk2QP/view?usp=sharing

b. **Folding group video**
https://drive.google.com/file/d/18p9nKCmHicrQ499PK1LErbQ0JMvYbiVZ/view?usp=sharing

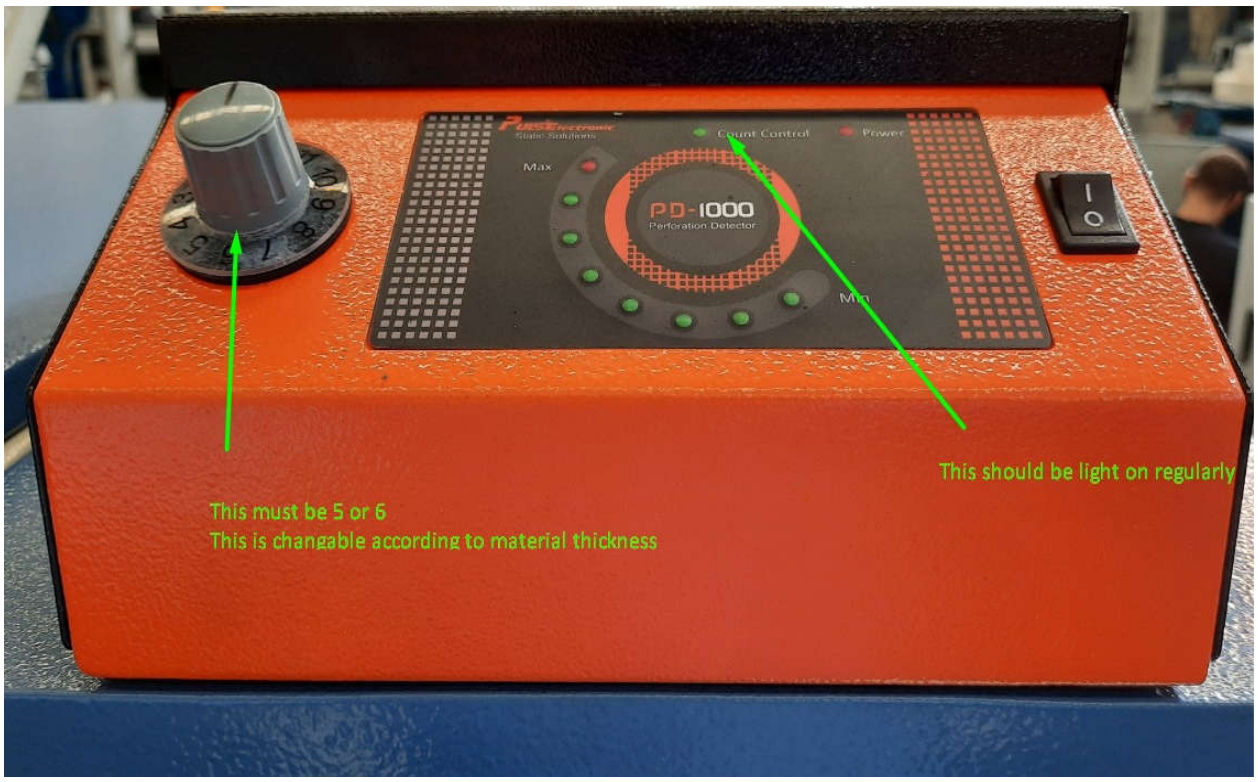
c. **Material Accumulation**
https://drive.google.com/file/d/1VqKNMSikT56hkGxy7OE7QE0XBv508jtm/view?usp=sharing

8.3 PERFORATION SETTINGS

https://drive.google.com/file/d/14fhtAk7ACAWk2fb-9YhF7VqgO4uqgcv9/view?usp=sharing

8.4 COUNTER SETTINGS

8.4.1 Counter Power Supply Settings

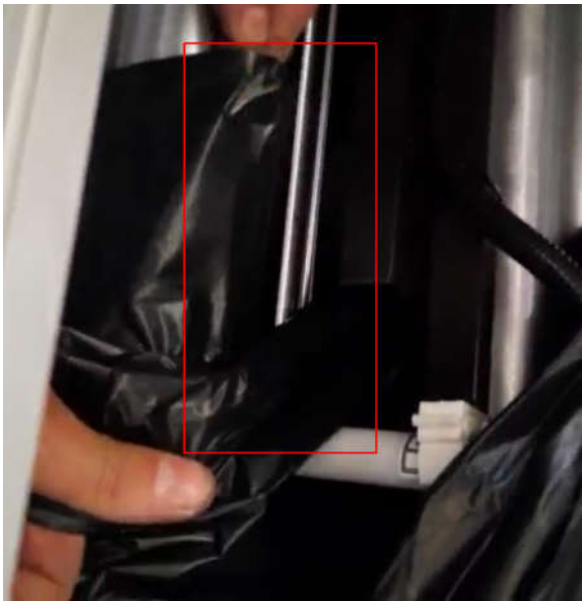


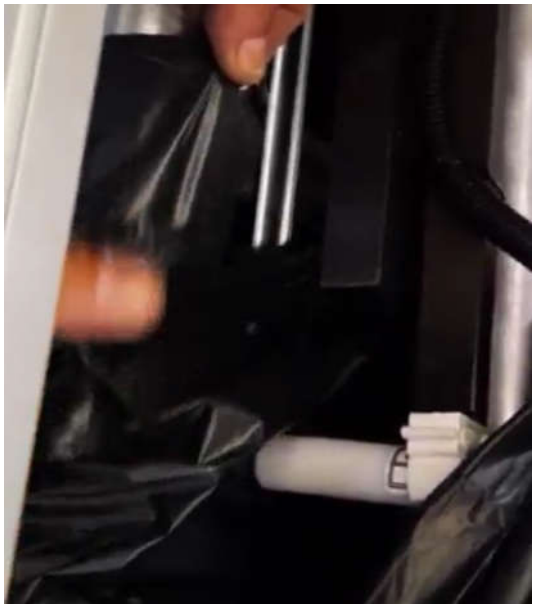
This device is counter power supply, it must be adjust according to material thickness and the perforation.

Smoothly working video can be watched from the link

https://drive.google.com/file/d/1k9928n7DIo-6Y6n_uX0f95mWV9k3A5lT/view?usp=sharing

8.4.1 Counter Trigger Settings

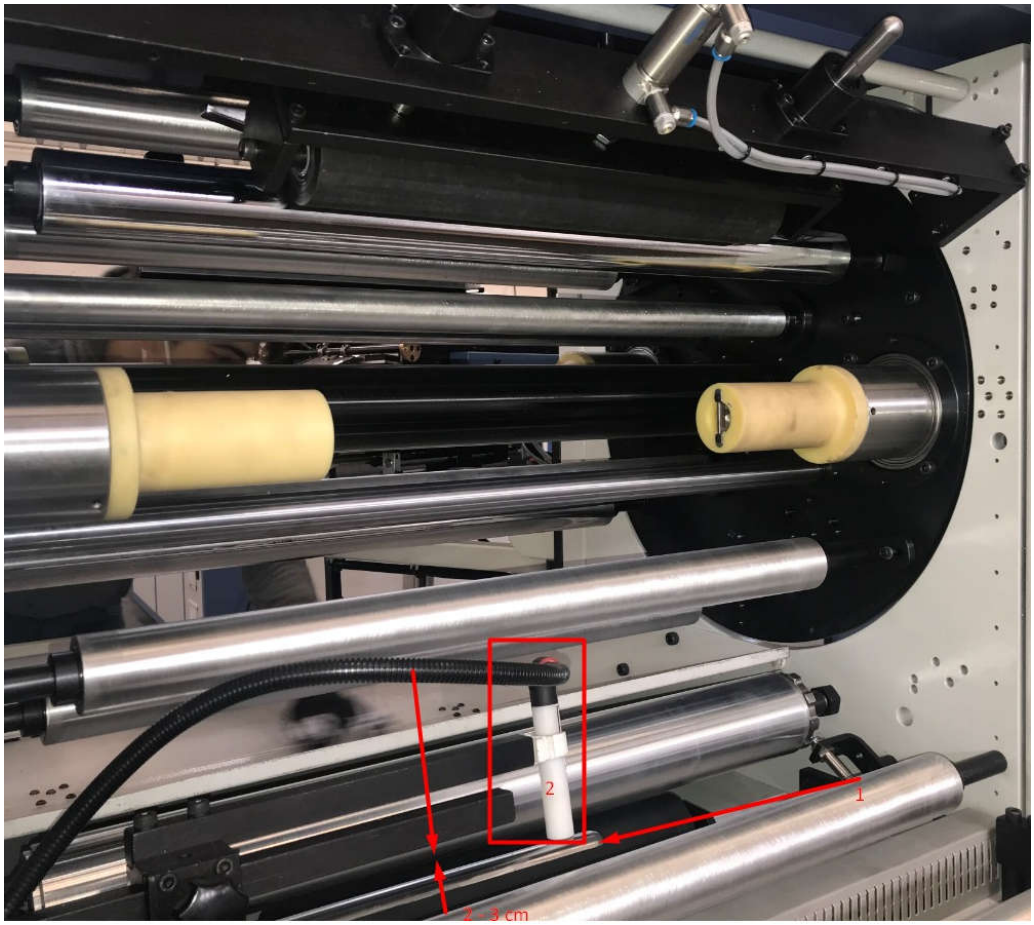
1 - 

2 - 

3 - 

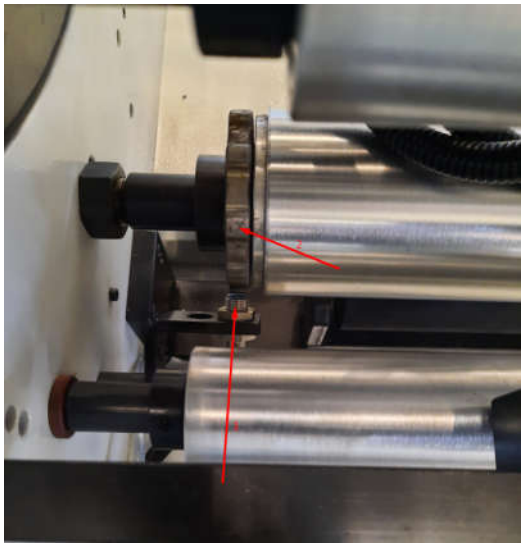
4 - 

5 - 



Smoothly working video can be watched from the link

https://drive.google.com/file/d/1YhYWYmrI1yXGfMoP9mj9EzSLQjmp4ic5/view?usp=sharing



1. Number 1 is sensor; it has to see every teeth of gear.
2. Number 2 is gear; it has to turn smoothly for count the length.

8.5 AIR PRESSURE SETTINGS

Air pressure settings can be change according to material, this settings can be use for initialasing.

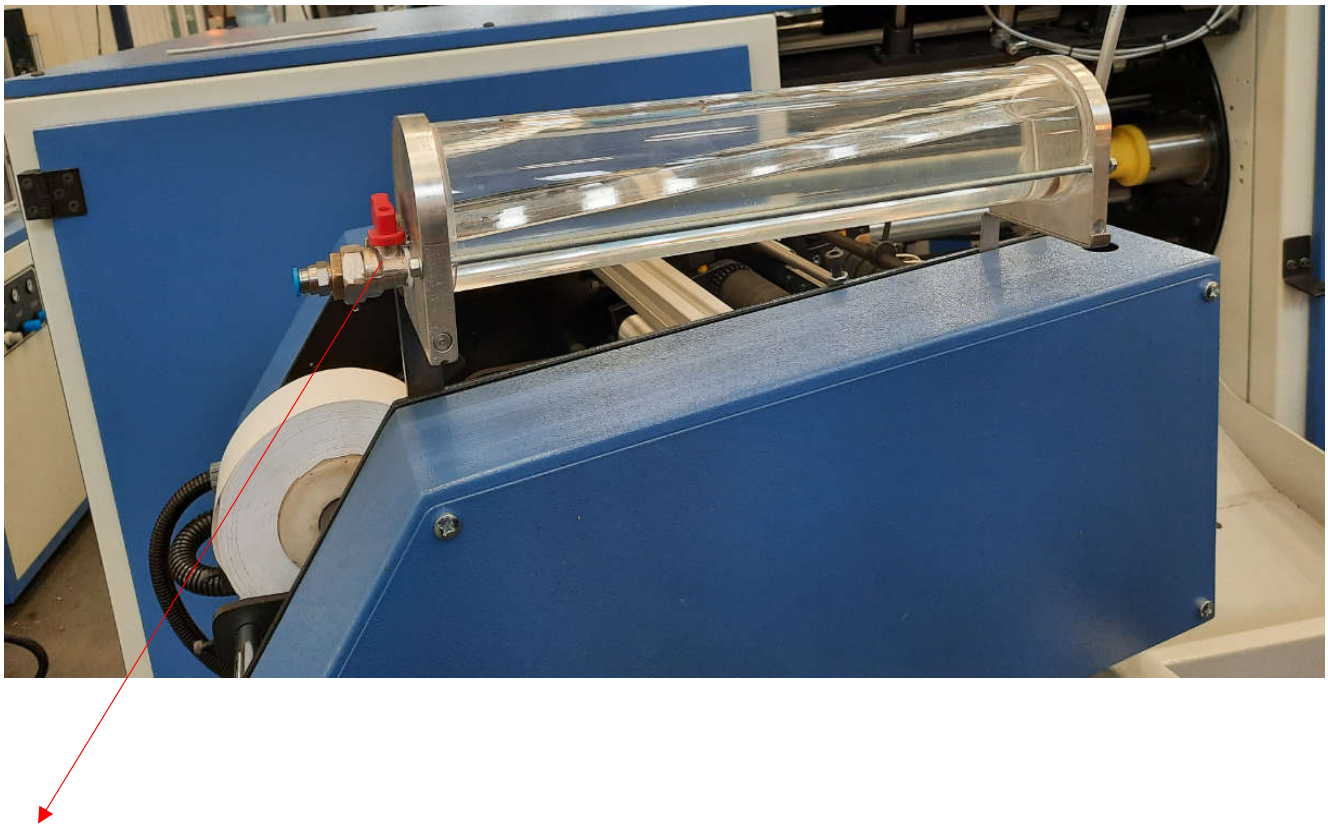
Smoothly working video can be watched from the link

https://drive.google.com/file/d/1Rg6Q4i-dQVtQm8KA_7cKq1cJ2mjO32GW/view?usp=sharing

8.6 LABEL UNIT ADJUSTMENT

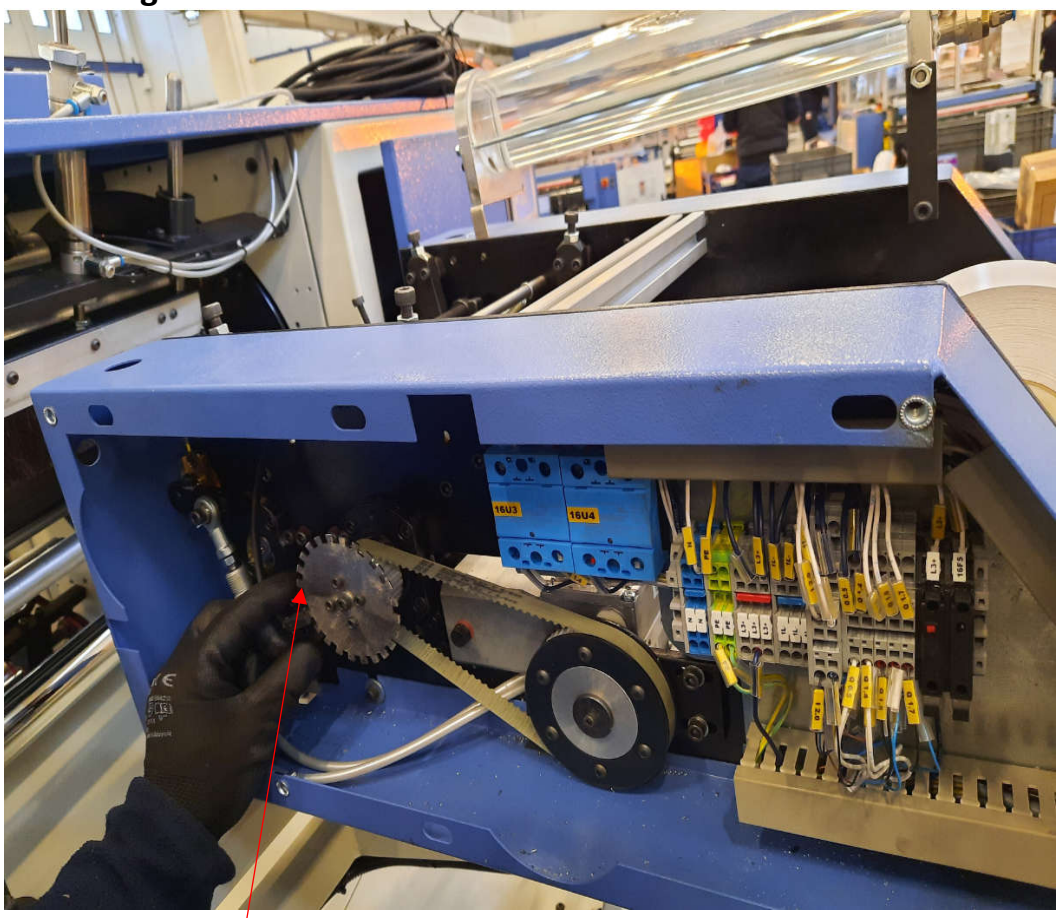
8.6.1 Water chamber installation

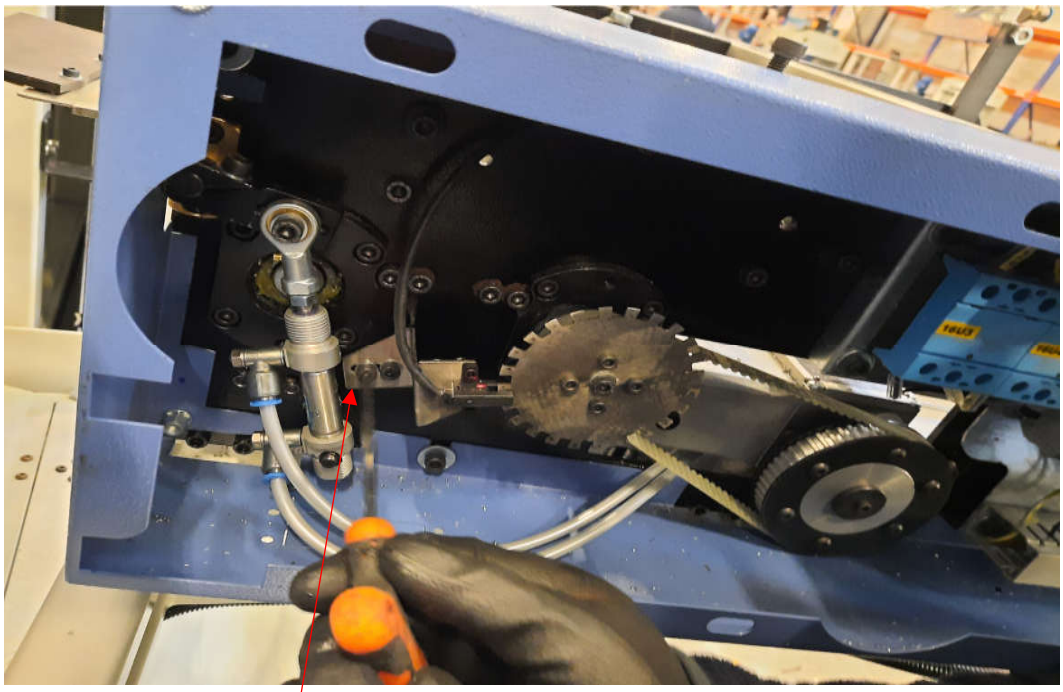
https://drive.google.com/file/d/1TqaOYOveDo2__gya8Km9TKHTDEXGqtbe/view?usp=sharing
Water chamber installation video can be watch video from link.



This valve should remain closed, and when the label dries, it should be opened until the chamber is filled again.

8.6.2 Label Length Counter Sensor





Adjusting the proximity of the sensor to the gear can be done with the slot in the picture. The sensor should be as close to the gear as possible without touching the gear.

8.6.3 Label Roll Installation

a. https://drive.google.com/file/d/1K7ghHNJiyur8k9lRz4woTmZqhRUly3DX/view?usp=sharing

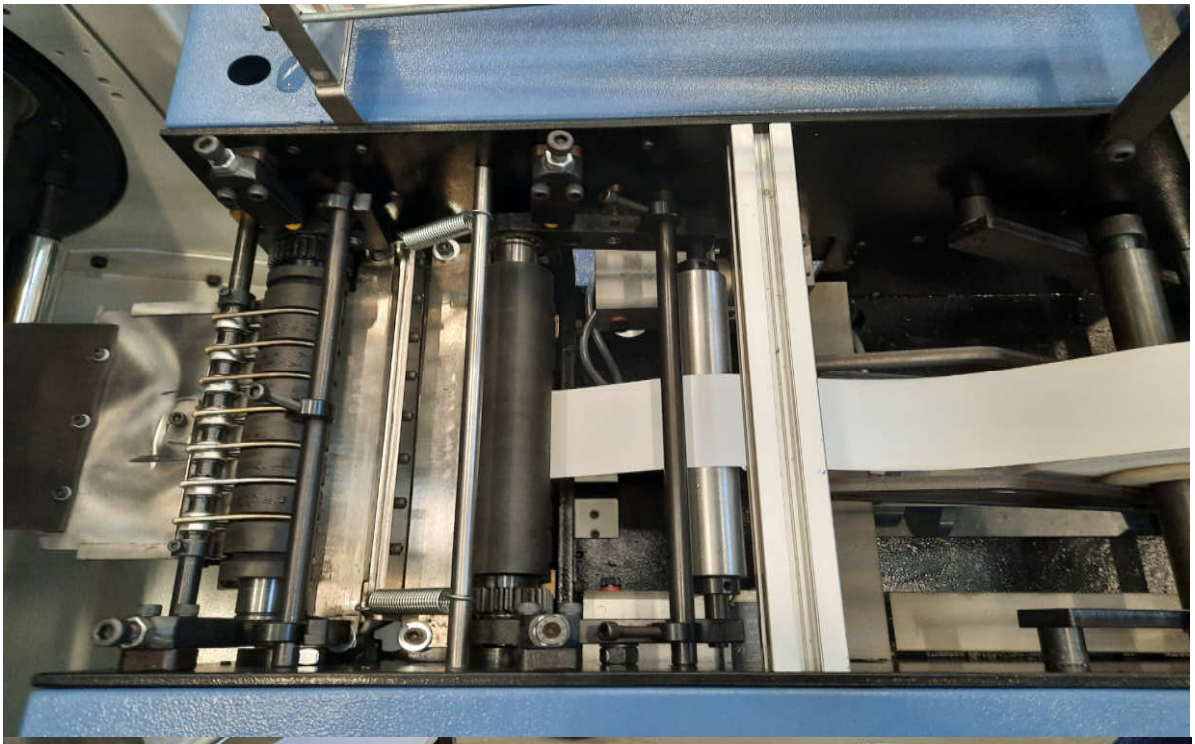
First label roll installation video can be watch video from link.

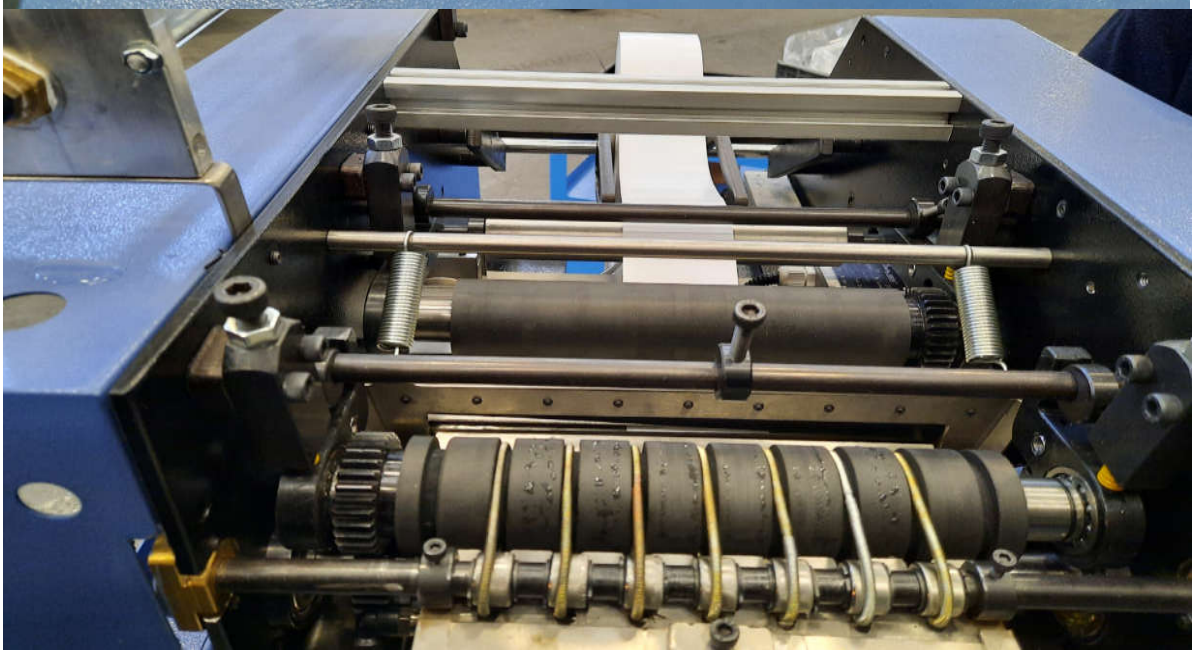
b. https://drive.google.com/file/d/16h9vKR98T3-Vp_JkCCgyW5rqZcjXAAm5/view?usp=sharing

Roller adjust video can be watch video from link.

c. https://drive.google.com/file/d/1XsC5at9vyTHlINQTUD4VHQhr3qL1SpeI/view?usp=sharing

Final label roll installation video can be watch video from link.

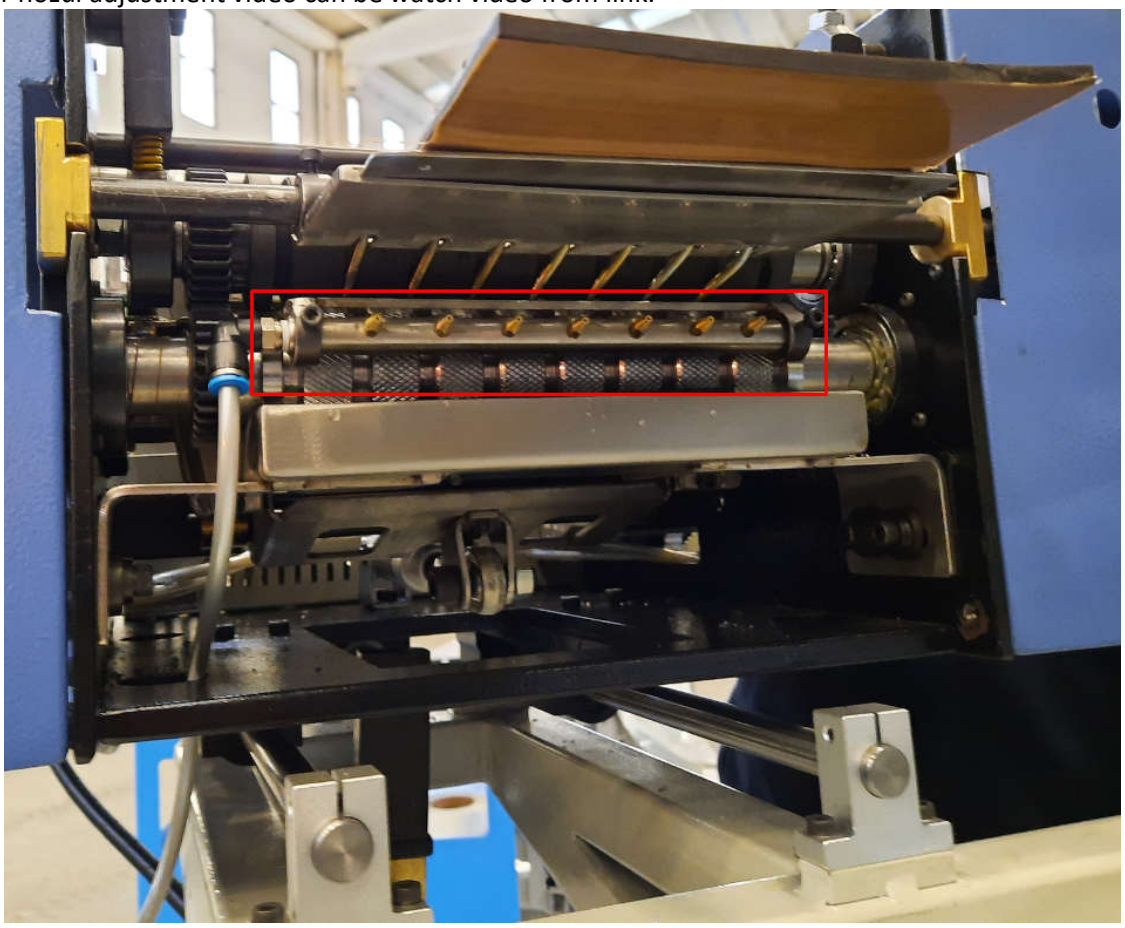




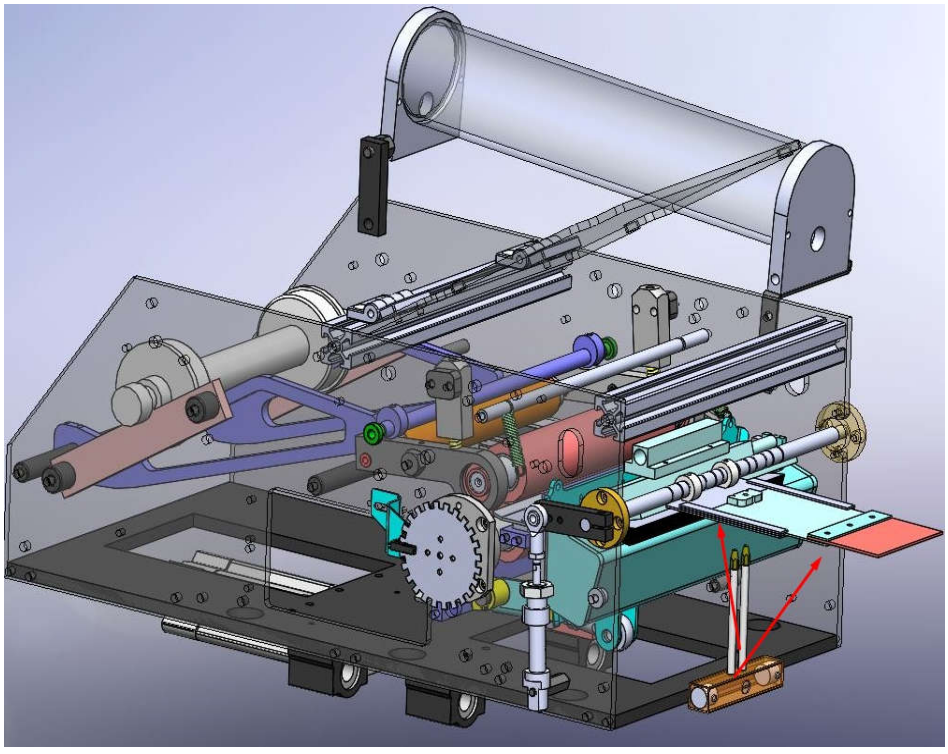
8.6.4 Label Air Adjustment

https://drive.google.com/file/d/1BUKR-8BFH9TV1kgd-G1bqxkkyAdpWAe3/view?usp=sharing

Label air nozul adjustment video can be watch video from link.



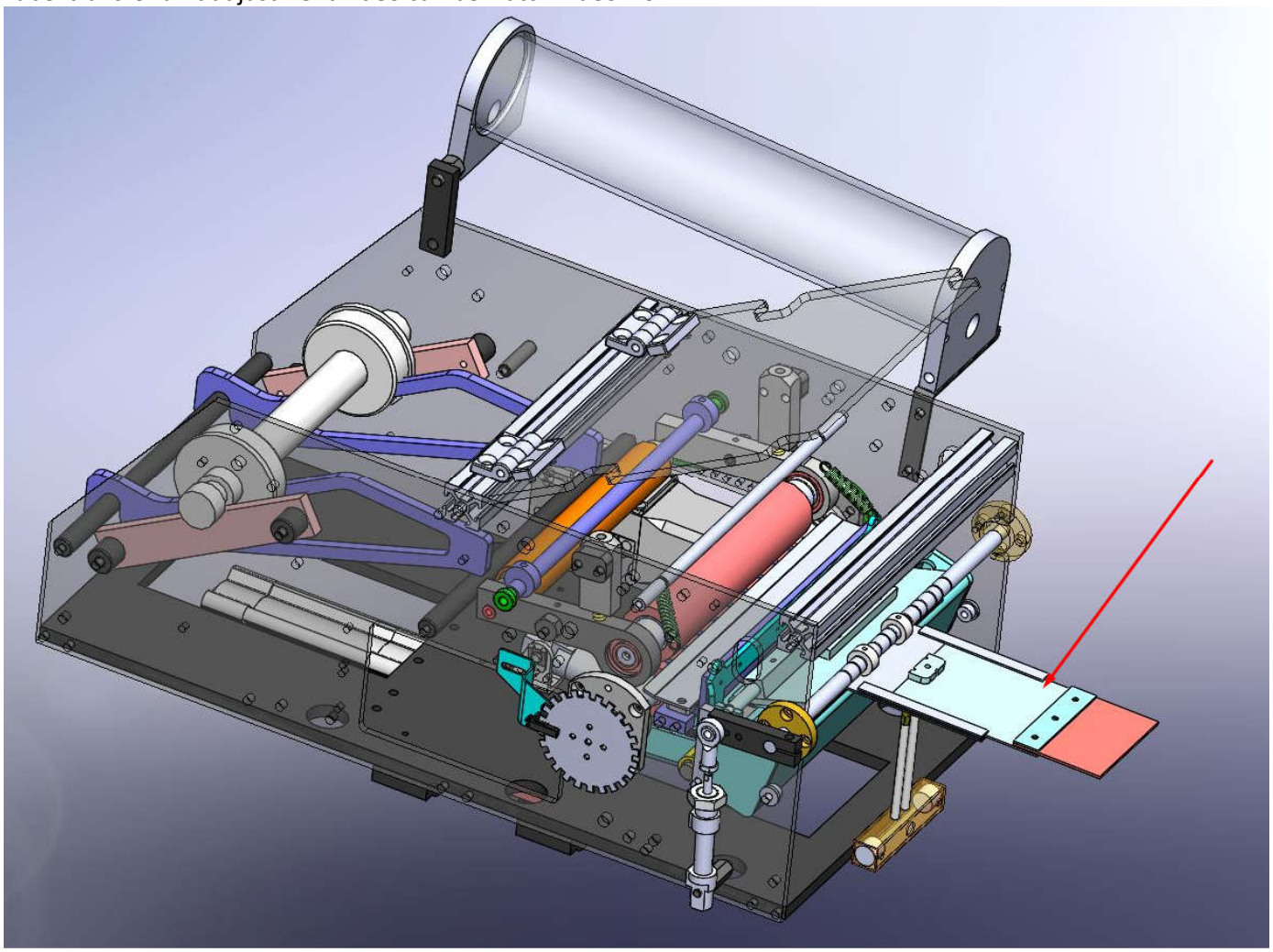
This air holds the label upper. This unit can be different dpend on production date. Old version picture like below picture.



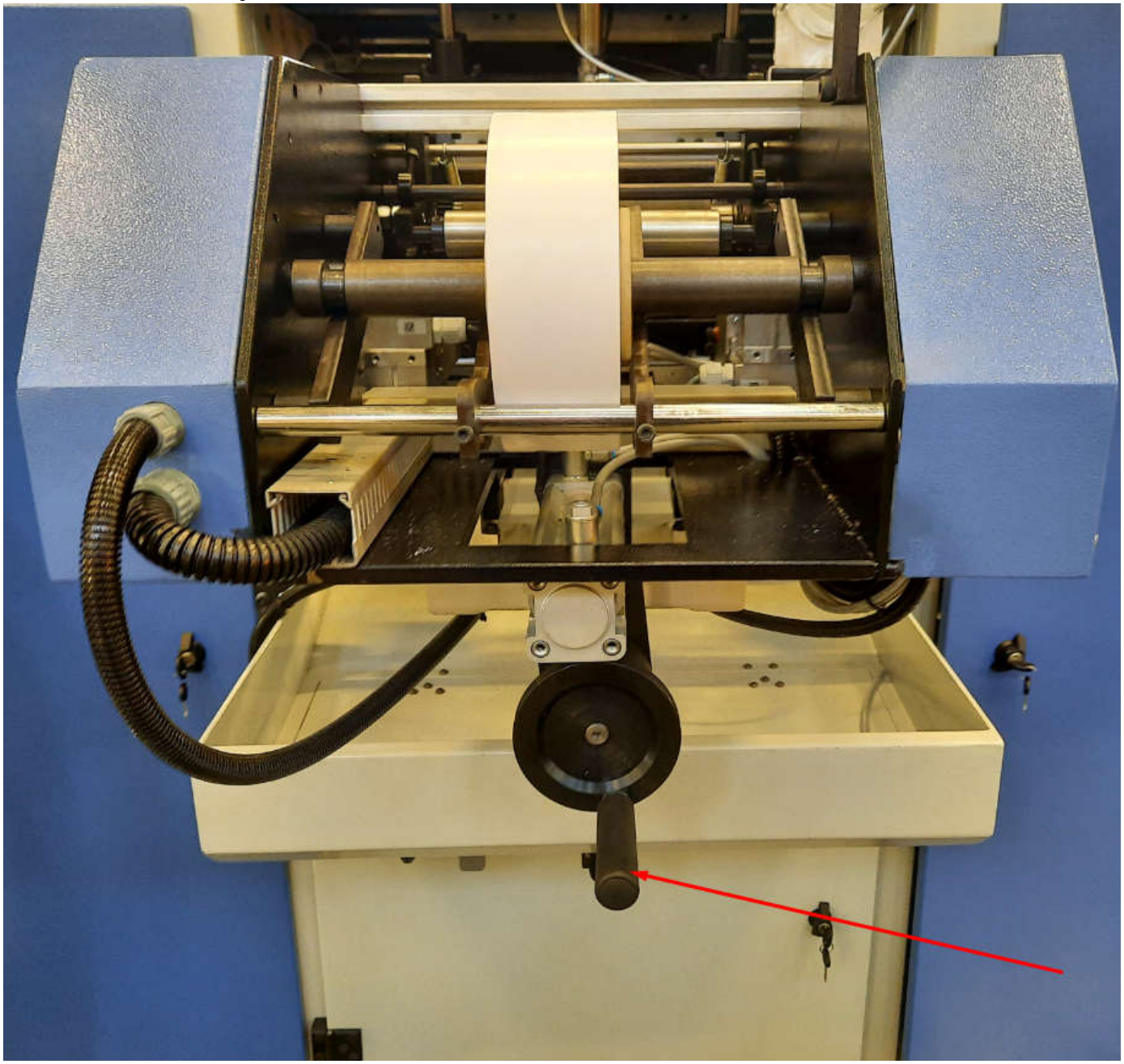
8.6.5 Label Transfer Unit Adjustment

https://drive.google.com/file/d/10P8NmDONShqWPEAwuBpwrnC8BWUTIqWW/view?usp=sharing

Label transfer unit adjustment video can be watch video from link.



8.6.6 Label Unit Adjustment Arm



Label unit can move forward or backward with this arm.

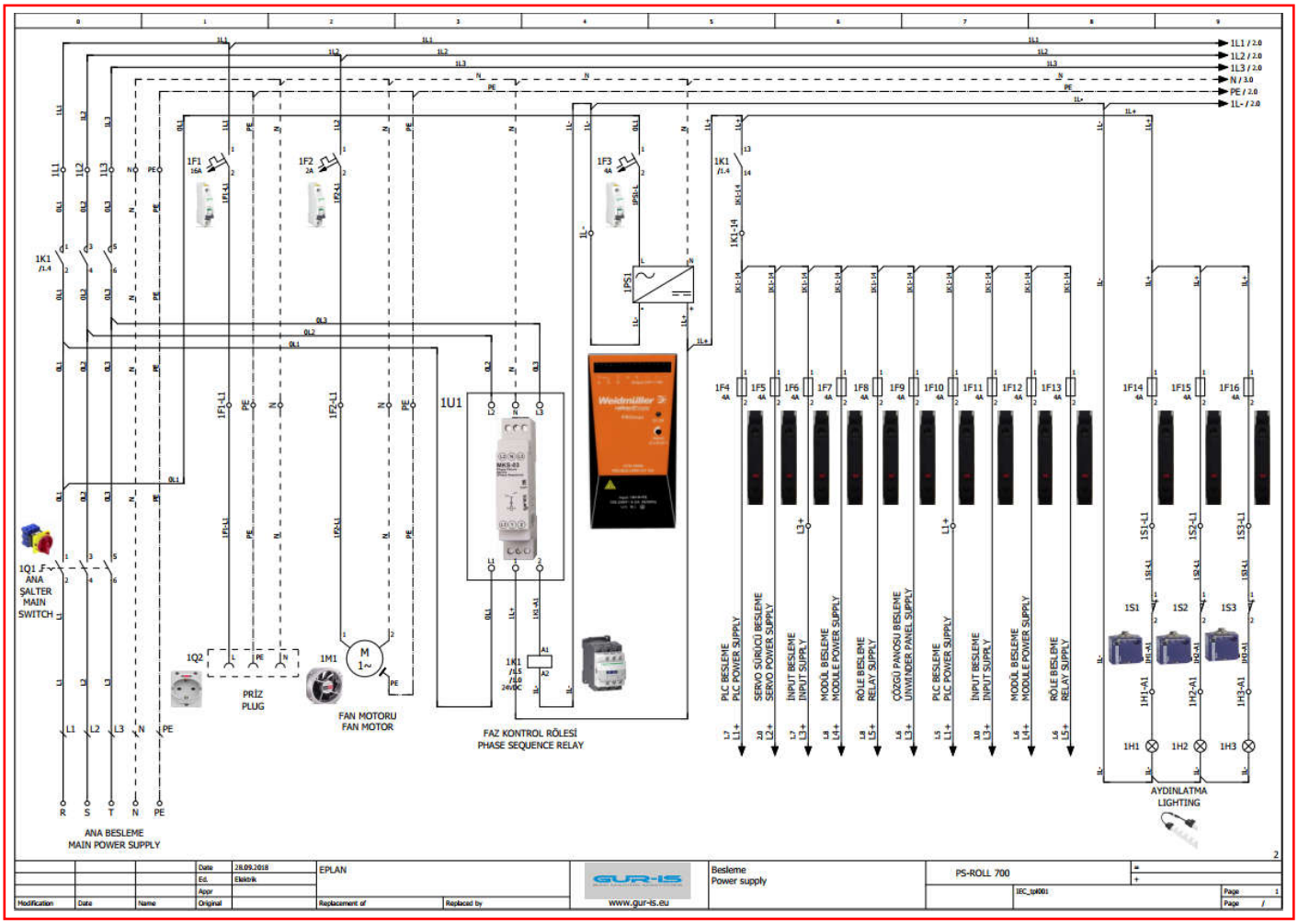
8.6.7 Label Unit Working

https://drive.google.com/file/d/1f5KyAEt1uep4TeWUKOQdKj34a1CmNV5K/view?usp=sharing

Label transfer unit works video can be watch video from link.

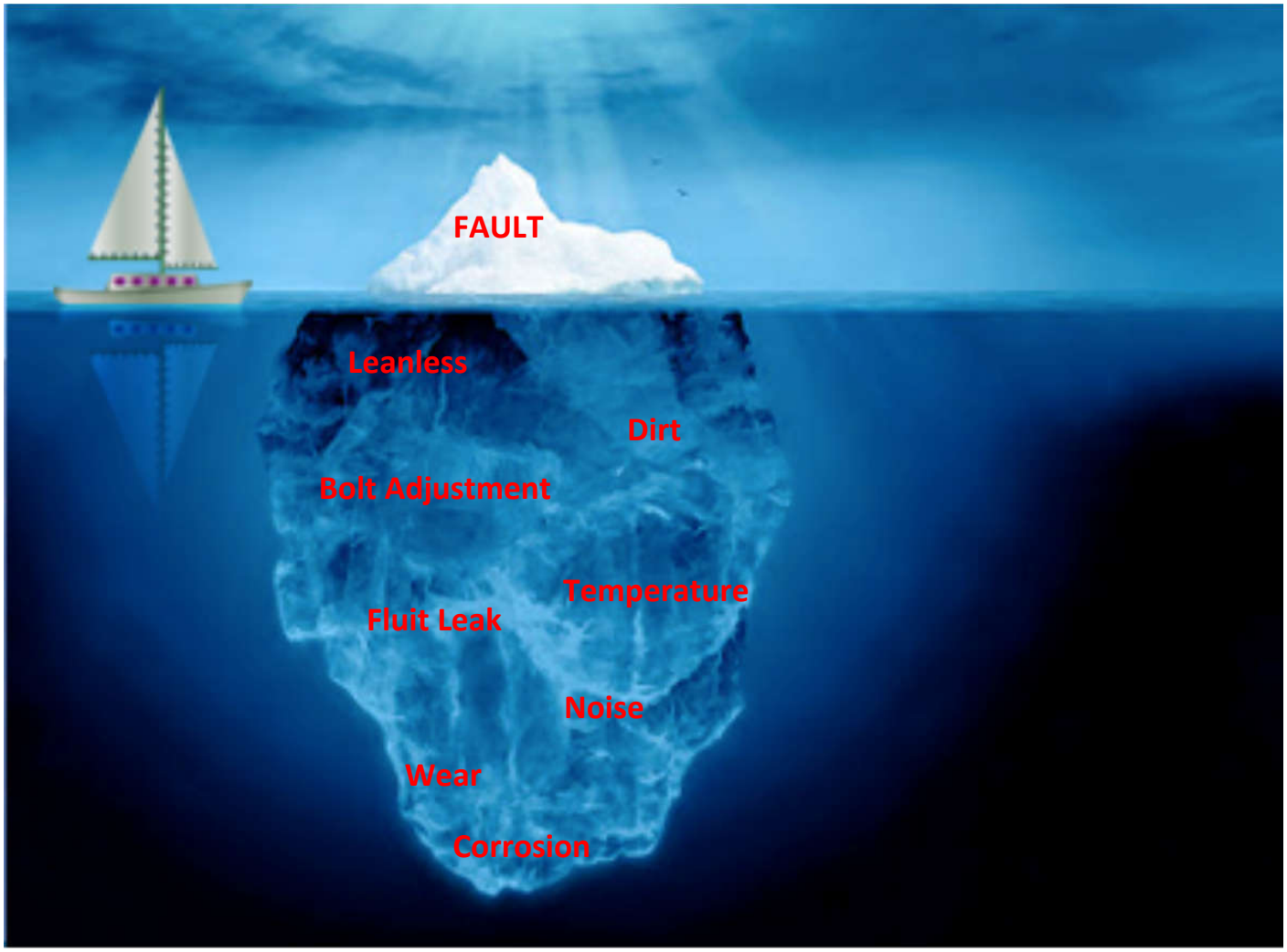
ELECTRICAL DIAGRAM

9.0 ELECTRICAL DIAGRAM



MAINTENANCE MANAGEMENT SYSTEMS

10. PERIODIC MAINTENENCE

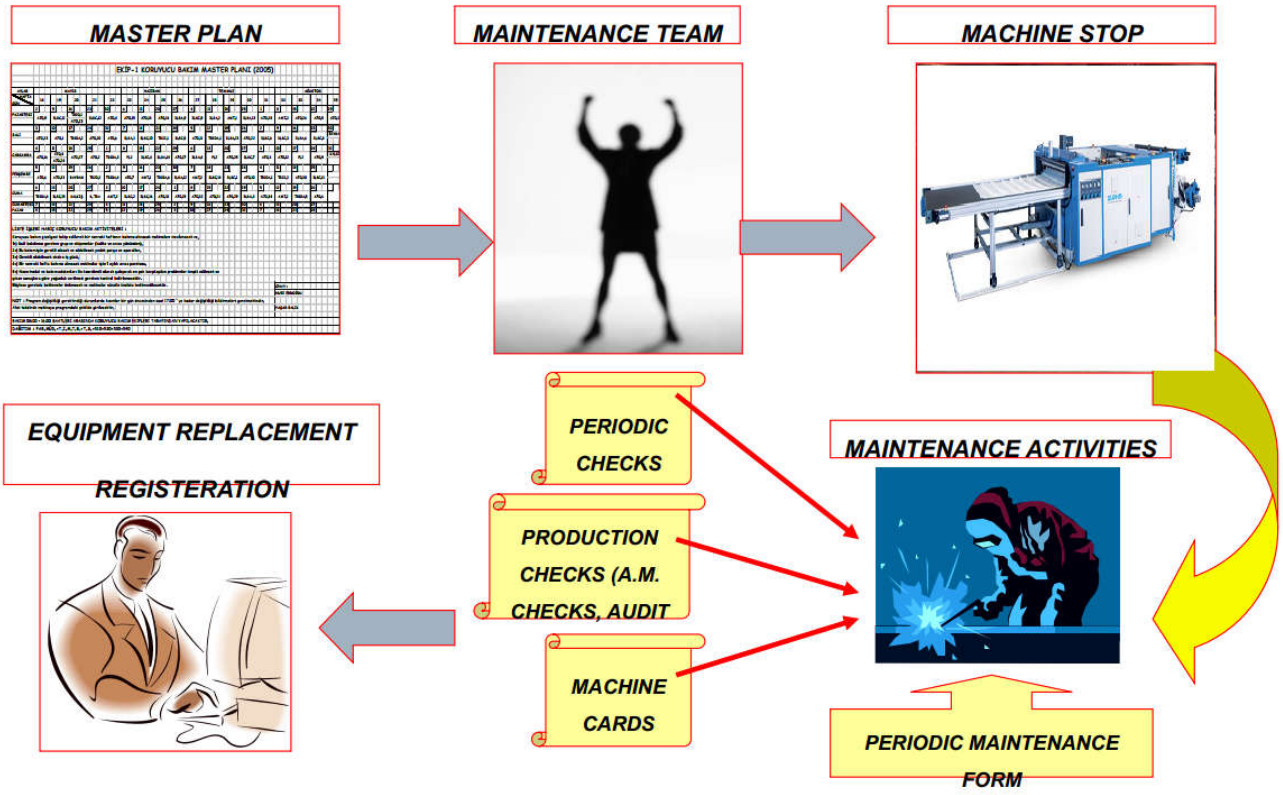


Periodic maintenance refers to activities performed on **equipment** based on a set time interval. The purpose of **periodic maintenance**, or time based **maintenance**, is to maintain smooth operation of a **machine** or other asset.

Key Takeaways

- ✓ Periodic maintenance activities are done based on a set time interval (e.g. weekly, monthly, etc.)
- ✓ Metrics such as mean time between failure (MTBF) can help determine whether periodic maintenance is applicable
- ✓ Periodic maintenance cannot address breakdowns caused by random events
- ✓ The assumption with periodic maintenance is that breakdowns can be predicted by time

PREVENTIVE MAINTENANCE

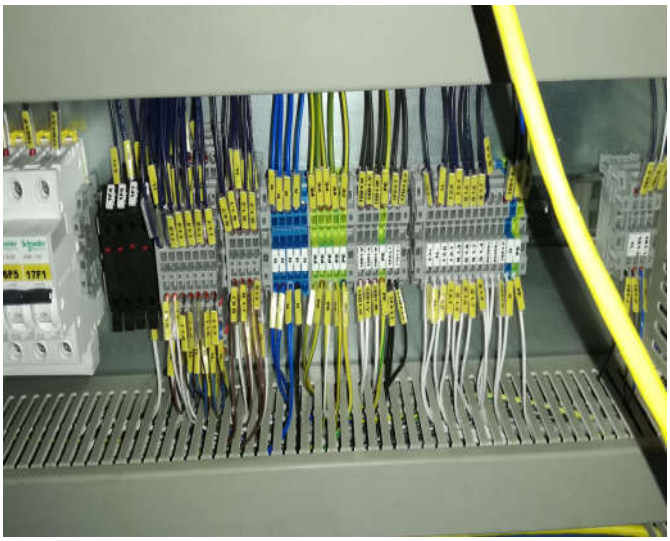


5 examples of periodic maintenance

The industrial applications of time-based maintenance usually solve replacement and repair-replacement problems. Examples include:

1. Changing out lubricating oils
2. Checking bearing grease
3. Replacing filter elements
4. Cleaning up corrosion
5. Checking pressure / temperature gauges

For equipment that is used over consistent running periods, the rate of deterioration can be accurately approximated as calendar periods. A bus that goes over the same route daily, for example, can be expected to require fuel refills at predictable intervals.



- ✓ It should always be kept clean
- ✓ Check the integrity of the cable connections
- ✓ It should be cleaned with weekly air
- ✓ The connection points with screws should be checked weekly by tightening
- ✓ Button contacts should be checked weekly
- ✓ Cable connection points must be checked weekly

PREVENTIVE MAINTENANCE WORKSHEET 1

PREVENTIVE MAINTENANCE SCHEDULE		DATE: / RESPONSIBLE	
DAY		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
WEEK			
MONTH			
DAILY	Check cleanliness of the sealing bars		
	Check the cleanliness of the cutting knives and anvils		
	Check and discharge the sludge container of the pressure regulator		
	Check cleanliness of the space inside packaging machine and filler		
WEEKLY	Check cleanliness of the optical probes		
	Grease and lubricate all sliding surfaces inside the machine		
MONTHLY	Check rotation of the film rollers		
	Inspect all moving parts, tighten all bolts and nuts and check cutting and slitter knives		
EVERY 3 MONTHS	Lubricate all rollers bearings (LV2-3 grease or bearing oil)	last check date:	last check date:
	Lubricate all sliding surfaces	last check date:	last check date:
EVERY 6 MONTHS	Check tension and lubricate all rollers	last check date:	last check date:
	Check oil fillings in transmissions (in case they do not have lifelong fillings)	last check date:	last check date:
	Check condition of sealing jaws	last check date:	last check date:
	Clean the entire line from dust and impurities	last check date:	last check date:

PREVENTIVE MAINTENANCE WORKSHEET 2

PREVENTIVE MAINTENANCE CHECKLIST

ITEM	TASK	COMPLETE	REMARKS
Squeegee System (if equipped)	Check condition/security and clean/wipe with oily cloth		
Drive Units	Check security and movement		
Shafts	Check security and clean/wipe with oily cloth		
Belts	Check condition and tension – replace if signs of excessive wear		
Belt guides	Check condition/security and check springs		
Drive pulleys	Check condition/security		
Air cylinders	Check condition/security and for any air leaks		
Vacuum	Vacuum belts are easily contaminated. Check and clean often.		
Knife	Remove the knife before cleaning jaw faces. Check for wear and build-up and clean/replace if necessary. Clean knife thoroughly.		
Servo motors	Check condition/security		
Couplings	Check screws for security		
Link arms	Check condition/security		
Grease zerk fittings	Clean before and after lubricating		
Heater cables and plugs	Check condition/security		
TC cables and plugs	Check condition/security		
Rollers, all	Check that all rollers turn freely and are clean		
Rack and pinon	Wipe clean and lightly oil		
Film roll brake	Check condition/security		
Safety Checks	Check safety switches/magnets for condition/security and function. Same for Estop. With the main power on and faults reset, open and close the doors and verify the air is dumped when the guards open.		

CONTACT

Guris Machinery technical support:	**+90533 050 17 99 or service@gur-is.eu**

CAUTION

Before cleaning, turn off and disconnect the power.

Sealing jaws and knife are hot. Wear heat resistant gloves and proper Personal Protective Equipment (PPE).

Prior to starting any maintenance activity, the energy sources to the machine must be isolated and locked-out.

Check safety switches/magnets for condition/security and function. Same for E-stop. With the main power on and faults reset, open and close the doors and verify the air is dumped when the guards open.

This information is for planning purposes only. Consult your owner's manual for machine-specific instructions and safety warnings.

GUR-IS BAG MAKING MACHINES

DEVICES MANUAL

11. SERVO DRIVE MANUAL

System manual

Servo Drives AX5000

Version: 2.5
Date: 2018-12-06

BECKHOFF

12. SERVO DRIVE DIAGNOSTIC

Documentation

AX5000 - Diagnostic messages

Version: 3.4
Date: 2016.10.20

BECKHOFF

13. ABB ACS 355 DRIVE'S MANUAL

ABB machinery drives

User's manual
ACS355 drives

Power and productivity for a better world™

14. OMRON E5CC TEMPERATURE CONTROLLER MANUAL

OMRON

Digital Temperature Controllers

User's Manual

E5CC
E5EC

1 Introduction
2 Preparations
3 Part Names and Basic Procedures
4 Basic Operation
5 Advanced Operations
6 Parameters
7 User Calibration
A Appendices
I Index

H174-E1-01

15. TROUBLE SHOOTING

PROBLEM	CAUSE	TROOBLESHOOTING
Main motor not working	Emergency stop button may be pressed	Release emergency stop button.
	Main motor driver may be in self protection	Refer to driver manual for protection and fix problem
	Main motor switch may be off.	Turn on switch again and if it gets off again, check power cables to motor.
	Power to machine may be off	Check if device on phase control device is on. If off, check power to cables or change phase order and make sure light on device is on.
Release motor not working	Emergency stop button may be pressed	Release emergency stop button.
	Release motor driver may be in self protection	Refer to driver manual for protection and fix problem
	Release motor switch may be off	Turn on switch again and if it gets off again, check power cables to motor.
Servo motor (pulling cylinder does not work)	Check the motor diagnostic and apply the alarm code	Make the action according to alarm code
	Trigger belt may be broken	Replace broken belt with a new one. Fix failure.

PROBLEM	CAUSE	TROOBLESHOOTING
Jaw is working bag is not driving	Bag size may be incorrectly entered.	Enter bag size into the operator panel in mm.
	Timing sensors may not sensing.	Make sure sensors are working. If not, sensor must be defective. Replace with a new one
	Trigger belt may be broken	Replace any broken belt with a new one.
	Servo motor driver may be in self protection	Refer to driver manual for protection and fix problem
Heat is not increasing	Heat button may be off	Turn on buttons..
	Jaw fuse may blown off	Turn on blown off fuse. If it is blown off again, check resistance cable connections.
	Thermostat may be defective.	Replace defective thermostat with a new one.

PROBLEM	CAUSE	TROOBLESHOOTING
No power to screen	There may be a failure with 24 volt power source	Check green light on power source transforming power to machine to 24 volts. If off, power source is failing. Replace with a new one
	There may be a problem with 24 volt glass fuse.	If glass fuse is blown off, red warning lamp will be on at lower part of housing. Replace fuse with a new one when warning light is on.
	There may be a problem with power	Check power socket to panel.
Welding is less.	Heats of jaw may be small.	Increase jaw temperature from thermostat
	Upper jaw lower jaw may not be pressing.	Check jaw pressure with main motor jog button. If there is no pressure, give pressure accordingly.
	Spring pressures of jaw may be less.	Check springs helping pressure force to jaw on both sides of jaw. T ighten if loosen.
	Welding may be insufficient according to machine speed	Decrease machine speed or increase thermostat temperature.
	Lower jaw silicon may be deformed	Check silicones. If deformed, replace with a new one.
	Jaw may not be in spooling position	Make jaw to lower spooling position. Then check welding and adjust spooling time on operator panel.

PROBLEM	CAUSE	TROOBLESHOOTING
Welding gets broken	Temperatures of jaw may be high.	Decrease jaw temperatures from thermostat
	Spring pressures of upper jaw may be high	Check springs helping pressure force to jaw on both sides of jaw. Loosen springs if jaw is not getting flexible
	Upper jaw Teflon may be deformed	Turn Teflon. If turned Teflon is finished, replace with a new one
	Blade may not be cutting	Check temperature of blade. Maintain the blade again. If blade is deformed, replace with a new one
	Welding may be higher according to machine speed	Increase machine speed or decrease thermostat temperature.
	Lower jaw silicon may be deformed.	Check teflon band. If deformed, replace with a new one.
	Jaw may be in spooling position	Remove jaw from spooling position. Then check welding again.

PROBLEM	CAUSE	TROOBLESHOOTING
No or insufficient welding on a single side (left-right)	Resistance of lower or upper jaw may be flat	Replace flat resistance with a new one
	Upper jaw lower jaw may not be pressing.	Check jaw pressure with main motor jog button. If there is no pressure, give pressure accordingly.
	Silicon upper jaw may be deformed	Teflon band on Silicon of no welding side may be deformed. Replace with a new one.
Bag welding breaks in the middle	There may be a problem with Servo factory settings.	Refer to our company.
	Ballerina pressure may be high.	Adjust pressure from regulator checking ballerina pressure accordingly.
	There may be a problem with trigger belt	Check trigger belt. If deformed, replace with a new check one.
Machine is topping but ballerina release cylinder keeps on turning	Release analog sensor housing may be loose or there may be a problem in the distance on metal.	Adjust the distance between analog sensor metal moving release motor to 1 mm when ballerina is in inclined position. Then fix
	Ballerina may have small amount of air	Check if air to machine is sufficient or not. Make sure sufficient amount of pressure is provided to ballerina pistols through regulator
	Analog sensor may be failing.	Check connection cables of sensor. If problem persist, replace sensor with a new one.

PROBLEM	CAUSE	TROOBLESHOOTING
Ballerina hits counter cylinders during operation	Position of metal against analog sensor may not be proper.	Check if angle of metal sensed by analog sensor and ballerina movement angle is the same or not
	Analog sensor may be failing.	Check connection cables of sensor. If problem persist, replace sensor with a new one.
	There may be a problem in servo ballerina adjustments	Refer to our company.
Ballerina causes loose	Ballerina may have small amount of air	Check if air to machine is sufficient or not. Make sure sufficient amount of pressure is provided to ballerina pistols through regulator
	Release cylinder may be loose.	Check pressure of paten cylinders pressed with the help of air on cylinder
	Cylinder with exit brake may have problems.	Tighten cylinder with brakes on the foremost side on flat surface.
Release cylinder is not turning	There may be a mechanic compression.	Try to manually rotate main cylinder by taking paten cylinders to upper position with the help of air on cylinder. If there is any compression or noise during rotation, fix the problem.

PROBLEM	CAUSE	TROOBLESHOOTING
Bobbin is available but machine does not start (Bag finished) alarm is generated	Ssensor does not sense bag.	When inserting the roll, there is one piece of sensor stopping the machine upon finishing of bobbins between the first two rollers. There is an adjustment screw on that sensor. If there is not any bags on the area sensed by sensor, then orange light on sensor should be off. If both lights are on, then make sure orange light is off by using suitable key
Bobbin is tightened but gets loose during operation	Bobbin may not be fixed	Check if knobs fixing bobbin on shaft is tightened or not
	Bobbin tightening knob may be reverse according to rotation.	Tighten bobbin on shaft fixed to a single side and other side according to knob untie direction with screws (if warp is on the bottom to leftwards and If on top from rightwards).
Bag causes loose between packs	Brake may be too loose.	Tighten spring of braking group used to prevent any looses between packs and make sure wrap ballerina works in the middle position.
Brake gear makes too much noise during operation	Brake may be too tightened.	Tighten spring of braking group used to prevent any looses between packs and make sure wrap ballerina works in the middle position.
	Brake gear may not be fitting	Gear making brake during untie roll may n ot be fitting into transmission gear. Make sure it fits
	Brake gears may lack of grease.	Lubricate brake gears according to lubrication directions.

PROBLEM	CAUSE	TROOBLESHOOTING
Edge control is in automatic mode but does not move	Man-auto button position might not be correct	Turn edge control button to auto position
	Machine may not starting.	Make sure that the machine is running to make side control run in automatic mode.
	Sensor might not sensing the bag.	Check to see if edge control sensors sense the bag or not. If not, adjust the sensitivity of sensor using the suitable switch.
	There might be a mechanic jamming	Try to manually move the edge control button. If jammed, try to remove.
	Motor and sensor may lack of energy.	Check motor and sensor energy cables and fuses connected.
Edge control moves one side but not to the other side	A single edge sensor might not be sensing	Make sure that failing sensor can sense with suitable switches and precise settings.
	Relay might be defective	Control relays that move edge control in direction If there is any defective relay, replace with a new one.

PROBLEM	CAUSE	TROOBLESHOOTING
Edge control does not move in manual mode	Man-auto button position might not be correct	Turn edge control button to auto position
	Motor may lack of energy	Check energy cables to motor and fuses connected
	Relay might be defective	Check relays that move edge control in direction. If there is any defective relay, replace with a new one.
Edge control has energy but does not move in both positions	There might be a mechanic jamming.	Remove edge control motor to see if there is any jamming. If so, try to remove.
	Motor might be defective	Replace defective motor with a new one
Edge control moves too much in automatic mode	Photocells might not have been calibrated	Make precise settings with a suitable switch on group photocell extremely moving. If it still moves extremely, replace photocells and their position.

PROBLEM	CAUSE	TROOBLESHOOTING
Conveyor band does not move	Engine switch may be off.	Lift switch. If it is blown again, check power cables to motor.
	Band time may not be correct.	Check band time on operator panel.
	There may be mechanic jamming.	Check gear and chain transmitting movement from motor to band.
Conveyor band turns constantly	There may be a problem with contactor.	Contactor moving band motor may be left pressed Try to normalize. If not, replace with a new one.
Conveyor band slides to a single side	There may be a problem with stretching	There are screws on both left and right hand side used to both to fix and stretch band. The screw of the part where to band is sliding should be tightened while other side should be loosened and operate in such position for some time. Band will recover at the end of such operation time. Repeat this until band is recovered