Cleveland Equipment

CE-FIL-OF11

In-Line Automatic Pressure
Overflow Filler

Contents

Safety Information

CAUTION: Read this manual in its entirety before attempting to set up or operate the Overflow Filler. Failure to do so could cause bodily harm and/or damage to the machine.

While reading this User's Manual, you will sometimes see call out boxes or headings with the terms Note, Caution, Warning, and Danger.

Notes, Cautions, Warnings, and Dangers notify the reader that incorrectly following instructions could damage the Bottle Rinser or could cause bodily injury.

Preface:

This manual introduces you to the CE-FIL-OF11 In-Line Automatic Pressure Overflow Filler. The manual will orient you to the many features and procedures that enable you to set up and operate the Overflow Filler.

CAUTION: If the Overflow Filler is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

1. Safety Symbols

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations about them, deserve your careful attention and understanding. The symbols do not by themselves eliminate any danger. The instructions and warnings they give are not substitutes for proper accident prevention measures.

DANGER: Failure to obey this safety warning WILL result in death or serious injury to yourself or others.

WARNING: Failure to obey this safety warning CAN result in death or serious injury to yourself or others.

CAUTION: Failure to obey this safety warning MAY result in personal injury to yourself or others or result in damage to the Overflow Filler.

NOTE: Damage to the Overflow Filler may result if these instructions are not followed.

2. Equipment safety labels

It is important to be aware of the meaning of the safety labels to ensure safe operation of the Bottle Rinser. Furthermore, safety warning labels have been attached to the equipment and must not be removed.

WARNING: Read and understand all of the safety label descriptions in the table below before operating the Overflow Filler.

Description	Label
Wear Eye/Ear Protection: A reminder that the process may be harmful to the eyes and ears. Always wear eye protection when operating or when performing maintenance on the machine. Proper ear protection is suggested when operating the equipment.	
Machine lockout: A reminder to turn off and lock out the electrical supply before servicing any components.	
General Warning: This area can only be accessed by a trained service technician.	
Crush Hazard: Keep hands clear while operating. A reminder that various manufacturing processes can present a crush hazard if hands or objects are near the machine.	
Risk of Electrical Shock: A reminder to unplug the machine from the electrical outlet before cleaning or servicing.	
Pinch Hazard: Keep hands clear while operating. A reminder that the movement of the nozzles can be a pinch hazard if hands or objects are placed in these locations.	
Shear Hazard: Keep hands clear while operating. A reminder that movement of the belt of the conveyor can be a shear hazard if hands or objects are placed in this location.	

Entanglement Hazard: Keep hands clear while operating. A reminder that movement of the belt of the conveyor could result in entanglement should hands or objects be placed in this location.	
Risk of Fire or Explosion: A warning to never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death.	

The safety labels are located on the right side on the Overflow Filler Machine.

It is the Buyer's responsibility to provide adequate supervision to ensure that safe work methods are in use. It is also the responsibility of the Buyer to establish and follow a periodic and regular inspection of this machine to ensure that all parts, auxiliary equipment, and safeguards are in a safe operating condition.

3. Electrical Safety

Hazardous Locations (Explosive Atmosphere):

Never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases, vapors, liquids, or combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death.

WARNING: Never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases, vapors, liquids, or combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death.

Electrical requirements:

AC Voltage	Phase	Current
208-230 V	3 Phase Grounded	15 Amps

Main disconnect:

The main disconnect is accomplished by disconnecting the AC power cord at the electrical outlet. Ensure that the power cord and electrical outlet are easily accessible.

WARNING: The main disconnect is accomplished by disconnecting the AC power cord at the electrical outlet. Ensure that the power cord and electrical outlet are easily accessible.

Grounding Instructions:

The Overflow Filler must be plugged into a properly installed outlet and grounded in accordance with all codes and ordinances. Never modify the plug in any way. Check with a qualified electrician if you think the outlet may not be properly grounded.

4. Operational Safety

DANGER:

- Do not use the machine in the presence of flammable liquids, gases or vapor, combustible dust, or ignitable fibers or filings.
- This product is not designed for, nor intended for use in hazardous areas as defined by ATEX or the NEC (National Electric Code).

WARNING:

- Do not move the machine without additional personnel or mechanical assistance.
- No one should operate this equipment unless they have read the service manual and have been instructed on safety and operation of the machine.
- Care and attention shall be taken place at all times in the vicinity of any operating equipment.
- Do not reach into the machine until it has come to a complete stop.
- Be aware, this equipment has many moving parts and extreme caution is advised when the Filler is in operation.
- The operator should look to ensure that the machine is clear before start-up, and calla warning, “CLEAR”, to alert other personnel that the machine is being started.
- Never operate this machine without all safety guards and covers in their proper position.

- All service must be performed by qualified original manufacturer's service personnel.
- All maintenance and reparations must be performed by qualified personnel.
- Disconnect and lockout electrical power and air sources prior to any service or maintenance work.
- Keep hands and foreign objects away from all moving parts and pinch points.
- Ensure that clothes, garments, hair, or body parts are kept clear of the machine's moving or rotating components while it is in operation. And is recommended than all jewelry be removed when performing these tasks.
- Always wear OSHA approved eye/ear protection when operating this machine.
- Do not make any changes or modifications to this machine.
- Never stands or climb on the Overflow Filler – use only an OSHA approved stepladder.
- Machine design including controls and logic should not be changed or modified since it may result in injury or damage to the Overflow Filler.
- Do not operate the Overflow Filler if the power cord is cracked or broken.
- Activate an **EMERGENCY STOP** prior to clearing jams and reaching into the machine.
- Electrical cabinets and boxes should not be opened unless power has been disconnected

5. Lockout/Tagout Procedures

Lockout and tagout procedures are integral elements of comprehensive **safety protocols** within industrial environments to mitigate the risk of accidents and injuries during maintenance activities. Therefore, awareness of these procedures is fundamental to fostering a safe environment, protecting personnel, and maintaining the integrity of equipment and operations.

5.1. Definitions:

- **LOCK OUT:**

  Refers to isolating and securing the equipment from its energy source to prevent its unintended activation during maintenance or servicing. This process involves the application of locks, tags, or other devices to deactivate the equipment's power source; thereby ensuring the safety of personnel working on it.

- **TAG OUT:**

  Refers to the use of warning tags or labels to indicate that the machine is undergoing maintenance or repair and must not be operated.

5.2. Safety Guidelines to ensure safe operation.

The following guidelines are provided to establish a minimum requirement for the **lockout of energy isolating** devices whenever maintenance or service is performed on equipment and associated parts. It is further advised that an independent safety study be performed on the machinery, its installation, and the lockout/tagout procedures.

1. Follow the safety procedures specified in the safety section of this manual, as well as the safety procedures specified throughout this manual.

2. Stop the equipment using the normal procedure of turning the On/Off position.

3. The equipment can be isolated from its electrical energy source by unplugging the main AC power cord from the electrical outlet and then enclosing the male plug of the AC power cord into an electrical plug cover (not included) such as the example shown on the pictures to the right. Once the male end of the plug cover is enclosed, a padlock (not included) can be utilized to lock the male plug into the plug cover, preventing its use.

4. Notify the operator and supervisor that the lockout has been initiated.

5. Air pressure, necessary to operate the equipment, should be disconnected when performing service to the equipment.

5.3. Reactivation of the machine

Reactivating the Overflow Filling machine after maintenance is a critical process that ensures the seamless resumption of operations; therefore, the following steps outline the procedure to reactivate the machine properly.

1. **Visual inspection:** Inspect the work area to ensure that non-essential items have been removed and that the machine is operationally intact.
2. Remove the lock out/tag out.
3. Ensure that all employees are clear of the equipment.
4. **Energize** the machine and ensure that all switches are in the OFF position.
5. **Safety check**: verify that all safety locks, emergency stops, and protective guards are functioning correctly. Test emergency shutdown procedure to confirm its effectiveness.
6. **Performance verification:** compare the machine's performance post-maintenance with its pre-maintenance baseline. Ensure that the performance metrics meet or exceed expectations.

2. Machine Specifications

Machine type	Overflow Filler
Model	
Serial Number	
Electrical requirements	208-230 VAC, 3 phases. 15 Amps
Air requirements	5 CFM at 80 PSI
Air connection	¾ " pipe

1. Principle and theory of the machine

SEQUENCE OF OPERATIONS:

1. Empty containers will be received on the infeed conveyor. At the beginning of the cycle, the entrance stops, and the discharge stop will be extended.
2. If the bottle count mode is enabled, the machine will eject any container inside the filling area before starting the first cycle and then will allow product to enter the machine.
3. Once containers are sensed on both sensors, the entrance stop will close, and the filler will start filling the containers.
4. After the fill me cycle is done, the discharge stop will retract to eject the full containers. Once the full containers are out, the discharge stop will extend again, and the entrance stop will retract to receive more empty containers.

Specifications:

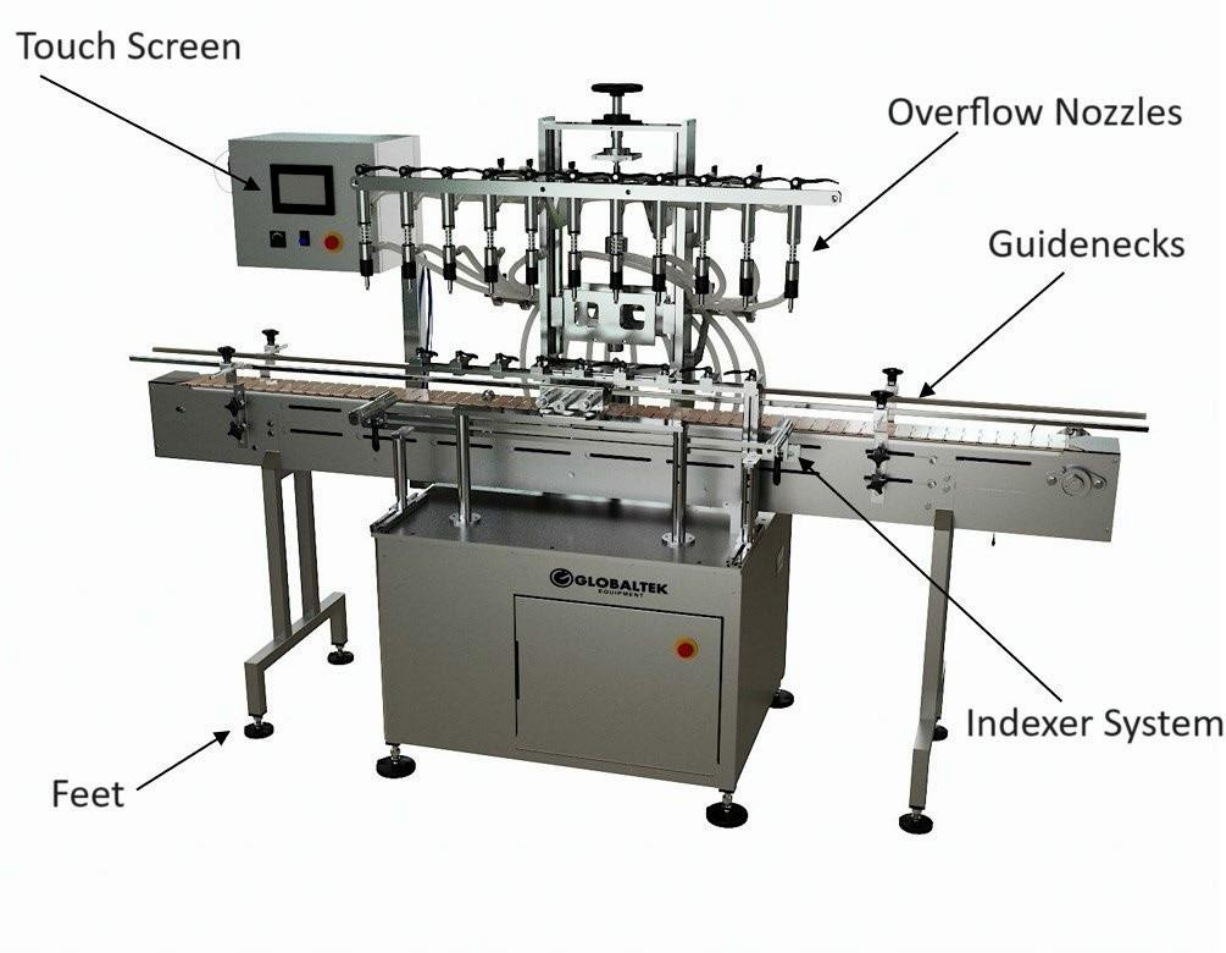
- The machine has_____adjustable overflow nozzles.
- The machine is designed to seamlessly integrate with a conveyor system.
- The neck guides adjusted manually allow the machine to be adaptable to different container's dimensions.
- Please **be advice** that any damage caused to the Overflow Filler Machine due to the washing liquids you may use is the buyer's responsibility.

2. Air connection.

Once the machine is powered up, this machine requires clean dry air and require a pipe ¾" inside diameter.

3. Components of the Overflow Filler machine

3.1. General illustration of the Overflow Filler



3.2. The touch screen controller

START AND STOPPING THE MACHINE:

1. Make sure the 120 VAC power plug on the filler is connected.
2. Make sure there are no containers on the filling conveyor.
3. Turn the **OFF ON** Switch on the control panel to the **ON** position.
4. Be sure all the **E-STOP's** are pulled out.
5. Press the blue **RESET** pushbutton on automation panel to activate power.
6. Press the **RUN MODE** button on the touch screen to make sure the machine is in run mode.
7. Press the **Start** button on the touch screen to start the machine.
8. Press **STOP** to stop the machine.

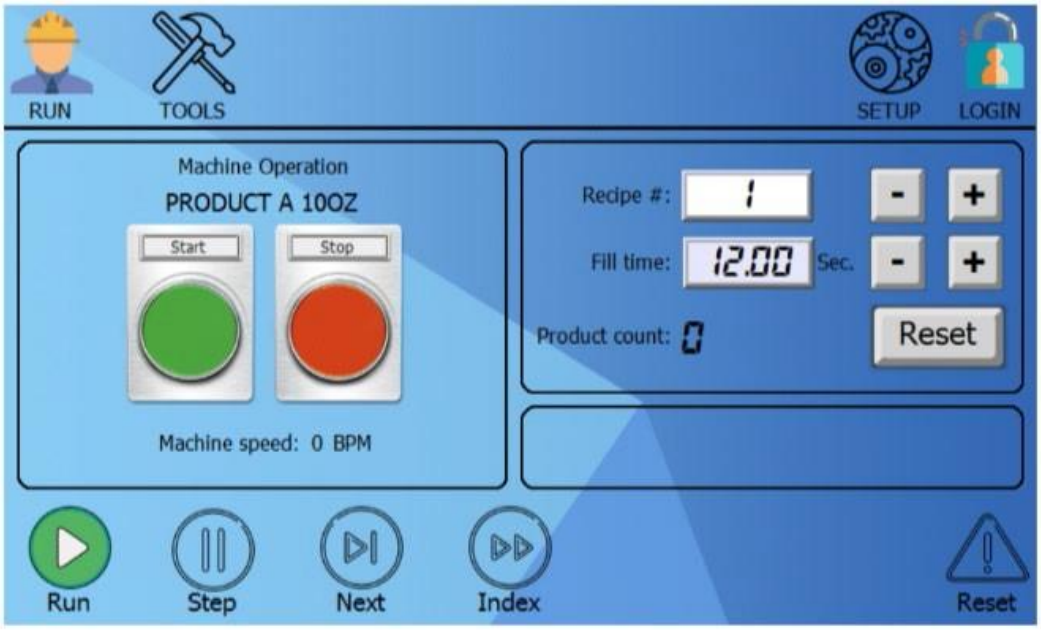
The Operator Interface allows the user to perform machine functions and set up user parameters to modify operation. User Parameters are password protected.

SPLASH SCREEN

Press ENTER to continue to the RUN screen.

RUN SCREEN:

This screen allows the operation of machine functions. The top menu bar is common to many of the screens and allows the user to navigate to the **RUN, TOOLS, SETUP** and **LOGIN** screens.

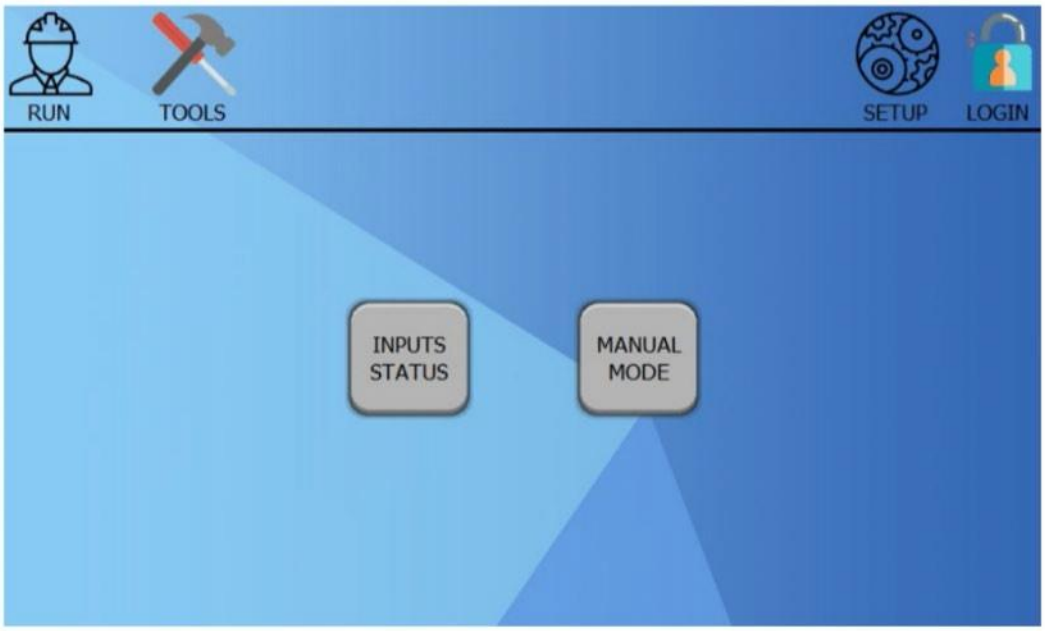


- **The START pushbutton** is used to turn ON the machine cycling. After an audible alarm, the machine will start to move all its mechanisms accordingly to the selected functions.
- **The STOP pushbutton** is used to turn OFF the machine cycling.
- **The RECIPE #** input box allows selecting the current recipe to be run on the machine. Up to 16 recipes can be created.
- **The RINSE TIME** input box allows modifying the rinse ⍰me. The rinse ⍰me is the ⍰me that the pump will be injecting rinsing jets on the bottles.
- **The RUN mode** and **STEP mode** are used for continuous operation or to index the machine cycle in steps for diagnostic purposes. If the machine is in **STEP mode**, it's necessary to use the **NEXT step button** to order the execution of the next step in the cycle.
- **The INDEX function** is shown only when the machine is stopped, and it will eject any product inside the rinsing area.
- **The RESET pushbutton** will light up only during faults and will reset any fault allowing the machine to start again.
- The product count **RESET** will set the product count to zero and it's only accessible by a logged operator.

TOOLS SCREEN:

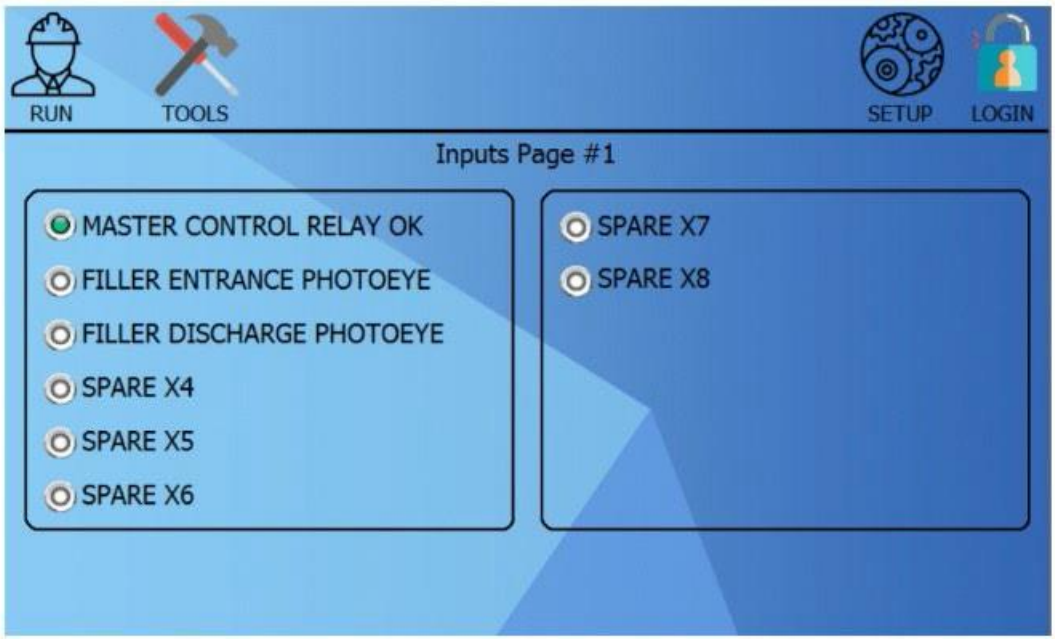
Enter this screen by pressing the **TOOLS** tab on the Menu bar.

Screen function: This screen is very useful to diagnose the machine. The INPUTS STATUS pushbuttons witches to the inputs screen where all PLC inputs are displayed. The MANUAL MODE pushbutton allows entry to the MANUAL MODE screen for troubleshooting purposes.



INPUTS SCREEN:

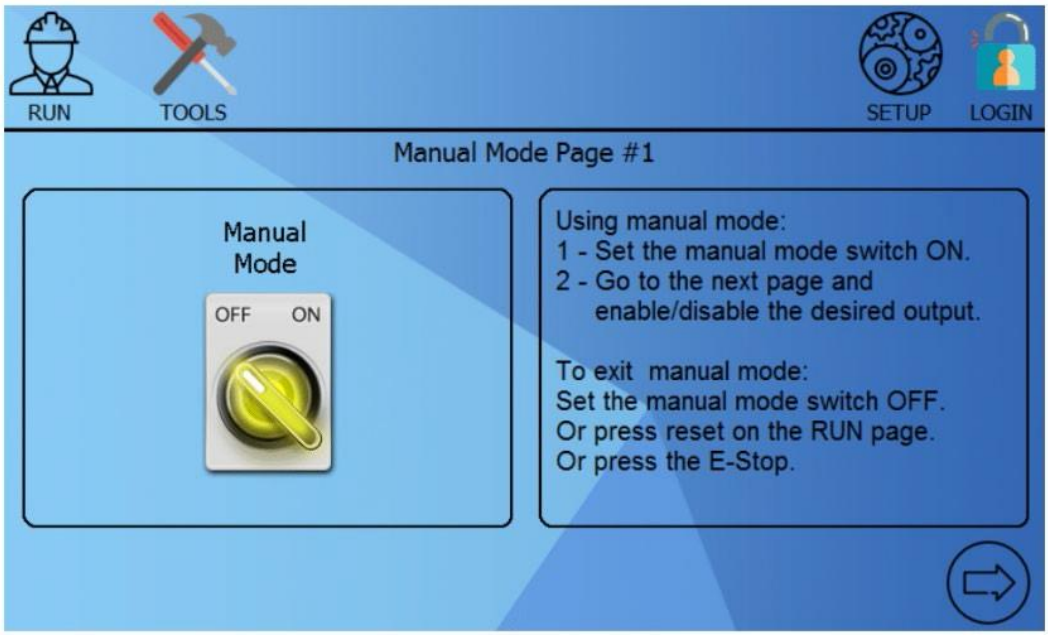
Enter this screen by pressing the **TOOLS** tab on the Menu bar and then press the **INPUTS STATUS** button. The **INPUTS SCREENS** display the status of the PLC inputs.



MANUAL MODE SCREEN:

Enter this screen by pressing the **TOOLS** tab on the Menu bar and then the **MANUAL MODE button**. You need to log as **MAINTENANCE** or **ADMINISTRATOR** to access these functions. This screen allows authorized personnel to force machine outputs independently for troubleshooting purposes only. Use caution when using these functions all machine sequencing is by passed.

1. To activate an output, the **MANUAL MODE** switch must be ON.

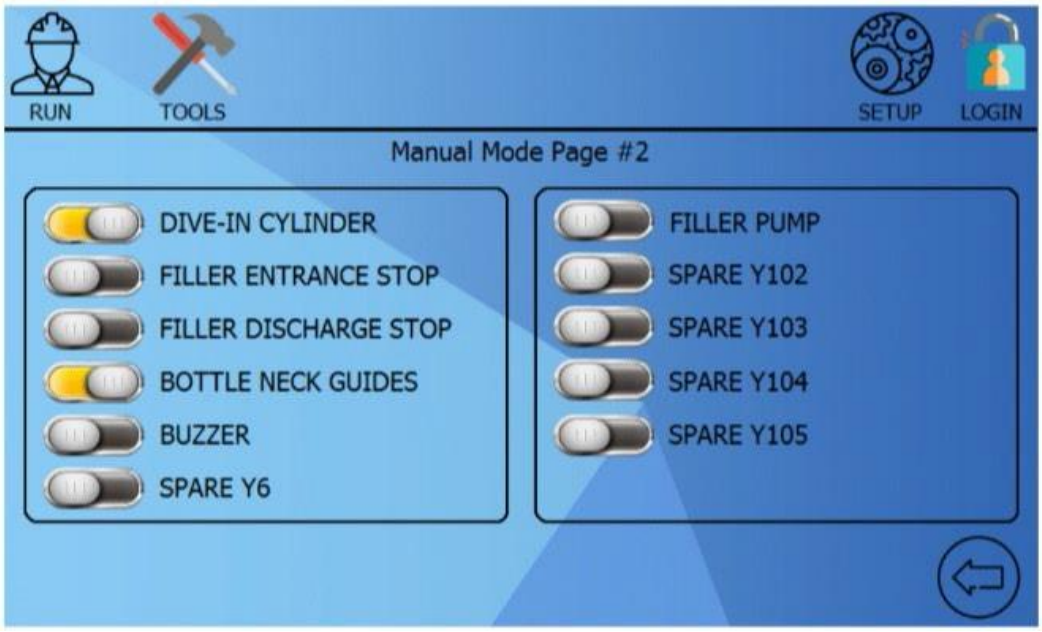


2. Press the **NEXT PAGE** arrow to access all the outputs.

⚠ CAUTION

Use extreme caution when using this machine mode.

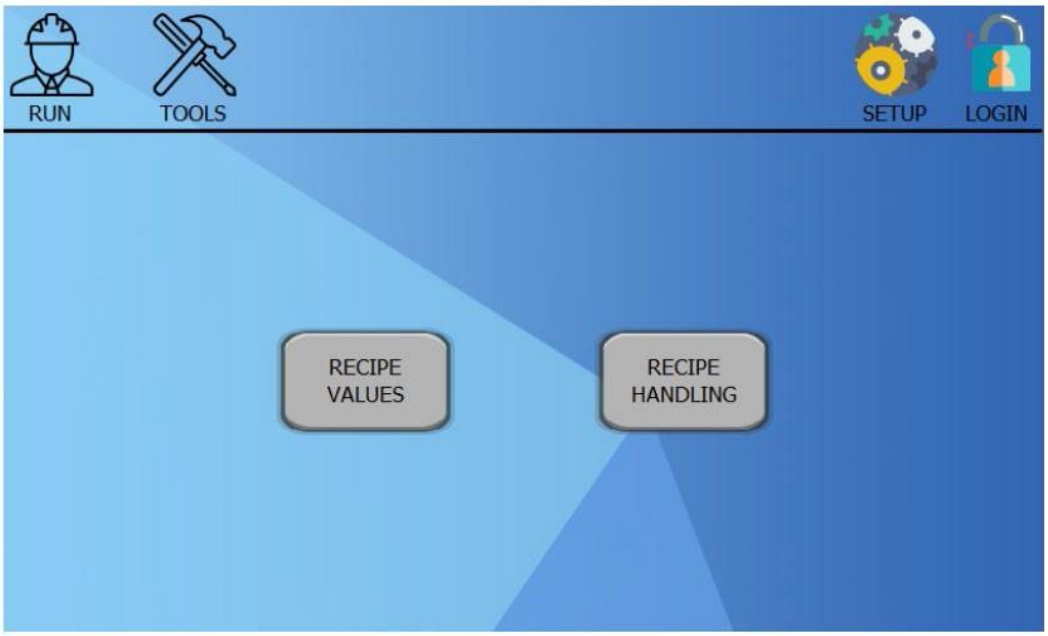
3. Press the corresponding switch to enable an output. It is possible to enable more than one output at the same time.



SETUP SCREEN:

When the **SETUP** tab on the menu bar is pressed the **SETUP** screen is displayed. **MAINTENANCE** or **ADMINISTRATOR** user level is required to access these functions.

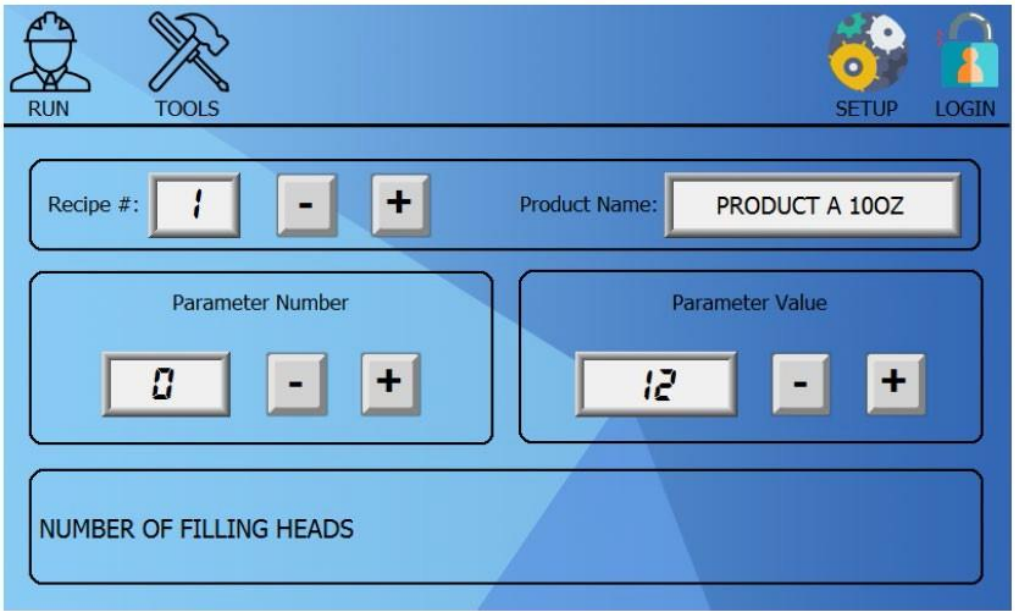
Use the **RECIPE VALUES** button to modify the recipe parameters. The **RECIPE HANDLING** screen is used to do certain recipe operations like copy one recipe into another or clear all the values on one recipe.



RECIPE VALUES SCREEN:

The **RECIPE VALUES** screen is used to set up the machine working parameters for each recipe.

1. Log as **MAINTENANCE** or **ADMINISTRATOR** and enter this screen by pressing the **SETUP** tab on the Menu bar, then press the **RECIPE VALUES** button on the **SETUP** screen.
2. Before modifying any parameter, make sure that the right **RECIPE #** has been selected first. Use the **RECIPE #** input box or the (+ / -) buttons next to it. The product name is shown to the le of the screen to help identify the right recipe.
3. Use the (+ / -) to change the **PARAMETER NUMBER** field or press the corresponding input box. Press the **PARAMETER VALUE** input box or press the corresponding (+ / -) to enter a new value. Press the **ENTER** key to save the new value.

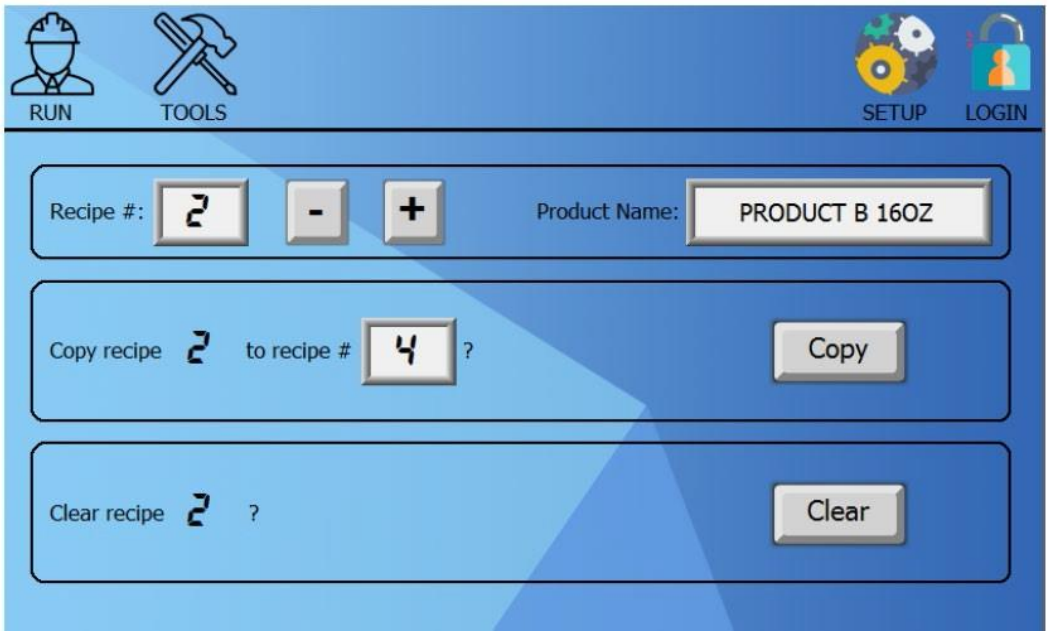


RECIPE HANDLING SCREEN:

1. Log as **MAINTENANCE** or **ADMINISTRATOR** and enter this screen by pressing the **SETUP** tab on the Menu bar, then press the **RECIPE HANDLING** button on the **SETUP** screen.
2. First, make sure that the right **RECIPE #** has been selected. Use the **RECIPE #** input box or the (+ / -) buttons next to it. The product name is shown to the le of the screen to help identifying the right recipe.

The **COPY** function makes a duplicate of the existing recipe into another recipe. Make sure you have selected the right target recipe because all the values on the target recipe will be overwritten. CAUTION, this operation cannot be undone.

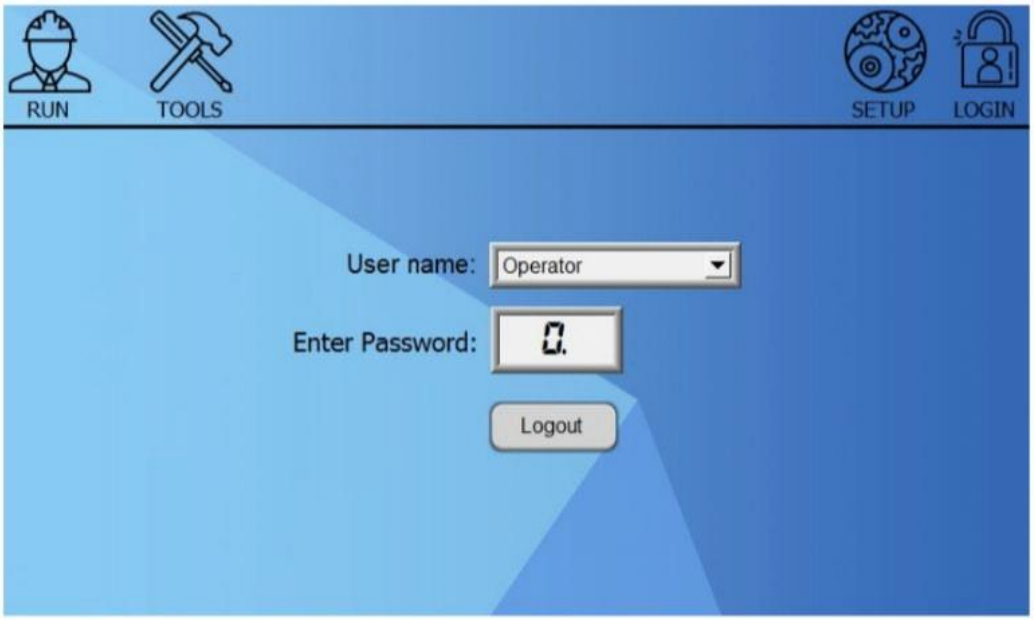
The **CLEAR** function will delete all the values on the selected recipe. CAUTION, this operation cannot be undone.

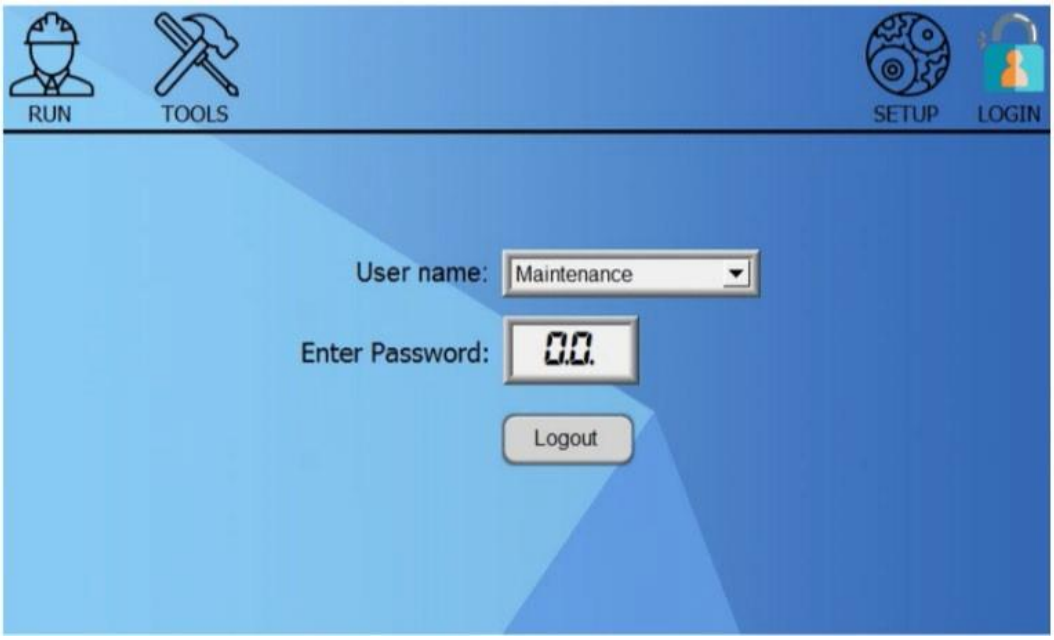


LOGIN:

Use this screen to log as **OPERATOR**, **MAINTENANCE** and **ADMINISTRATOR** to access the restricted machine functions.

1. Select the appropriate **USERNAME** on the drop-down list and enter the corresponding **PASSWORD**. Once a user is logged on, the lock on the top right corner will light up.





2. Use the **LOGOUT** button once you've finished accessing the protected functions.

Username	Password
Operator	1234
Maintenance	2222
Administrator	3280

Default parameters of value

P. No.	Description	Recipe 1	Recipe 2	Recipe 3
0	NUMBER OF FILLING HEADS			
1	ENTRANCE PHOTOEYE FILTER TIME (MS)			
2	DISCHARGE PHOTOEYE FILTER TIME (MS)			
3	BOTTLES READY TIME (MS)			
4	BOTTLE COUNTER DETECTION (0=DISABLED; 1=ENABLED)			
5	MANUAL BOTTLE INDEXING DISCHARGE TIME (MS)			
6	FILLER ENTRANCE STOP EXTEND DELAY (MS)			
7	FILLER ENTRANCE STOP RETRACT DELAY (MS)			
8	FILLER DISCHARGE STOP RETRACT DELAY (MS)			
9	FILLER DISCHARGE STOP EXTEND DELAY (MS)			
10	DIVE IN DOWN DELAY (MS)			
11	DIVE IN UP DELAY (MS)			
12	BOTTLE NECK GUIDE ON DELAY (MS)			
13	BOTTLE NECK GUIDE OFF DELAY (MS)			
14	FILLING PUMP ON DELAY (MS)			
15	FILLING PUMP OFF DELAY (MS)			
16	TANK REFILL ON DELAY (MS)			
17	TANK REFILL OFF DELAY (MS)			
18	TANK REFILL CONTROL MODE (0=DISABLED; 1=ENABLED)			
19	CONVEYOR CONTROL MODE (0=STAND ALONE; 1=CONTROLLED BY FILLER)			
20	FILLING PUMP VFD ENABLE (0=0FF; 1=ON)			
21	FILLING PUMP SPEED (X0.1 HZ)			
22	TANK REFILL PUMP VFD ENABLE (0=0FF; 1=ON)			
23	TANK REFILL PUMP SPEED (X0.1 HZ)			
24	FILLING CONVEYOR VFD ENABLE (0=0FF; 1=ON)			
25	FILLING CONVEYOR SPEED (X0.1 HZ)			
26	SPARE			
27	SPARE			
28	SPARE			
29	SPARE			
30	SPARE			

3.3. Recommended Spare parts listing.

SPARE PART LIST			
QTY	**PARTNO**	**DESCRIPTION**	**NOTES**
1	5931K926	Corrosion-Resistant Flange Mounted Linear Ball Bearing	BOTTLES CLAMP ASSY
1	A20020DN	1-1/4 AIR CYLINDER 2" STROKE	BOTTLES CLAMP ASSY
2	5720K130	QUICK POSITIONING CAM HANDLE	
1	9657K404	COMPRESSION SPRING	NOZZLE
2	TW-12-20	DryLin®, TW-12-20	
1	D2SK-40	NITRA seal kit, for use with 2.5in bore NFPA cylinders	REPLACEMENT SEAL KIT FOR CYLINDER

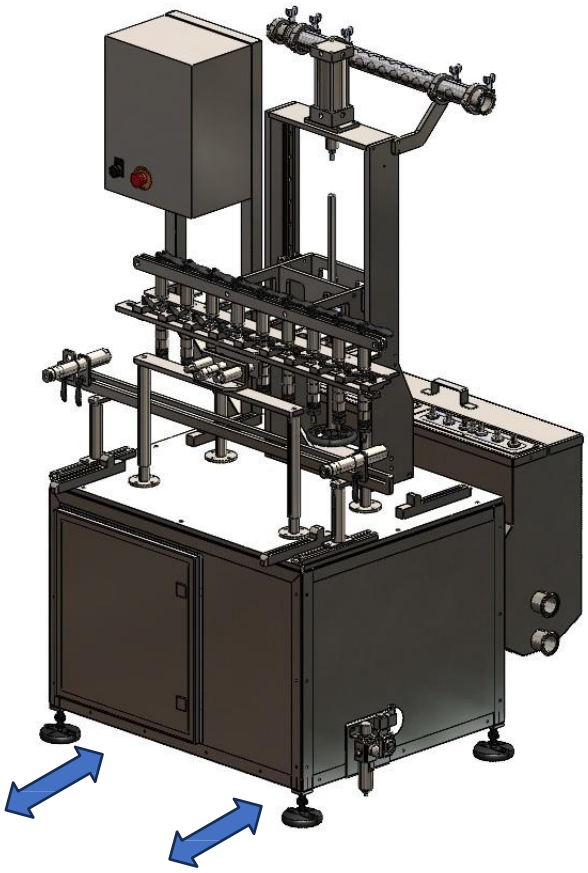
Unpacking the Overflow Filler

We subject the machine through rigorous test running procedures. After successfully conducting the test run and meticulously inspecting the quality of your machine, in order to ensure the safe transportation and delivery of our machines, we adhere to a meticulous packaging process. We take the utmost care in crating the equipment to ensure maximum protection during shipment. The packaging is thoughtfully designed to facilitate easy unloading and seamless placement within your plant, minimizing any risks of damage during the process.

Although our strict measures significantly reduce the likelihood of damage during transit, we highly recommend inspecting the machine upon its arrival at your site. Should any signal of damage be observed, we kindly request immediate recording and reporting of such instances. This proactive approach allows us to swiftly address any concerns and initiate appropriate actions, ensuring your utmost satisfaction with the equipment's condition and performance.

1. Procedure to unload the Overflow Filler

1. Remove the shipping container.
2. Remove any ties that may be included.
3. Only lift the machine by the lower section of the frame, be aware of non-lift points.
4. Immediately upon unpacking and prior to setting up, look over the machine in the shipping crate, for loose components.
5. Move the machine to the designated area by lifting it up with a forklift through the safe areas signed.



Lifting points.

3. Tools or equipment required.

The forklift used to unload and transport the Bottle Rinser must be capable of lifting the weight of the machine.

The contents of the crate are now exposed. The legs, which were detached from the conveyor prior to shipping, are located under the conveyor and indicated in the picture to the right. Also included is a box that contains the parts and hardware required to assemble the conveyor.

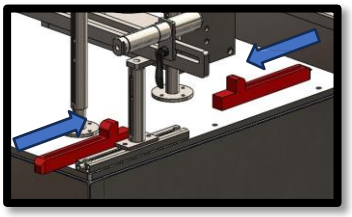
4. Environmental conditions

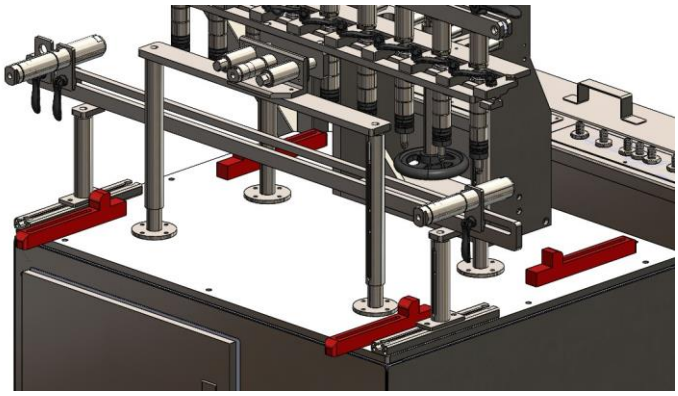
Upon unloading your Bottle Rinser at your facility, it is imperative to adhere to specific environment conditions for its proper setup and subsequent operation. The designated area must possess **adequate ventilation** to ensure the efficient dissipation of heat generated during machine operation, and a **dust-free** environment to prevent potential contaminants from interfering with the machine's functionality. Additionally, the set-up location must be **non-corrosive** to safeguard the machine' structural integrity. Lastly, is crucial to guarantee a **leak-free** environment to prevent any damage to the machine. Following these instructions will contribute to the longevity and efficient performance of the Bottle Rinser machine. Please **be aware** that any damage caused to the machine due to the use of washing liquids selected by the buyer is the sole responsibility of the buyer.

Installation Procedure

1. Procedure:

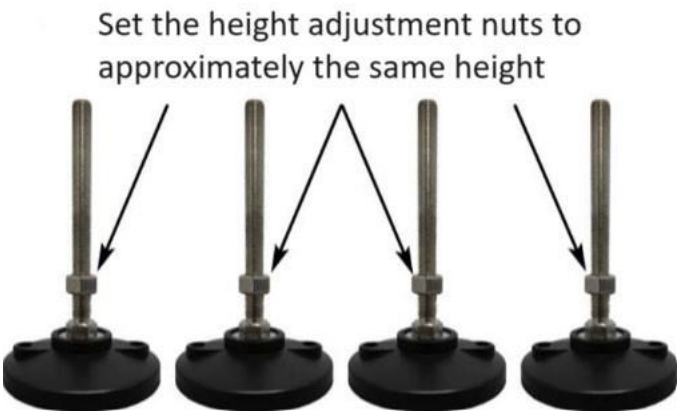
a. Visually and physically **examine the machine** for any damage, wear, or missing part.
b. Make sure the 120 VAC power plug on the filler is connected.
c. **Mount the conveyor belt on the machine**.
    a. Place the conveyor over the two brackets in the chassis of the filler.
    b. Align the body of the conveyor with the nozzles over it.





d. Power up the machine: turn the **Power ON** switch to the **ON** position.
e. Be sure all **the E-STOP'**s are pulled out.
f. Press the blue **RESET** pushbutton on automation panel to activate power.
g. Once the machine is powered up, connect the machine to the **pneumatic system.**
h. Installing the **feet** onto the base of the frame

Set the height adjustment nuts to approximately the same height on the threads of all four feet as is shown in the image to the right. Do not be concerned with determining the exact final height of the conveyor at this time. Adjustments can be made later to adjust the final height of the machines.



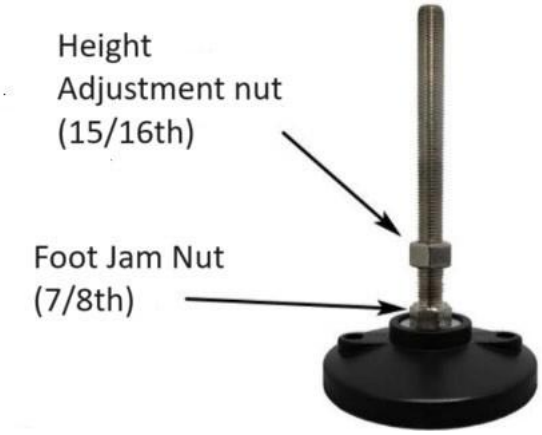
The adjustable feet are threaded into the legs of the machine by hand as shown in the picture to the right. The height of the machine is adjustable from 35–40inches. The further you thread the feet into the machine legs, the lower the height of the conveyor and the Filler will be. Thread the adjustable foot into the leg until the height adjustable nut contacts the leg of the machines. Leave the nut only snug for now

i. Height Adjustment feet

An adjustable foot is shown to the right. The height adjustment nut and foot jam nut are indicated.

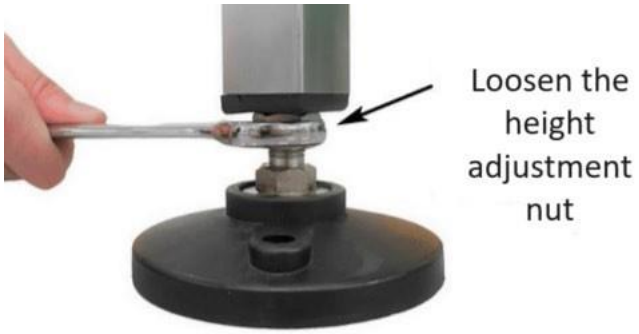
The height adjustment nut locks the foot in place once the desired height of the machine is determined.

The foot jam nut is locked to the round foot. Rotating the foot jam nut rotates the foot. The foot jam nut provides an easy means of rotating the foot when raising, lowering, or leveling the machine.



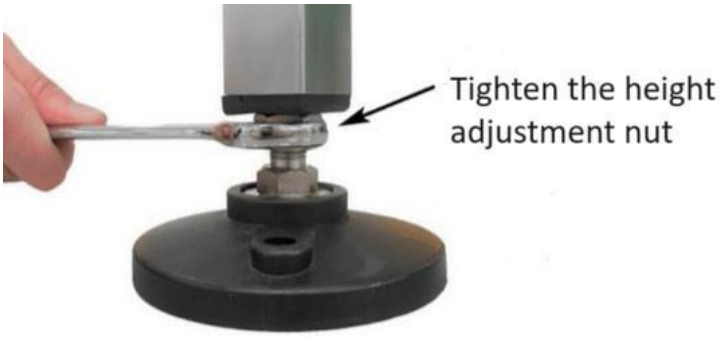
j. Raising and lowering the machine

To raise, lower or level the machine, first loosen the height adjustment nut with a 15/16th wrench as is shown in the image to the right.



With the height adjustment nut loose, rotate the foot jam nut with a 7/8th wrench. To raise the machine, rotate the foot jam nut clockwise. To lower the machines, rotate the foot jam nut counterclockwise.

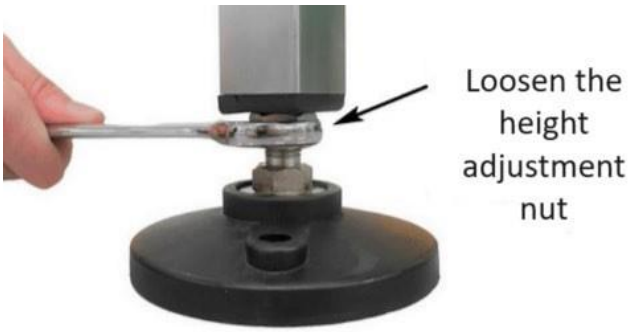
When the machines are at the desired height, tighten the height adjustment nut against the leg of the machine with a 15/16thwrench



k. Leveling the machine.

To level the machine, place a level along the belt of the conveyor as shown in the picture to the right.

If adjustments are required, loosen the height adjustment nuts on the feet of the conveyor with a 15/16th wrench.

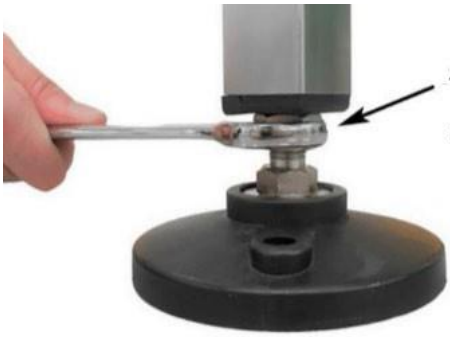


With the height adjustment nut loose, rotate the foot jam nut with a 7/8th wrench. To raise the conveyor, rotate the foot jam nut clockwise. To lower the conveyor, rotate the foot jam nut counterclockwise.

Rotate clockwise **to raise** the machines

Rotate counterclockwise **to lower** the machines

When the conveyor is level, tighten the height adjustment nut against the leg of the conveyor with a 15/16th wrench.



Tighten the height adjustment nut

l. Press the **RUN MODE** button on the touch screen to make sure the machine is in run mode.
m. Press the **START** button on the touch screen to start the machine.

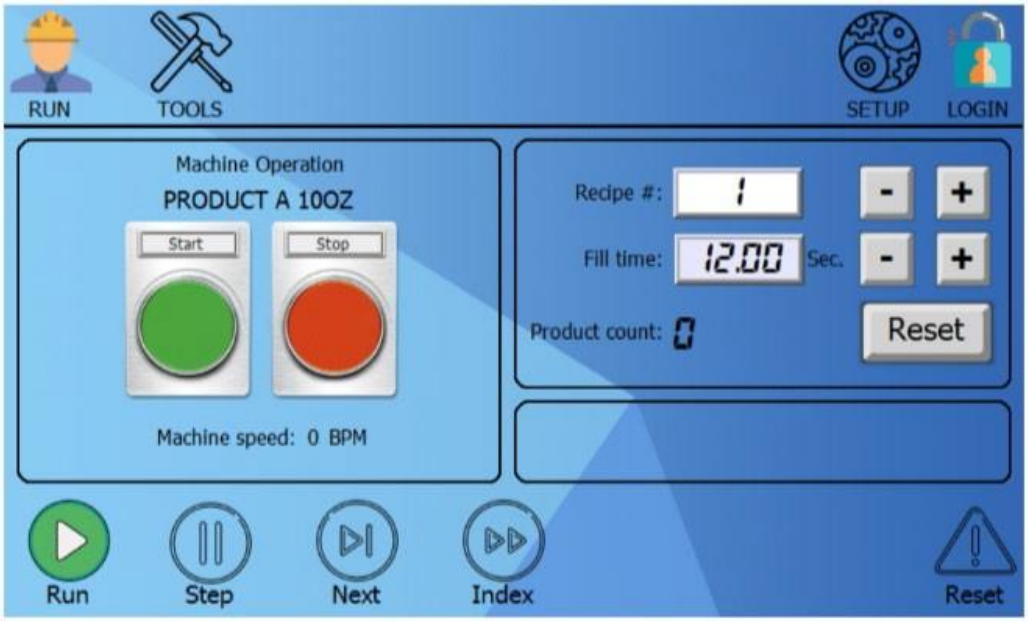
2. Change-over Procedure.

Follow the process described in this section to adjust the machine from running one line of containers to a different container's dimensions.

2.1. Touch screen setup for adjustment

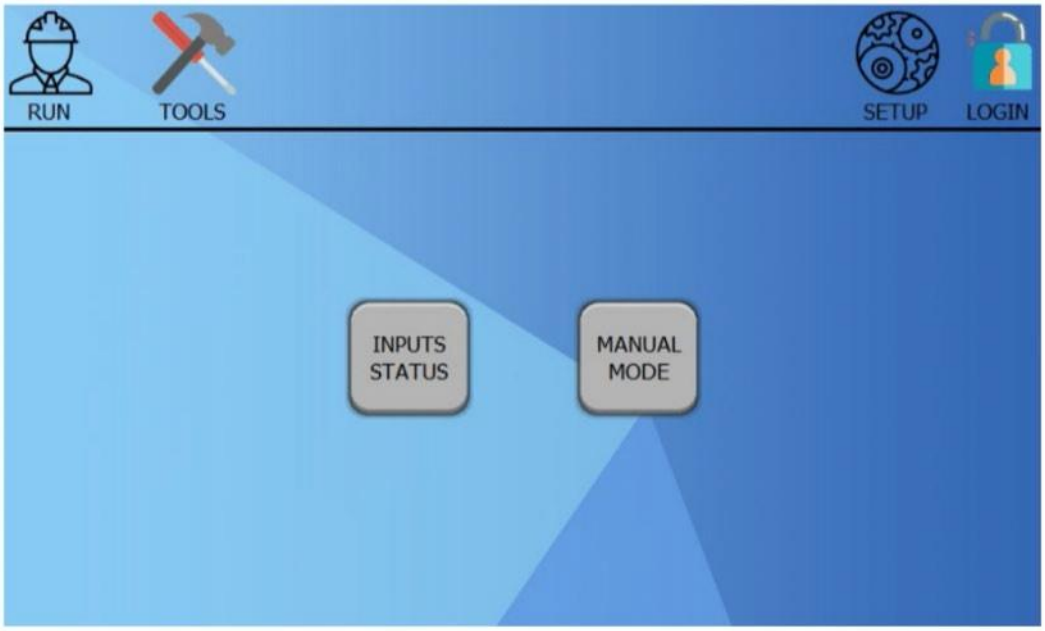
1. Turn on the machine.
2. Press **ENTER** to continue to the RUN screen.

3. Press **LOGIN** on the top menu bar.

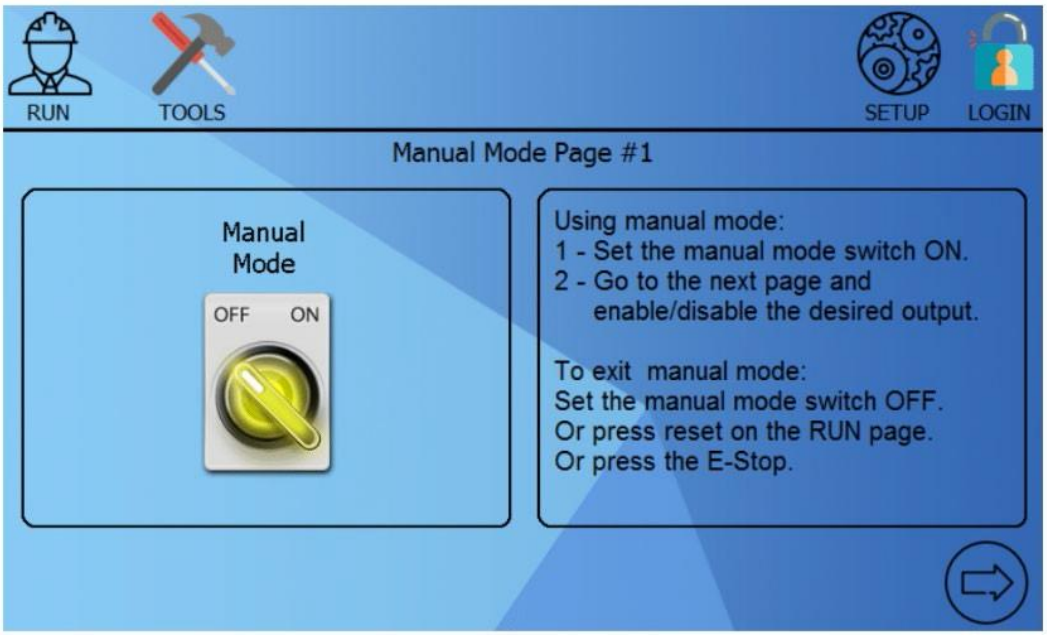


4. Select the **USERNAME Maintenance** on the drop-down list and enter the corresponding **PASSWORD**. Once a user is logged in, the lock on the top right corner will light up.

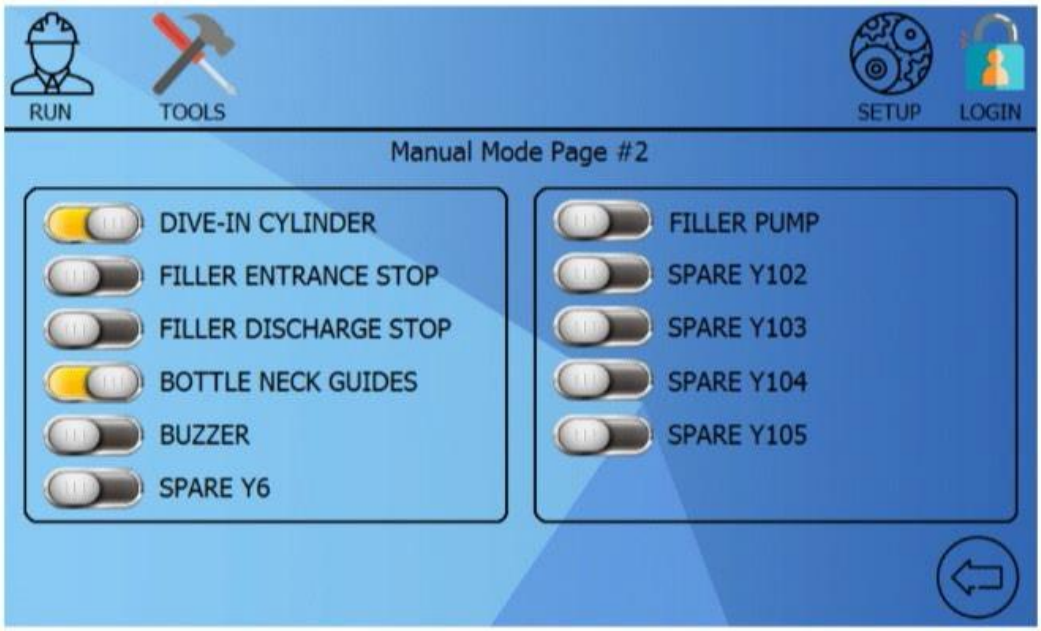
5. Once you press **ENTER** the machine is turned on and ready. Make sure that the blue button is light.
6. Select **TOOLS** on the top menu bar and then select **MANUAL MODE** on the screen.



7. Activate the **Manual Mode** Switch ON and select next.

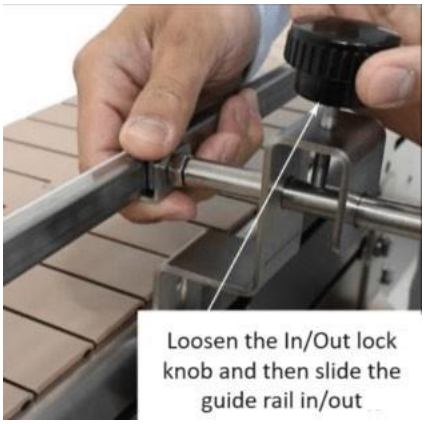


8. To start setting up the nozzles for different sizes of containers it is necessary to **be aware** that there is no interference with the nozzles from the **Drip Tray** or the **Neck Guides**.
9. Activate the **BOTTLE NECK GUIDES** on the screen, release the **Drip Tray** away from the nozzles and activate **DIVE-IN CYLINDER** to begin the set up moving down the nozzles toward the containers.



2.2. Conveyor guiderails Adjustment

1. Place the containers in the nozzles' position at the first and last nozzles.
2. Adjusting the **width** of the **guide rails**: to move the guide rail in or out, loosen the In/Out knob as shown in the image below and to the left. With the knob loose, the guide rail is free to slide in our out. Slide the guide rail to the desired position and then tighten the lock knob to fasten into place.

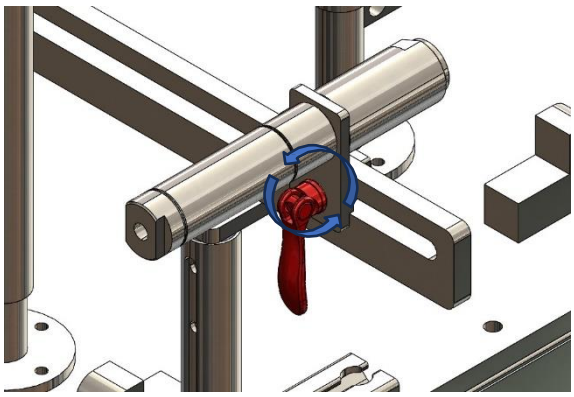


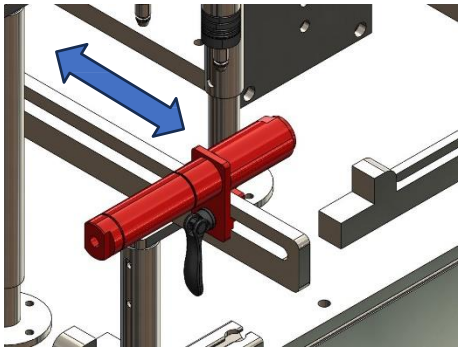

Slide the guide rail to the desired position and then tighten the lock knob to fasten

2.3. Indexing system adjustment

Adjustment of the pneumatic gates and photo sensor placement:

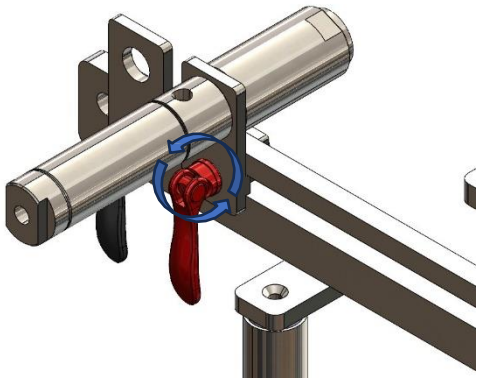
1. Set up the 11 bottles that are going to be filled.
2. Adjust the **discharge pneumatic gate** by loosening the handle, move the gate to desire position then tighten the handle.

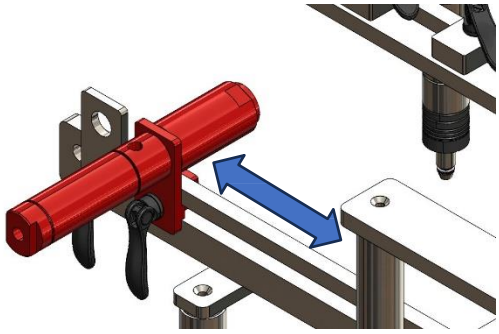




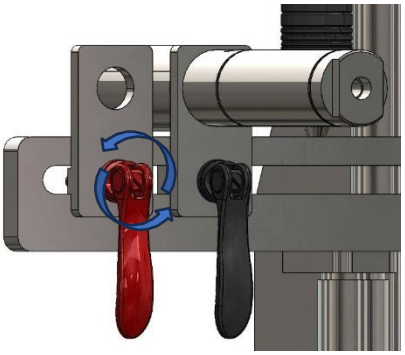
3. Retract the pneumatic gate at the entrance.
4. Turn **ON** the conveyor on the **Touch screen** and feed the conveyor with the containers.

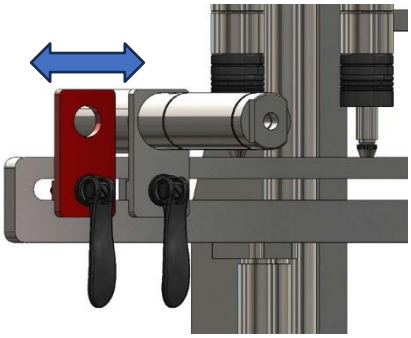
5. Once you have the containers set up, turn **OFF** the conveyor.
6. Adjust the **pneumatic gate at the entrance** of the Filler after the last bottle is set up by loosening the handle, move the gate to desire position then tighten the handle.





7. Place the photo sensor next to the entrance gate.





8. Place the entry sensor in front of the body of the last container that entered the machine. If this sensor doesn't detect the container the machine won't work.
9. Place the exit sensor at about the width of the container from the exit cylinder.

2.4. Neck guides adjustment.

1. Place the neck guides to the le□, right or in-between bottles, where don't interrupt with the adjustment of the nozzles.
2. Set the **NECK GUIDE** on the neck of the bottle by releasing the locking handle to the position and tighten again. Position the neck guide on the center of each bottle to ensure the bottles are stable.



3. Adjust the **GUIDE REAR** to the neck of the bottle and loosen the screw. This adjustment must be made on both sides of the Guide. After this adjustment tighten again.


2.5. Nozzles Adjustment

The nozzles can be easily adjusted manually for different containers following the steps:

1. **NOZZLE ALIGNMENT**
    a. Release the nozzles one by one and slide them to the le.
    b. Align the nozzles with the center of the containers' neck.


2. **NOZZLE HEIGHT ADJUSTMENT:**
    a. Align the nozzles' position according to the position of the containers by releasing the nozzles and placing them starting from the left, set them aligned with the center of the neck of the bottles.
    b. To adjust the nozzle height UP or DOWN: position the nozzles ¼" from the neck of the bottles by rotating on the handwheel on the rear of the machine. Lower the nozzles until you see the Nozzle springs compressed, the recommended compression of the Nozzle springs is 1".



3. **NOZZLE VOLUME ADJUSTMENT:**

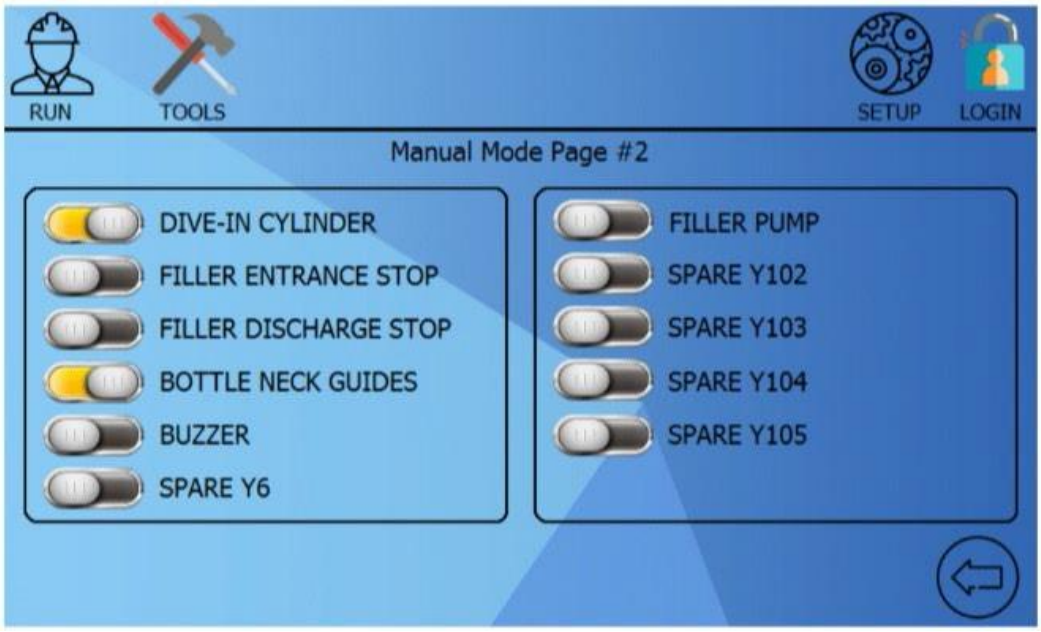
To optimize bottle filling volume, please adhere to the following operational guidelines considering that the volume given to the bottles are state by me and according to the precision of the nozzles:

a. To increase the volume of liquid filled into the bottles, adjust the nozzles to the downward position.
b. Conversely, to reduce the volume of liquid filled into the bottles, adjust the nozzles to the upward position.

These adjustments should be made in accordance with your specific production requirements to ensure precise and consistent bottle filling.

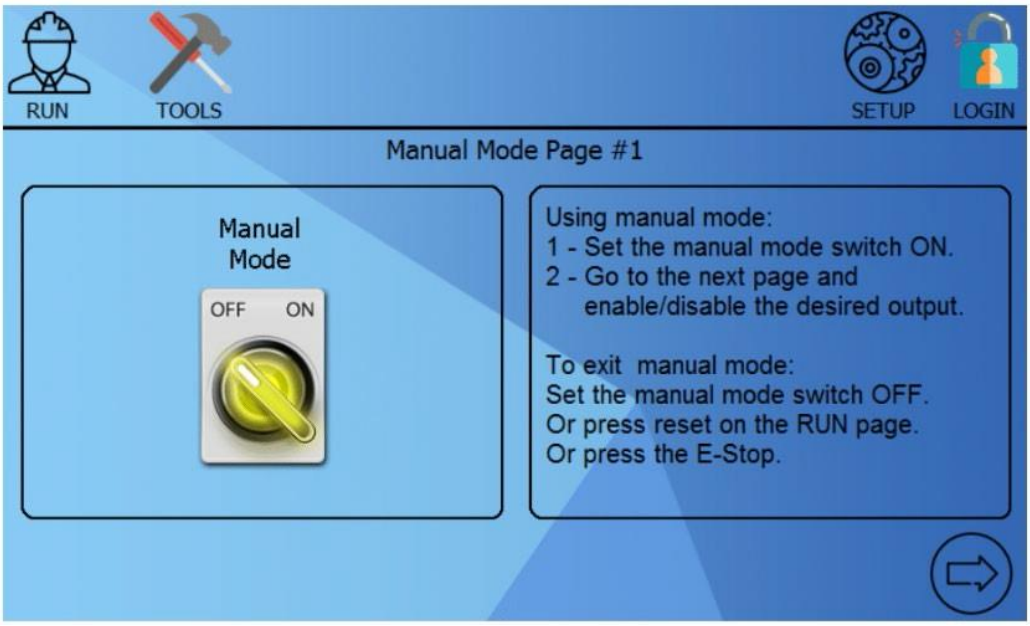
2.6. Drip Tray setup

1. Once the nozzles have the spring compressed, go to the Touch Screen and deactivate **DIVE INTO CYLINDER**, to move the nozzles up from the containers.
2. On the touch screen, retract the **BOTTLE NECK GUIDES**.

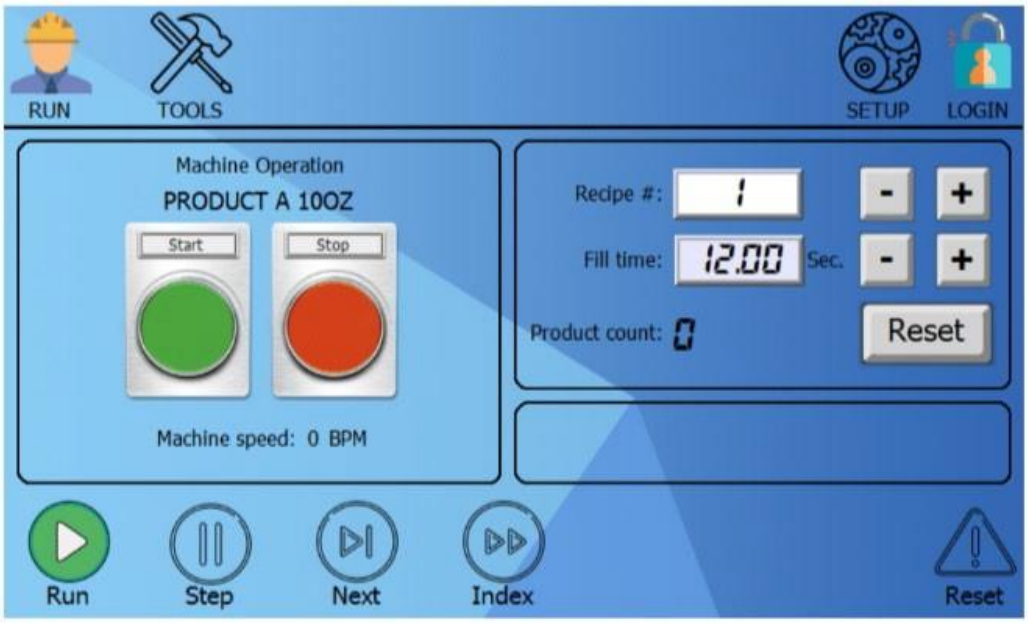


3. Adjust the Drip Tray to a position where the nozzles are flush with the wall of the **Drip Tray**.

To complete the setup process for the adjustments made to prepare the machine for different size of containers, it is necessary to deactivate **MAUAL MODE** by turning the switch to the **OFF** position and select **RUN.**



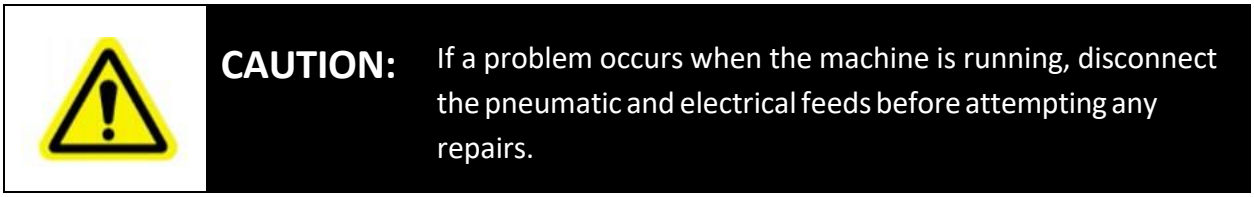
Press **START** to operate the machine.



4. Start-up Assistance.

If you opt to pay for installation, we will provide you with set-up and installation assistance as part of our package. This ensures a hassle-free experience and guarantees your new system is up and running smoothly.

Maintenance and cleaning procedures



1. Maintenance task and schedule

- Use approved **lock out / tag out procedure** when performing the maintenance as stated above on this manual.
- The **Frame** is Stainless Steel and can easily be cleaned with the use of nearly any solvent. How often and with what type of cleaning solution will depend on your specific application and local and federal guidelines for your product type and manufacturing format.
- Unplug the main power and attach a padlock to assure that the power to the machine remains OFF when performing maintenance on the machine.

2. Daily check list

1. Check for loose nuts or bolts and retighten.
2. Check for loosen or broken electrical cables.
3. Check that all safety guards and covers are in place.
4. Remove all excess glue from guide rails.
5. Lubricate all bearings.
6. Check alignment of equipment.
7. test run all pieces of equipment without load and inspect for proper operation prior to container flow.

3. Weekly check list.

1. Check motor and gear reducer of drive for overheating.
2. Lightly oil all drive chains.

Troubleshooting

PROBLEM	POSSIBLE CAUSES	REMEDY
The machine doesn't start	Emergency stop button is not activated	Check that the emergency button is activated, if it is, twist its head 90 degrees to free the button and start the machine.
	The electrical feeder may not have the appropriate voltage and frequency	Be sure the electrical feeder has the Voltage and frequency as stated in the manual.
		Be sure that the air feeder has the appropriate pressure, and that the security valve is open.
The sensors are not detecting the containers		Check that the sensors are not obstructed.
		The sensor may need a re-adjustment:
	The side rails are too close to the containers and the containers are stuck	
	The sensors are too distant from the containers	The sensor may need a re-adjustment:
Inaccurate filling	The filling time could be too short	Increase the time until the nozzles begin to create return of flow and the foam comes out of the containers

	The pump might require a higher acceleration	Check the values on pump speed screen
	The nozzles may not be properly placed	Verify the nozzles have the same number of spacers.
	The nozzles may not open properly	Check that the spring of the nozzles retracts around 90 degrees.
	Can be leaked of fluid in the connections of the hoses	
Dripping of nozzles		Be sure all the hoses and clamps are well adjusted
		Adjust the upper part of the nozzle until it completely seals
		Replace the O-rings at the end of the nozzle and in the inside of the nozzle
	Caused because of the property of the product (oils for example)	Increase the time the nozzles stay over the containers filled so the drops fall inside the containers.