SNEED * PACK

Automatic Liquid Filling Production Line:

Tabletop Capper



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Hey there,

pros

congrats on scoring your very own piece of the "SNEED-PACK Automatic Liquid Filling Production Line!" We're stoked that you're now a part of our automation tribe. This manual is like your compass to navigate through all your new gear's cool features and hacks. Feeling like a deep dive? Swing by and schedule a video chat with our tech pros - just zap that QR code. Or if it's a quick fix you need, the other QR code will whisk you away to our online Help Desk faster than you can say, "Automate everything!" Big thanks for choosing Sneed Coding - get ready to rock the world of automation with us!



Schedule a video meeting with one of our tech

Visit our Help Desk:



- 1 -

Table of Contents

Safety Precautions	3 -
Specifications & Diagrams	4 -
Physical specifications	4 -
The Control Panel	5 -
Getting Started	7 -
Stop-Gate Timing	7 -
Instructions:	7 -
Setting The Bottle Clamp	8 -
Dial in and Set the Cap Applicator / Spinner	9 -

Safety Precautions



Keep hands clear of any moving parts while the equipment is in operation and always power down prior to inspection. Failure to do so may cause bodily harm.



Risk of electric shock, make sure the machine is properly grounded before use.



Do not alter the mechanical or electrical systems. Any changes could result in malfunction or injury.



Always turn off the power to the equipment before replacing any consumables.

Specifications & Diagrams

Physical specifications

Bottle Height Range	6 – 27cm
Cap Diameter Range	1.8 – 7cm
Working Speed	20 – 40 bottles p/min
Voltage	220/110 VAC @ 50 – 60Hz
Conveyor Length	3.6ft
Air Pressure	60 – 85psi
Machine Dimensions (footprint)	112 x 58 x 111cm
Weight	



- 1. **Cap Height** Set the height of the cap applicator.
- 2. **Applicator push rod** The applicator push rod is used to press each cap down onto the threads. Use the knob to raise and lower the applicator push rod.
- 3. Cap Width Knob set the width of the cap applicators (rollers)
- 4. **Bottle Sensors** "Sensor 1" triggers the stop gates, and "Sensor 2" activates the bottle clamps and capper.
- 5. **Stop Gates** The stop gates control the rate of bottles into the capper.
- 6. **Bottle Clamp** Holds the bottle in place while the cap is applied. Use the Height and width knobs to set the clamping pressure and position.

- 4 -

7. Air Pressure Regulator – Set the air pressure (60 – 80psi)

The Control Panel



Figure 2.

- 1. **Stop** Emergency stop.
- 2. Capper Speed Increase or decrease the speed at which the cap is applied.
- 3. On / Off
- 4. Control panel
- 5. **Conveyor controls** increase or decrease the speed of the conveyor. Not all capping machines feature a conveyor motor. It is dependent on the rest of your purchase.





- 1. **Signal Delay** The clamping delay, the time that it takes the bottle clamp to close after the applicator sensor has been triggered.
- 2. **Clamping Time** Cap applicator time is the amount of time the cap applicator rollers spin to apply the cap. Setting this too low will cause the caps to be loose.

- 5 -

- 3. **Pressing Time** Clamp timer.
- 4. **X0** This button sets the clamp and cap applicator to automatic mode. It uses the sensors to initiate the capper.
- 5. **Y7 Clamp** manually close the bottle clamp.
- 6. **Y5 Motor** Manually start the cap applicators.
- 7. **Y6 Cap** Initiate the cap applicators.
- 8. Working Time Primary Stop gate timer.
- 9. Separate Time Secondary Stop gate timer.
- 10. **X1 Switch** Set the stop gates to automatic mode. The sensors will trigger the stop gates to cycle.
- 11. **Y4 Valve** Manually initiate the stop gates.

Getting Started

Stop-Gate Timing

The stop gate timing is crucial to ensuring that all bottles are capped smoothly and efficiently. The bottle sensor works in conjunction with timers to guarantee consistent spacing and speed of each bottle. The interface options labeled "Working Time" and "Separate Time" are used to set the duration. The stop gates work in a cycle illustrated by the flow chart below.

- Working Time The "Primary" stop gate timer.
- Separate Time The "Secondary" stop gate timer.

Working Time: 4.00

Seperate Time: 3.00



Figure 4.

Instructions:

1. Start by lining up several bottles and positioning the Primary gate between bottles one and two.



Pressure Regulator Thumb Screws

- Figure 5.
- Position "Sensor 1" between the gates and no more than a centimeter from the bottle. See Fig. 5.
- 3. To begin dialing in the timers, set them to 3 and 4, respectively. This should allow enough time so that the bottles don't get jammed. Setting the "Working Time" too low can cause the primary gate to close early and cause damage to the bottle or equipment.

- 7 -

- 4. Press the button on the screen labeled "X1" to initiate the stop gates and allow a few bottles to pass through.
- 5. View the distance between bottles and set the "separate Time" to the desired duration. Setting the bottles too close together will cause the machine to bind up.
- 6. Once the "Separate Time" is set, you can set the "Working Time" to allow the next bottle through to the stop gate.
 - If you find that any of the machine's pneumatic parts are not operating fast enough or are operating too fast, you can adjust the PSI to each component using the thumbs screws seen in Fig.5.

Setting The Bottle Clamp

- 1. Using the width knob in Fig.6, set the clamp to its widest setting and place the bottle between the clamps.
- 2. Adjust the height so that the clamp lines up near the center of the bottle.
- 3. Close the clamp by using Button Y7 (#5 Fig.3). Keep in mind that while the clamp is set to its widest setting, it will not engage.
- 4. Use the width knobs (Fig.6) on each side of the capper to set the bottle clamp. Do not overtighten the clamp onto the bottle.
- 5. Pressing Y7 again will release the bottle.



Figure 6.

Dial in and Set the Cap Applicator / Spinner

1. With the bottle secure in the clamp, turn the cap width knob in Figure 5 counterclockwise until it stops.



Figure 7.

- 2. Lower or raise the height so that the rollers lie just above the top of the cap rim. (Fig.8)
- 3. Press Y6 to initiate the applicator arms and turn the width knob clockwise until the rollers contact the cap. (Fig.8.1) This may require fine-tuning to achieve the desired pressure. Overtightening will cause unnecessary wear.
- 4. Finally, turn the applicator push rod knob until the push rod contacts the top of the cap. This ensures the cap is all the way onto the threads when the rollers twist it on. Lowering the push rod too far will damage the cap.



- 9 -

Figure 8.

Figure 8.1

That's a Wrap!

You've reached the end of this portion of the SNEED-PACK Automatic Liquid Filling Line – you're officially a pro in the making! Remember, when in doubt, this manual is your trusty sidekick. And if you ever need a hand, a high-five, or just a virtual fist bump, our tech pros are just a QR code away – you know what to do!

Go forth, automate, and conquer!

- Your friendly Sneed Coding Technical Services crew.

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