

# DM-20 Semi-Auto Depositing Machine Product Manual

Serial No: <u>202101</u>

Year of Mfg: 2021.01

Thank you for using the DM-20 Semi-Auto Depositing Machine manufactured by SAINTYCO. The equipment is manufactured according to the industry standard.

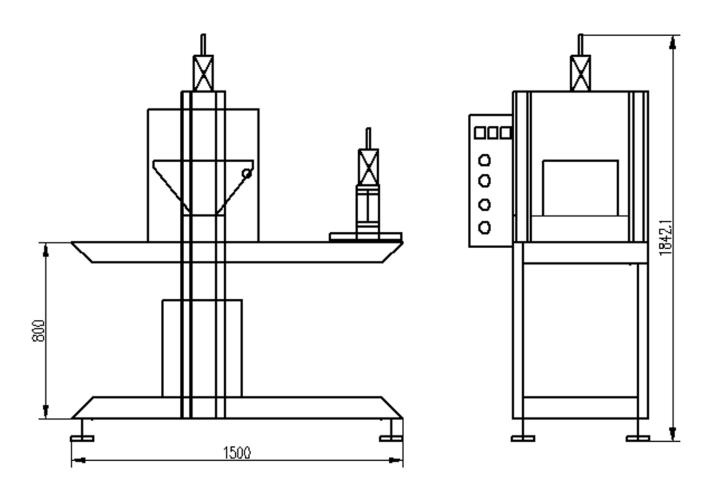


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## 1. Machine appearance





#### **Structures drawing of major component:**

## 2. General descriptions

This is the smallest production line for gummy production.

The processing line is an advanced and continuous plant for making different sizes of gummies. It is an ideal equipment which can produce out exceptional quality products with the saving of both the manpower and the space occupied.



## 3. Operation

- 3.1 Before operation, the whole equipment should be inspected. Whether the parts of the equipment are damaged or loose during transportation can be installed and debugged after checking.
- 3.2 It should be ensured that all related equipment is installed correctly, all cables, compressed air wire is correctly connected.
- 3.3 Turn on the depositing machine, set the temperature of the hopper heat and base heat and manifold heat at around 75-90 $^{\circ}$ C. (click here to see how to set the temp)



3.4 Depositing is driven by cylinder, control the depositing amount by adjusting the piston travel. (click here to see how to set the depositing amount)

-Spin up to get more depositing amount and spin down to get less.





3.5 Add cooked solution to the hopper manually.



3.6 First deposit several times without mold, in order to reach the best state.

Then put mold in the mold plate, then push it under the hopper and align with depositing heads. (There is a stopper to fix the mold position)





3.7 Turn on depositing button or step on the pedal.(click here to watch continuous depositing)







3.8 Take out the mold and put it aside until the gummy solidate. (This normally takes 5-8 minutes). Repeat depositing by using empty molds.

3.9 Put the mold to the de-molding machine, step on the pedal or switch on the button to drive the plate. Then the plate will drop down to press the ejection pin on the back of the mold to demold the gummy.



- 3.10 Put the gummies on the drying trays, then move the tray to the drying room.
- 3.11 Cleaning process: (click here to watch the water cleaning process)
- (1) Add hot water to the hopper and keep the hopper temp at  $90^{\circ}$ C
- (2) Let the water dissolve the leftover in the hopper for 15-20 minutes.
- (3) Keep depositing water from the hopper to the water drain to dissolve leftover inside the nozzle and piston
- (4) The water bucket at the bottom of the equipment will hold the waste water and needs to be disposed of.

#### 4. Maintenance

- 4.1 Routine maintenance: clean, lubricate, fasten easily loose parts, check the integrity of parts and components. This kind of maintenance items and parts are less, most of them are outside the equipment.
- 4.2 First-level maintenance: generally tighten, clean, lubricate, tighten, and adjust partially. First-level maintenance and Second-level maintenance are generally undertaken by operators.
- 4.3 Second-level maintenance: internal clean, lubricate, adjust and partial disintegration of inspection.
- 4.4 Third-level maintenance: disassembly inspection and adjustment of the main part of the equipment. If necessary, replace the parts that reach the specified wear limit. In addition, it is necessary to measure, appraise and record



the wear of main components. Second-level maintenance and third-level maintenance are generally undertaken by full-time maintenance workers with the participation of operators.

## **5. Technical Parameter**

Model	DM-20
Capacity	3000-6000 gummies per hour (gummy
	quantity can by customized)
Depositing speed	5-8 times/min
Power supply	220V 60HZ 1P 5KW
Air pressure	> 0.4 MPa
Weight	400 kg
Dimension	1500X600X1800 mm

## 6. Trouble shooting

1	There are bubbles in the solution of the	Let the solution stay in the hopper for	
	hopper	several mins before depositing	
	The nozzle could not deposit solution	-Take part of the piston (click here) and	
	from hopper	insert into the hopper hole and squeeze	
2		the solution out of the nozzle	
		-Use a thread to insert into the nozzle	
		from the bottom	
3	The temp could not be set on Omron	Please see the Omron E5CSL instruction	
	The hopper is not heated	-check whether the conduction oil is	
		filled into the hopper ( <u>click here</u> to	
4		watch how to open the conduction oil	
		inlet)	
_	There is drawing for the depositing	Refine the recipe and cooking process.	
5	solution from the nozzle	The temperature	



# 7. Spare parts list

No.	Item	Qty
1	Temperature Probe PT100	2 pcs
2	Heating pipe	3 pcs
3	Piston and cooper bush	1 set
4	Steel ball	5 pcs
5	Spring	50 pcs



# 8. Circuit diagram



