

# Instruction Manual for YST-100 type Potato Chips Machine

Standard of execution: SB238-85

## 1 Summary

### 1.1 Usage

YST-100 type Potato Chips Machine is widely used making superior quality chips of vegetable, which is the exclusive equipment in vegetable processing industry for producing fresh or dehydrated vegetable. It is also perfect machinery for processing high quality potato chips in the fast food industry

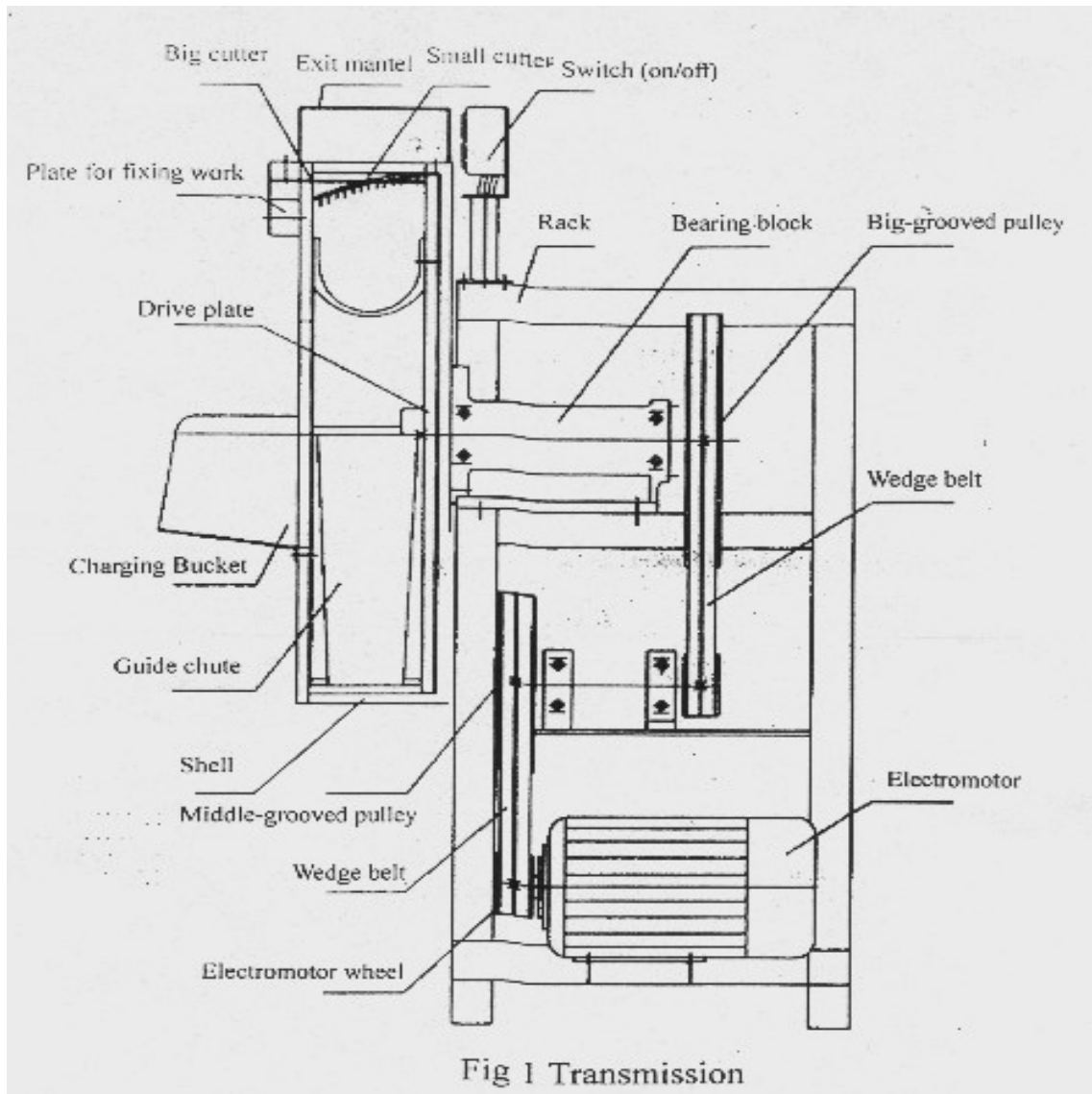
### 1.2 Main Features

During processing, the material is transferred using guide Chute on the rotary drive plate, and slices up by small cutter distributed obliquely and arched big incline cutter. The machine is high efficiency, low energy consumption and easy operation, and can produce vegetable chips with high section quality. All machinery parts contacted with the vegetable are made of aluminum alloy or stainless steel, which is satisfied with the requirements for hygiene standards of food processing machinery

## 2 Structure Features and Working principle

### 2.1 Main Structure

The machine contain Rack, shell, Drive Plate, cutter, Transmission, and Discharging parts etc (See fig. 1)



## 2.2 Working principle

Potato materials put in charging bucket rotate along the shell with the help of the guide chute distributed on the rotary drive plate, and slice into chips by the cutters installed on the shell. At last, the chips are transported to the discharging parts.

## 3 Technical Parameters

- a. Production capacity: 1000kg/h (Calculated by 10mm standard)

b. Standards of chip: 5mm, 8mm, 10mm.(Each machine is only configured with one standard. Consumers can buy other type of accessories if they need.)

c.Rotate speed of drive plate: 178r/min.

d.Motor power: 1.1 kw-4 or 0.75kw-4.

e.Rated voltage :220V or380V.

f.Rated frequency: 50HZ.

g.Waterproof grade:IPX1.

h.Ordinary v-belt:A737-2 or A 1000-2.

#### 4 Size and Weight

4.1.Dimensions:1070\*685\*1030mm.

4.2.Weight:120kg.

#### 5 Installation and Debugging

5.1. The machine must be placed in the level ground where is dry and ventilation to make sure it works steadily and reliably.

5.2 The discharging parts can be detached for easy to transportation. After placing the machine, it must be assembled on the shell by using hinge.

5.3 Before using the machine, all the parts must be inspected carefully make sure fasteners worked well, cable and socket not broken, and there are no sundries in the shell or bucket.

5.4 Make sure the supply power voltage is according with the

requirements, yellow and green wire connects the earth reliably, and the other three or two wires connect to the connectors of the air switch.

5.5 Close the circuit breaker and start the machine make sure the rotation direction of drive plate is clockwise. Otherwise, reconnect the wire correctly. Trial operation can be done only after the rotation direction is correct and machine running well with no load.

6.1 Trial cut works must be done before normal working in order to make sure vegetable chips is accord with the standard size. If they are not consistent, please replace appropriate small cutter, cutter gasket, drive plate, or reset the position of the big cutter. Only after all the parts are adjusted well, the machine can be used normally.

## 6.2 Cutter Adjustment

a. Big cutter: The big cutter is installed on the baffle plate by plate for fixing work. Adjustment method: Release the bolt and adjust the position of the plate for fixing work to make the clearance meet the requirement. Then, screw down the bolt.

b. Small cutter: The small cutter is installed on the elongated slot of the shell, whose inner length can not be regulated. The only method to adjust the inner length of small cutter is to replace another cutter. Normally, the inner length of the cutter is 0.3mm-0.5mm

longer than the chips standard. To replace the small cutter, must release the bolt near the elongated slot and turn around the platen, and then replace the appropriate cutter and screw down the bolt.

c. To make different standard of potato chips, the corresponding cutter gasket should be replaced. The method to replace the cutter gasket can refer to cutter replace.

d. To make different standard of potato chips, appropriated drive plate need be replaced. While do it, you must first release the bolt near the elongated slot and turn around the platen.

#### 7 Analysis and Removal of Ordinary Malfunctions

| Malfunctions                                       | Possible Causes       | Malfunctions Removal                                      |
|--|-----------------------|---|
| Vegetable chip section is coarse or chip is linked | Blunt cutter          | Sharpen the cutter  |
|  | Damaged small Cutter  | Replace the small cutter                                  |
| Wrong rotary direction of drive plate              | Reversal Power Source | Reverse wire connectors                                   |
| Slowed up while working                            | Loosed wedge belt     | Release the bolt and adjust the position of motor         |
|  |                       | Release the bolt and adjust the position of bearing block |

Do not work before installing guard plate and guard cover well to avoid accidental injury.

8.1 Do not put hand and hard object into the machine to avoid accidental injury or machine damage while working.

8.2 Do not mix other materials into the vegetable to avoid cutter damage or accidental injury.

8.3 Do not switch on while repairing the machine.

8.4 Do not touch cutters directly with hand while cleaning or disassemble cutters.

8.5 Do not maintain or repair the machine while working.

## 9. Maintenance

All the Maintenance work must be done while cut off the power.

9.1 Clean the machine carefully after each usage. Do not clear the cutter blade using sharp thing. Do not wash the machine with water directly. Coat the cutters with edible oil when long time disuse to avoid rust.

9.2 Lubricate the bearing with calcium grease every quarter.

9.3 Cut off the power and inspect machine if abnormal noise is heard. Only after all the malfunction is removed, it can go on working.

## 10 Packing and Transportation

10.1 Do not collide, side sway or invert the machine while transportation.

10.2 Do not place the machine in moisture circumstance; Do not expose the machine in corrosive gases or connect corrosive material.