

Instruction of CX vegetable washing machinery

1 Introduction

1.1 Application

CX vegetable washing machinery is developed based on the market demand, it is specialized in washing root & rhizome vegetables and fruits, such as carrot, potato, sweet potato, apple, pear, haw, etc.

1.2 Feature

This machinery can discharge continuous or intermittent during working, moreover, it is advanced in designing, easy to operate, lower energy consumption, efficient, health and safety. So, it is an ideal vegetable processing equipment.

2 Structure Features and Working Principle

2.1 Main structure

2.1.1 This machine mainly consists of machine frame, brush roller, turbine reduction gearbox, chain wheel, chain, and integral water pipe, etc. (Fig. 1)

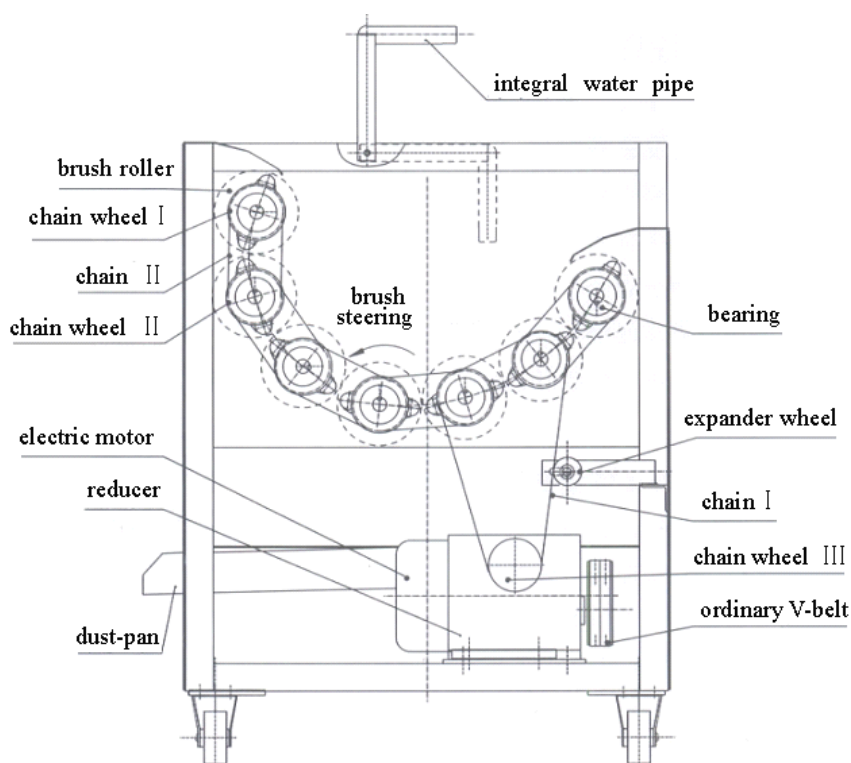


Fig.1 Schematic diagram of transmission structure

2.1.2 UC204, FL204 bearing with excellent performance is adopted in this machine, which prolongs the machine's service life.

2.1.3 This machine's outlet part composes of welded handle and integral door. Turn the handle anticlockwise and push handle baffle to door pocket, then pullback spring will draw back the door panel to discharge. (Fig. 2)

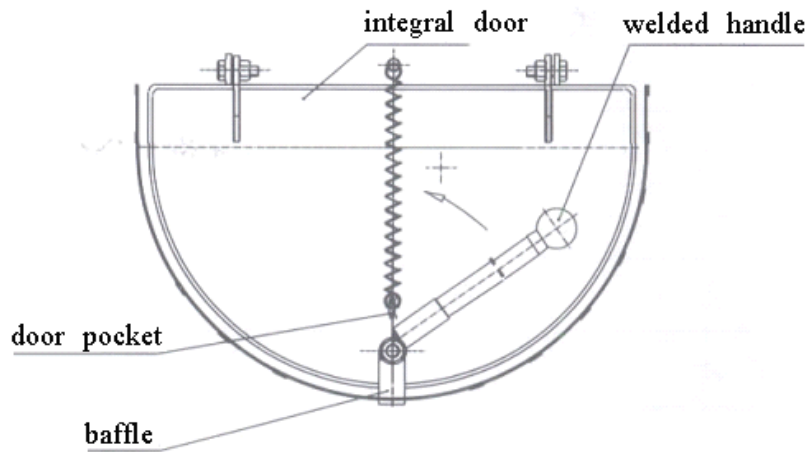


Fig.2

2.2 The main components of this machine are made of stainless steel, guaranteed stainless, non-corrosion, non-toxic and harmless in long term working, which conforms to food processing machinery hygienic standards and requirements.

2.3 Working principle

After putting raw materials into this machine, brush rollers rotate to scrub the raw materials and turn them over continuously, while water pipe spray the raw materials and rinse dirt out till raw materials are clean, then open the outlet door to discharge.

2.4 Transmission principle

The transmission system of this machine adopts belt, chain wheel and many other forms of transmission. As shown in Fig. 1.

3 Size and Weight

Parameter \ Model	CX100	CX150
Size	1335 × 700 × 900	1835 × 700 × 900
Weight	240 kg	280 kg

4 Technical Parameter

Parameter \ Model	CX100	CX150
Production capacity (kg/h)	450	650
Brush roller speed (r/min)	141	
Chain specification	10A-1*31	10A-1*66
Ordinary v-belt	A737-2	
Power	Y90s-4 1.1kW	
Rated voltage	220V~	
Rated power	60Hz	
Reducer	WP70	Speed ratio 10:1
Water resistance	IPX1	

5 Installation and Debugging

5.1 Put the machine in dry, well ventilated place on a level surface, confirm it works stably and reliably.

5.2 Check the machine before using. Check out whether fastening pieces is loosened, power wires damaged or not during transit, and whether foreign objects existing among brush rollers.

5.3 Confirm the existing electric power is in conformity with this machine's power consumption.

5.4 Invite a professional electrician to connect the power code. Elongate the soft power cord and ground olive wire with power port, connect the rest two cores to the education line terminals of breaker with a capacity of 10A (user prepare), respectively. The breaker should be fixed reliably and firmly. Close the breaker, the brush roller should rotate in the same direction as shown in Fig.1. Operate test with no load.

5.5 If unusual noises or vibration arise when trial , it is necessary to stop the machine and check it. After clearing fault, connect to water and aligns the dust-pan to floor drain outlet, then can trial.

6 Operation and usage

6.1 Find out if the brush roller can rotate flexibly, otherwise add lubricant oil to bearing till rollers rotate flexibly.

6.2 Do not damage the electric motor and wires , keep from damp and moisture to avoid electricity leak. Be sure to connect the ground cord.

6.3 Control the amount of water according to the dirty degree of raw materials.

6.4 Do not fill the machine before starting. Feed raw materials evenly after the machine working steadily.

6.5 Open the outlet door to discharge when raw materials are clean after about 4-5 minutes.

6.6 When washing is over, clean the brush roller and shut down the machine, close the water pipe, dry it and set aside.

7 Fault analysis and resolution

Failure symptom	Analysis of cause	Solution method
Brush roller is not flexible during washing	There is little lubricating oil in bearing.	Oil the bearing periodically
Can't wash normally	V-belt is too loose; Chain is too loose	Loosen fixing bolt on the motor, adjust fixing bolt of the expander wheel, then tighten them.

Brush vibrate unusual and sound abnormal	Misplacement of chain and chain wheel exists in the axial direction.	Remove the left cover, loose jbscrew on the bearing, adjust brush roller's axle, align chain wheels, and tighten jbscrew.
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8 Safety device and Notice

- 8.1 Do not put hand(s) or hard substance on brush rollers to avoid personal injury or machine damage while machine is operating.
- 8.2 Do not start the machine while the cover is open to avoid personal injury.
- 8.3 In case of abnormal phenomena during working, stop the machine immediately to check and remove the faults before operating again.
- 8.4 Do not do any maintenance or care while the machine is operating to avoid personal injury.

9 Maintenance

Always unplug before repairing or maintenance.

- 9.1 Clean the machine after each time use. Do not use sharp appliances to clean brush rollers. Do not flush brush rollers directly with spray pipe in the event that remove the protective cover and guard plate.
- 9.2 Remove the protective cover and guard plate after the machine has worked for about 100 hours. Add lubricating oil to the chain, choosing #20 machine oil or calcium base grease.
- 9.3 Add lubricant to bearing every week, choosing #20 machine oil; Replace lubricant in the turbine reduction gearbox every half year, choosing #20 machine oil.

10 Transportation and storage

- 10.1 Do not bump, lean or invert during transportation to avoid damage and affecting the machine use.
- 10.2 The machine should be put in dry, free from corrosion gas condition, and avoid contacting with erosive objects when it is not used for a long time.