

CGF8/8/4

Washing/Filling/Capping In One Machine

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1. Purpose

This machine is a fully automatic and multi-functions combined plant, which integrating bottle washing, filling and capping in one unit. It is suitable for producing no aerated beverage, such as fruit juice, wine, mineral water, pure water and tea. The whole plant has many unique performances in design, beautiful in appearance, strong adaptability, and convenience in operation. So it is the most advanced beverage equipment in domestic market at present.

2. Main Technological Parameters

- (1) Work heads:
For bottle washing: 8 For bottle filling: 8 For bottle capping: 4
- (2) Turnout: 2500~3000bottles/hour (500ml bottle)
- (3) Total power: 3.13Kw
- (4) Height of bottle: 120-330 mm Diameter of bottle: 50-105mm
- (5) Power: 380V 50Hz
- (6) Total weight: 2200kg
- (7) The size of appearance: 2100*1500*2100mm

3. Running principle and main characteristic

(1) Running principle:

When bottles are sent to this machine by wind conveyer continuously, then stirred by receiving wheel at first and reach to washing part, bottle clamps hold bottles and turns over 180° around the tramroad to wash, then turns over bottles to original position after having enough time to dry the bottle. Next step, bottles are stirred middle stirred wheel I and reach to filling part to be filled, then moved by middle stirred wheel II and reach to capping part to be capped, at the same time, cap trimmer sends caps to the top of the bottles and cap screws caps. At last, bottles get to conveying chain by the out stirring wheel to next working position.

(2) Main characteristic:

- a. Adaptability is widely: Because all parts have a height adjust device, the height of bottle can be adjusted within the range of 170~320mm, change few parts, such as bottle stirring wheel and guiding plate, to suit different bottle diameter in the range of Φ 50-85mm.
- b. Production capacity can be adjusted continuously according to the need: using a frequency inverter to control the whole machine. So it works more reliability.
- c. This machine has a complete set of fully automatic and reliable protection system.
- d. Compare with same type of machine, it has following performances:
 - More compact in structure, more beautiful in appearance.
 - The structure of bottle rinsing clamp is more delicate.
 - Screw head uses magnetic parts.

4. Installation and adjustment

(1) Wind conveyer

At first connect the wind conveyer with bottle receiving stirring wheel, make them at same height level.

(2) Bottle receiving stirring wheel

When installation, assure the arc slot of stirring wheel is centered to bottle washing clamp at first, then use bolts to fix the wheel.

(3) Bottle rinser:

- a. Main parts: bottle clamps, water distributing tray, and cam for sliding-rail of clamps, manual height adjusting devices. There are 18 bottle clamps. They should be assembly together as a complete part.
- b. Before state, water-distributing tray, water cistern, water distributor should be matched each other and polished. Adjust the bolts and its nuts to regulate the pressure between distributor and water-distributing tray. Assure to rotate freely, no any leakage.
- c. Sliding-rail for bottle clamps is a standard apace curve, shall be fabricated into several sections, and welded together at site after adjustment on machine has been fashioned.
- d. Although the cam could be adjusted in radial direction, the curve of cam should be modified according to status of bottle clamps, at the time of testing running.

(4) Filler

Middle stirring wheel A:

Its function is to send bottles form bottle rinse to filler.

Installation: when assembly, assure the arc slot of stirring wheel is centered to bottle washing clamp and filling valves, then use bolts to fix the wheel.

(5) Rotary capper

- (1) When assembling, make and set aside rounds of arc trough in the center at the same time with washing department of bottle insert and pour into valve aim at, Use the tight careless gear wheel of the screw again.
- (2) Adjust the organization: Irritate adjusting one set and adjusting the organization manually of installation. While adjusting, the handwheel drives the jar upper and lower sports of liquid under moving, thus satisfy different bottle high requests.
- (3) Fasten and cover the head: This fastens and builds head fasten form of building for magnetic suspension type, it install, The body always becomes and revolves round the sun at random, a round of departments of planet drives its rotation again. Rotation and combination that revolve round the sun finish and fasten movement of building, fasten and build the lifts of head fasten and build cam come and control. When working, fasten and cover the first to drop and rotate and drop to bottle when keeping in

touch at one at one, Begin and fasten and stamp, after the bottle lid fasten urgent, while exceeding certain torsion, Two a piece of magnetic ones produce relative to rotate and skid and fasten and build movement go on no longer at this moment, Guarantee that fastens the good bottle lid, thus play a protecting by year role. If find the bottle Cover and fasten and deduct too many fastening and deduct and incompletely, come and regulate and fasten and build the torsions of hair according to adjustment that determine in advance, Adjust to the ideal torsion, should make six fasten and overlay the head and keep unanimity .

- (4) Pay attention to the covering machine: Pay attention to person who build fix in organism become top always, whether alone electrical machinery urge. While working, the electrical machinery drives awl one of garden to rotate, the bottle lid piled up in a jumble is arranged in certain order through the special pass way. Guarantee that bottles lid that comes out are all covering from paying attention to the covering machine. At the same time copies of machine consist of and blow and build device inside out, guarantee perfectly safe. Slide fix at support, its available each fix hole come and change, Top with paying attention to person who cover export and meet, underpart with producing and build trough meet.
- (5) Produce bottle dial ship Produce bottle set aside wheel fasten easy bottle that builds send to chain have by one, so far, the all processes of machine all be finished this. Fifth, try the machine 1、 Check in front of trying the machine : Check and transport and install part have and damage and shift course, positions join screw become flexible. 2、 Adjust in front of trying the machine : The operator must be familiar with the principle of transmission of a machine, the ensemble architecture, electricity accuse of the requiring in step of the principle and every department.

5. Test running

(1)Check in front of trying the machine: Check and transport and install part have and damage and shift course, positions join screw become flexible.

(2)Adjust in front of trying the machine: The operator must be familiar with the principle of transmission of a machine, the ensemble architecture, electricity accuse of the requiring in step of the principle and every department.

6. Operation and maintenance

(1)The user should allocate the clean liquid and supply the device in addition, should wash the equipment after the per tour is finished producing, Wash the hardness of water < No. 50, if and hardness exceed acceptable range water, propose and use hard water machine of softening, Otherwise because the calcium carbonate deposit enables slipping the device or the airtight position very apt to wear and tear.

(2)Before operating, should guarantee that all shelter boards are on the correct position and in order to close the state.

(3)Operate, maintenance personal forbid and dress and involve machine in sport

the dress or scrappy ornaments of part.

(4) Before maintaining beginning, guarantee that a master switch of circuit of power has already been cut off.

(5) It is convenient to need to mix a portable light in order to maintain lighting.

(6) While polishing the machine surface and control the device, Use and soak and have soft, neutral the cloths of cleaning solutions polish but don't at alcohol or petrol, etc. destroy machine polish by superficial solvent, While washing the equipment, must cut off the electric apparatus and atmospheric pressure pipeline equipment .

(7) Lubricate the position besides applying and sulphurate the molybdenum and refuel two times while equipping each, should refuel and change the lubricating oil regularly .

7. Installation circumstance and storage

a) Installation surrounding

- i. This machine shall be installed in a shielded place without more equipments heavy objects and pipelines.
- ii. Best room temperature: 5-40°C, relative humidity :0%-60%.

b) Storage

- If it has been stored for more 6 months, you shall replace machine-oil and lube of machine.
- If restart this machine, you shall examine the whole machine and its electric appliances before running.