QGF 3加仑、5加仑桶装饮用水生产线
3-Gallon, 5-Gallon Water Filling Line

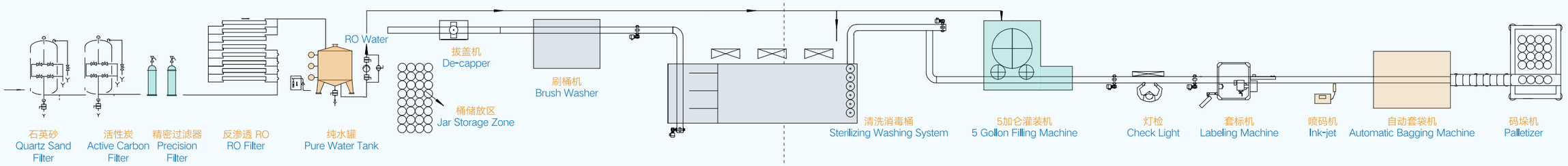
品质 Quality　服务 Service　高效 Efficiency

■ 产品描述 / Product Description

用于5加仑、3加仑桶装饮用水生产的TXG系列，产量100-2000桶小时，可供用户选择。另可按用户需要配置自动拔盖机、自动捡漏机、内外桶刷洗机、自动上盖机，热收缩机等。

TXG series apply to 3-Gallon, 5-Gallon water production, with optional capacity from 100b/h to 2000b/h.Customerized service includes automatic cap puller, internal and external barrel scrubber, cap elevator and heat shrinker, etc.

■ 工艺流程图 / Flow Chart



Auto decapper

1) The piston of the square cylinder embedded in the capping head drives the connected conical block upwards, driving the two claw plates to grip the barrel cover to be pulled out and complete the capping action.
2) The piston of the capping cylinder placed on top of the capping head moves upwards, driving the entire capping head upwards, and the bucket to be capped also moves upwards. However, due to the shoulder of the bucket body being blocked by a fixed baffle, during the process of the capping head moving upwards, the lid is pulled off the bucket, which is a capping action.
3) After the cap is removed, the piston with the built-in square cylinder immediately descends, and the connected column blocks push the four claw plates to open the cap and fall under the action of self weight, completing the lid removal action.
4) At the same time as the cap falls off, the air nozzle immediately opens, and compressed air immediately blows the lid towards the flow port, flowing to the cover collection box, completing the entire cap removal action. The rack is made of SUS304 stainless steel material, with a total time consumption of less than 4S for four actions.

Straight external brushing machine

1) Structure composition: It consists of a rack, a washing water (or alkaline solution) circulation system, a clean water flushing system, a transmission system, a filter screen, an organic glass cover, mechanical conveying, electrical and other components.
2) Implement streamlined operations for online assignments; The residual water from the

bucket should not be ≥ 20ml; Pre brushing on the outside of the barrel ensures that the oil, mosquitoes, fibers, and other debris adhering to the outer wall of the barrel are brushed clean, ensuring that the outer wall of the barrel is clean and free of dirt after pre washing.
3) The clean water flushing pumps are all equipped with Southern pumps.
4) The automatic adding device adopts stainless steel mechanical float valve.
5) The transmission components are made of high-strength, wear-resistant, and corrosion-resistant materials. The main transmission is equipped with a clutch device (to avoid jamming or damaging the barrel), and the transmission should be stable and reliable.
4) Using a three-step valve type external washing machine with double row brushes for brushing; The top bearing seat is made of # 304 material to avoid long-term rusting; Equipped with an independent water tank and cleaning pump, easy to use. Divided into two stages: brushing with a brush and spraying with clean water.

5 gallon barrel washing filling capping machine

Structural composition

Consisting of a rack, automatic upper and lower barrel system, forward mechanism, sterile water return, disinfectant, sterile water circulation spray system, filling mechanism, upper cover mechanism, lid adjustment mechanism, reducer conveying, electrical and other components.

Automatic upper and lower barrel system

The automatic up and down bucket mechanism is a cylinder flipping type, which ensures accurate up and down bucket without wearing the bucket.
The upper and lower bucket flipping cylinders should be two each.
The upper and lower bucket flipping frames are made of thick walled square tubes (wall thickness ≥ 2.0mm) (to reduce weld breakage and frame deformation).

Flushing liquid circulation system

The process of sterile water, return water, and disinfectant shall comply with the requirements of the washing bucket provided by the purchaser. Spray and wash evenly, and the inner wall of the bucket is sprayed with pressure water. Spray and wash should ensure that each workstation can reach the entire inner wall of the bucket (all-round nozzle)

Each circulation box is circular, equipped with a liquid level display, convenient for drainage and cleaning, and timely replenishment of water and disinfectant; Each water tank is equipped with a filling cap, a manhole, and a filter screen that can be cleaned or replaced during operation.

Filling mechanism

1) Filling process effect: The filling process is completed using high flow filling.

2) Lid lifting, capping, and capping system: The device is equipped with a storage box and a rotating capping device, and the capping is continuously sealed with a stainless steel chain.

3) Filling technical indicators: use a high flow filling valve. Bottle mouth non-contact filling, using a variable frequency water pump to control the water flow and save water loss in the finished product. In response to the high failure rate of cylinder type filling in the early stage, our factory currently adopts the clamp barrel filling method, which has low maintenance costs and is convenient, and operates stably. The filling area is equipped with 4 filling valves for displacement filling, which meets the filling speed requirements. At the same time, due to the unique design of the filling valve, the optimal filling effect is achieved with accurate liquid level and no waste of finished water.

4) Power transmission part: The transmission of various transmission components is stable and reliable, facilitating lubrication and maintenance.

5) Filling mechanism: sliding sealing of the filling valve core.

Other instructions

All water pumps are from Southern Pump Industry; The reducer is from Taizhou Sihai; All PLCs are Japanese Mitsubishi products; Contactors and relays are Schneider products;

The total flushing station is divided into 14 stations according to process requirements:

Station 1-2: Alkali washing; Alkali washing can effectively flush the dirt inside the bucket; Adopting high-pressure flushing, the water pump is placed inside the body, which is overall beautiful and easy to maintain.

Station 3: Return water flushing.

Workstation 4-8: Disinfection liquid flushing. The disinfectant circulates and washes the bucket to kill microorganisms and bacteria.

Station 9: Return water flushing. Station 10: Clean water flushing. The remaining 4 stations are drip drying stations.