New Trends in Beverage Production

Since the history of beverage production, the industry has developed a series of processing and filling technology, and is developing rapidly to ensure the quality of products. Drink Microwave Drying / Sterilizing machine

These processing filling technologies include: cold treatment and filling under strict sanitary conditions; filling filling after cold treatment and pasteurization; pasteurization combined with hot filling process; cold filling with adding preservatives and pasteurization; pasteurization combined with cold "ultra-clean line" filling. Microwave drying machinery and equipment

With the increasing demands of the market and health regulatory authorities on the hygiene level of the food and beverage industry and the change of consumers' tastes, the beverage market has gradually transformed from non-sensitive products such as carbonated beverages to sensitive products such as milk-containing beverages, thus bringing about changes in the whole beverage production process.

The driving forces in this process include: the development of new, microbial-sensitive beverages; the consumption demand for beverages containing natural raw materials; the consumption demand for beverages without preservatives; the consumption demand for beverages with better taste and appearance; the distribution economics of environmental conditions requiring long shelf life storage; intensive marketing-driven expansion schemes and catering to the trend of large-capacity PET bottles. Wait.

Under such conditions, a new beverage production technology, Cold Aseptic Filling, has come into the market. Compared with the previous beverage production technology, the advanced cleaning and disinfection technology is adopted in aseptic cold filling. The control of production process is more stringent, which can minimize the risk of microorganisms and ensure the food safety of raw materials and finished products.
1.1 Aseptic Cold Filling Process

The technological process of aseptic cold filling is as follows: raw materials of beverage are put into the mixing tank in batches and blended, water is added to the syrup and adjusted to the final concentration, and the product is cooled to keep aseptic after ultra-high temperature instantaneous sterilization. The fully enclosed aseptic filling machine is separated from the packing hall in a clean positive pressure room. PET bottles are fed into sterile area by sterile air conveying air track. After strictly controlled cleaning and disinfection, sterile products are poured into containers in sterile environment.

At the same time, PET bottle caps are also cleaned and disinfected. The bottles filled with the products are sealed and entered into the spraying code and packing area.

1.2 Sterile Cold Filling Line Equipment structure

Generally speaking, the sterile cold filling line usually consists of the following five parts: bottle sterilizer, bottle washer, filler, cap sterilizer and capping machine.