

Green sunflower oil production technical specifications (3)

Main production technology

Pretreatment requirements



(1) Removal of impurities. Sunflower seed oil often contains various impurities to remove impurities with color or odor, improve the comprehensive utilization value of oil and cake, and remove various impurities with large volume, hard texture and quantity to facilitate the improvement. The processing capacity of the equipment reduces the wear and tear of the equipment and improves work efficiency. Shelling.

[Microwave drying machine](#)

The main components of green sunflower seed hulls are cellulose, hemicellulose and lignin. The oil content is small, but the structure is loose and porous. It can absorb a lot of oil, so it needs to be shelled to make oil. Otherwise, the oil content in the residue is very high. The wax content is 0.4% to 0.5%, which accounts for 75% of the wax content of the whole

seed. The wax content of the finished oil after shelling is 0.011% to 0.015%.

(2) Softening. Through proper moisture regulation, the hardness and brittleness of the oil material are improved, the oil material is softened, and the plasticity is appropriately obtained to reach the standard of entering the machine. Therefore, the softening material is an important pretreatment work before the embryo is germinated.

(3) Steamed and fried. Stir-fry in a layered steamer, first moisten the raw embryos, the moisture content is 14% to 16%, and after 90 minutes of steaming, the water is reduced to 4% to 6% after boiling, and the temperature is about 110 °C. . Next, enter the press auxiliary steamer. After adjusting the steaming, the water content is about 1.5% and the temperature is 125-130 °C.

(4) Broken. Increase the contact area of the subsequent oil material, easy to adjust, prepare high-quality raw embryos, and make the material easy to enter the gap in the embryo.

(5) Pressing. The pressing method, also known as the physical pressing method, squeezes the oil in the oil at a higher pressure. Generally, the chemical solvent is not used to extract the oil, and the residual organic solvent in the oil is avoided. The pressing production process maximizes the polyunsaturated fatty acids in sunflower seeds as well as various nutrients beneficial to the human body such as protein, dietary fiber, vitamins and trace elements. The pressing method has strong adaptability and simple process operation. The production equipment is easy to maintain, the production scale is flexible, and it is suitable for various vegetable oil extraction, and the production is relatively safe.

[Refining of green sunflower seed oil](#)

The whole process of refining green sunflower oil includes the pretreatment of wool oil (removing suspended impurities), degumming, deacidification, decolorization, deodorization and dewaxing. It can be refined according to the quality requirements of refined oil of different quality grades. Steps and control of process parameters.

2 Green sunflower oil inspection standards and specifications

Green sunflower oil testing should comply with the relevant provisions of green food inspection. Establish relevant testing laboratories for raw materials and finished products. Record the test results in detail.

The green sunflower oil should be clear and transparent, with the normal odor of green sunflower seed oil, no scorch,

spoilage and other odors. At the same time, the production of raw materials and the processing of product processing are the main links in the production and processing of green sunflower oil. Increasing awareness of food safety among producers and consumers and increasing acceptance of green products are also important factors in green food production. Although green food is generally recognized by the society, the scale of production and production are small, and there is still much room for development.