

Features and applications of GZLS Series Vacuum Freeze Dryer (Lyophilizer)

I. Features:

1. Designed and manufactured based on GMP requirement, GZL vacuum freezing dryer adopts a solid construction with a small occupied area and convenient installation and transportation.
2. Its operation can be controlled by hand, automatic program or computer. It will be more reliable if being equipped with the anti-jamming unit.
3. The metal components as the case, plate, vapor condenser, vacuum pipeline and hydraulic device and all made of stainless steel.
4. Since the shelf is equipped with an advantageous stopped automatically in a bacteria-free condition so as to decrease the labor intensity and increase the product quality.
5. Adopting the indirect freezing and heating, the shelf is equipped with a high-efficiency heat exchanger in order reduce the temperature different between plates.
6. The refrigerating system adopts the Semi-closed compressor imported from USA. The key components such as the medium refrigerator, solenoid valve, expansion valve and oil distributor are also purchased from world-famous companies as to ensure the cooling temperature ,improved the reliability and lower energy of the whole machine m is the domestic first-class energy -saving product .
7. The vacuum, temperature, product resistance, water interruption, power interrupting, automatic over temperature alarming and automatic protection are all displayed by the digital control instrument.
8. The visual-type horizontal water collector can absolutely prohibit and fault operation. Its collecting capacity is 1.5 times of that of similar collectors.
9. The air valve can be closed or opened automatically. The protection for water and power interruptions is also equipped.
10. The relevant freeze drying curve can be supplied to customers.
With the help of the advanced drying case exhaust device, the water ratio of products can be lower than 1%.
11. The SIP steam sterilizing system or CIP automatic spraying can also be attached based on the customer requirement.
12. Electric control unit has advanced measure system which can guarantee the quality of products.
13. The material of drying box, condensator, evaporator, vacuum tube is stainless steel according to the requirement of GMP.
14. The refrigeration system is unipolar or bipolar which can reach the perfect low temperature and can be conveniently operated and repaired.

15.The vacuum system is bipolar which can keep products in the best vacuum condition in order to have the drying process in a shorter term.

16.An all-round service including the satisfied after-sale service, installing, setting-up .repairing and technical training is committed .

II. Applications:

Food industry:

Vacuum freeze-drying technology can be used for drying fruits and vegetables, meat, poultry, aquatic products, condiments, convenience foods and famous specialty products. It can achieve the purpose of maintaining the original color, aroma, taste, shape and freshness of foods, and has good rehydration performance. The finished product is easy to store and transport, the cost is reduced, and the shelf life is extended.

Nutrition:

In the drying of royal jelly, ginseng, turtles, oysters, clams and other nutritional health products, the use of vacuum freeze-drying process, but also make people believe that the nutrition is pure and natural.

Pharmaceutical industry:

Vacuum freeze-drying can be applied to the dehydration and preservation of Chinese and Western medicines such as serum, plasma, vaccines, enzymes, antibiotics, and hormones.

Biological research:

The blood, bacteria, arteries, bones, skin, cornea, nerve tissue, and various organs that have been stored for a long time using the vacuum freeze-drying technique can be regenerated simply by supplying water when used, and their biophysical characteristics can still be maintained.

other:

Such as the production of aerospace thermal insulation ceramics, the archeological preservation of raft products, specimen production, special material preparation, etc., can receive unique effects.