

Laboratory 3L Spray Dryer

MODEL: SSP-3



Features

1. PLC automatic control, more convenient for you to control and manage.
2. High speed of drying, after spraying of the material liquid, the surface area of material will be increased greatly, make your research more efficient.
3. In the hot-air flow, 95%-98% of water can be evaporated at a moment. You can finish material drying only in several seconds.
4. Especially suitable for drying the heat sensitive materials, after drying, there's no need for smashing and sorting, so as to reduce the operation procedures and save your time.

Technology Parameters

Product name	SSP-3
Max capacity	3,000ml/h
Temperature range of inlet air	30°C - 300°C adjustable
Temperature range of outlet air	30°C - 140°C
Precision of temperature	+1°C
Spray system	Centrifugal nozzle
Spray direction	Downwards co-current
Total power	6KW 220V
Dried powder restoring rate	≥92 (Maltodextrin>92)
Maximum moisture evaporation	3kg/h

Product Description

1. Laboratory table top spray dryer is the latest type which adopts advanced international technology and spare parts.
2. Laboratory Spray Dryer assembles many of new design, for example, small size for free moving, combining air compressor and electrical heater inside the cabinet, glass spray and cyclone separator for inspecting. All the data and functions are controlled by PLC.
3. Working Principle
 - 1) The air are filtered and heated then into the distributor on the top of the dryer, spiral hot air evenly go into drying chamber.
 - 2) Liquid through the high-speed centrifugal atomizer on the top of the tower, then (rotation) spray into very fine mist droplets. contact with hot air and dried into the finished product in a very short time.
 - 3) Dried product are continuously produced from the bottom of the drying tower and the cyclone, the exhaust are vented by fan.

Application

1. Spray dryer can be used in a wide range where the production of a free-flowing powder sample is required. This technique has processed materials in the following areas successfully:
 - 1) Beverages, Flavors and Coloring, Milk and Egg Products, Plant and Vegetable Extracts, Pharmaceuticals, Heat sensitive Materials, Plastics, Polymers and Resins, Perfumes, Ceramics and Advanced Materials, Soaps and Detergents, Blood, dyestuffs, Food Stuffs, Adhesives, Oxides, Textiles, Bones, Teeth and Tooth Amalgam and many others.
 - 2) Most solutions and suspensions can be spray dried providing that the resulting product has the characteristics of material.
 - 3) It is popular in fields of Food, biology, material, pharmacy, university, and R&D institute, etc. especially for processing temperature-sensitive material, for e.g., powder, because material only touch air for a brief moment so that heat couldn't destroy the component of material.

