

Spray Dryer

- SASTEC ST-SD15 spray dryer is built with US technology on spray drying, contained in a stainless steel cabinet.
- It can be placed on bench top or with optional stainless steel stand.
- Operation is controlled by a touch screen keyboard with animated menu. It allowed either automatic or manual operation.
- SASTEC ST-SD15 spray dryer is suitable for universities, research institutes, pharmaceutical industries, food industries and others.
- It is used in the production of micro-powder particles such as the solutions to emulsion, suspension of heat-sensitive materials biological products, bio-pesticide, enzymes and etc. The results of the materials emitted is in the size of sprayed particles into mist by high temperature, and the material still maintain its active ingredient.

Advantages

- Large color touch-screen operation, automatic or manual operation, a class of its own

Automatic Control

- One-click start, setting spray process parameters, such as maximum temperature and peristaltic pump operation.
- Touch screen display running status in animation mode.
- To shutdown, simply press stop button, the machine will automatically shutdown safety.

Manual Control

- In the automatic mode, it can be switched to manual for adjustment of process parameters. The whole process will be displayed in color touch-screen in animation mode.
- Spray drying and collection system using heat-resistant, Pyrex glass materials, making spray-drying process in the most stable manner and pollution-free environment. The whole spray-drying process can be viewed through the glass component. Research can control the experimental results by changing the control process to solve the problem.
- Built-in oil-less compressor, low noise, less than 60dBA.
- Second spray atomized fluid through a high quality stainless steel material, compact design. In consists of a inner tube for the liquid sample leading to a 0.7mm jet. An outer tube supply air from compressor to ensure a fine vaporized spray.
- Real time PID temperature control technology enable user to adjust the parameters of the experiment. The heating temperature accuracy is $\pm 1^{\circ}\text{C}$.
- Air filter removes laden particles to maintain purity of sample.
- Samples up to 32ml/ minutes is being delivered by the peristaltic pump.
- The spray assembly incorporates an automatic de-blocking device (pin) which will prevents blocking in the nozzle.
- After the spraying process, the dry powder produced has a 95% uniform size particles.
- Glass cyclone is coated with thin film polyurethane to reduce static.



Specification of Spray Dryer

Model	ST-SD15
Evaporation Rate of Water at Inlet Temperature of 250°C Using Standard Chamber	Approx. 1500ml/ hour
Air Inlet Temperature Range	30-300°C
Air Outlet Temperature Range	30-140°C
Heating Power	3kW
Dry Circle Time	1.0-1.5 second
Temperature Precision	1°C
Sample Delivery Rate	Max. 32ml/ min (2.0L/ hour)
	Min. 50ml/ hour
Spray System	Two fluid nozzle with standard 0.7mm jet
Spray/ Hot air	Downward
Compressor	4.2m ³ / hr
Dimension (mm)	1600 x 90 x 80
Weight	150kg
Power Supply	AC 220V 50Hz
Accessories	Nozzle: 0.5mm, 0.70mm, 0.75mm, 1.0mm, 1.5mm, 2.0mm