

YC-1800实验室低温喷雾干燥机 YC-1800 LAB LOW TEMP. SPRAY DRYER

长期以来，实验室中药（中草药）天然产物提取物和果汁的喷雾干燥是科研人员的一大难题。常规的实验室喷雾干燥机，在对实验室中药（中草药）天然产物提取物和果汁做喷雾干燥时，由于物料本身含有很多糖类成分，糖在高温下比较容易融化，在喷雾干燥的瞬间就融化，粘在一起，形成像牛皮糖一样的东西粘在喷雾干燥机干燥室的瓶壁上，科研人员得不到需要的流动性好的粉末，有时为了得到粉末，添加大量的辅料，如淀粉，环状糊精等，但是效果也都不不是很理想。YC-1800实验室低温喷雾干燥机是上海雅程仪器设备有限公司专注于喷雾干燥技术的突破性进展，整机设计紧凑，自成一体，无需其他设施即可运行。一键式开机，彩色大液晶触摸屏操作，可采用全自动或人工监控两种运行模式，方便操作和实验过程的监控，在实验室，能对中药（中草药），天然产物提取物和果汁等，在105° C的低温条件下，得到流动性极好的粉末颗粒，而且得率极高，为热敏物料提供了极为方便极为安全的干燥方法，如生物制品，含糖量高的中药天然产物提取物，不耐热的高分子材料，遇热气化的材料等等。

For a long time laboratory traditional Chinese medicine (herbal) natural product extraction and juice spray drying have been a difficult problem for scientific research personnel. Upon laboratory traditional Chinese medicine (herbal) natural product extraction and juice spray drying, materials immediately melt when spray dried as they have a lot of carbohydrate compositions which are easy to melt at high temperature and they form sticky candy like substances on drying chamber wall of traditional spray dryer. As a result, scientific research personnel can not get desirable powder with good liquidity. Sometimes a lot of auxiliary materials are added in order to get the powder, such as starch or cyclodextrine, but no satisfactory effect has been achieved. YC-1800 laboratory low-temperature spray dryer is a breakthrough made by Shanghai Pilotech Instrument & Equipment Co., Ltd with efforts in spray drying technology. YC-1800 can dry natural product and juice from traditional Chinese medicine (Chinese herbal medicine) in laboratory and get powder particles of excellent liquidity at a low temperature of 110° C with a high yield. In particular, it achieves rapid material drying at low temperature and provides very convenient and safe drying method for thermo-sensitive materials, such as biological product, high carbohydrate traditional Chinese medicine natural product extract, thermolabile polymer material, heat gasification material and so on

YC-1800实验室低温喷雾干燥机的技术参数

- 1、整机不锈钢制作，二流体喷雾的雾化结构，喷雾头位于干燥室中部，可并流或逆流干燥，干燥室为不锈钢和玻璃混合结构；
Two fluid atomizing structure, made of SUS 304 (316 optional) Stainless steel.
- 2、额定物料处理量：1000~1800mL/H；（视物料不同而有差异）
Evaporation rate of water at inlet temperature of 110°C using Standard: Approximately 1000 ml~1800ml/hour
- 3、最小样品量：50mL（视物料固形物含量差异）；
Min sample: 50mL
- 4、实时调控PID恒温控制技术，加热控温精度：±1°C；
To assure accurate temperature control and easy parameter adjusting, YC-1800 applies PID.
- 5、喷嘴口径：0.5mm、0.7mm、1mm、1.5mm、2mm 可选，并可根据客户要求定制；
standard with 0.7 mm jet and other sizes are available as accessories
- 6、整机功率：4KW/220V；
Power: 4KW/220V
- 7、在低温（105°C）条件下完成瞬间喷雾干燥，进风温度105~200°C；
Spray dry at low temperature (110°C) using for thermosensitive material.
- 8、彩色LCD触摸屏操作控制，全中文操作界面。
7" high-resolution touch screen LCD
- 9、流化床功能（可选）
Fluidized bed optional
- 10、尾气精密过滤器（可选）



YC-1800实验室低温喷雾干燥机的技术特点

- 1) 喷雾干燥整个实验过程在105°C即可完成，大大降低了物料干燥温度，解决了热敏性物料喷雾干燥的难题。
Spray dry at low temperature (105°C) using for thermosensitive material.
- 2) 7"彩色触摸屏操作，中英文操作界面。
7" high-resolution LCD, human-oriented interface, Chinese and English menu, Optimize operation procedure, efficiency, flexibility, easy-going and easy learning.
- 3) 喷粉的粒径呈正态分布，流动性非常好。
Particle size with normal distribution
- 4) 二流体喷雾的雾化结构，采用优质不锈钢材料精密制造，设计紧凑，无需附属设备，方便使用，历久如新。
Two fluid atomizing structure, made of SUS 304 (316 optional) Stainless steel. Easy operating.
- 5) 为了满足用户在实验范围调节各项参数的要求，在干燥温度控制的设计上采用实时调控PID恒温控制技术，使全温区控温准确，加热控温精度±1°C。
To assure accurate temperature control and easy parameter adjusting, YC-1800 applies PID.
- 6) 进料量可通过进料蠕动泵调节，额定处理量1000~1800mL/H
The self-priming peristaltic pump delivers the sample liquid from a container through a small diameter jet into the main chamber to avoid secondary pollution.