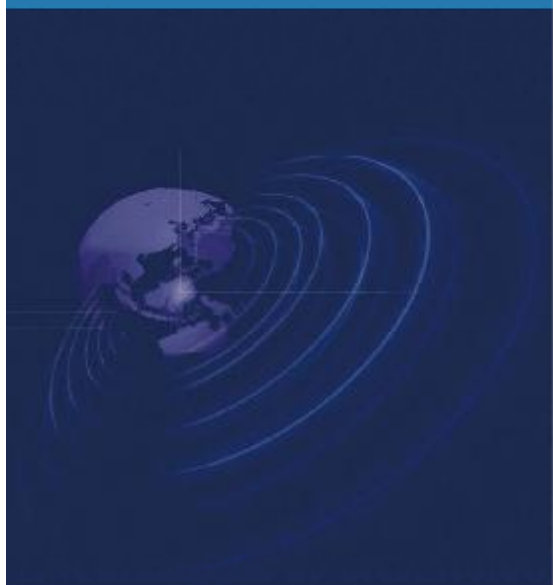


YC-015A实验室有机溶剂喷雾干燥机

YC-015A LAB SPRAY DRYER(ORGANIC SOLVENTS)

YC-015A微型实验室有机溶剂喷雾干燥机是上海雅程仪器设备有限公司与PILOTECH公司在实验喷雾干燥领域精心开发的结晶。整机设计紧凑，自成一體，一键式开机，彩色大液晶触摸屏操作，可采用完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。是目前国内唯一可用于有机溶剂溶液的实验室喷雾干燥机。

YC-015A Lab scale spray dryer is our latest type which adopts advanced international technology and spare parts and can be used to process the samples of aqueous solutions and organic solvents. It assembles many of new design, for example, small shape for free moving, combining air compressor and electrical heater inside the cabinet, glass spray and cyclone separator for inspecting. All the data and function are controlled by PLC, English language.



一、适用范围 APPLICATION RANGE

YC-015A微型实验室有机溶剂喷雾干燥机主要适用于高校、研究所和食品医药化工企业实验室生产微量颗粒粉末，对所有溶液如乳浊液、悬浮液具有广谱适用性，适用于对热敏感性物的干燥如生物制品、生物农药、酶制剂等，因所喷出的物料只是在喷成雾状大小颗粒时才受到高温，故只是瞬间受热，能保持这些活性材料在干燥后仍维持其活性成份不受破坏。

This type is popular in field of Food, biology, material, pharmacy enterprise or university, R&D institute. Especially some non-heat material, that can be sprayed to power wonderfully, because material touch heat air in a little time, and high temperature don't destroy the component of production. Flavour, dairy, plant and vegetable extract liquid, pharmacy, biology, chemical, material, resins, Ceramics and superconductors Biochemicals, etc.

二、YC-015A微型实验室有机溶剂喷雾干燥机主要特点CHARACTERISTIC

1) 可以解决喷雾干燥中含有有机溶剂物料干燥难的问题，一般有机溶剂会呈易燃易爆的特性，防爆型闭式实验室喷雾干燥机使物料能在密闭的干燥系统中循环，可避免有机溶剂气体与外界空气的接触，确保了安全生产；

Using for organic solvent materials difficulty in spray dry. General organic solvents are flammable and explosive, and anti-explosion closed laboratory spray dryer makes materials circulate in closed drying system and protect organic solvent gas from external oxygen and air, which guarantees safety production.

2) 可以解决原料生产中易氧化物料干燥难的问题，该技术利用惰性气体的抗氧化性，物料在闭路循环系统抗氧化性的环境中干燥与输送，起着与氧隔绝的目的，确保了易氧化物料干燥生产的质量；

Using for oxidizable materials. This technology uses inoxidizability of inert gas, materials are dried and transported in closed anti-oxidative circulation system to avoid contact with oxygen, which guarantees quality and dry production of oxidizable material.

3) 可以解决有些原料生产中有害气体污染问题，有些物料或溶剂气化时会产生有毒气体，惰性气体闭路循环实验室喷雾干燥机将使这些产生的有毒气体密闭在系统之中，并在后道工序收集，可减少环境污染，有利于环境保护。

Using for poisonous gas pollution during raw material production. Some materials or solvents generate poisonous gas upon gasification, and inert gas closed circulatory laboratory spray dryer encloses poisonous gas generated in a closed system before collecting in the back-end to reduce environmental pollution, which is beneficial to environmental protection.

4) 彩色大触摸屏操作，全自动控制和手动控制相结合，国内唯一：

全自动控制：一键式开机，设定喷雾工艺参数后，温度到达预定温度，蠕动泵自行启动，触摸屏上显示运行动画，运行流程清晰显示；关机时只需按停止键，机器自动安全关机。

手动控制：如需在实验过程对工艺参数进行调整，可方便切换至手动状态，整个实验过程彩色触摸屏动态显示（动画）。

Two modes of run: Automatic-mode, and Eye-monitored mode for the purpose of easily controlling experimental process. PLC controller, LCD touch panel control fascia with flow path of system.

5) 二流体喷雾的雾化结构，整机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.

6) 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 $\pm 1^{\circ}\text{C}$ 。

To assure accurate temperature control and easy parameter adjusting, YC-015 applies PID.

7) 进料量可通过进料蠕动泵调节，最小样品量可达50ml。

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.





三、YC-015A实验室有机溶剂喷雾干燥机技术参数 Parameters

1) 彩色触摸屏操作控制，中文或英文操作界面

7" high-resolution LCD, human-oriented interface, Chinese and English menu, Optimize operation procedure, efficiency, flexibility, easy-going and easy learning.

2) 进料量: 1000mL/h~1500mL/h

Evaporation rate of solvent at inlet temperature of 150°C using Standard: Approximately 1000 mL~1500mL/hour

3) 彩色触摸屏参数显示: 进风口温度/出风口温度/氧气浓度

As standard a touch screen to display temperature, oxygen concentration etc.

4) 防爆阀自动泄压装置，系统内压力一旦达到0.2Mpa，防爆阀自动开启泄压，确保设备安全，即使干燥生产中有粉体摩擦积累或气体气化膨胀而产生静电而导致系统内压力升高时，防爆阀自动泄压装置能有效消除超压或爆炸的隐患，进一步确保设备和实验安全。

Anti explosion valve automatic pressure relief device. When internal pressure in the system reaches 0.2 Mpa, the anti-explosion valve automatically starts to relieve pressure so as to guarantee safety equipment. Even in case of increased system pressure resulting from static electricity from powder friction accumulation or gas gas fication and expansion, anti-explosion valve automatic pressure relief device can effectively eliminate the hidden trouble of overpressure or explosion and further guarantee the safety of equipment and experiment.

5) 整个系统处于封闭状态，含氧浓度在线监控，系统内氧气浓度一旦达到2%，系统会自动强制性停机并报警。

The whole system is in a closed state with on-line monitoring of oxygen concentration. When system oxygen concentration reaches 2%, the system will automatically resort to shutdown and alarm. (Sensors to monitor the device work, the gas, the heating, the pressure and other.)

6) 喷嘴口径: 0.5mm 0.7mm 1mm 1.5mm 2mm可选，并可根据客户要求定制，适用于各种物料和不同的喷粉粒径要求 standard with 0.7 mm jet and other sizes are available as accessories

7) 进风温度控制: 60°C~200°C

Air inlet temperature range 60°C to 200°C

8) 适时调控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-015A applies PID. Temp. Precision: ±1°C

9) 含氮气循环系统和溶剂在线回收系统

Nitrogen containing circulatory system and solvent online recovery system

10) 可用于水溶液或有机溶液物料的喷雾干燥

Can be used to process the samples of aqueous solutions and organic solvents.

11) 设有通针，喷嘴堵塞时可消除，通针频率可调

Automatic de-block device prevents the nozzle from becoming blocked and variably controlled.