

Laboratory Inert Loop Spray Dryer

由于潜在爆炸和易燃的危险，对于易燃易爆有机溶剂的喷雾干燥一直是困难和禁止的。然而在研究和应用的许多重要新技术领域，都迫切需要对有机溶剂进行喷雾干燥或造粒。上海雅程对这一挑战作出回应，成功的推出了系列适用于有机溶剂干燥的实验室封闭式喷雾干燥机，对于当前实验室大多用到的有机溶剂，YC-501、YC-015A和YC-018A实验室有机溶剂喷雾干燥机都能安全有效彻底的干燥！

The spray drying of flammable and explosive organic solvents is difficult and prohibitive because it is so dangerous. But meanwhile, in the research and application of many significant newly-developed technologies, there is an urgent need for spray drying or granulation of organic solvents. To solve this problem, Shanghai Pilotech Instrument & Equipment Co., Ltd. successfully launches a series of spray dryers for safe and thorough drying of organic solvents in the laboratory, such as YC-501, YC-015A and YC-018A inert loop spray dryer.

YC-501实验室有机溶剂喷雾干燥机

YC-501 Inert Loop Spray Dryer

YC-501实验室有机溶剂喷雾干燥机采用模块化设计，分为上下两个部分，分别为喷雾干燥机主机YC-500和氮气循环系统，物料为有机溶剂时连接上下两个部分，安全可靠，物料为水溶液的时候，直接用喷雾干燥机主机部分，节省氮气。

The YC-501 inert loop spray dryer adopts modular design and is divided into upper and lower parts, main engine YC-500 and inert loop system. When the material is organic solvent, the upper and lower parts are connected, which is safe and reliable. When the material is an aqueous solution, the upper part is used only to save nitrogen.

1、喷雾干燥机主机可直接放置在实验台或氮气循环系统装置上，系统采用全自动控制与手动控制双重控制模式，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.

2、进风温度控制：最高200℃，出风温度：最高100℃
Max inlet temperature is 200℃ ,Max air outlet temperature is 100℃

3、物料处理量：最高500ml/h;

Capacity:500ML/H at inlet temperature of 200°C

4、最小进料量：20ML(根据物料浓度不同而有所差异);

Min. Sample : 20mL

5、喷雾头为同心喷雾头(长度350mm)，雾化时确保没有任何偏心而导致喷到瓶壁一侧，喷雾头安装后可以上下移动，以利于调整雾化位置改善喷雾干燥效果（可选三流体喷雾头，适用更多物料混合需要）；

The spray head is a concentric one. It guarantees no eccentricity during atomization that may lead to spraying to the bottle wall. The spray head can move up and down after installed to facilitate the adjustment of the atomization position to improve the spray drying effect. The spray head is made of SUS316L stainless steel.

6、彩色LCD触摸屏参数显示：进风口温度/出风口温度/蠕动泵转速 /风量/通针频率

As standard a touch screen to display temperature, airflow volume, air pressure, pump speed and de-blocker frequency.

7、喷嘴口径：0.5mm/0.8mm/1.0mm/1.5mm /2.0mm可选，并可根据要求定制；

Standard with 0.8 mm jet and other sizes are available as accessories

8、整机全不锈钢制作,二流体喷雾的雾化结构，喷雾、烘干及收集系统采用优质SUS304不锈钢制造（带观察视镜）

Spray chamber, cyclone separator, collector are all made of SUS 304 stainless steel.

9、整机功率（含氮气循环系统和制冷系统）：
2.5KW /220V

Power: 2.5KW AC220V



10、可用于水溶液和有机溶液的喷雾干燥，一瓶氮气可使用3-5小时,乙醇回收率90%以上;

Can be used for spray drying of aqueous and organic solutions

11、整个系统处于封闭状态，含氧气浓度在线监控，系统内氧气浓度一旦达到2.5%（浓度范围可设定），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 oxygen concentration reaches 2.5%, the system will automatically resort to shutdown and alarm. (Sensors to monitor the device work, the gas, the heating, the pressure and other.)