

## **Configuration description for BYP series closed-cycle spray dryer**

1. The system technology of the equipment is designed for explosion proof in the main body and key parts of the equipment as to ensure the safety of equipment operation

2 In the system it has condensing system and solvent recovery system to the solvent of the liquid material .the recovery system can make second processing the solvent in the drying solution and let the solvent recycle , thus greatly reducing the production cost.

3.For the heating system for the machine , it is very flexible. we can configure it based on the customer site conditions such as steam ,electricity , gas furnace and so on , all of them we can design it to match our spray dryer.

4.The feeding pump , atomizer ,blast fan and the suction fan are with the inverter.

5.The main parameters such as the inlet temperature , main tower temperature and outlet temperature are adjusted by the temperature meter . The machine has the main tower pressure testing point , air inlet pressure testing point , air outlet pressure testing point, the oxygen testing point and so on . Once machine run , you can see everything clearly .and very convenient for the user to operate it . The main electrical components are international brand and which can ensure the electrics run reliable and safely. The Electrical control are adopted sequential interlock interlock, super temperature, fault alarm and other measures to ensure the safe operation.

6.The inlet temperature are controlled,displayed and alarmed by the intelligent digital thermometer to ensure constant inlet temperature.

7.The outlet temperature value are specified through the inverter adjusting the feeding rate .

### **8. The main control points are as follows:**

- (1) Control the liquid flow through a frequency converter or manually adjusting the diaphragm pump;
- (2) The atomizer's rotation speed is controlled by the inverter (control linear velocity and particle size), and it has an oil pressure control and alarm system;
- (3) The air inlet has a temperature control system and a pressure display device;
- (4) Blower adopts variable frequency speed control to control air volume and air

pressure;

(5) The draft fan adopts the frequency converter to control the air volume and the wind pressure, and controls the system pressure;

(6) The system has a nitrogen gas exhaust and discharge device;

(7) The system is equipped with a nitrogen detection device to ensure the smooth and safe operation of the equipment;

(8) bag filter with pulsed (back) blowing system;

(9) The outlet air has a temperature control system and a pressure display device;

(10) The condenser has a liquid level control system;

(11) The gas-liquid separator has a liquid level control system;