

RICHTEK INDUSTRY

Double Cone Rotary Vacuum Dryer SZG-series



SZG series double cone vacuum dryer is a new generation of drying device developed by our factory in combination with the technology of similar domestic products. The double cone vacuum adopts two elastic connection methods of belt and chain, so the equipment runs smoothly. The specially designed process fully reflects the good concentricity of the two shafts. The heat medium and vacuum system adopt reliable mechanical seals or American technology rotary joints. On this basis, we developed SZG-A, which can not only stepless speed regulation, but also constant temperature control.

As a professional drying equipment manufacturer, our products are available from high-temperature heat transfer oil as the heat medium, medium-temperature steam and low-temperature hot water. When drying viscous materials, our factory will specially design a “copy board” mechanism or set up balls in the tank for you.

Working principle:

- ©The heat energy (such as hot water, low pressure steam or heat transfer oil) is passed into the closed interlayer, and the heat is transferred to the dried material through the inner shell.
- ©Under the power drive, the tank body rotates slowly, and the materials in the tank are continuously mixed, so as to achieve the purpose of intensified drying.
- ©The material is in a vacuum state, and the vapor pressure drops so that the water (solvent) on the surface of the material reaches a saturated state and evaporates, and it is discharged and recovered by the vacuum pump in time. The water (solvent) inside the material continuously penetrates, evaporates, and discharges to the surface. The three processes are continuously carried out, and the material achieves the purpose of drying in a short time.

FEATURES:

- ©The boiling point of raw material will be decreased under the vacuum condition and make the evaporator increases the pushing force of heat transfer.

- ◎The heat source can be low pressure steam or waste heat;
- ◎The loss of the heat during the evaporation is only a little.
- ◎The disinfection treatment can be carried out before drying and there is no impurity material mixing during drying process. It is in conformity with the requirement of GMP;
- ◎Static vacuum dryer will not damage the shape of raw materials.

Application:

The Double cone rotary vacuum dryer is suitable for the concentration, mixing, drying of powder, granular and fiber in the chemical, pharmaceutical, food and other industries, and materials that require low temperature drying (such as biochemical products, etc.). It is more suitable for drying of easily oxidized, volatile, heat-sensitive, strongly irritating, toxic materials and materials that are not allowed to destroy crystals.

Parameter:

Model	SZG-100	SZG-350	SZG-500	SZG-750
Total volume (L)	100	350	500	750
Loading volume (L)	≤50	≤ 175	≤ 250	≤ 375
Heatingarea(m ²)	1.16	2	2.63	3.5
Rotary speed (rpm)	4-6			
Motor power (kw)	0.75	1.1	1.5	2
Rotary height (mm)	1750	2100	2250	2490
Tank inner pressure (Mpa)	-0.1–0.15			
Clip set pressure (Mpa)	≤ 0.3			
Working temp.(°C)	Inner tank ≤ 85 Clip set ≤ 140			
Heating media	Steam, Hot water, Heat transfer oil			
Weight (kg)	800	1100	1200	1500
Floor area (L*W)	2160*800	2260*800	2350*800	2550*1000

Model	SZG-1000	SZG-1500	SZG-2000
Total volume (L)	1000	1500	2000
Loading volume (L)	≤ 500	≤ 750	≤ 1000
Heatingarea(m ²)	4.6	5.6	7.5
Rotary speed (rpm)	4-6		
Motor power (kw)	3	3	4
Rotary height (mm)	2800	2950	3000
Tank inner pressure (Mpa)	-0.1–0.15		
Clip set pressure (Mpa)	≤ 0.3		
Working temp.(°C)	Inner tank ≤ 85 Clip set ≤ 140		
Heating media	Steam, Hot water, Heat transfer oil		
Weight (kg)	2800	3300	3600
Floor area (L*W)	2860*1300	3260*1400	3760*1800