

# MULTIPLE-NOZZLE VERTICAL PRESSURE SPRAY DRYING TOWER

## 多喷头立式压力喷雾干燥塔

奶粉系列  
Milk Powder  
Equipments



奶粉工程喷雾干燥塔顶装置  
Equipment on top of the spray drying tower for milk powder



奶粉工程进风加热部分  
Air intake heating system for milk powder



奶粉工程微粉输送部分  
Milk powder delivery system



奶粉工程进风部分  
Air intake system for milk powder



# VIBRATION FLUIDIZED BED

## 振动流化床

奶粉系列  
Milk Powder  
Equipments



### 技术说明

主要用于奶粉、豆粉及其他粉状物质的二次干燥、颗粒的再团聚，第二次清除微粉、喷涂卵磷脂和使产品冷却到包装温度等。经流化床处理的物料粉粒均匀，微粉少，温度在35℃，可以立即进行包装。广泛用于乳制品、医药及化工等行业。

### 用处与特点

物料与设备接触的部分均采用 SUS304-2B 优质不锈钢制造。三段式，第二段为除湿空气冷却段，可将产品冷却到35℃以下。床体采用上中下分体式结构，快速拆装，筛孔板可随时更换清洗。波型筛孔板、强度高、刚性好、落粉少，物料在床内的流化效果好。振动电机的振击力、振动频率可调，不积粉，有自排空的优点。塔内固定流化床有二次干燥、塔内二次团聚造粒、塔锥节出口口角度缩小的情况下降低锥节高度、采用上进排风工艺时有效稳定塔内负压和恒速降速干燥时间的作用。

### Technical explanation

It is mainly used in secondary drying, particle re-agglomeration, secondary powder removing, lecithin spraying and material cooling to the packing temperature for milk powder, soybean powder and other powder materials. Through the processing by the fluidized bed, material particles are even and contain little micro-powder, and their temperature is less than or equal to 35℃, so that they can be packaged immediately. Now it has been widely used in dairy, medicine and chemical industry etc.

### Applications and features

All parts contacting materials are made of high-quality SUS304-2B stainless steel. The fluidized bed adopts three-stage structure. In the third stage, dehumidification and air-cooling functions are set, so that materials can be cooled to less than or equal to 35℃. The bed body is composed of upper, middle and lower parts, and can be disassembled or assembled. Branchial aperture plates can be replaced and cleaned anytime. Ripple branchial aperture plates are featured by high strength, sound rigidity and little falling powder. The fluidization effect of materials inside the fluidized bed is excellent. The vibrating force and frequency of the vibrating motor can be adjusted as required. So the equipment is free of powder accumulation and has the function of self-emptying. The fixed fluidized bed inside the tower has such functions as secondary drying, secondary agglomeration inside the tower, reduction of taper section height in case of decrease of powder outlet angle at the lower taper section, effective stabilization of negative pressure and drying period at a constant speed or reducing speed inside the tower through adopting the technology of upper air intake and exhaust.

### 技术参数 Technical Parameter

参数 Parameter	型号 Model	PLCLH3-400	PLCLH3-500	PLCLH3-700	PLCLH3-900	PLCLH3-1250	PLCLH-2500	PLCLH-3000
停留时间(min) Staying period		150~250	300~450	500~800	520~1200	1500~2000	2000~2500	2800~3200
公称振次(RPM) Nominal vibration time		2~3	2~3	2~3	2~3	3~5	3~5	3~5
最大激振力(N) Maximum vibration force		980	980	980	980	980(无级)	980(无级)	980(无级)
床内真空度(Pa) Vacuum degree inside the bed		5000*2	10000*2	10000*2	10000*2	10000*2	10000*2	10000*2
蒸汽耗量(kg/h) Steam consumption		-150~-300	-150~-300	-150~-300	-150~-300	-150~-300	-150~-300	-150~-300
耗冷量(2进8℃出)(kcal/h) Cooling water consumption (2 inlet 8℃Outlet)		150	200	310	500	900	1250	1550
装机容量(kw) Capacity		700	800	1000	1400	3200	4500	5000
处理粉量(kg/h) Powder disposal quantity		7.6	7.6	10.7	18.4	22	32	38
一、二、三段允许温度范围 Permissible temperature range at first phase, second phase and third phase		第一段: 室温~100℃; 第二段: 室温~80℃; 第三段: 15℃~60℃ First phase: room temperature~100℃; second phase: room temperature~80℃; third phase: 15℃~60℃						
占地空间(m)Space		8*5*3.5	9*5.5*3.5	9.6*5.5*3.5	9.6*6*3.5	16*10*10	18*10*10	20*12*12