

流動層噴霧 造粒包衣機

FLUID-BED SPRAY / GRANULATOR / COATER

已申請專利
Patented



生產型
Production Size



實驗型
Laboratory Size

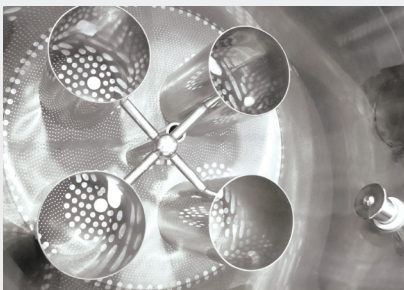
適用產業 +

- **頂噴式：**
 - 製藥：中藥、西藥、生物製劑之造粒、乾燥。
 - 即溶食品：健康食品之沖劑、果汁粉；肉精粉、調味料、乳酸菌之造粒乾燥。
 - 化工：顏料、染料及合成原料之乾燥。

- **底噴式及側噴式：**
藥品及健康食品之小圓粒製劑生產。

功能 +

- **頂噴式：**濕顆粒粉末乾燥及細粉末噴上黏合劑之造粒乾燥。
- **底噴式：**在小圓粒噴上懸浮液或膜衣、腸衣材料之包覆。
- **側噴式：**在小圓粒噴上黏劑和定量的粉末包覆形成較大的圓粒或在小圓粒噴上懸浮液或膜衣／腸衣材料之包覆。

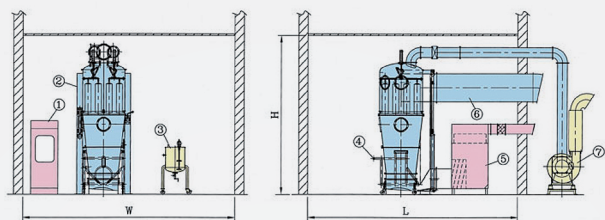


FUNCTION +

- **Top spray type:**
Drying wet granule or powder; granulation and drying of spraying binder on tiny powder.
- **Bottom spray type:**
Spray suspension on pellet or film / enteric coating.
- **Side spray type:**
Pellet powder coating; suspension coating or film / enteric coating.

APPLICATION +

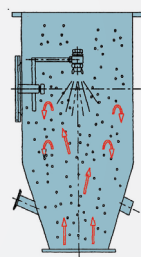
- **Top spray type:**
 - Pharmaceutical: granulating and drying of Chinese or Western medicine, Bio-tech products.
 - Instant food: granulating and drying for instant powder of health food; juice extract powder; meat extract powder; seasoning; lactic acid bacteria.
 - Chemical: drying of dye and synthesis raw material.
- **Bottom & Side spray type:**
Produce pellet of medicine and health food.



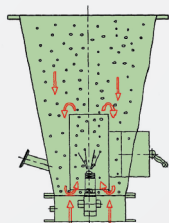
- 1. Control Panel
- 2. Drying Body
- 3. Solution Tank
- 4. Container
- 5. Heater
- 6. Explosion proof gate
- 7. Centrifugal Fan

原理介紹 +

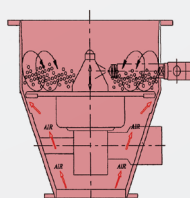
- **頂噴式**：利用吸風機將加熱並淨化後之空氣，抽送進入機體內，使機體內顆粒粉末產生均勻的浮動狀態，並配合一組濾袋防止粉末外漏，排放出蒸發水份，達到乾燥的目的，如另加一組噴槍時將黏合劑或主要成份（如：濃縮浸膏），利用噴槍霧化往下噴灑在均勻浮動狀態之粉末上，使粉末相互結合成顆粒後，乾燥至所須之含水量。
- **底噴式**：利用熱風氣流通過台車底部特殊設計的網子，產生虹吸原理，顆粒經由外圍進入中管內，使顆粒形成強烈由下向上浮動，在往下落的對流狀態，並利用放在底部的噴槍往上噴灑在均勻浮動的顆粒上，達到包覆及乾燥的效果。
- **側噴式**：將糖蕊做的核心放在旋轉盤上滾動，熱風從轉盤與造粒室之間隙向上吹，造成核心的翻滾，此時液劑經由泵浦及噴槍噴灑在均勻滾動的核心上，一邊噴霧包覆，並一邊乾燥，若要將粉末包覆在核心上，則要同時定量下粉，讓液劑將粉末黏合在核心外，而達到造粒、包覆及乾燥的效果。



頂噴式
Top spray type



底噴式
Bottom spray type



側噴式
Side spray type

discharge the vaporated water to get drying purpose. If add one more spray gun can spray the binder or active ingredient downward into the uniform fluid powder, whenever the powder combined in granule, will be dried to get the required moisture content.

- **Bottom spray type:**
When the hot air flows through the bottom screen of coating column, it will generate siphonal principle. Convection is created through the strong force the granule will be sucked into the coating column and floating from bottom toward top, then fall down again, the bottom spray gun will spray upward into the uniform fluid granule to get coating and drying purpose.

- **Side spray type:**
Place the sugar cores on the turntable. Hot air is blown upward between turntable and granulation area. The air causes the cores to roll, the binder solution is sprayed on the rolling cores through the pump and spray gun, coating and drying simultaneously. If powder coating is required, the fixed volume powder will be sprayed at the same time let solution coating the powder on the cores to produce pellet and get coating and drying purpose. cores to roll, the binder solution is sprayed on the rolling cores through the pump and spray gun, coating and drying simultaneously.

If powder coating is required, the fixed volume powder will be sprayed at the same time let solution coating the powder on the cores to produce pellet and get coating and drying purpose.

THEORY +

- **Top spray type:**
Heated and purified air flows into the column by suction fan, the pellet or powder will be in uniform fluid condition inside the column, use one set of filter bag to prevent leak of powder,

規格表 | SPEC

型號 Model	台車全容積 Container Full Volume(L)	產能：公斤/批次 Capacity : Kgs/Batch (B/D:0.5)	尺寸 Size(WxLxH)(MM)
YS-FD-2BG	7	0.5-2	800X1100X1600
YS-FD-5BG	26	2-5	1100X1200X2000
YS-FD-10BG	30	5-10	1200X1200X2220
YS-FD-30BG	100	10-30	1300X1300X2500
YS-FD-60BG	180	20-60	1400X1400X2800
YS-FD-120BG	400	50-120	1500X1500X3000
YS-FD-150BG	500	80-150	1600X1600X3500
YS-FD-200BG	650	80-200	1800X1800X3800
YS-FD-300BG	1000	100-300	2100X2100X4300
YS-FD-400BG	1300	100-400	2800X2800X4600
YS-FD-500BG	1600	400-500	3500X3500X5000

*Size is for reference only which could be design to fit plant layout. *Capacity based on B/D:0.5