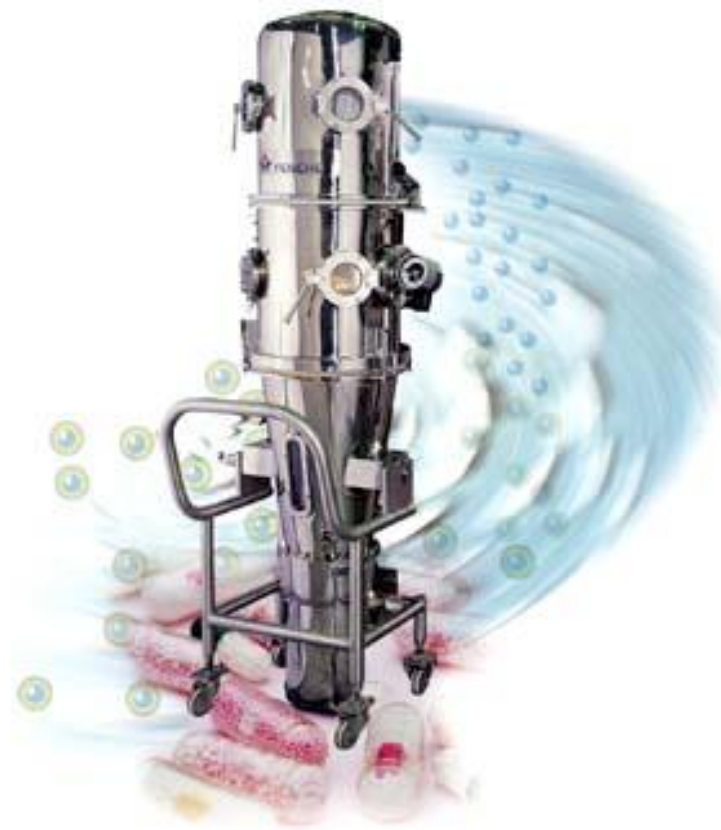


FLUID-BED SPRAY/GRANULATOR/COATER



DNV
ISO2000:9002



SUITABLE FOR

Chinese & Western Medicine 、 Health Food:
Powder & Granule Drying and Granulation 、 Pellet
Granulation 、 Control Released Film Coating

PELLET:
producing pellet, controlled release film
coating/ enteric coating



APPLICATION

1. Top Spray:

Pharmaceutical - Granulation and drying of Chinese 、
Western medicine

Instant Food - Dry granulation for instant powder of health
food 、 juice extract powder 、 meat extract
powder 、 seasoning 、 probiotic (lactic acid
bacteria)

Chemical - Drying of dyes and chemical synthesis raw material

2. Bottom & Side Spray: Medicines and health food.

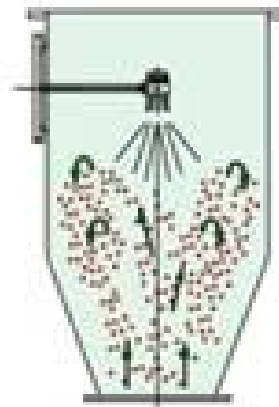


THEORY

1、Top Spray Granulation

Spray fluidized binder on the suspending powder to form even granules.

(1) Top Spray Granulation



2 、 Bottom Spray Film Coating

When the hot air flows through the bottom screen of container and coating column, it will generate the siphonal principle. Convection is created through the strong force from bottom toward top. The granules will then fall down and will be sucked into the coating column again, while the bottom spray gun will spray towards top to achieve coating purpose.

(2) Bottom Spray Film Coating

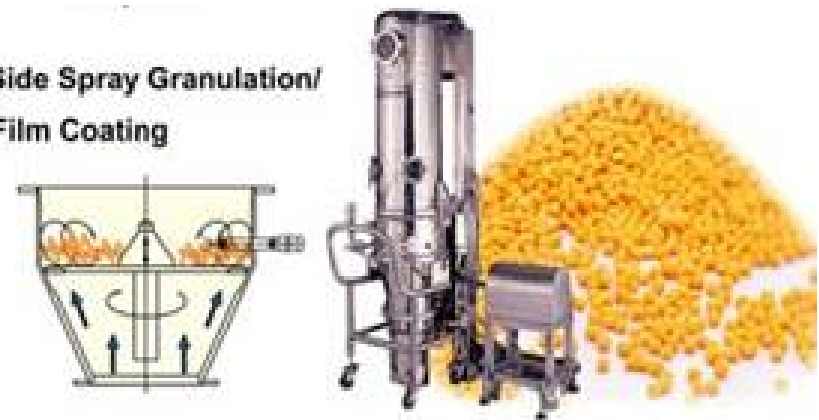


3、Side Spray Granulation/Film Coating

The cores (seeds) are placed on the turntable and hot air is blown upward between the turntable and the granulation area. The passage of air causes the cores to roll on the turntable; at the same time, the coating solution is sprayed on the rolling cores through the pump and spray gun. The process involves simultaneous coating and drying of the cores, layer after layer, until the repeated actions achieve the desired coating thickness or granule size. Powder coating is achieved by charging powder and spray binder at the same time. Powder and binder are combined to form the required layer, thus the repeated layer after layer actions can achieve the desired granule size or coating thickness.



(3) Side Spray Granulation/
Film Coating



FEATURES

1. Multi-purposes: One machine can perform multiple functions: Drying 、 Granulation 、 Coating 、 Pelleting
2. Two sets of valve are interacting automatically to suspend the granules continuously.



FEATURES

3. Adjustable variables for machines are as below:

- (1) inlet / outlet temperature
- (2) drying / granulating time
- (3) air volume
- (4) air volume and pressure of spray gun
- (5) speed of rotation plate for side spray
- (6) the height of coating column for bottom spray
- (7) powder charging speed



OPTIONAL

1. Basic machine with drying or top spray system :
 - (1) Top spray type: FBDG for drying and top spray function only (for additional bottom spray or side spray the basic machine structure will be different)
 - (2) Bottom spray type: for coating function
 - (3) Side spray type: for coating and pelleting function



2. Explosion Proof Type (for organic solvent):

- (1) Top safety relief vent type: for single floor only or top floor only
- (2) Back safety relief vent type: for operation room next to outdoor area



3. W.I.P. auto cleaning function

4. Touch screen interface

5. Temperature recorder

6. Lifting and tilting device

7. Dust collector

8. Dehumidifier

9. Powder layering and add auto powder charging

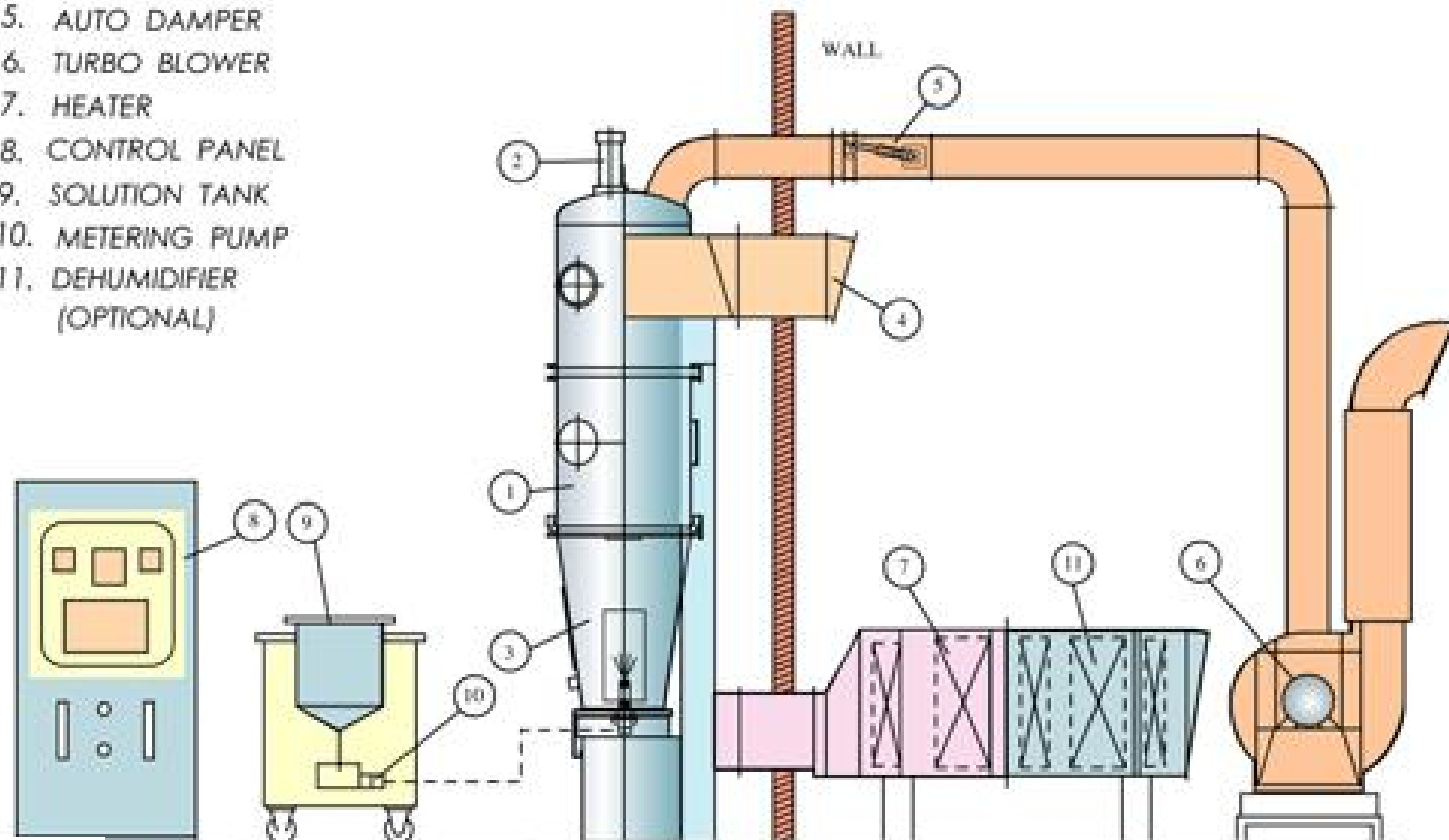


FUNCTION

- (1) Top Spray : Spray binder for powder granulation
 - (2) Bottom Spray : Pellet suspension coating or film/sugar coating
 - (3) Side Spray : Pellet powder coating 、 suspension coating or film/sugar coating
- (Above are suitable for aqueous solutions or organic solvents)



1. DRYING CHAMBER
2. SHAKING DEVICE
3. PRODUCT CONTAINER
4. SAFETY RELIEF DUCT
5. AUTO DAMPER
6. TURBO BLOWER
7. HEATER
8. CONTROL PANEL
9. SOLUTION TANK
10. METERING PUMP
11. DEHUMIDIFIER
(OPTIONAL)



SPECIFICATIONS :

Specification		FBD-G:TOP SPRAY Granulation FBD-B:Bottom Spray Film Coating FBD-S:Side Spray Granulation/Film Coating							
Model		YC-FBD-2	YC-FBD-8	YC-FBD-15	YC-FBD-30	YC-FBD-60	YC-FBD-100	YC-FBD-150	YC-FBD-200
Working Capacity (B.D 0.5 g/c.c)	FBD-G	0.5~1.5	3~5	10~15	20~30	50~75	75~100	100~150	150~200
	FBD-B	0.3~1.0	2~3.5	7~10	15~20	30~50	50~70	70~100	100~130
	FBD-S	0.25~0.75	1.5~2.5	5~7.5	10~15	20~35	35~50	50~75	75~100
Room Dimension (L×W×H)	Cm	300×200 ×250	300×300 ×280	350×300 ×290	350×300 ×320	400×350 ×330	450×400 ×370	450×400 ×420	450×400 ×470

Specifications subject to change without notice

