Tablet Film Coating Machine BGB-C

Features:

1. The control system consists of PLC and HMI. The design is reasonable and programming is flexible, able to adapt to different needs within the pharmaceutical industry. It is reliable, and features a stable performance that conforms to GMP standards.
2. Under the streamline guide plate's agitation, the tablet cores will tumble smoothly and exchange in a frequent manner, thus eliminating the risk of the tablet cores from falling and colliding, which in turns solves the problems that lead to broken pieces and chipped edges, thereby improving the rate of finished products. The narrow surface of the guide plate eliminates adhesion of the coating material to the surface, thus saving coating material and improving the overall medicine quality.
3. The peristaltic pump features a constant pressure and variable parameters, which eliminates the need for a return pipe. The turning radius of the drum varies with the pressure, allowing the slurry output and slurry quantity to be sprayed in a balanced manner without plugging the pump, and thus, saves in coating material. Cleaning is simple, and done with no dead corners.
4. The spray gun is specially designed for film coating machines, and features an easy atomization and known for its large spray coverage. The universal adjustable spray head allows the cleaning mechanism to remain unaffected by a change in quantity, so that coating can be done continuously, thus, reducing the coating time and saving coating material.
5. Display and control the negative pressure in the coating drum
We developed a negative pressure detecting point in the upper box of the coating machine and installed a 2300-1kpa pressure differential gauge (made by the American company, Dwyer) on the operating consol. This allows the operator to operate the touch screen based on technological specifications (for instance, the negative pressure being 10pa) as well as control the exhaust fan speed in order to control the negative pressure within the drum.

6. Display and control of the speed of heat-supply air
We installed an air-speed detecting point in the heat-supply air pipe and installed a 2001AV air speed gage (made by the American company, Dwyer) on the operating console. This allows the operator to operate the touch screen based on specified air speed values (8m/s) in order to control the speed of the hot air fan, and meet air supply demands.
7. Display and control of temperature value
Temperature sensors are installed at the air inlet and outlet of the film-coating machine. After the temperature signal is inputted to the PLC and compared to the set value (90), the heat exchange is automatically controlled, thus achieving film coating temperature value control.
8. Adjustment and control of sprayed syrup
The spray delivery pipe system has the function of fine adjustment of each spray gun, the syrup flow control valve and the pressing wheel of peristaltic pump in the pipe can change the turning radius according to the tightness of syrup delivery pipe(i.e. the pressure at the delivery pipe orifice), thus ensuring a constant-pressure output of syrup while the flow can be automatically balanced at any time according to the quantity of spraying, thus ensuring that the syrup is at the pressure(for instance 0.08Mpa) defined by the technological parameters, and achieving the automatic control of the quantity of syrup.
9. Adjustment and control of the coverage area of atomized syrup.
The spray gun used in the film-coating system is our own individual design, with the atmomizing area adjustable by 360° using a spray head that turns to cover based on the charge quantity in the machine. Operation is convenient and easy to control, and ensures the final atomization effect is not impacted by any human error, thus facilitating standard operating procedures.
10. The memory and the print function
It is possible to automatically record relevant technological parameters of the production process in real time, and print them based on requirements. This prevents possible errors in a manual record made by the operator, and thus, ensures the truth and reliability of the original record.

Technical Parameters

Model	BGB-600C	BGB-500C	BGB-450C	BGB-350C	BGB-200C	BGB-150C
Production capacity (kg/run) bulk density is 1	600	500	450	350	200	150
Speed-adjusting range of film coating drum (rpm)	2-10	2-10	2-11	2-11	2-15	2-15
Motor power of main machine (kW)	5.5	5.5	4.0	4.0	3	2.2
Temperature-regulating range of hot air (℃)	Normal temperature ～ 80℃					
Filtration accuracy of hot air (μm)	0.5 mm (100000 grade)					
Motor power of air heater (kW)	5.5	5.5	2.2	2.2	1.1	1.1
Motor power of exhaust machine (kW)	15	11	7.5	7.5	5.5	5.5
Motor power of vibration dust-cleaning device(kW)	0.74	0.74	0.37	0.37	0.37	0.37
Motor power of peristaltic pump (kW)	0.18	0.18	0.18	0.18	0.18	0.18
Overall dimension of main machine (L*W*H)(mm)	2000x	2000x	2000x	2000x	1570x	1570x
	2240	1940	1800	1560	1360	1260
	x2320	x2320	x2300	x2300	x2000	x2000
Weight of main machine(kg)	2500	2300	1800	1650	1000	900

Model	BGB-100C	BGB-75C	BGB-40C	BGB-20C	BGB-10C	BGB-5C
Production capacity (kg/run) bulk density is 1	100	75	40	20	10	5
Speed-adjusting range of film coating drum (rpm)	4-19	4-19	4-19	6-30	6-30	6-30
Motor power of main machine (kW)	1.1	1.1	1.1	0.55	0.55	0.55
Temperature-regulating range of hot air (℃)	Normal temperature ～ 80℃					
Filtration accuracy of hot air (μm)	0.5 mm (100000 grade)					
Motor power of air heater (kW)	1.1	1.1	1.1	0.75	0.75	0.75
Motor power of exhaust machine (kW)	3	3	3	2.2	2.2	2.2
Motor power of vibration dust-cleaning device(kW)	0.37	0.37	0.37	0.37	0.37	0.37
Motor power of peristaltic pump (kW)	0.18	0.18	0.18	0.18	0.18	0.18
Overall dimension of main machine (L*W*H)(mm)	1200x1150x1765	1200x965x1750	1200x88x1715	1100x850x1570	1100x750x1540	
Weight of main machine(kg)	650	550	500	420	380	380