



Application

HFD Series Bin Blender (hereinafter called "this machine") is ideal for powder and granules mixing applications in pharmaceutical industry with high mixing efficiency and without cross contamination and dust. Thus, the machine can satisfy strict batch control and comply entirely with GMP requirements for medicine production.

This machine can catch several kinds and different sizes of bins, which lifting, clamping, mixing, descending and clamp loosing full automatically. One main machine can be configured with various bin specifications, thus it's the ideal blender for general mixing in pharmaceutical plant, meanwhile, widely used in chemical, light and food industries, etc.

Working Principle

This machine is composed of frame, clamping type of rigid rotating shell (hereinafter called "rotating shell"), lift descend /clamp, drive, brake and control systems.

When start working, firstly, put the loaded square mixing bin (hereinafter called "bin") into rotating shell and a position signal will be sent by the control system when the bin fixed position. Press "confirm" key on the touch panel, the bin will be automatically raised in position and clamped by the lift descend /clamp system. After the bin fully clamped, the drive system starts blending according to the setting time and rotating speed. On achieving the set mixing time, the rotating shell slow down automatically, and brake system operates to stop the rotating shell vertically for moving the bin out easily and the blending task finished. Then the lift descend /clamp system work to lower the bin on the ground. Meanwhile, the printer will print out complete data of this batch. Finally, move out the bin from rotating shell and thus finish this blending cycle.

Features

- 1. This machine is novel in design and has compact structure and nice appearance. The evenness of mixing achieves above 99% and the volume charge coefficient reaches 0.8.
- 2. Low rotating height, smooth running, reliable performance and easy operation.
- 3. Mirror polish for the inner and outer surfaces of the bin without dead corner, easy to unload and clean with no cross contamination, which conforms to the requirement of GMP.
- 4. The system controlled by PLC, sensor of photoelectric position control, and drive system which composed of motors, thus, can control the mixing time and unloading position. And when machine stopped, the discharge port will at the best position for unloading.
- 5. The locking clamp structure of loading cover bolt is easy for disassembly, cleaning and well sealing, and no leakage found in testing fill with water cover 80% of total volume.
- 6. Silicon soft connecting is used for connecting between inlet/outlet of the bin and other equipment, thereby, avoids flying dust.
- 7. The patented discharge butterfly valve is easy for disassembly, operation and cleaning with well sealing, and no leakage found in testing fill with water cover 80% of total volume. It has been used on thousands of blenders and well received by customers.
- 8. Overload alarm, with isolating fence, alarm lamp and buzzer.
- 9. Function of data printing.

Main Technical Parameters

Parameter/Model	HFD1000	HFD1500	HFD2000
Max.bin volume (L)	1000	1500	2000
Max. charge volume (L)	800	1200	1600
Max. charge weight(kg)	500	750	1000
Total power(kW)	8.5	10.5	11.5
Front width×rotate depth ×rotate height (mm)	3150×3030×3350	3260×3200×3650	3500×3550×3950
Weight(kg)	3020	3750	4250