

NJP Series Automatic Capsule Filling Machine



The automatic capsule filling machine is a kind of automatic hard capsule filling equipment with intermittent operation and orifice filling. The machine is optimized according to the characteristics of traditional Chinese medicine and the requirements of GMP, featuring compact structure, low noise, accurate filling dose, complete functions, and stable operation. It can simultaneously complete the actions of sow capsule, open capsule, filling, rejection, locking, finished product discharge and module cleaning. It is a hard capsule filling equipment for manufacturers of medicines and health products.

Working Principle

The capsules in the material hopper will continually upright get into sending device in dividing device when machine start to work. In the effect of direction push off and sending device, each capsule will be placed into module bores of first working position、second working position and third working position in the way of cap up body down, meanwhile, vacuum separation system will separate cap and body. The fourth working position is a sheave reserved position for buffer. In the fifth working position, upper module rise, apart from lower module. Filling device will push the pressed grain into the capsule in the sixth working position. The seventh working position is a cam reserved position for buffer. Those capsules which cap and body didn't separated will be eliminated in the eighth working position. The ninth working position is the same as fourth working position. In the tenth working position, lower module retracted and combine with upper module, fastening and locking filling capsules in the effect of push rod, reach the requirement of finished product. In the eleventh working position, prefect fastening capsules will be pushed by push rod and collect. In the twelfth working position, clean up device clean the module and ready to get into next circulation.

Performance & Feature

1. Automatically change the direction of the capsule structure.
2. Capsule separation adopts the method of vacuum suction capsule body, and the buffer structure is designed to reduce the loss and noise.
3. Plug-type metering and filling device for powder, slider-type metering and filling device for pellets.

4. The filling rod station adopts a modular design, which is easy to disassemble and replace, and is marked with a scale to adjust the filling volume.
5. No material remains in the feeder cavity, reducing material waste.
6. When the viscosity of the material is high, the material on the punch rod can be scraped off by adjusting the cam to reduce sticking and punching.
7. Customized high-quality sealing rings greatly reduce the mechanical movement gap of powder entering, and all sealing rings can be easily disassembled and replaced independently.
8. Concealed Dust Extraction tubing: reduces dust and aesthetics.
9. Adopt the second generation totally enclosed turntable design. The upper die adopts two shafts to move up and down circumferentially, and imported silica gel seals to reduce the powder feeding into and out of the rotary table; the lower die adopts two shafts to move in and out circumferentially, matched with imported rubber seals to reduce the situation of powder feeding due to the back and forth expansion of the moving shaft, and it is stable and has high precision; the double shafts are made of a press cover, easy to disassemble and assemble, easy to clean, and the sealing ring is not changed. It is necessary to turn on the turntable to avoid cumbersome defects due to the dismantling of the turntable.
10. It adopts three dimensional control elements; and takes the undersurface plane of dosage as base, so as to eliminate the natural transmutation of the dosing disc and copper saucer, it is uniformity in interval and guarantees the accurate of filling weight, decreasing the phenomena of powder leak and easy to clean.
11. It adopts capsule vacuum positioning mechanism to make the capsule qualified over 98%.
12. Add the extra function of Capsule control switch. Control the capsule outside of the machine: it's more safely and quickly.
13. The modular closed powder filling mechanism is adopted, which is easy to assemble and disassemble and easy to clean.

Technical parameters

Model	NJP-200	NJP-400	NJP-800
Capacity(Capsules/h)	12000	24000	48000
Machine Weight(kg)	700	800	900
Overall Dimension(mm)	610*680*1800	760*780*1800	840*820*1900
Power Supply	380/220V 50Hz	380/220V 50Hz	380/220V 50Hz
Total Power(KW)	3	3	4
No.of Segment Bores	2	3	6
Vacuum	20m ³ /h-0.04-0.08Mpa		
Making Rate	Empty capsule 100%Full,capsule over 99%		
Suitable For Capsule	00,0,1,2,3,4,5#		
Filling Error	±2.5%-±3.5%		

Model	NJP-1200	NJP-2300	NJP-3500
Capacity(Capsules/h)	72000	138000	210000
Machine Weight(kg)	1100	1500	2200
Overall Dimension(mm)	860*940*1900	1010*1080*2000	1170*1560*2000
Power Supply	380/220V 50Hz	380/220V 50Hz	380/220V 50Hz
Total Power(KW)	5	8	10.май
No.of Segment Bores	9	18	25
Vacuum	40m ³ /h-0.04-0.08Mpa	63m ³ /h-0.04-0.08Mpa	120m ³ /h-0.04-0.08Mpa
Making Rate	Empty capsule 100%Full,capsule over 99%		
Suitable For Capsule	00,0,1,2,3,4,5#		
Filling Error	±2.5%-±3.5%		

