

## SHH-SZP-35, 37, 43, 45, 53, 57 Rotary High Speed Tablet Press



## Introduction

- 1. SHH-ZP series rotary tablet press machine can be widely used in the pharmaceutical industry, can also be used in food, chemical, electronics and other industries. This machine can press the particulate material which according to the requirements of pressing tablet. The highest capacity is 300000 pieces per hour.
- 2. This machine is used to suppress the drying of granular materials in fine powder (greater than 100 mesh) content less than 10%, not suitable for semi solid, wet particles, low melting point easy to wet raw material and no particles of powder compacting.
- 3. This machine can not only suppress the circular sheet, can suppress the geometry of the profiled sheet and double-side lettering plate.
- 4. SHH-ZP series rotary tablet press has four specifications, namely: SHH-ZP35, SHH-ZP37, SHH-ZP43, SHH-ZP45, SHH-ZP53, SHH-ZP57 customers can accord their yield, product pressing size to choose suitable models.
- 5. Four types of parts, components are based on current world popular criteria, such as standardization, serialization, universalization and so on, for designing and manufacturing technology and management, four kinds of more than 90% parts, components of the structure, size, Geometry and so on are the same, to facilitate customer's maintenance and management.
- 6. This machine has a host of major components of mechanical and electrical control system (major components of mechanical and electrical control systems detailed below).
- 7. Mechanical and electrical components of the machine configuration is excellent, mechanical components using high strength and high rack mechanism stiffness of frame body, the main casting adopt Japanese-owned company's products, special processing technology turntable structure, the main pressure preload wheel and wheel structure lubrication system uses Americanowned Beiqier company's products, the main motor is ABB's products, inverters, displays adopts Siemens products.

- 8. Fully enclosed work area uses transparent window structure, less dust pollution, excellent sealing.
- 9. Working room and transmission mechanism is completely separated, prevent cross-infection effectively. Parts in contact with the medicine are made of stainless steel or with special surface treatment, no dead corner in working room, loading and unloading easily, easy cleaning and maintenance, compliance with medicine production and quality management practices of GMP standards.
- 10. This machine has some functions, such as frequency control, filling and thickness of tablet display, average pressure display, overload protection, emergency braking and so on.

## **Main features**

- 1. The highest pressure, at the same time setting pre-pressing device, prolongs the duration of compression, more in line with the requirements of the tablet quality.
- 2. High rotating speed, double-sided tablet, and the production efficiency is high; can meet the requirements of pharmaceutical factory mass production.
- 3. Installed pressure sensors on the pressure wheel parts, accurately shows the average working pressure of the tablets through the amplifier and display screen; while you can set the maximum working pressure, when the operating pressure exceeds the set value, the machine will emergency stop automatically, play a protective role.
- 4. Main pressure, pre-press and filling part uses displacement sensor, through the adjustment of the 6 front handles, the display screen can clearly show the main pressure, pre-pressure and filling depth, easy to adjust tablet thickness and weight.
- 5. Equipment lubrication part adopts electric lubrication pump, measurement and other automatic lubrication system, can supply the oil to the part which has a relative friction movement, such as the upper and lower rail, punch roller, punch and role of rotary table, and can according to the actual work needs in a timely manner on the touch screen to adjust the lubrication of frequency and time, in order to obtain the best lubricating effect, reduce noise, prolong the life of parts.
- 6. Control part adopts programmable controller, the operation panel touch screen with color, convenient and intuitive. The operation of the display screen as the user interface can display the main technical parameters, the average pressure, filling amount, the thickness, etc.; Set the turntable running parameters, such as speed, maximum working pressure, lubrication control parameters such as frequency and time; Can fast locate the fault point, show the cause of the problem and elimination method, improve the efficiency of maintenance.
- 7. Mechanical parts: the material key parts (material):
- Copper rail material adopted specially formulated casting a military enterprise, improve the wear resistance. The top cap, turntable, rail, track plate, main body and so on, adopts unique technology of casting by a sole proprietorship enterprise of Japan. By analyzing metallographic experiment, uniform material internal molecular structure of the body, tight, no bubble, trachoma and crack, inner pressure and reliable, the casting surface level off, smooth. Main shaft adopts special mark of forgings, small deformation and good rigidity.
- 8. The processing technology of the mechanical parts:
- Copper track, on the roof, turntable, rail, rail bridge, the main body and other major parts adopt precision machine tools (machining center), the processing dimensional accuracy is high.
- 9. The improvement of pressure wheel and wheel frame structure:
- Native roller frame structure change of the current tablet press is widely used form of leveraged (or pole type), using column type structure, its advantage is pressure point, pressure big, less noise and small volume etc.
- 10. Changes in the structure of rotary table:
- Native turntable structure change of the current tablet press is widely adopted in the structure of the die for the blind hole, fission turntable adds a block template, make the original die in blind holes for the straight hole. Although increased turntable processing difficulty, but the effect is obvious. Its advantage is in the depth of the die, the die after installed to the turntable in the die is in the same plane, plane and plane rotary table can ensure the into each mold grain filling volume, make the pressure of the weight of each product.

- 11. The turbine box adopts circular arc gear turbine, its characteristic is smooth running, low noise, high carrying capacity, small in size.
- 12. The lubrication
- SHH-ZP high-speed series rotary tablet press lubrication system, using a wholly owned American company product the product sealed performance is good.
- 13. The motor adopts a wholly owned company of Swiss ABB QABmZK4A B, the power of 7.5 kW; the big power, stable and reliable operation.
- 14. The studio of organic glass surface spraying "orange" color stripe prompt operator can't open the organic glass door when the machine is working, guarantee the safe operation and prevent the dust float in the sky.
- 15. Appearance after industrial stereo modeling design, safety tips humanized design, novel, beautiful and easy.
- 16. Control system (electrical part)

In order to improve the electrical components and improve the system reliability and stability of the main components are sourced currently trustworthy brand in the world, such as: PLC, touch screen, inverter are Siemens brand, such as switch, breaker etc for Omron products.

## **Technical Parameters**

Model		SHH-ZP-35	SHH-ZP-37	SHH-ZP-43
No.of Stations		35	37	43
Type of Tooling		IPT	IPT	IPT
Max. Pressure (kn)		80	80	80
Max. Pre-pressure (kn)		60	60	60
Max. Filling Depth (mm)		18	18	18
Max. Tablet Dia (mm)		25	23	18
Max. Tablets output (ten thousand/ hour)		18.9	19.98	23.22
Max. Turret Speed (r/min)		45	45	45
Main Motor Power(kw)		7.5	7.5	7.5
Height of the Machine (mm)	Without Hopper	1750	1750	1750
	With Hopper	1900	1900	1900
Machine Floor Space (mm²)		1170*1290	1170*1290	1170*1290
Machine Net Weight (kg)		3500	3500	3500

Model		SHH-ZP-45	SHH-ZP-53	SHH-ZP-57
No.of Stations		45	53	57
Type of Tooling		IPT	IPT	IPT
Max. Pressure (kn)		80	80	80
Max. Pre-pressure (kn)		60	60	60
Max. Filling Depth (mm)		18	18	18
Max. Tablet Dia (mm)		17	13	11
Max. Tablets output (ten thousand/ hour)		24.3	28.62	30.78
Max. Turret Speed (r/min)		45	45	45
Main Motor Power(kw)		7.5	7.5	7.5
Height of the Machine (mm)	Without Hopper	1750	1750	1750
	With Hopper	1900	1900	1900
Machine Floor Space (mm²)		1170*1290	1170*1290	1170*1290
Machine Net Weight (kg)		3500	3500	3500