HANYOO
翰洋科技

DSJ-16C

Visual Imaging Counting Machine

EQUIPMENT
TECHNICAL PARAMETER

南京翰洋智能设备有限公司
NANJING HANYOO PHARMATECH CO., LTD.

DSL-16C Visual Imaging Counting Machine

PERFORMANCE CHARACTERISTICS

1. High resolution: Traditional infrared sensors have approximately 10 to 15 detection points per channel, while our CCD counting machine averages around 250 imaging points per channel, which is equivalent to a detection accuracy of 0.12mm.
2. Dual chip recognition: It can recognize dual chips. We know that our counting machine may have overlapping chips, but in reality, it is impossible to completely overlap during the falling process, and the infrared sensor will not be able to cope. This CCD can be calculated based on the projected area. The accuracy of identifying laminations is more than 10 times that of infrared sensors.
3. Removal of broken particles: Because the width of the drug particles can be accurately measured, and based on the falling time, the projection of the drug particles can be calculated, so that the difference between small broken particles and normal drug particles can be seen. The highest standard that traditional sensors can sense is the thickness of the tablet, which can be added to the thickness dimension, that is, the detection width. One third of the fragments can be removed. This is mainly determined by the posture of free fall.
4. Anti particle dust: Due to the use of CCD cameras and backlighting for imaging, our company has developed a high brightness and automatically dimmable light source, which is perfectly combined with program algorithms to automatically increase the brightness of the light source with the increase of dust; On the other hand, due to the distance of the CCD camera from the dust producing area, it is not easily contaminated.
5. Full process recording: Equipped with a 32GB memory card internally, we have developed our own high-speed recording system and combined it with a precise clock system to accurately record the projection data and production time of the medicine granules produced in the past year. With our human-machine interface system, we can view the historical image data of each moment. Easy to trace products, it can track the projected images of all drugs during production, including those under two pieces, foreign objects passing through the drugs, and small fragments during the production process. Easy for device debugging, once the cylinder fails to work properly and causes the pill to pop up, the

special image of the popped up medicine can be used to assist in determining whether the cylinder is normal and adjusting the counting parameters.

6. Installation and debugging. Easy to use: The functionality is powerful, but installation and debugging are also very simple. Simply follow the specified steps in the human-machine interface and embed video tutorials. Whether it is the after-sales personnel of the equipment manufacturer or the technical personnel of the manufacturer, they can complete installation, debugging, and replacement.
7. Stable scanning cycle: We use a more advanced quad core processor, with a scanning cycle of every 1mm movement of the drug particles. We use multiple cores for area recognition and simple shape recognition; The processor adopts direct acquisition and algorithm processing, and will cooperate with the measurement and control board for output control. The entire process is closed-loop without other devices, making it more stable.
8. Powerful human-machine interface: Combined with CCD cameras, our company's self-developed human-machine interface software runs on the Windows system; Firstly, it not only controls the device but also has the function of displaying, playing, installing, and debugging videos; Secondly, it can display the camera's imaging image in real-time; Thirdly, it is possible to view all historical images; Fourth, it can support more powerful and complex subsequent development.
9. System maintenance: As the entire system is developed by our company, when the user provides us with a WIFI hotspot signal, our equipment can be connected to the internet. After networking, we can remotely upgrade the human-machine interface software, CCD sensor system, and measurement and control motherboard system.
10. Adopting a dual axis cylinder to control bottle feeding, medication dispensing, and bottle placement, with a simple structure, easy adjustment, and stable control.
11. Equipped with a photoelectric control device, the equipment automatically shuts down when there are no bottles or when there are bottle blockages, without counting the particles. When it returns to normal, the device automatically starts running.
12. When replacing bottles of different heights, an electric adjustment method with upper and

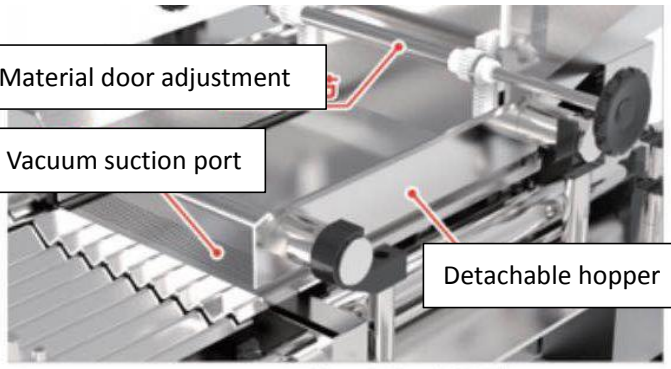
lower limit switches can be used and controlled on the touch screen.

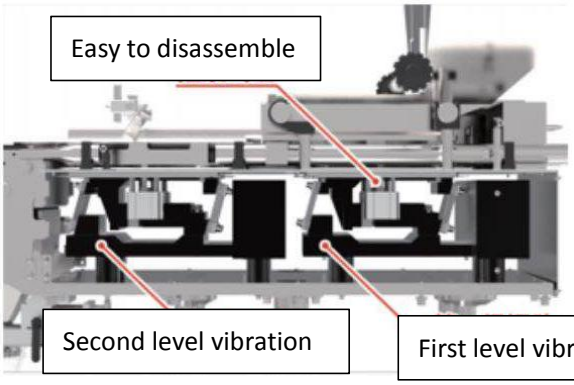
13. When a device malfunction occurs, the device will shut down and an alarm shutdown message will be displayed on the screen, and troubleshooting will be carried out through the operation mode displayed on the screen.
14. 14. Adopting a modular design structure and locking components through cylinders enables true tool free disassembly, which not only facilitates maintenance and upkeep, but also avoids many potential risks, preventing screws, nuts, and other fasteners from accidentally falling into the material bin and entering the bottle due to prolonged vibration during long-term use, causing serious impact on users.
15. The vibration module adopts full wave frequency conversion and carbon fiber spring combination, which reduces noise by at least 10dB compared to peers.

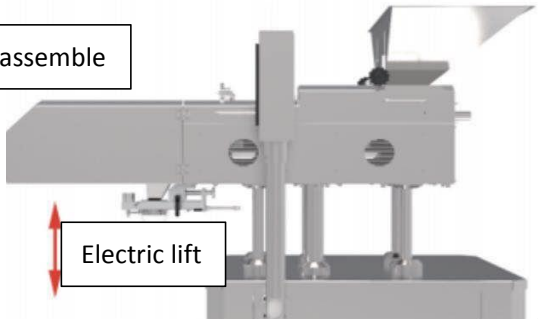
SUMMARY OF DEVICE FUNCTIONS

- Automatic fill light function (ensuring that the camera has sufficient discriminative brightness)
- Electric lifting function (for easy adjustment of bottle height)
- Tool free disassembly design (modular design, easy to maintain and upkeep, while avoiding the risk of potential foreign objects falling into the discharge nozzle)
- Multi particle, missing particle, and fragmented particle removal function (camera image recognition)
- Bottle blockage, insufficient supply of bottles, automatic shutdown function for bottle pouring (detected by infrared photoelectric)

DETAILS INTRODUCTION







TECHNICAL PARAMETER

Model	DSJ-16C	
Number of vibration tracks	16	Double feeding nozzle
Maximum production speed	8000pcs/min	Related to the specifications of packaging materials and granules
Packing quantity	1 ~ 9999	Related to the specifications of packaging materials and granules
Drug specifications	thickness:2 ~ 10mm diameter:3 ~ 20mm L:3 ~ 30mm	Pills, tablets, soft and hard capsules, and others
Bottle diameter	20 ~ 200mm	/
Bottle height	40 ~ 240mm	/
Power Supply	AC220V 50/60HZ	/
power	1.2KW	/
pressure	0.6Mpa	/
Gas consumption	200L/min Clean Air	/
External dimensions	2600×2060×1770mm	L×W×H
hopper capacity	70L	/
weight	700kg	/

ELECTRONIC PART LIST

NO.	NAME	MODEL	QTY	BRAND
1	Solenoid valve	VUVD-L10-M52-RT -M7-1H2L-W1	18	FESTO (Germany)
2	Small gate cylinder	DSNU-10-80-P-A	16	FESTO (Germany)
3	Emergency stop switch	ZB2-BE102C	1	Schneider (France)
4	Photoelectric sensor	GTB6-N1212	3	SICK (Germany)
5	Open source power supply	NDR120-24	1	Mingwei (Taiwan)
6	camera lens	JT35	2	NEWYI
7	Frequency converter	AMK3000P42	2	Panasonic (Japan)
8	Industrial touch all-in-one machine	EPC-19	1	Weiwo (Guangzhou)
9	Solenoid valve	4V210008B	9	Yadeke (Taiwan)
10	Vibration controller	SDVC34-MR	4	CHU (domestic)
11	controller	KZSA	1	Hanyoo
12	camera	XJSA	2	Hanyoo
13	light source	GYSA	2	Hanyoo
14	air switch	OSMC16A	1	Schneider, France
15	Digital pressure switch	ISE30A-C6L-A	1	AirTAC

Add:No.380 Sanqiaogeng,Gaochun District,Nanjing,China

Tel:+86-025-5621 6295

Http://www.hanyoopm.com