

SED-400QYDJ-D Pharmaceutical Automatic Light Inspection Machine



The automatic light inspection machine uses machine vision technology and automatic control principles to make the inspected products rotate at a high speed and brake instantaneously through mechanical methods. It uses a special light source system and ultrahigh-speed sophisticated industrial camera to obtain images of the inspected product. The self-developed image processing algorithm software system compares, calculates and analyzes the images. The unqualified products detected are rejected by the actuator of the automatic control system.

Main advantages

- We are professional in the production of automatic light inspection machines (linear automatic, rotary automatic) and semi-automatic light inspection machines.
- Our software has independent intellectual property rights.
- Bottle caps and bottle heads are inspected by 3 cameras, so the inspection effect is much better. Before the bottles enter the inspection turntable, bottles with unqualified heads are rejected to prevent broken bottles in the inspection turntable due to cracks in the bottle heads, affecting the inspection.
- Menu hierarchical system, only the administrator can set and modify the parameters, avoiding the possibility of misoperation and modification of the parameters by operators.
- The images of unqualified products are saved, which is convenient for users to analyze the problems in order to improve the process. It has the function of on-line inspection image playback, which is convenient for on-line monitoring.
- The inspection parameters can be set freely and saved according to customer requirements.
- Imported servo motors are used as the driving force to ensure the accuracy of equipment operation.
- The centrifugal belt adopts well-known brands and is highly wear resistant.

- The operation interface can effectively display the working status of each camera, thereby ensuring the safety of product inspection.
- The electrical control system adopts Omron motion controller, each motor can independently and accurately output, and the motion position is accurate without dislocation. This effectively avoids signal jam and delay caused by the traditional PLC that triggers signals through the photoelectric sensor, and achieves the consistency of tracking speed and millisecond-level non-deviation of the images taken with the cameras, thereby leading great improvement of the inspection effect and equipment stability.
- Machine fault information feedback can be set.
- Reserved communication interface can facilitate remote fault diagnosis.
- The centrifuge bottle holders are made of high-strength alloy material, which does not need to be replaced within 2 years of normal operation, which greatly saves use and maintenance costs.
- Light source illuminance, camera status and centrifugal bottle spinning status are monitored real time. Fault information can be displayed on the control panel in real time, and an alarm will be triggered to stop the machine at same time.
- The height of the whole machine is completely suitable for ordinary female operators.

Product Parameters

Application	1-20ml ampoules
Inspection items	Visible foreign objects in liquid (such as glass crumbs, metal crumbs, hair, fibers, white spots, white blocks), filling volume, and appearance
Inspection speed	400 bottles/min (taking 2ml ampoules for example)
Resolution	≥40μm
Noise	≤75dB
Power	9KW
Voltage	AC 380V 50Hz
Net weight	3300kg
Dimensions	3400x2000x2300mm (L x W x H)
Workbench height	930mm