湖南汇一制药机械有限公司 HUNAN FE PHARMACEUTICAL MECHINERY CO.,LTD DZDJ24 Auto Light Inspection Machine



For a long time, we've been using manual visual method for inspection of injection products, which leading to high labor intensity and low production efficiency, and also resulting in false inspection and risks of medicine quality. In order to improve the lagging method and guarantee products quality, our company has developed auto light inspection machine. Its operating principles, performance characteristics and technical parameters are briefly introduced as follows:

Operating principles:

Products will be sent to bottle-feeding driving wheel by conveyor. The driving wheel will send bottles to inspection station. The bottles will rotate with high speed due to rotary mechanism. After high speed rotating of bottle liquid, the bottle will enter into light area and stop rotating. While the liquid is still rotating, camera will catch image at the moment and identify through image processing.

If there is any visible impurity, the product will be recognized as defective goods. The bottle wall won't affect the inspection result. Meanwhile, different light sources will be applied to inspection to improve qualified rate of inspecting. One time disqualification will be recognized as defective goods.

Defective goods will enter into bottle storing area respectively by bottle separating device.

Performance characteristics:

1. Automatically finish equidistant separate bottle feeding, bottles will enter into inspection station smoothly.

2. Multiple servo motors are applied to bottle rotating and braking. Bottles can quickly rotate(speed can be adjusted) and stop, which will be beneficial to inspect the impurity movement of liquid.

3. High resolution CCD linear array sensor can get high definition image to ensure inspection of tiny impurity. (min 30 micron)

4. Smooth movement to ensure camera shooting stability

5. Size & quantity of impurity of defective goods can be adjusted according to different requirements; Wide adaptability

- 6. Automatically removing of defective goods
- 7、Classified statistic of qualified and defective products
- 8、Easily operating human machine interface with touch screen LCD tablet computer

Technical parameters:

- 1、Size of inspection object: high-capacity, 50---500ml; small capacity, 1----20ml。
- 2、Inspection speed: 200~600bottle/min
- 3、Inspection station: 3 stations
- 4、Heads on inspection station: 24~90
- 5, Operating system: Windows XP professional or Windows 7
- 6、Operation interface language: Chinese/English
- 7、Working environment temperature : +5~+30°C
- 8、Working environment humidity: max80%