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Calibration Specification for Automatic Lamp-Inspecting Machines

全自动灯检机校准规范

(English Translation)

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Preview: page 1 of 4 shown, 11 in the full document. Complete English PDF, instant download:
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Table of Contents

Introduction (II)
1 Scope (1)
2 References (1)
3 Terms and units of measurement (1)
4 Overview (1)
5 Metrological characteristics (2)
5.1 The smallest detectable foreign object diameter (2)
5.2 Detection rate and false rejection rate of foreign objects (2)
5.3 Recognition of abnormal filling liquid level (2)
5.4 Solution fading recognition ability (2)
5.5 Light source illuminance and repeatability (2)
6 Calibration conditions (2)
6.1 Environmental conditions (2)
6.2 Calibration reference materials, reagents and auxiliary equipment (2)
7 Calibration items and calibration methods (2)
7.1 General inspection (2)
7.2 The smallest detectable foreign object diameter (3)
7.3 Detection rate and false rejection rate of foreign objects (3)
7.4 Recognition of abnormal filling liquid level (3)
7.5 Solution fading recognition ability (3)
7.6 Illuminance of light source and its repeatability (4)
8 Expression of calibration results (4)
9 Recalibration time interval (5)
Appendix A Preparation method of colorimetric solution (6)
Appendix B. Preparation method of standard solution vials containing standard beads (7)
Appendix C Calibration Original Record Format (8)
Appendix D Calibration Certificate (Inner Page) Format (10)
Appendix E Examples of Uncertainty Evaluation of Light Source Illumination Measurement Results (11)

Preview: page 2 of 4 shown, 11 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1824-2020

5 Metrological characteristics (2)

5.1
The smallest detectable foreign object diameter (2)

7.1 General inspection (2)

7.2 The smallest detectable foreign object diameter (3)

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Introduction

The drafting of this specification refers to JJF 1001-2011 "General Measurement Terms and Definitions" and JJF 1059.1-2012 "Evaluation and Expression of Measurement Uncertainty", according to the requirements of JJF 1071-2010 "Rules for Compiling National Measurement Calibration Standards" Seeking to compile.

This specification is the first release.

Calibration Specification for Automatic Light Inspection Machine

1 Scope

This specification is applicable to the calibration of the automatic ampoule injection lamp inspection machine, the calibration of other types of lamp inspection machine can refer to this specification is implemented.

2 Reference documents this specification refers to the following documents.

JJF 1071-2010 Compilation Rules for National Measurement and Calibration Specifications JB/T.20006-2016 Glass bottle small capacity liquid preparation lamp inspection machine JB/T.20135-2011 Automatic Inspection Machine for Foreign Body in Ampoule Injection Pharmacopoeia of the People's Republic of China (2015 edition) National Pharmacopoeia Commission for dated reference documents, only the dated version applies to this specification; for those without date references the latest version (including all amendments) is applicable to this specification.

Preview: page 3 of 4 shown, 11 in the full document. Complete English PDF, instant download:
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3 Terms and units of measurement

3.1 Detection rate

The percentage of the number of unqualified products found in the inspection event to the total number of current unqualified products is called the detection rate. When detected when the rate is not less than 70%, the non-conforming product can be effectively detected.

3.2 error rateofdetection the percentage of qualified products that were mistakenly judged as unqualified products in the inspection event accounted for the total number of qualified products at the time.

4 Overview

The automatic ampoule injection lamp inspection machine (hereinafter referred to as the lamp inspection machine) is a collection of photoelectric detection technology, machine vision technology, Fully automatic liquid and freeze-dried product inspection machine integrating image processing technology and high-precision mechanical manufacturing technology.

In terms of detection principle, the light inspection machine is mainly divided into static division (SD) photoelectric inspection light inspection machine and high-speed camera inspection light inspection machine.

SD photoelectric inspection light inspection machine. brake the sample to be inspected quickly after high-speed rotation, and the liquid in the bottle remains due to inertia Movement, it can be seen that the light source passes through the sample to be tested in front, and the optical lens group behind the product to be tested will affect the presence of foreign objects in the sample.

The sub-projector accurately projects on the analog-to-digital converter, causing a change in voltage.

Management, and produce light inspection results. This type of light inspection machine consists of visible light source, optical lens group, analog-to-digital converter and image sensor, it consists of automatic identification system and computer processing system.

High-speed camera inspection light inspection machine. when the sample to be inspected enters the photoelectric inspection area, the visible light source emits backlight and direct light on the product to be inspected, the camera groups in different positions take high-speed photos of the product to be inspected.

Preset parameter thresholds, through different computer algorithms, compare the collected images to judge the products to be inspected Break, get the light inspection results. This type of light inspection machine consists of light source, high-speed camera, visual recognition system, image processor and computer

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