Chinastandards.org

JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE

PEOPLE'S REPUBLIC OF CHINA

JJF 1890-2021

Calibration Specification for Straightness Measuring Devices

医用分子筛制氧机校准规范

(English Translation)

Issued on: February 23, 2021 **Implemented on: August 23, 2021**

Issued by: State Administration for Market Regulation

Preview: page 1 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1890-2021

Chinastandards.org

Table of Contents

Introduction (II)

1 Scope (1)

2 Reference documents (1)

3 Overview (1)

4 Measurement characteristics (2)

4.1 Error of micrometer indication value (2)

4.2 Straightness error (2)

4.3 Measurement repeatability (2)

5 Calibration conditions (2)

5.1 Environmental conditions (2)

5.2 Calibration items and calibration standards (2)

6 Calibration items and calibration methods (2)

6.1 Error of micrometer indication value (3)

6.2 Straightness error (3)

6.3 Measurement repeatability (3)

7 Expression of calibration results (3)

8 Recalibration interval (3)

Appendix A. Example of segmented reconstruction data processing (4)

Appendix B Example of Uncertainty Evaluation of Straightness Error Measurement Results of Straightness Measuring Instrument (6)

Appendix C Contents of Calibration Certificate (8)

8 Recalibration interval (3)

Appendix A. Example of segmented reconstruction data processing (4)

Appendix B Example of Uncertainty Evaluation of Straightness Error Measurement Results of Straightness Measuring Instrument (6)

Appendix C Contents of Calibration Certificate (8)

Introduction

JJF 1071 "Rules for the Compilation of National Metrology and Calibration Specifications", JJF 1001 "General Metrology Terms and Definitions" and JJF 1059.1 "Evaluation and

Preview: page 2 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1890-2021

Chinastandards.org

Expression of Measurement Uncertainty" together constitutes a basic series that supports the formulation of this specification.

In the process of formulating this specification, refer to GB/T 11336-2004 "Straightness Error Detection", JB/T 11501-2013 "Air Floating Straightness Measuring Instrument".

This specification is released for the first time.

Calibration specification for straightness measuring instrument

1 Scope

This specification applies to the calibration of straightness measuring instruments.

2 Reference documents the following documents are cited in this specification.

GB/T 11336-2004 Straightness error detection JB/T 11501-2013 Air-floating straightness measuring instrument for dated reference documents, only the dated version applies to this specification; for all undated references the latest version (including all amendments) is applicable to this specification.

3 overview

The straightness measuring instrument is composed of a precision guide rail, a sliding seat and a micrometer indicator (instrument) (hereinafter referred to as a micrometer), etc.

When the sliding seat moves, the probe of the micrometer is in contact with the surface of the test piece, and the straightness error of the surface of the test piece is measured. its the main types are air-floating type and sliding type. The schematic diagrams are shown in Figure 1 and Figure 2 respectively.

Figure 1 Schematic diagram of air-floating straightness measuring instrument

1- rail; 2- column; 3- cross arm; 4- micrometer; 5- air-floating sliding seat

Preview: page 3 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1890-2021