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JJF

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JJF 1411-2013

Replacing JJF 1091-2002

**Calibration Specification for Micrometers of Measuring Inside
Dimension
(English Translation)**

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Introduction

JJF 1071-2010 "National Calibration Specifications writing rules", JJF 1001-2011 "common terminology and measurement Definitions ", JJF 1059.1-2012" Evaluation and Expression of Uncertainty in Measurement "constitute support calibration code revision work as a series of basic norms.

JJF 1411-2013 "Measurements within micrometer calibration specification" (hereinafter referred to as "the Rules") identical with GB/T 6314-2004 "claw inside micrometer", JB/T 10006-1999 "Niece micrometer" modify the use of GB/T 22093-2008 "electronic digital inside micrometer", this specification replace JJF 1091-2002 "within Measurements Micrometer calibration specification. " Compared with JJF 1091-2002, in addition to editorial changes, the main technical specification of the changes are as follows.

--- Three o'clock inside micrometer measuring range to 300mm, electronic digital Niece micrometer range increase to 200mm.

--- Internal micrometer size outline configuration diagram of a larger changes, consistent with the new structure now.

--- "Indication error" and other technical indicators by GB/T 22093-2008 "electronic digital inside micrometer" JB/T 10006-1999 "Niece micrometer" requirements identical with.

--- "Proofreading ring diameter" size requirements and technical specifications of a larger change, tantamount to the adoption GB/T 22093-2008 "electronic digital micrometer diameter" national standards.

--- Increase in the size of electronic digital micrometer "segment error" and "value drift" two

technical requirements.

--- Increased international recommendations 10.00 recommended amount requested block size indication error test method.

--- Increased electronic digital three-point internal micrometers and electronic digital display shows error measured uncertainty micrometer assessment.

--- Original specification measuring three micrometer diameter ring gauge sizes used in poor operability, the new version has been removed.

Previous version JJF 1091-2002 release conditions.

JJG23-1988 Niece micrometer;

JJG378-1985 micrometer pore size.

Measuring internal dimensions micrometer calibration specification

1 Scope

This instruction applies to indexing is 0.01mm to 150mm measuring range upper limit Niece micrometer scale value to 0.001mm, 0.002mm, 0.005mm to 300mm measuring range limit of three micrometer diameter, resolution Force 0.001mm Measuring range upper limit to the number of electrons was measured 200mm and micrometer resolution of 0.001mm Measuring range upper limit to the number of electrons in the inner diameter of 300mm was three micrometer calibration.

Resolution is measured 0.001mm ~ 0.01mm to 200mm measuring range upper limit of the counter and sub-micrometer Distinguishing force 0.001mm ~ 0.01mm to 300mm measuring range upper limit of the counter three micrometer diameter, can refer to the specification for calibration.

2. References

This specification references the following documents.

JJG894-1995 standard ring gauge GB/T 6314-2004 jaw micrometer diameter GB/T 22093-2008 electronic digital micrometer diameter JB/T 10006-1999 Niece micrometer DIN863-1 micrometer (DIN863-1micrometer) for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 Overview

Measured by micrometer screw lieutenant rotary motion into a linear measurement plane along two curved parallel to the axis of rotation Line motion, and two readings from the measuring surface divided inner dimension measuring instruments. Its shape structure shown in Figure 1.

Electronic digital Niece micrometer screw is rotated by a lieutenant movement into two arc-shaped measuring surfaces along the axis of rotation Linear motion parallel to the use of angle sensors, electronic and digital display technology, calculate and display two measuring surface divided Internal dimensions measuring instruments distance. Its shape structure shown in Figure 2.

Three-point inside micrometer screw pair by the steering mechanism and the rotary motion into three arcuate surface along a measuring spin Linear motion perpendicular to the axis of rotation, and three arc-shaped measuring surfaces constituted within the cylinder diameter size measurement instrument readings.

Its shape structure shown in Figure 3.

Electronic digital three o'clock micrometer diameter by screw pair and the steering mechanism rotary motion into three arcuate measure Linear movement along a plane perpendicular to the axis of rotation, the use of an angle sensor, and an electronic digital display technology, is calculated and displayed Three arc-shaped cylindrical measuring surface constituting the inner diameter dimension measuring instruments. Its shape structure shown in Figure 4.