

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

JJG 429-2000

Replacing JJG 429-1986

Verificaion regulation of Measurement Standard Instrument of Roundness and Cylindricity (English Translation)

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Roundness, cylindricity tester verification procedures

Introduction

The regulations to ensure that the main performance test equipment to be tested under the premise of the need to streamline part of the test items to increase the relevant part of the test cylinder. Analog devices, in addition to the contents of the provisions of this rule accreditation, but also attached A recorded in the content of the supplementary test.

1 Scope

This procedure applies to the first roundness, cylindricity measuring instrument for the first test, follow-up test and the use of the test.

2 References

This regulation cites the following documents.

General measurement terms and definitions Evaluation and Expression of Uncertainty in Measurement GB/T 1182-1996 tolerances on shape and position - General, definitions, symbols and pictorial representation Roundness measurement terms, definitions and parameters Methods of assessing roundness errors Measurement of radius variation JB/T 10028-1999 roundness meter (instead of ZBJ42030-1988) when using this code, care should be taken to use the currently valid version of the above cited references.

3 Terms

Measurement system. the sensor, amplifier detection circuit, filter, calculation, display output system.

4 Overview

Roundness measuring instrument (hereinafter referred to as roundness meter) is a precision turning center for turning measurement base, measured by the sensor the amount of change in the actual contour to the center of rotation of the measured angular position of the measured parts to quantitative evaluation of the measured piece of a Cross section roundness measuring instruments. According to the reference axis of rotation is divided into the sensor rotary type (see Figure 1) and work Taiwan rotary (see Figure 2) two categories. Divided by the form of signal processing analog output type (recorder display, output) and the number Word output type (computer processing rating, display, output) two categories. Can be used to measure the inner and outer surface of the revolving wheel Contour roundness, concentricity and face beating and other parameters.

Cylindricity measuring instrument (hereinafter referred to as the cylindricity meter) is based on the precision rotary centerline for the rotary reference, precision straight Linear

motion guide for the linear measurement of reference, through the linear motion of the track on the displacement sensor, measuring the surface of the cylinder A number of cross-section in different corner position of the actual contour to the radius of change of the center line of rotation to quantitative evaluation of the cylinder Cylindrical surface measuring instruments. According to the standard rotary axis formation is also divided into sensor rotary (see Figure 3) and workers Taiwan for the rotary (see Figure 4) two categories. Divided by the form of signal processing analog output (recorder display, output) and Digital output type (computer processing assessment, display, output) two categories. Can be used to measure the cylindrical surface profile of the workpiece