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

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Replacing JJG 888-1995

**Calibration Specification for Cylindrical Thread Gauges
(English Translation)**

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Introduction

The reference to the following specification drafting.

The European Federation of National Metrology Institute
(European Association of National Metrology Institutes) Calibration Guide. mechanical
measurement gauge diameter cylindrical threaded guide (EURAMET/cg-10/v.01.
Determination of Pitch Diameter of Parallel Thread Gauges by Mechanical Probing, July 2007)
German Calibration Laboratory (DKD) guide DKD-R4-3.2003 section 4.8. dimensional
measuring instruments calibration Standard. threaded barrel set regulations, work
regulations and master gauge calibration (Richtlinie DKD-R4-3 Blatt 4.8 Kalibrieren von
Messmitteln für geometrische Messgrößen. Kalibrieren von zylindrischen
Gewinde-Einstellnuten, Gewinde-Lehrdornen und Prüfdornen, 2003) the specification for
the revision, instead of JJG888-1995 "Cylindrical thread gauge." Compared with JJG888, in

addition to editorial changes, the major technical changes are as follows.

Metrological characteristics --- calibration includes only thread gauge diameter values parameters directly impact. diameter, single tooth side Angle, pitch and pitch accumulated error. Inspection of metrological characteristics, such as hardness, surface roughness, etc. are not included.

--- For metrological characteristics set combinations can be calibrated clear part of the metrological characteristics according to need to select combinations.

Effect --- diameter of the probe components considered by the laboratory as uncertainty depending on the method used.

Cylindrical thread gauge calibration specification

1 Scope

This standard applies to symmetrical straight tooth flank Cylindrical thread gauge calibration.

2. References

This specification refers to the following documents.

JJF 1071-2010 National Calibration Specifications writing rules GB/T 3934-2003 Technical requirements common thread gauge GB/T 14791-1993 threaded term GB/T 27025 testing and calibration laboratories General requirements 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 Terms

The term cylindrical threaded see GB/T 3934-2003, GB/T 14791-1993.

4 Overview

Cylindrical thread gauge is internal and external thread cylindrical element size boundary conditions for a comprehensive examination of measuring instruments, with the control elements threaded barrel limit sizes.

Elements that constitute threaded barrel shown in Figure 1.

Figure 1 threaded barrel elements

d2- diameter; d- large diameter; d1- trails; P- pitch; α_1 , α_2 - flank angle; α - tooth type angle, $\alpha = \alpha_1 \alpha_2$ Note. The figure graphics and symbols apply to external threads.

Internal thread diameter, large diameter, small diameter symbols are denoted as D2, D, D1, the same as the rest of the external thread.

5 Metrological characteristics

5.1 Metrological characteristics and symbols Metrological characteristics and symbols shown in Table 1.