



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEX ANA OPPAHIMATION AND CTAHDAPTIMAL ORGANISATION INTERNATIONALE DE NORMALISATION

Taper pins, unhardened

Goupilles de position coniques non trempées

Second edition - 1986-11-01

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 2339 was prepared by Technical Committee ISO/TC 2, *Fasteners.*

This second edition cancels and replaces the first edition (ISO 2339-1972), of which it constitutes a technical revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Taper pins, unhardened

1 Scope and field of application

This International Standard specifies the characteristics of unhardened taper pins, with metric dimensions and nominal diameters, *d*, from 0,6 to 50 mm inclusive.

2 References

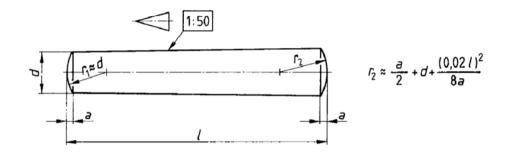
- ISO 2081, Metallic coatings -- Electroplated coatings of zinc on iron or steel.
- ISO 3269, Fasteners Acceptance inspection.
- ISO 4520, Chromate conversion coatings on electroplated zinc and cadmium coatings.

ISO 2339-1986 (E)

3 Dimensions

Type A (ground pins) : Surface finish $R_a = 0.8 \ \mu m$

Type B (turned pins) : Surface finish $R_a = 3,2 \ \mu m$



| | | | | | | | | | | | | | | | | | | | vimens | ions ir | n millir | netres |
|--------------------------|--------------------------------------|--------------------------------------|------|-----|------|------|-----|------|-----|-----|-----|------|------|------|-----|-----|-------|-----|--------|---------|----------|--------|
| d | | h10 ¹⁾ | 0,6 | 0,8 | 1 | 1,2 | 1,5 | 2 | 2,5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 16 | 20 | 25 | 30 | 40 | 50 |
| a | | и | 0,08 | 0,1 | 0,12 | 0,16 | 0,2 | 0,25 | 0,3 | 0,4 | 0,5 | 0,63 | 0,8 | 1 | 1,2 | 1,6 | 2 | 2,5 | 3 | 4 | 5 | 6,3 |
| | <i>(</i> 2) | | | | | | | | | | | | | | | | | | | | | |
| nom. | min. | max. | | | | | | | | | | | | | | | | | | | | |
| 2 3 4 | 1,75 2,75 3,75 | 2,25 3,25 4,25 | | | | | | | | | | | | | | | | | | | | |
| 5 6 8 | 4,75 5,75 7,75 | 5,25 6,25 8,25 | | | | | | | | | | | | | | | | | | | | |
| 10 12 14 | 9,75 11,5 13,5 | 10,25 12,5 14,5 | | | Rai | nge | | | | | | | | | | | | | | | | |
| 16 18 20 | 15,5 17,5 19,5 | 16,5 18,5 20,5 | | | | | | 0 | f | | | | | | | | | | | | | |
| 22 24 26 | 21,5 23,5 25,5 | 22,5 24,5 26,5 | | | | | | | | | | | | | | | | | | | | |
| 28 30 32 | 27,5 29,5 31,5 | 28,5 30,5 32,5 | | | | | | | | | | COI | nmer | cial | | | | | | | | |
| 35 40 45 | 34,5 39,5 44,5 | 35,5 40,5 45,5 | | | | | | | | | | | | | | | | | | | | |
| 50 55 60 | 49,5 54,25 59,25 | 50,5 55,75 60,75 | | | | | | | | | | | | | | | | | | | | |
| 65 70 75 | 64,25 69,25 74,25 | 65,75 70,75 75,75 | | | | | | | | | | | | | | ŀ | ength | s | _ | | | |
| 80 85 90 | 79,25 84,25 89,25 | 80,75 85,75 90,75 | | | | | | | | | | | | | | | | | | | | |
| 95 100 120 | 94,25 99,25 119,25 | 95,75 100,75 120,75 | | | | | | | | | | | | | | | | | | | | |
| 140 160 180 200 | 139,25 159,25 179,25 199,25 | 140,75 160,75 180,75 200,75 | | | | | | | | | | | | | | | | | | | | |

1) Other tolerances, for example, a11, c11, f8, as agreed between customer and supplier.

2) For nominal lengths above 200 mm, steps of 20 mm.

Dimensions in millimetres

| Material | St = Free-cutting steel, hardness 125 to 245 HV. Other materials as agreed between customer and supplier. | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|
| | Plain, i.e. pins to be supplied in natural finish treated with a rust-preventative lubricant, unless otherwise specified by agreement between customer and supplier. | | | | | | | |
| Surface finish | Preferred coatings are black oxide, phosphate coating or zinc plating with chromate conversion coating (see ISO 2081 and ISO 4520). Other coatings as agreed between customer and supplier. All tolerances shall apply prior to the application of a plating or coating. | | | | | | | |
| Workmanship | Parts shall be uniform in quality and free of irregularities or detrimental defects. No burrs shall appear on any part of the pin. | | | | | | | |
| Taper | The taper shall be inspected by use of an adequate optical comparator. | | | | | | | |
| Acceptability | The acceptance procedure is covered in ISO 3269. | | | | | | | |

4 Specifications and reference International Standards

5 Designation

Example for the designation of an unhardened steel taper pin, type A, with nominal diameter d = 6 mm and nominal length l = 30 mm :

Taper pin ISO 2339 - A - 6 \times 30 - St