INTERNATIONAL STANDARD

ISO 3466

Second edition
2016-03-01

Machine taper pin reamers with parallel shanks

Alésoirs à machine pour trous de goupilles coniques, à queue cylindrique

Reference number
ISO 3466:2016(E)

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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 9, *Cutting tools with defined cutting edges, cutting items*.

This second edition cancels and replaces the first edition (ISO 3466:1975), of which it constitutes a minor revision.

Machine taper pin reamers with parallel shanks

1 Scope

This International Standard lays down the dimensions of machine taper pin reamers with parallel shanks.

It covers only metric dimensions, which are the only recommended dimensions in the future for these types of reamers.

The reamers have been designed to produce holes for taper pins manufactured to ISO 2339, in the range of 2 mm to 12 mm nominal diameter.

Unless otherwise stated, these reamers will be right-hand cutting.

The flutes may be straight or left-hand spiral at the option of the manufacturer.

Hand taper pin reamers are dealt with in ISO 3465, and machine taper pin reamers with Morse taper shanks in ISO 3467.

2 Normative references

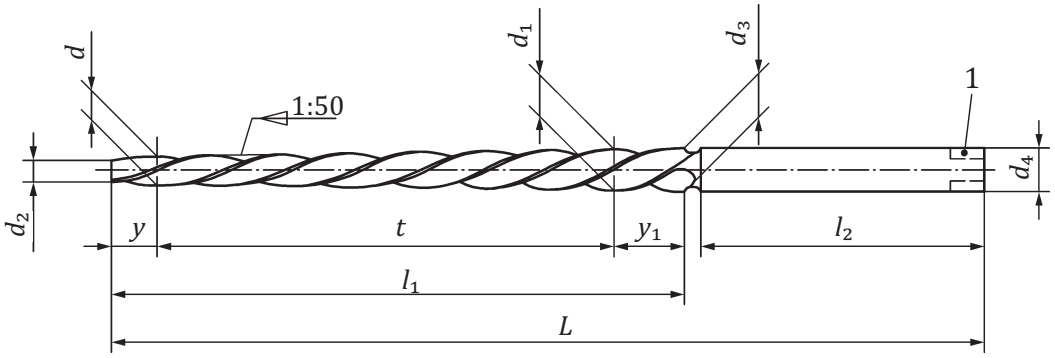
The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4203, *Parallel shank tools — Driving tenons and sockets — Dimensions*

3 Driving tenons

The dimensions of the driving tenons for machine taper pin reamers with parallel shanks, when required, shall be in accordance with ISO 4203.

4 Dimensions



Key

1 tenon dimensions in accordance with ISO 4203

Figure 1

Table 1

Dimensions in millimetres

d nominal	d_1	t	y	y_1	d_2	d_3	l_1	d_4 h9	l_2	L
2	2,7	35	5	8	1,9	2,86	48	3,15	29	86
2,5	3,2	35	5	8	2,4	3,36	48	3,15	29	86
3	3,9	45	5	8	2,9	4,06	58	4,0	32	100
4	5,1	55	5	8	3,9	5,26	68	5,0	34	112
5	6,2	60	5	8	4,9	6,36	73	6,3	38	122
6	7,8	90	5	10	5,9	8,00	105	8,0	42	160
8	10,6	130	5	10	7,9	10,80	145	10,0	46	207
10	13,2	160	5	10	9,9	13,40	175	12,5	50	245
12	15,6	180	10	20	11,8	16,00	210	16,0	58	290

Annex A
(informative)

Relationship between designations in this International Standard and ISO 13399

For relationship between designations in this International Standard and preferred symbols according to ISO 13399, see Table A.1.

Table A.1 — Relationship between designations in this International Standard and ISO 13399 series

Symbol in ISO 3466	Reference in ISO 3466	Property name in ISO 13399	Symbol in ISO 13399	Reference in ISO 13399
d	Figure 1 and Table 1	cutting diameter	DC	ISO/TS 13399-3 71CE7A96D9F7D
d_1	Figure 1 and Table 1	taper diameter largest	DTAX	ISO/TS 13399-3 726E3AA6C4A1C
d_2	Figure 1 and Table 1	interference cutting diameter	DCINTF	ISO/TS 13399-3 726E2FCC0EC78
d_3	Figure 1 and Table 1	cutting diameter maximum	DCX	ISO/TS 13399-3 71D084656CE32
d_4	Figure 1 and Table 1	connection diameter machine side	DCONMS	ISO/TS 13399-3 71EBDBF5060E6
L	Figure 1 and Table 1	overall length	OAL	ISO/TS 13399-3 71D078EB7C086
l_1	Figure 1 and Table 1	usable length	LU	ISO/TS 13399-3 71EBB33490FDA
l_2	Figure 1 and Table 1	shank length	LS	ISO/TS 13399-3 71CF298870946
t	Figure 1 and Table 1	taper length	—	—
y	Figure 1 and Table 1	distance reference point PK	LDC	ISO/TS 13399-3 726E3AAAF99A3
y_1	Figure 1 and Table 1	—	—	—
1:50	Figure 1	taper gradient	TG	ISO/TS 13399-3 71CEAEC02FEBD

Bibliography

[1] ISO 286–1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits*

[2] ISO 2339, *Taper pins, unhardened*

[3] ISO 3465, *Hand taper pin reamers*

[4] ISO 3467, *Machine taper pin reamers with Morse taper shanks*

[5] ISO/TS 13399-3:2014, *Cutting tool data representation and exchange — Part 3: Reference dictionary for tool items*