INTERNATIONAL STANDARD

ISO 10889-5

First edition
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Tool holders with cylindrical shank —

Part 5:
Type D with more than one rectangular seat

Porte-outil à queue cylindrique —

Partie 5: Porte-outil de type D comportant plusieurs logements

Reference number
ISO 10889-5:1997(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10889-5 was prepared by Technical Commitee ISO/TC 29, *Small tools*.

ISO 10889 consists of the following parts, under the general title *Tool holders with cylindrical shank*:

— *Part 1: Cylindrical shank, location bore — Technical delivery conditions*

— *Part 2: Type A, shanks for tool holders of special designs*

— *Part 3: Type B with rectangular radial seat*

— *Part 4: Type C with rectangular axial seat*

— *Part 5: Type D with more than one rectangular seat*

— *Part 6: Type E with cylindrical seat*

— *Part 7: Type F with taper seat*

— *Part 8: Type Z, accessories*

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Tool holders with cylindrical shank —

Part 5:
Type D with more than one rectangular seat

1 Scope

ISO 10889 applies to tool holders with cylindrical shank for machine tools with non-rotating tools, preferably for turning machines.

This part of ISO 10889 specifies dimensions, designations and complementary technical delivery conditions for tool holders with more than one rectangular seat of types D1 and D2 with cylindrical shank in accordance with ISO 10889-1. For non-standardized tool holders with more than one rectangular seat, such as tool holders as shown in the drawings, it is recommended to apply the corresponding specifications of this part of ISO 10889.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10889. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10889 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2768-1:1989, *General tolerances — Part 1: Tolerances for linear and angular dimensions wlithout individual tolerance indications.*

ISO 10889-1:1997, *Tool holders with cylindrical shank — Part 1: Cylindrical shank, location bore — Technical delivery conditions.*

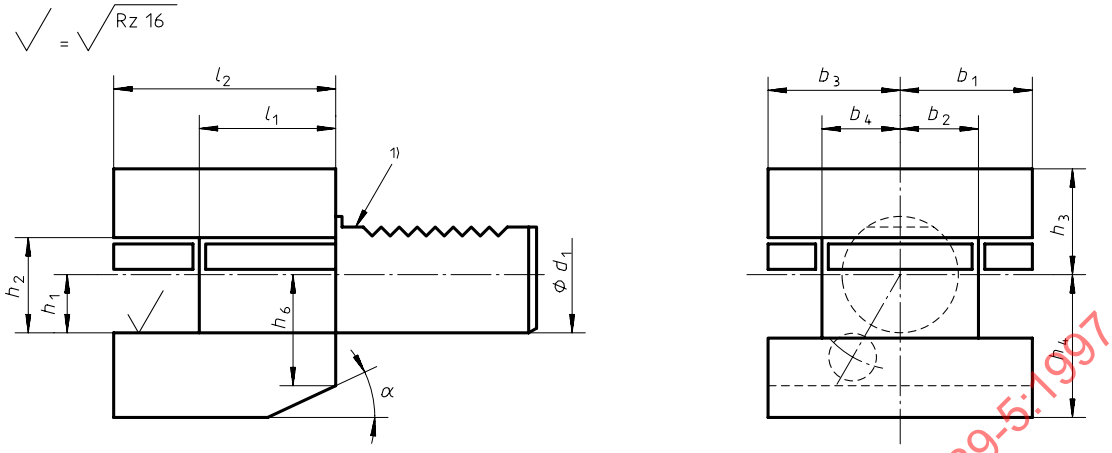
3 Dimensions

See figures 1 and 2 and table 1.

Unspecified details shall be chosen appropriately.

General tolerances: ISO 2768-1 - mB

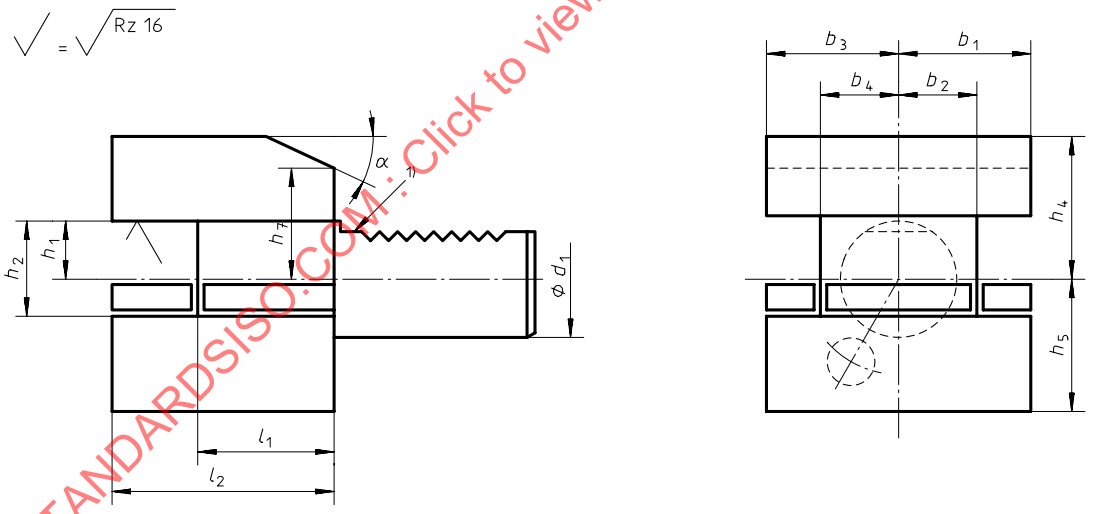
Surface roughness in micrometres



1) Cylindrical shank in accordance with ISO 10889-1.

Figure 1 — Type D1 tool holder

Surface roughness in micrometres



1) Cylindrical shank in accordance with ISO 10889-1.

Figure 2 — Type D2 tool holder

Table 1

Dimensions in millimetres

d_1	h_1 $^{0}_{-0,1}$	b_1	b_2 $^{+0,3}_{0}$	b_3	b_4 $^{+0,3}_{0}$	h_2 max.	h_3	h_4	h_5	h_6	h_7	l_1 $^{+0,5}_{0}$	l_2	α
25	16	33	19	33	19	22	25	30	25	25	25	34	48	30°
30	20	35	17	41	23	29	28	38	35	30	28	42	60	25°
40	25	42,5	21	47,5	25,5	34	32,5	48	42,5	—	—	50	72	—
50	32	50	26	55	30,5	41	35	60	50	—	—	60	85	—
60	32	57,5	33	57,5	33	41	42,5	62,5	62,5	—	—	85	110	—
80	40	76	42	76	42	53	55	80	80	—	—	105	140	—

4 Geometrical tolerances

See figure 3.

Dimensions in millimetres

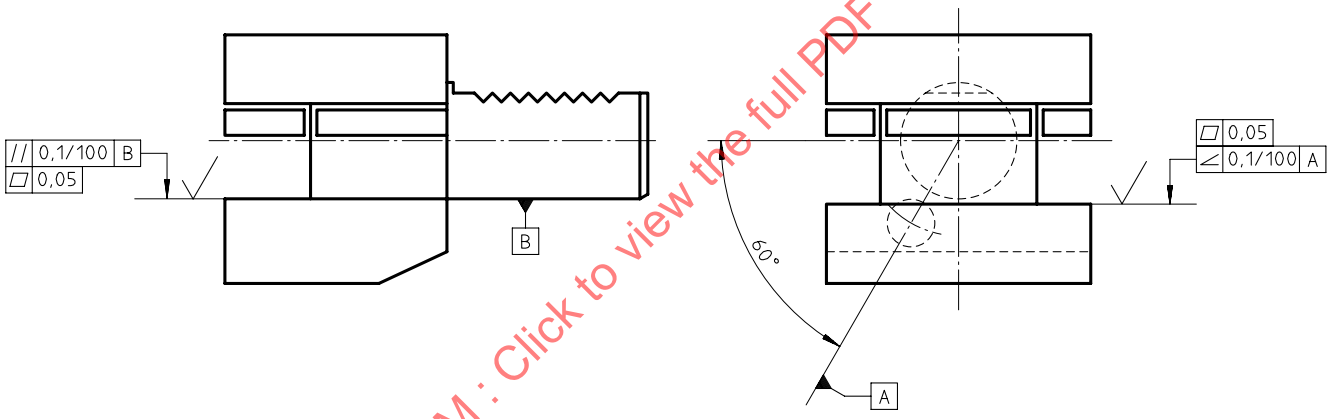


Figure 3 — Geometrical tolerances

5 Designation

A type D tool holder with more than one rectangular seat in accordance with this part of ISO 10889 shall be designated by

a) "Tool holder";
b) reference to this part of ISO 10889, i.e. ISO 10889-5;
c) type (D1 or D2);
d) nominal diameter, d_1, in millimetres;
e) nominal height, h_1, in millimetres.

EXAMPLE

A tool holder with more than one rectangular seat of type D1 with a nominal diameter d_1 = 60 mm and a nominal height h_1 = 32 mm is designated as follows:

Tool holder ISO 10889-5 - D1 - 60 × 32

6 Technical delivery conditions

As a complement to the requirements of ISO 10889-1 the following applies.

6.1 Design

Tool holders with more than one rectangular seat are equipped with a coolant supply with adjustable direction; the design is at the discretion of the manufacturer.

The tools shall be adjustable in the tool holder at right angles to the rectangular seat; the design is at the discretion of the manufacturer.

6.2 Scope of delivery

The scope of delivery of tool holders includes clamping elements for the clamping of the tools; the design of the clamping elements is at the discretion of the manufacturer.