INTERNATIONAL STANDARD

ISO 12164-4

Third edition
2023-10

Hollow taper interface with flange contact surface —

Part 4: Receivers of types T and U for hollow taper shanks of types T, TA and U

Interfaces à cône creux-face —

Partie 4: Nez de broches de types T et U pour queues de types T, TA et U

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Foreword

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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 document 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).

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This document was prepared by Technical Committee ISO/TC 29, *Small tools,* Subcommittee SC 9*, Tools with defined cutting edges, holding tools, cutting items, adaptive items and interfaces*.

This third edition cancels and replaces the second edition (ISO 12164-4:2014), which has been technically revised.

The main changes are as follows:

— new HSK-types added;

— for HSK-types T, U and new HSK-type TA;

— some editorial changes.

A list of all parts of the ISO 12164 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Hollow taper interface with flange contact surface —

Part 4: Receivers of types T and U for hollow taper shanks of types T, TA and U

1 Scope

This document specifies dimensions for receivers with taper and flange contact surfaces for hollow taper shanks (HSK) according to ISO 12164-3 to be applied to machine tools (turning and combinations of turning and milling machines).

This document specifies two types of receivers:

— type T for automatic tool change;

— type U for manual tool change only, via radial holes in both the receiver and the tool shank.

NOTE 1 The receivers of types T and U fit the HSK shanks T, TA and U (according to ISO 12164-3). The receivers also fit the HSK shanks A, AB, C and CB according to ISO 12164-1.

NOTE 2 HSK types A, AB, C, CB, T and TA can also be changed manually.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— EC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

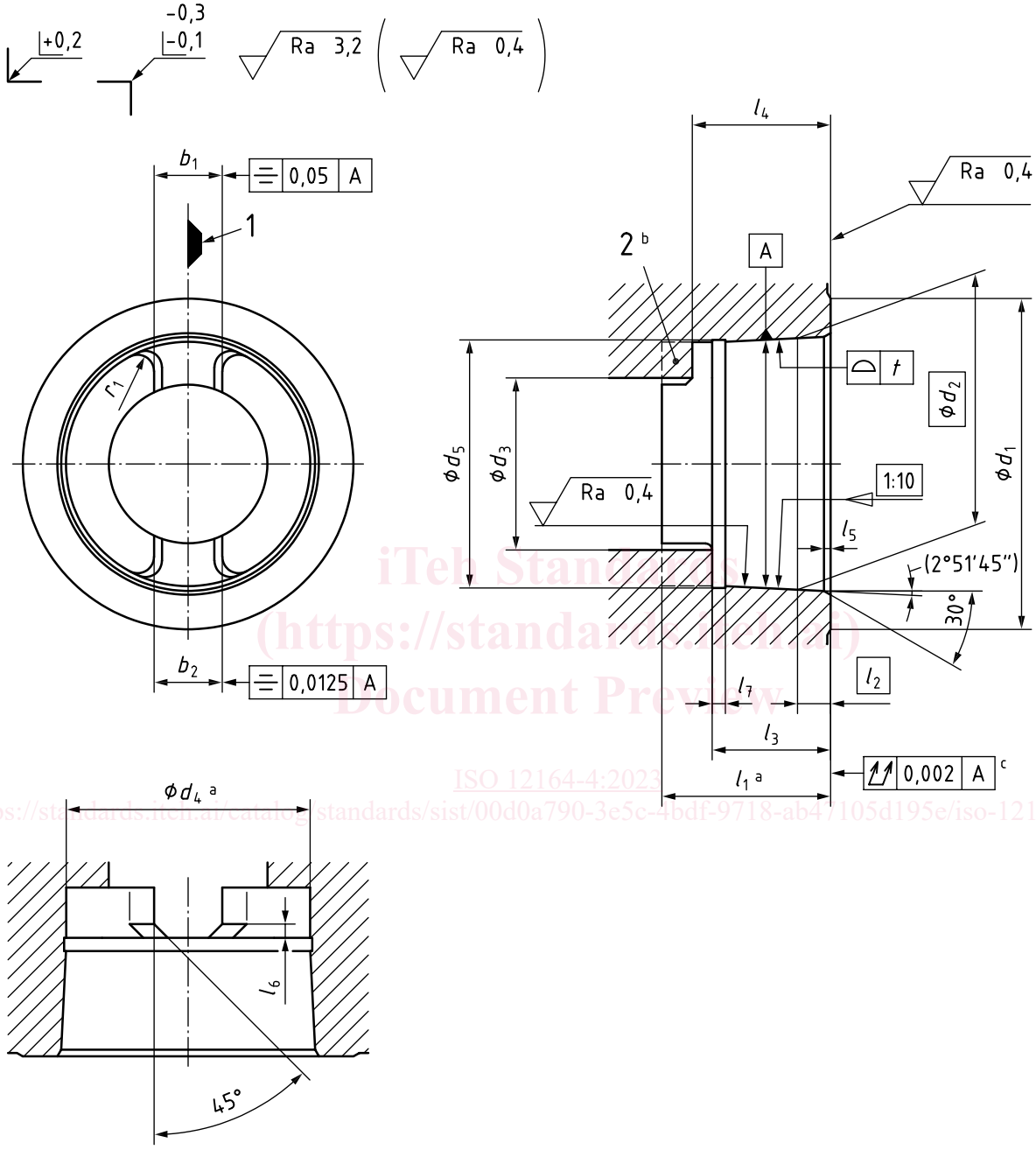
4 Receivers for hollow taper shanks, types and dimensions

4.1 General

Dimensions of receivers for hollow taper shanks with flange contact surface of types T, TA and U are specified in Figure 1, Figure 2 and in Table 1. Details not specified shall be chosen expediently. Tolerances of form, orientation, location and run-out correspond to ISO 1101. Dimensions and tolerances of cones are according to ISO 3040. Tolerances not specified shall be of tolerance class “m” in accordance with ISO 2768-1. Recommendations for use and application are provided in Annex A.

4.2 Receiver of type T for hollow taper shanks of types T and TA

The dimensions of a receiver for hollow taper shanks of types T and TA shall be in accordance with Figure 1 and Table 1.



Key

1 position of the cutting edge for right hand tools with single cutting edge

2 tenon block

a With inserted tenon blocks, the taper may extend over the total depth l_1.

b Tenon blocks, either integrated or inserted.

c Not convex.

Figure 1 — Receiver of type T for hollow taper shanks of types T and TA