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**Milling cutters with tenon drive —  
Interchangeability dimensions for  
cutter arbors — Metric series**

*Fraises à métaux à entraînement par tenons — Dimensions  
d'interchangeabilité avec les mandrins porte-fraise — Série métrique*

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Published in Switzerland

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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](http://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](http://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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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*.

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](http://www.iso.org/members.html).

This fourth edition cancels and replaces the third edition (ISO 2780:2006), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- addition of [Annex A](#);
- correction of [Figure 3](#);
- editorial changes to align with the ISO/IEC Directives.

# Milling cutters with tenon drive — Interchangeability dimensions for cutter arbors — Metric series

## 1 Scope

This document specifies the dimensions for interchangeability between milling cutters with tenon drive and the cutter seating of cutter arbors.

It is applicable only to milling cutters of the metric series.

It gives the interchangeability dimensions for:

- the milling cutters;
- the cutter seating on the arbor;
- the cutter retaining screw on the cutter arbor.

## 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 240, *Milling cutters — Interchangeability dimensions for cutter arbors or cutter mandrels*

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 terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

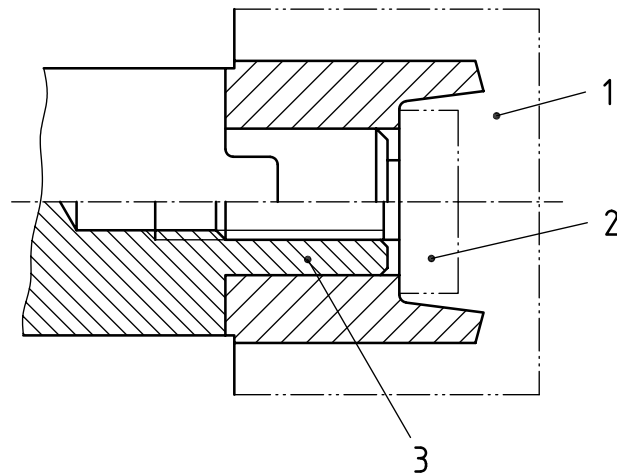
## 4 Dimensions

### 4.1 General

All dimensions and tolerances are given in millimetres. Tolerances not specified shall be of tolerance class m, in accordance with ISO 2768-1.

### 4.2 General layout

See [Figure 1](#).



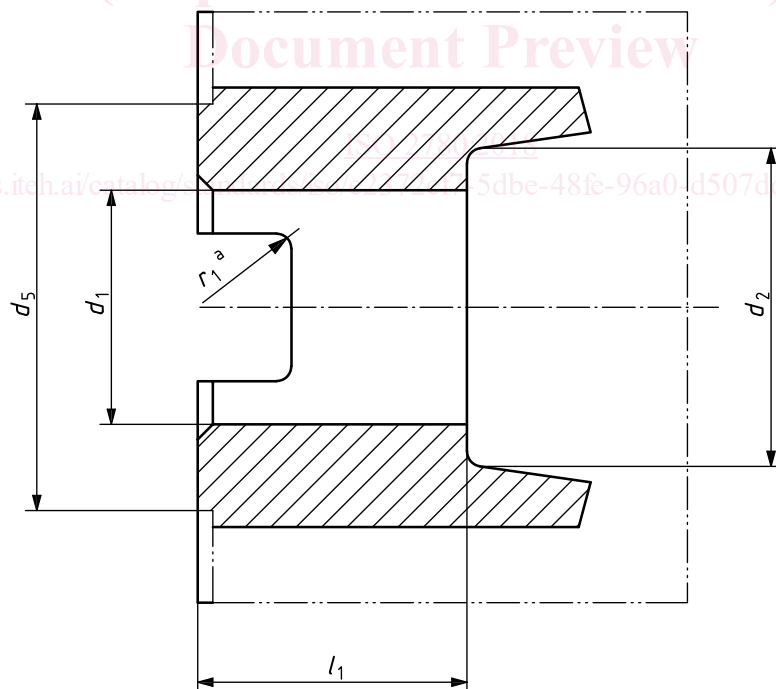
**Key**

- 1 tenon drive cutter
- 2 cutter retaining screw on cutter arbor
- 3 arbor spigot

**Figure 1 — General layout**

**4.3 Interchangeability dimensions of cutter**

The dimensions for the interchangeability of the cutter are shown in Figure 2 and given in Table 1.



**Key**

- <sup>a</sup> For dimensions  $r_1$ , see ISO 240.

**Figure 2 — Cutter**