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**Cutter arbors with tenon drive —**  
**Part 1:**  
**Dimensions of Morse taper**

*Mandrins porte-fraise à entraînement par tenons —*  
*Partie 1: Dimensions des cônes Morse*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 3937-1 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 2, *High speed steel cutting tools and their attachments*.

This first edition of ISO 3937-1, together with ISO 3937-2, cancels and replaces ISO 3937:1985, which has been technically revised.

ISO 3937 consists of the following parts, under the general title *Cutter arbors with tenon drive*:

- *Part 1: Dimensions of Morse taper*
- *Part 2: Dimensions of 7/24 taper*
- *Part 3: Dimensions of hollow taper interface with flange contact surface*

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# Cutter arbors with tenon drive —

## Part 1: Dimensions of Morse taper

### 1 Scope

This part of ISO 3937 specifies the dimensions of cutter arbors with tenon drive and with Morse tapers.

The interchangeability dimensions of the milling cutter bearing on the cutter arbor are in conformity with ISO 2780.

The dimensions of the retaining screw used are specified in ISO 2780.

Morse tapers are in conformance with ISO 296 and ISO 5413.

### 2 Normative references

The following referenced documents are indispensable for the application 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 296, *Machine tools — Self-holding tapers for tool shanks*

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

ISO 2768-2, *General tolerances — Part 2: Geometrical tolerances for features without individual tolerance indications*

ISO 2780, *Milling cutters with tenon drive — Interchangeability dimensions for cutter arbors — Metric series*

ISO 5413, *Machine tools — Positive drive of Morse tapers*

### 3 Dimensions

#### 3.1 General

All dimensions and tolerances are given in millimetres. Tolerances not specified shall be of tolerance class “m” in accordance with ISO 2768-1 and of tolerance class “mk” in accordance with ISO 2768-2.