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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 37891.1-2019

Cutter arbors with parallel key and tenon drive -- Part 1: General dimensions

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Foreword

GB/T 37891 "Milling cutter with flat key and end key drive" is divided into 6 parts.

--- Part 1. General size;

--- Part 2. Dimensions and markings of hollow cone-shank shanks with flanged contact surfaces;

--- Part 3. Dimensions and markings with 7.24 automatic tool changer taper shank;

--- Part 4. Dimensions and markings with 7.24 manual tool changer taper shank;

--- Part 5. Dimensions and markings of multi-sided taper shank with flanged contact surfaces;

--- Part 6. Dimensions and markings of modular taper shank with steel ball tensioning system.

This part is the first part of GB/T 37891.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the redrafting method to modify the ISO 10649-1.2013 milling cutter with flat key and end key drive. Part 1. General

size".

The technical differences between this part and ISO 10649-1.2013 and their reasons are as follows.

---About the normative reference documents, this part has made technical adjustments to adapt to China's technical conditions, adjustments

The situation is reflected in Chapter 2, "Regulatory Citations", and the specific adjustments are as follows.

* Replace ISO 2768-2 with GB/T 1184 equivalent to the international standard;

* Replace ISO 2768-1 with GB/T 1804 equivalent to the international standard;

* Replace ISO 2780 with GB/T 20329 equivalent to the international standard;

* Replace ISO 10643 with GB/T 37895 modified to international standards.

--- Revised the drawing method of the bolt in Figure 1, the original international standard drawing method is wrong.

This section has made the following editorial changes.

--- Removed references to international standards.

This part was proposed by the China Machinery Industry Federation.

This part is under the jurisdiction of the National Tool Standardization Technical Committee (SAC/TC91).

This section drafted by. Chengdu Tool Research Institute Co., Ltd., Sentai Yingge (Chengdu) CNC Tool Co., Ltd.

1 Scope

This part of GB/T 37891 specifies the dimensions of the interface of the milling cutter tool with flat key and end key drive.

This section applies to milling cutters with flat and end key drives.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1184 Shape and position tolerances without tolerance values (GB/T 1184-1996, eqvISO 2768-2. 1989)

GB/T 1804 General tolerances No tolerances for linear and angular dimensions (GB/T 1804-2000, eqvISO 2768-1.

1989)

GB/T 20329 end-key transmission milling cutter and cutter holder interchangeable size (GB/T 20329-2006, ISO 2780.1986,

IDT)

GB/T 37895 with flat key and end key drive milling cutter attachment size (GB/T 37895-2019, ISO 10643.2009, MOD)

3.1 General provisions

All dimensions and tolerances are in millimeters, unfilled tolerances are in accordance with the "m" class of GB/T 1804, and unformed geometric tolerances are in accordance with GB/T 1184.

The "k" level of the regulation.

The diagram is only a schematic diagram, does not represent the design diagram, just gives the dimensions that need to be met.

The interchangeable dimensions of the milling cutter on the milling cutter are in accordance with GB/T 20329.

See Appendix A for the relationship between the dimensional symbols in this section and the symbols in the ISO 13399 series of standards.

3.2 Milling cutter tool interface size

The dimensions of the milling cutter tool interface are shown in Figure 1 and Table 1.