ICS 25.100.20
CCS J 41

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 20323-2020

Replacing GB/T 20323.1-2006, GB/T 20323.2-2006

Milling cutters designation - Shank-type and bore-type milling cutters of solid or tipped design or with indexable cutting edges

Issued on: November 19, 2020 **Implemented on: March 1, 2021**

Issued by: State Administration for Market Regulation, China National Standardization Administration

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 20323.1-2006 "Milling Cutter Code Part 1.Shank End Mills with Integral or Inserted Tooth Structure",

GB/T 20323.2-2006 "Milling Cutter Code Part 2.Shank and Hole Milling Cutters with Indexable Inserts".

Compared with GB/T 20323.1-2006 and GB/T 20323.2-2006, the main changes of this standard are as follows.

---Added normative references;

---Modified the brief description of the code;

---According to the brief description of the new code, the symbol rules have been modified;

---Modified manufacturer information;

---Modified the additional information of cutting some materials;

---Informative Appendix A has been added.

This standard uses the redrafting method to modify and adopt ISO 11529.2013 ``Milling cutter code integral or insert structure or with indexable cutting

Shank and hole milling cutters.

The technical differences between this standard and ISO 11529.2013 and the reasons are as follows.

--- Regarding normative reference documents, this standard has made adjustments with technical differences to adapt to my country's technical conditions and adjustments.

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

* Added reference to ISO /T S13399-60 (see 4.9 and Table 7).

---In Table 7, the corresponding common types of HSK handles in China have been added. The reason is that it was not popular before.2013 and the current production volume is increasing.

increase.

---In the symbol (number 11) for identifying the size of the shank, a polygonal shank with a flange contact surface and a steel ball tensioner are added

The example of the tapered shank of the module of the system, the reason is that there is its type in Table 7, so the example is improved.

This standard has made the following editorial changes.

---Modify the standard name to "milling cutter code integral or toothed structure or shank and hole milling cutter with indexable cutting edge".

This standard was proposed by China Machinery Industry Federation.

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

Drafting organizations of this standard. Sentai Inge (Chengdu) CNC Tool Co., Ltd., Chengdu Tool Research Institute Co., Ltd., Taizhou University Zhejiang

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1 Scope

This standard specifies the code names of shank and hole milling cutters with integral or inserted tooth structure or with indexable cutting edges to simplify users and supply

The supplier's communication with this type of tool.

This standard applies to shank and hole milling cutters with integral or inserted tooth structure or with indexable cutting edges.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

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

ISO 3002-1 Basic Parameters of Cutting and Grinding Processing Part 1.General Terms and Basics of Geometric Parameters of the Working Part of the Tool

Quasi-coordinate system, tool angle and working angle, chip breaker (Basicquantitiesincuttingandgrinding-Part 1.Geometryof

theactivepartofcuttingtools-Generalterms,referencesystems,toolandworkingangles,chip

breakers)

ISO 3002-3 Basic parameters of cutting and grinding. Part 3.Geometric parameters and motion parameters in cutting (Basicquan-

titiesincuttingandgrinding-Part 3.Geometricandkinematicquantitiesincutting)

ISO /T S13399-60 Cutting tool data expression and exchange Part 60.Connection system reference dictionary (Cuttingtooldata

representationandexchange-Part 60.Referencedictionaryforconnectionsystems)

3 Brief description of code

The code of shank and hole milling cutters is composed of codes containing several symbols. These codes are used to identify important features of milling cutters.

Additional information about the manufacturer or supplier is specified in Chapter 5.

The symbols of this standard are defined as follows.

Definition of number symbol