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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 5900.3-2022

Machine tools - Connecting dimensions of spindle noses and work holding chucks - Part 3: Bayonet type

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules of Standardization Documents"

drafted.

This document is part 3 of GB/T 5900 "Dimensions for the connection between the end of the machine tool spindle and the chuck". GB/T 5900 has been released to

the next part.

--- Part 1.Conical connection;

--- Part 2.Cam locking type;

--- Part 3.Bayonet type;

--- Part 4.Cylindrical connection.

This document replaces GB/T 5900.3-1997 "Interchangeable dimensions of the end of the machine tool spindle and the faceplate - Part 3.Bayonet type", and

Compared with GB/T 5900.3-1997, in addition to structural adjustment and editorial changes, the main technical changes are as follows.

a) Deleted "transmission key" (see Chapter 5 of the.1997 edition);

b) Changed Figure 1 (see Figure 1, Figure 1 of the.1997 edition), Figure 2 (see Figure 2, Figure 3 of the.1997 edition), Figure 3 (see Figure 3, the.1997 edition

Figure 2) and Figure 4 (see Figure 4, Figure 6 and Figure 7 of the.1997 edition);

c) Changed Table 1 (see Table 1, Table 1 of the.1997 edition), Table 2 (see Table 2, Table 4 and Table 5 of the.1997 edition), Table 3 (see Table 3,.1997

Table 2 of the.1997 edition) and Table 4 (see Table 4, Table 6 and Table 7 of the.1997

edition).

This document is identical to ISO 702-3.2007 "Dimensions for the connection between the end of the machine tool spindle and the chuck - Part 3.Bayonet type".

Two chapters "Normative References" and "Terms and Definitions" have been added to this document.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

There are four main types of connection methods between the end of the machine tool spindle and the chuck in my country. conical connection, cam locking type, bayonet type and cylindrical connection.

The dimensions of these four connection methods vary greatly. In order to facilitate the use of related products such as machine tool spindles and chucks in my country,

It needs to be standardized. GB/T 5900 "Dimensions of the connection between the end of the machine tool spindle and the chuck" can better solve the problem of different machine tool spindles and chucks.

The problem of the connection size of the disc provides a unified dimension for the manufacturers and users of the machine tool and the chuck, which is to be composed of four parts.

--- Part 1.Conical connection. The purpose is to establish the correlation between the end of the machine tool spindle and the chuck in the form of a conical connection type connection.

size.

--- Part 2.Cam locking type. The purpose is to establish the relationship between the end of the machine tool spindle and the chuck in the form of a cam lock type connection.

off size.

--- Part 3.Bayonet type. The purpose is to establish the relative dimensions between the end of the machine tool spindle and the chuck in the form of a bayonet-type connection.

--- Part 4.Cylindrical connection. The purpose is to establish the correlation between the end of the machine tool spindle and the chuck in the form of a cylindrical connection type connection.

size.

Combined with the specific situation of the bayonet-type connection at the end of the machine tool spindle and the relevant dimensions between the chucks, with the

advancement of technology and the development of products

Development, there are new requirements and suggestions based on the content of GB/T 5900.3-1997, at the same time, ISO 702-3 has released the.2007 edition.

In view of this, this document is equivalent to ISO 702-3.2007, and the relevant technical content of GB/T 5900.3 is revised and improved to continuously adapt to domestic

New changes in foreign-related standards and new demands for technological progress and development of production practices.

Dimensions of the connection between the end of the machine tool spindle and the chuck

Part 3.Bayonet Type

1 Scope

This document specifies the interchangeable dimensions of bayonet-type machine tool spindle ends and corresponding connecting discs or chucks.

Note. Conical connection, cam lock type and cylindrical type are specified in ISO 702-1, ISO 702-2, ISO 702-4 respectively.

2 Normative references

There are no normative references in this document.

3 Terms and Definitions

There are no terms and definitions that need to be defined in this document.

4 Interchangeability

All linear dimensions and tolerances in this document are in millimeters (mm).