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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5900.4-2022

**Machine tools - Connecting dimensions of spindle noses and
work holding chucks - Part 4: Cylindrical connection**

Issued on: July 11, 2022

Implemented on: February 1, 2023

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

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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 4 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 is identical to ISO 702-4.2004 "Dimensions of the connection between the end of the machine tool spindle and the chuck - Part 4. Cylindrical connection".

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 scale for the manufacturers and users of the machine tool and chuck, and it is planned to be composed of 4 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.

With the advancement of technology and the development of products, there is a demand for the relative dimensions between the end of the machine tool spindle and the chuck in the form of a cylindrical connection.

In order to meet the requirements of interchangeability and versatility of machine tool products at home and abroad, the actual situation of existing products and the use of users are equivalent to using ISO 702-

4.2004 developed this document.

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

Part 4. Cylindrical connections

1 Scope

This document specifies the interchangeable dimensions of cylindrical machine tool spindle

ends and corresponding connecting discs or chucks.

Note. "Conical connection type", "cam lock type" and "bayonet type" are specified in ISO 702-1, ISO 702-2 and ISO 702-3 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.

4.1 Spindle end

This document only specifies a distribution circle with a diameter of d_2 , with 6 threaded holes for No. 3 and 12 threaded holes for Nos. 4 to 28.

The dimensions of the spindle end are shown in Figure 1 and Table 1.

Figure 1 Spindle end