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

GB/T 36485.2-2018

**Tool holders with rectangular shank for indexable inserts -- Part
2: Arbor dimension**

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Foreword

GB/T 36485 "Rectangular shank with indexable insert" is divided into two parts.

--- Part 1. Determination, relevance and size determination;

--- Part 2. Toolbar size.

This part is the second part of GB/T 36485.

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

This section uses the redrafting method to modify the ISO 5610-2.2014 "Rectangular shank with indexable inserts Part 2. A

Type, ISO 5610-3.2014 "Rectangular shank with indexable inserts Part 3. Type B", ISO 5610-4.2014 "Installable indexable knives

Piece of rectangular shank shank Part 4. D-type, ISO 5610-5..2014 "Rectangular shank with indexable inserts Part 5. F-type",

ISO 5610-6.2014 "Rectangular shank with indexable inserts - Part 6. Type G", ISO 5610-7.

Rectangular shank shank part 7. J type, ISO 5610-8..2014 "Rectangular shank with indexable inserts Part 8. K type",

ISO 5610-9.2014 "Rectangular shank with indexable inserts - Part 9. L-type", ISO 5610-10.

Rectangular shank shank Part 10. N-type, ISO 5610-11.2014 "Rectangular shank with

indexable inserts - Part 11. R

Type", ISO 5610-12.2014 "Rectangular shank with indexable inserts Part 12. S-type", ISO 5610-13.2014 "Installable indexable

Rectangular shank for inserts - Part 13. T-type, ISO 5610-14..2014, s.

H-type", ISO 5610-15..2014 "Rectangular shank with indexable inserts Part 15. V-type" (English version).

This section has more adjustments in structure than ISO 5610-2~5610-15.2014.

--- The dimensions of parts 2~15 of the international standard correspond to 3.2~3.15 of this part;

--- The common mark and design of the second part of the international standard, corresponding to Chapter 4 and Chapter 5 of this part;

--- Sections 2 to 15 of the International Standards are listed in Chapter 7 of this section;

--- Deleted Chapters 7 and 8 of Sections 2 to 15 of the International Standards;

--- Added Chapters 6 and 8.

The technical differences and reasons for this part and ISO 5610-2~5610-15.2014 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 References", and the specific adjustments are as follows.

* Replaced ISO 5068.2012 with GB/T 5343.1 modified to adopt international standards;

* Replace ISO 5610-1.2014 with GB/T 36485.1-2018 modified to international standards;

* Add references to GB/T 2078, GB/T 2079, GB/T 2080;

--- Added Chapter 6 appearance and surface roughness;

--- Chapter 7 adds material selection and hardness;

--- Added Chapter 8 logo and packaging.

This section has made the following editorial changes.

--- Changed the standard name.

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 is mainly drafted by: Chengdu Tool Research Institute Co., Ltd., Sentai Yingge (Chengdu) CNC Tool Co., Ltd.

1 Scope

This part of GB/T 36485 specifies the dimensions of the following rectangular shank holders for indexable inserts.

- Type A rectangular handle arbor of the indexable insert with the main angle Kappap equal to 90° ;
- B-type rectangular handle arbor of the indexable insert with the main angle Kappap equal to 75° ;
- D-shaped rectangular shank with indexable inserts with a main angle Kappap equal to 45° ;
- F-shaped rectangular handle arbor with indexable inserts with a main angle Kappap equal to 90° ;
- G-shaped rectangular handle arbor of the indexable insert with the main angle Kappap equal to 75° ;
- J-shaped rectangular shank with indexable inserts with a main angle Kappap equal to 93° ;
- K-shaped rectangular shank for indexable inserts with a main Kappap Kappap equal to 75° ;
- L-shaped rectangular handle arbor of the indexable insert with the main angle Kappap equal to 95° ;
- N-shaped rectangular handle arbor of the indexable insert with the main angle Kappap equal to 63° ;
- R-shaped rectangular handle arbor of the indexable insert with the main angle Kappap equal to 75° ;
- S-shaped rectangular shank with indexable inserts with a main angle Kappap equal to 45° ;
- T-shaped rectangular shank with indexable inserts with main angle Kappap equal to 60° ;
- H-shaped rectangular shank for indexable inserts with a main angle Kappap equal to 107.5° ;
- V-shaped rectangular shank with indexable inserts with a main angle Kappap equal to 72.5° .

This section applies to rectangular shank shanks with indexable inserts. The material of

indexable inserts is made of cemented carbide or other cutting materials.

The indexing insert is clamped on the arbor and used for rotary turning.

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 2078 Carbide indexable inserts with rounded holes for fixing (GB/T 2078.2007, ISO 3364.1997, MOD)

GB/T 2079 Carbide indexable inserts with rounded corners without fixing holes (GB/T 2079.2015, ISO 883.2013, IDT)

GB/T 2080 Carbide indexable inserts with rounded counterbore fixing (GB/T 2080.2007, ISO 6987.1998, IDT)

GB/T 5343.1 Indexable turning tools and tool holders - Part 1. Specification of the model (GB/T 5343.1-2007, ISO 5608.

1995, MOD)

GB/T 36485.1-2018 Rectangular shank holders with indexable inserts - Part 1
(ISO 5610-1..2014, MOD)

3.1 General instructions

All figures are just schematics and are only used for dimensioning.

For the determination of dimensions h_1 , f and l_1 , see GB/T 36485.1-2018. See the GB/T 5343.1 for the type of tool holder.

Note. The values of the rake angle and the blade inclination angle shown in the figure are recommended values and can be changed according to the actual application.

3.2 Type A arbor

3.2.1 Install the (C) diamond-shaped indexable insert type A shank according to Figure 1 and Table 1.

Note. In the figure is the right arbor view, and the left arbor view is flipped 180°.

a Blade inclination angle λ_{bd} .

b rake angle γ_{ma} .