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

**GB/T 15306.3-2008**

Replacing GB/T 15306.3-1994

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**Indexable inserts for cutting tools - Ceramic inserts with  
rounded corners - Part 3: Dimensions of inserts without fixing  
hole(Class U)**

陶瓷可转位刀片 第3部分：无孔刀片尺寸（U级）

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### Foreword

GB/T 15306 "Ceramic indexable insert" is divided into four parts.

--- Part 1. nonporous blade size (class G);

--- Part 2. perforated blade size;

--- Part 3. nonporous blade size (U level);

--- Part 4. Technical specifications. This section GB/T Part of 315,306. This part is GB/T 15306.3-1994 "ceramic indexable inserts without fixing hole size (U)" for amendments. This Part replaces GB/T 15306.3-1994. Section compared with the GB/T 15306.3-1994 The main changes are as follows:

--- Canceled a standard

5.1 text. You can also choose K, P-type;

--- Modify the cutting edge cross-sectional shape of the symbol S, K (formerly standard

5.2 Figure 1 cutting edge cross-sectional shape symbol S is amended as K, the symbol K Modify S);

--- Increasing the cross-sectional shape of the cutting edge symbol K (the original standard

--- Modify the markup example (Chapter 9 of the original standard markup example in grades modify material code);

--- Modify the name of measuring instruments Appendix A (Appendix A of the original block gauge modify the amount of blocks, dial gauge modify instruction sheet). Appendix A of this section is an informative annex. This part is proposed by China Machinery Industry Federation. This part of the tool by the National Standardization Technical Committee (SAC/TC91) centralized. This section is drafted. Chengdu Tool Institute. The main drafters of this section. Lucy Liu, check States soldiers. This part of the standard replaces the previous editions are.

--- GB/T 15306.3-1994. Ceramic indexable inserts Part 3. nonporous blade size (U level)

## 1 Scope

GB/T 15306.3-2008 is the Chinese national standard on indexable inserts for cutting tools - ceramic inserts with rounded corners - part 3: dimensions of inserts without fixing hole(class u), in the field of manufacturing engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 3 June 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2009. Classification: ICS 25.100.01, CCS J41. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB/T 15306 specifies the rounded tip, without fixing hole, law backward angle is 0 °, U-grade precision, ceramic cutting materials Into indexable insert size. These blades clamped on the main from the top and turning Boring Bars. This section applies to a variety of ceramic cutting materials made of non-porous grade U indexable insert. Ceramic cutting material consists of a variety of oxides, nitrides and carbides and metal components. For example, such ceramic materials are. Oxidation Ceramic material (composed mainly of aluminum oxide Al<sub>2</sub>O<sub>3</sub>) oxide - carbide ceramics (mainly composed of other materials such as alumina and titanium carbide TiC group A), nitride ceramics (typically made of silicon nitride Si<sub>3</sub>N<sub>4</sub>, and other materials such as aluminum oxide and yttrium oxide Y<sub>2</sub>O<sub>3</sub>).

## 2 Normative references

The following documents contain provisions which, through reference

GB/T 15306 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 2075 Classification and use of cutting large groups and groups of application of hard cutting materials classification code ( GB/T 2075- 2007, ISO 513.2004, IDT)

GB/T 2076 Rules of cutting tools represented by indexable insert size ( GB/T 2076-2007, ISO 1832.2004, MOD)

GB/T 15306.4 Ceramic indexable inserts - Part 4. Technical conditions

### 3 Blade type

Ceramic indexable inserts of the type specified in this standard are as follows: TN. Law backward blade angle of  $0^\circ$  of the equilateral triangle; SN. Act backward square blade angle of  $0^\circ$ ; EN. France back angle is  $0^\circ$  and  $80^\circ$  nose angle of the diamond blade; DN. France back angle is  $0^\circ$  and  $75^\circ$  nose angle of the diamond blade; HN. France back angle is  $0^\circ$  in the hexagonal blade; WN. Law and backward angle of  $0^\circ$  to  $80^\circ$  nose angle is not equilateral equiangular hexagon blade; FN. Law and backward angle of  $0^\circ$  to  $82^\circ$  nose angle is not equilateral equiangular hexagon blade; RN. circular blade method backward angle of  $0^\circ$ . This Part of the blade has two kinds of chip breaker grooves with and without chip breaker. Usually you should use ceramic inserts with a chamfer or rounding the cutting edge of the cutting edge, see Chapter 5.

### 4 Tolerance

Ceramic provisions of this Part of the indexable insert U-level accuracy available under GB/T 2076 regulations. Tolerance according to GB/T 2076 defined values listed in Tables 2 to 5.

### 5 Cutting edge

5.1 cross-sectional shape of the cutting edge Sectional shape of the cutting edge ceramic indexable inserts provisions of this Part may be selected from those cross-sectional shape of the GB/T 2076 provisions of.