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

GB/T 35479-2017

Replacing GB/T 6409.1-1994

**Super-abrasive products -- Grinding tools with diamond or
cubic boron nitride -- General survey and designation**

超硬磨料制品 金刚石或立方氮化硼磨具 形状总览和标记

(English Translation)

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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 6409.1-1994 "superhard abrasive and saw shape overview, mark", compared with GB/T 6409.1-1994 the technical changes are as follows.

- Modify the scope of the standard (see Chapter 1, 1994 edition Chapter 1);
- Modify the normative references (see Chapter 2, Chapter 2 of the 1994 edition);
- Increased 10 and 13 matrix (see Table 1, 1994 edition of Table 4);
- Modify part of the abrasive layer section shape (see Table 2, 1994 edition of Table 5);
- Increases the basic shape of the K-type base modification, standardizing countersink and countersink language (see Table 4, 1994 edition of Table 7);
- Increasing the shape of the stone mark method (see 3.2);
- Revised part of the size code (see Chapter 4, 1994 edition Chapter 4);
- Increased part of the code number of metal binding agent (see Table 6, 1994 edition of Table 10);
- Increased part of the concentration of the code, corrected the concentration of expression, increasing the concentration of cubic boron nitride abrasive content (see Table 7, Table 11 of the 1994 edition);
- Modified part of the shape and marking (see Table A.1 ~ Table A.4, 1994 edition of Table 1 ~ Table 3).

This standard uses redrafted Law Amending the use of ISO 6104:2005 "superhard abrasive diamond or cubic boron nitride abrasive shape Like overview, labeling and multi-country terminology. " this standard compared with ISO 6104:2005, there are more structural

adjustments, Appendix B lists the standard and ISO 6104:2005 Chapter number control list.

This standard and ISO 6104:2005 technical differences and the reasons are as follows.

--- This standard adds a normative references chapter, these normative references are to meet the increase of abrasive and granularity and improve the need for size tagging

--- In addition to grinding wheel, grinding head and saws, an increase of millstone, and increased the type 15 matrix and some abrasive layer section shape to expand the standard Coverage, while the English name made the corresponding changes;

--- Clearly pointed out that does not apply to single product standards for the shape and marking otherwise provided for diamond or cubic boron nitride abrasive, the actual situation in our country

--- Added some size code and added the icon to meet the actual needs and easy to understand the definition of size;

--- Increasing the abrasive and particle size and binding agent code, retaining the former version of the international standards exist in the concentration code, and added to improve the production Product markup content and markup examples to ensure the integrity of the product markup content;

--- Put the contents of the appendix A and appendix B of the international standard into the main text so as to meet the standards of our country to write the rules and the usage habit.

This standard made the following editorial changes.

--- The standard name was revised to "superhard abrasive diamond or cubic boron nitride abrasive shape overview and marking." this standard is proposed by the China Machinery Industry Federation.

This standard by the National Abrasives Standardization Technical Committee (SAC/TC139) centralized.

This standard was drafted unit. Zhengzhou abrasive grinding Institute Co., Ltd., Beijing Aetna Steel Research superhard material products limited liability company, Guilin Special Bond New Materials Co., Ltd., Suzhou Hite Diamond Products Co., Ltd., Guangdong Ben Long New Materials Co., Ltd., Guangdong New King Kong New Materials Technology Co., Ltd.

1 Scope

This standard specifies the diamond or cubic boron nitride abrasive shape overview and marking.

This standard applies to diamond or cubic boron nitride grinding wheel, grinding head, saw and millstone.

This standard does not apply to single product standards for the shape and mark otherwise provided for diamond or cubic boron nitride abrasive.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6405 superhard abrasive cubic boron nitride varieties GB/T 6406 Superhard abrasive particle size test (GB/T 6406-2016, ISO 6106:2013, MOD) GB/T 6409.2 superhard abrasive products diamond or cubic boron nitride abrasive shape and size GB/T 11270 (all parts) superhard abrasive diamond saws GB/T 23536 Super abrasive synthetic diamond varieties GB/T 35477 Super Abrasive synthetic diamond powder JB/T 7990 super hard abrasive synthetic diamond and cubic boron nitride powder

3.1.1 Shape labeling rules

Diamond or cubic boron nitride grinding wheel, grinding head and saw the shape of the marking system includes three kinds of code. These three codes can be used for any mark, If necessary, add a code.

The meaning of these codes is as follows.

- Numbers or feature numbers that the basic shape of the matrix (see 3.1.2.1);
- One or two letters indicate the shape of the abrasive layer section (see 3.1.2.2);
- Numbers or feature numbers indicate the position of the abrasive layer on the substrate (see 3.1.2.3);
- If the modified matrix, can be one or several letters (see 3.1.2.4).

3.1.2 Shape and code

3.1.2.1

The basic shape of the matrix and code these codes are not related to the position of the abrasive layer on the substrate and the end use of the abrasive, and the surface of the substrate in contact with the abrasive layer or the transition layer Groove does not affect the code to determine. The basic shape of the matrix and code in Table 1.