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

GB/T 16457.1-2023

Replacing GB/T 16457.1-2009

**Blanks of diamond circular saw blade - Part 1: For welded saw
blades**

金刚石圆锯片基体 第1部分：用于焊接锯片

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 1 of GB/T 16457 "Diamond Circular Saw Blade Base". GB/T 16457 has released the following parts.

1. For welding saw blades;

2. For sintered saw blades. This document partially replaces GB/T 16457.1-2009 "Superhard material saw blade base dimensions - Part

1. Used in buildings and civil engineering Mechanical cutting of engineering materials" and GB/T 16457.2-2009 "Saw blade base dimensions for super-hard materials - Part

2. Used in buildings and civil engineering Hand-held cutting of engineering materials. This document is based on GB/T 16457.1-2009 and integrates GB/T 16457.2-2009 and welding Contents related to the saw blade base. Compared with GB/T 16457.1-2009, in addition to structural adjustments and editorial changes, the main technical changes as follows:

a) Changed the scope (see Chapter 1, Chapter 1 of the.2009 edition);

b) The code name and mark have been changed (see Chapter 4, Chapter 2.1, 2.2, and Chapter 3 of the.2009 edition);

c) The dimensions and requirements have been changed (see 5.4, Appendix A, 2.3 of the.2009 edition);

d) Added requirements for safety, appearance, surface roughness, geometric tolerance, and tension (see 5.1, 5.2, 5.3, 5.5, and 5.6);

e) Added requirements for test methods, inspection rules, marking, packaging, transportation and storage (see Chapter 6 ~ Chapter 8). Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents. This document is proposed by China Machinery Industry Federation. This document is under the jurisdiction of the National Abrasives and Abrasives Standardization Technical Committee (SAC/TC139). This document was drafted by: Black Tornado Saw Industry Co., Ltd., Beijing Antai Steel Research Superhard Materials Products Co., Ltd., Wanlong Times Technology Co., Ltd., Guangdong Benlang New Materials Co., Ltd., Guilin Tebang New Materials Co., Ltd., Wuhan Wanbang Laser Diamond Tools Stock CO., LTD. The main drafters of this document. Zhang Yuncai, Hu Huan, Xu Yanjun, Xu Xiaowang, Ma Shaowei, Luo Wenlai, He Chengjun, Liu Yibo, Pi Houkuan, Ye Hongyu. The previous versions of this document and the documents it replaces are as follows:

---First released in.1996 as GB/T 16457-1996 "Superhard Material Saw Blade Base Dimensions";

---The first revision in.2009 was published in parts as GB/T 16457.1-2009 "Superhard Material Saw Blade Base Dimensions Part 1" Points. Mechanical cutting of building and civil engineering materials" and GB/T 16457.2-2009 "Superhard material saw blade base ruler Part

1 Scope

GB/T 16457.1-2023 is the Chinese national standard on blanks of diamond circular saw blade - part 1: for welded saw blades, 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 7 September 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2024. Classification: ICS 25.100.70, CCS J43. 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 document specifies the codes and markings, technical requirements, test methods, inspection rules and signs, packaging Loading, transportation and storage. This document is applicable to the substrate for welding diamond circular saw blades.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 11270.1-2021 Superabrasive products diamond circular saw blades Part

3 Terms and definitions

There are no terms or definitions to be defined in this document.

4 Code names and marks

4.1 Shape code The basic shape code of the substrate for welding diamond circular saw blades (hereinafter referred to as the substrate) is 1, and its modified shape and code

should comply with The provisions of

4.1.3 in GB/T 11270.1-2021.

4.2 Applicable welding process codes The sawtooth welding processes and codes applicable to the base body are shown in Table 1. Table

1 Applicable welding process codes Applicable welding process code Laser weldingLW
High frequency induction welding HF

4.3 Dimension code The base size code is shown in Table 2 and Figure 1.