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

GB/T 18845-2017

Replacing GB/T 18845-2002

Abrasive grains -- Test-sieving machines

磨料 筛分试验机

(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 18845-2002 "abrasive screening test machine", compared with GB/T 18845-2002 main technical changes as follows.

- Added structure description (see Chapter 3);
- Fixed timing 15min timing accuracy (see Table 1, 2002 edition of Table 1);
- Removed some of the technical requirements (2002 version 3.1.2, 3.1.5, 3.1.6, 3.1.7 and 3.1.8);
- Deleted the size of the test sieve limited (see 4.2, 2002 version 3.1.3);
- Modify the requirements of operation (see 4.2, 2002 version 3.1.4);
- Increased clamping and rotating test methods (see 5.2);
- Modify the installation requirements (see Chapter 6, 2002 edition 3.2);
- Increased inspection and maintenance requirements (see Chapter 7);
- Modify the inspection rules (see Chapter 8, Chapter 5 of the 2002 edition);
- Increase the requirements of transport (see 9.3).

This standard uses redrafted Law Amendment uses ISO 9284:2013 "abrasive screening test machine." this standard compared with ISO 9284:2013 in the structure there are more adjustments, Appendix B lists the standard and ISO 9284:2013 Chapter number control list.

This standard and ISO 9284:2013 technical differences and the reasons are as follows.

--- On normative references, this standard made a technical difference with the adjustment to adapt to China's technical conditions, adjust the situation Concentration reflected in the second chapter "Normative references", the specific adjustments are as follows.

- Equivalent to the use of international standards GB/T 2481.1 instead of ISO 8486-1;

- Equivalent to the international standard GB/T 9258.2 instead of ISO 6344-2;
- Remove referenced ISO 2591-1:1988 and ISO 6344-1;
- Increased reference to GB/T 191, GB/T 6406, GB/T 13306, GB/T 13384.
- Remove the scope of the abrasive screening test machine for abrasive and coated abrasives abrasive particle size determination of the determination and 5.1 in the test screen frame size limit, because it is also used for the determination of the particle size of superabrasive;
- Removed the international standard Chapter 3 "operating requirements" and 5.2 "screening time", because of its description is too general, inconvenient to operate. This standard is "Technical requirements" in the sieve testing machine parameters and requirements were specific;
- Modify Chapter 4 of the International Standard titled "Technical Description" as "Structure Description" to match the content;
- Modify the international standard Chapter 6 installation requirements in the design of concrete base and anchor bolt configuration (Figure 2) for the informative appendix, at the same time, the content of the vibration absorbing plate was deleted to meet the actual situation of production and use;
- Increased test methods, inspection rules, signs, packaging, transportation and storage content to comply with the composition of the complete product standards.

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., Pingdingshan Yi Cheng New Materials Co., Ltd., Guizhou Tatsu seventh Grinding wheel limited liability company, Zhengzhou Yufa High-tech Materials Co., Ltd.

1 Scope

This standard specifies the screening test machine structure description, technical requirements, test methods, installation, inspection and maintenance, inspection rules, signs, bags Loading, transportation and storage.

This standard applies to the screening method for the determination of abrasive particle size screening test machine.

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 191 Packaging - Pictorial signs (GB/T 191-2008, ISO 780:1997, MOD) GB/T 2481.1 abrasive particle size distribution of the detection and marking Part 1. Rough abrasive particles F4 ~ F220 (GB/T 2481.1-1998, eqvISO 8486-1.1996) GB/T 6406 Superhard abrasive particle size test (GB/T 6406-2016, ISO 6106:2013, MOD) GB/T 9258.2 Particle size analysis of abrasives for coated abrasives - Part 2 Determination of the particle size composition of coarse abrasive particles P12 - P220 (GB/T 9258.2-2008, ISO 6344-2:1998, IDT) GB/T 13306 signs GB/T 13384 mechanical and electrical product packaging General technical conditions

3 Structure description

An example of a screening tester is shown in Figure 1.

Screen test machines usually include the following basic components.

- a) Base and support frame;
- b) Motor;
- c) Actuator. Converting motor rotation into eccentric rotation of test sieve sleeve and slap motion of slap hammer;
- d) timer;
- e) Slamming hammer. Vertical slapstick (upper limit of flapping per unit of time)
- f) Set of sieve and bottom cover clamping positioning device;
- g) Top cover with a ferrule fitted with a plunger (usually made of cork or rubber) on which the rapping hammer is struck.

In addition, the screening test machine operation needs the following configuration.

- Sieve fixed base;
- Sieve set by the five test sieve;