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

GB/T 20316.1-2009

**Abrasive grains -- Determination of bulk density -- Part 1:
Macrogrits**

普通磨料 堆积密度的测定 第1部分：粗磨粒

(English Translation)

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Foreword

GB/T 20316 "ordinary abrasive bulk density determination" is divided into two parts.

--- Part 1. coarse grains;

--- Part 2. powder.

This section GB/T Part of 120,316.

The partial modification using ISO 9136-1:2004 "Determination of ordinary abrasive bulk density - Part 1. coarse grain" (in English).

This section according to ISO 9136-1:2004 redrafted.

Because of the special needs and requirements of the development of industry, this section at the time of adoption of international standards has been modified. These technical differences with Vertical single-line identification in which they are involved in terms of margin.

This portion of the ISO 9136-1:2004 main technical differences are as follows.

--- Clear measuring cylinder volume calibration time;

--- Provisions of the instrument should be measured horizontal position adjustment before measurement;

--- Provisions of the arithmetic mean of three measurements as a measurement result;

--- Gives the F100 or P100 to fine abrasive and drying temperature tolerances.

For ease of use, this section also made the following editorial changes.

--- Delete foreword international standards;

--- With the decimal point as the decimal place of international standards "and";

--- The "ISO 9136 of this part" to "this part." Appendix A of this section is an informative annex.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee Abrasives (SAC/TC139) centralized.

This section is drafted. Zhengzhou Institute of Abrasives grinding.

1 Scope

This section GB/T 20316 specifies the method for determination of bonded abrasives and coated abrasives bulk density of coarse grains.

This section applies to ordinary abrasive grit F12 ~ F220 and P12 ~ P220's.

2 Normative references

The following documents contain provisions which, through reference GB/T 20316 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 2481.1 Bonded abrasives grain size composition testing and labeling - Part 1. kibble F4 ~ F220 (GB/T 2481.1-1998, eqvISO 8486-1:1996) GB/T 9258.1 coated abrasives Analysis Part 1 abrasive particle size. Grain size (GB/T 9258.1-2000, ISO 6344-1:1998, IDT) GB /20316.2 ordinary abrasive bulk density determination T - Part 2. Powder (GB/T 20316.2-2006, ISO 9136-2:1999, IDT)

3 Terms and Definitions

GB/T 2481.1, terms and definitions GB/T 9258.1 and GB/T 20316.2 established in this section apply to GB/T 20316 of.

4.1 General provisions

Referring to Figure 1 the test apparatus (see Appendix schematic A), which contains 4.2 to 4.6 parts.

4.2 Bracket

Can funnel fixed in the vertical position, and the bottom of the funnel spout to the distance measuring cylinder (138 ± 1) mm.

4.3 Funnel

Funnel slope should be sufficiently smooth to ensure that the abrasive particles are not stuck on an incline. Funnel from the smooth inner surface of stainless steel, too. Its size Parameters are as follows (see also Figure 1).

- Funnel Total height. 240mm;
- Upper opening diameter. 160mm;
- Cylindrical spout inner diameter. (20 ± 0.5) mm;
- Cylindrical spout height. (40 ± 1) mm.

4.4 Hopper discharge valve

To ensure that the funnel outlet openable and closable. You can use swing drain valve shown in Figure 1.

4.5 Measuring cylinder

Measuring cylinder is a smooth inner surface, V_p is the volume (200 ± 0.5) cm³ cylinder; an inner diameter of 64mm, the height 62.2mm. Measuring cylinder being placed on the lower end of the falling material. Drop height should be measured abrasive grains (138 ± 1) mm (bottom funnel spout