

ICS 25.100.70
CCS J 43



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

GB/T 9258.2-2025

Replacing GB/T 9258.2-2008, GB/T 9258.1-2000

**Coated abrasives - Determination and designation of grain size
distribution - Part 2: Macrogrit sizes P12 to P220**
(English Translation)

Issued on: August 1, 2025

Implemented on: February 1, 2026

**Issued by: State Administration for Market Regulation, Standardization
Administration of China**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 2 of GB/T 9258 "Testing and marking of abrasive grain size composition for coated abrasives". GB/T 9258 has been the following parts were published.

--- Part 2: Coarse abrasive particles P12 to P220;

--- Part 3: Micropowders P240 to P5000.

This document replaces GB/T 9258.1-2000 "Abrasive particle size analysis for coated abrasives Part 1: Particle size composition" and GB/T 9258.2-2008 "Abrasive particle size analysis for coated abrasives - Part 2: Determination of particle size composition of coarse abrasive particles P12 to P220".

The document is based on GB/T 9258.2-2008 and integrates the contents related to coarse abrasive grains in GB/T 9258.1-2000.

Compared with 2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2008 edition);
- b) The terms and definitions have been changed (see Chapter 3, Chapter 3 of the 2008 edition);
- c) Added a chapter on "Grit size composition of coarse abrasive grains" (see Chapter 4);
- d) The provisions for P-coarse abrasive standard sand have been changed (see 5.1, 4.5 of the 2008 edition);
- e) The provisions on timers have been modified (see 5.2.2, 4.2 of the 2008 edition);
- f) The provisions for balances have been changed (see 5.2.3, 4.4 of the 2008 edition);
- g) The provisions for checking the suitability of test sieves have been changed (see 5.3, Chapter 5 of the 2008 edition);
- h) The sample preparation steps have been changed (see 5.4.1, 6.1.1 of the 2008 edition);
- i) The provisions for screening of P-coarse abrasive standard sand have been changed (see 5.4.3, 6.1.3 of the 2008 edition);
- j) The provisions of the test steps have been changed (see 5.5, 6.1.4 of the 2008 edition);
- k) The provisions for evaluation of sieve analysis results have been modified (see 5.6, 6.2 of the 2008 edition);
- l) Added test report requirements (see Chapter 6);
- m) The marking provisions have been changed (see Chapter 8, Chapter 8 of the 2008 edition);
- n) Modified the element attributes of the sieve analysis result recording form (see Appendix A, Chapter 9 of the 2008 edition).

This document modifies ISO 6344-2:2021 "Testing and marking of abrasive grain size composition for coated abrasives - Part 2: Coarse abrasive grains" P12~P220".

The technical differences between this document and ISO 6344-2:2021 and their reasons are as follows.

--- Added normative reference GB/T 16458 (see Chapter 3) to facilitate the understanding and application of the standard;

--- Changed the definition of "particle size composition" (see 3.2) to adapt to my country's technical conditions;

--- Changed the relevant content of P-coarse abrasive standard sand (see 5.1) to conform to the actual testing situation in my country;

--- ISO 9284 (see 5.2.1) is replaced by the normative reference GB/T 18845 to adapt to my

country's technical conditions;

--- Changed the provisions of the timer (see 5.2.2) to improve detection accuracy;

--- Replaced ISO 3310-1 (see 5.2.4) with the normative reference GB/T 6003.1 to adapt to my country's technical conditions;

--- ISO 9138 (see 5.4.1) is replaced by the normative reference GB/T 4676 to adapt to my country's technical conditions;

--- Changed the provisions for the installation of test sieves (see 5.4.2) to conform to the actual test situation;

--- Changed the marking provisions (see Chapter 8) to conform to my country's actual situation.

Introduction

Due to the different requirements of grinding purpose, grinding efficiency, grinding accuracy, etc., the requirements for abrasive size are also different, so the abrasive needs to be the abrasive is processed and graded into different particle sizes to meet different grinding requirements. This requires characterization and testing of the particle size of the abrasive and its Row standardization.

Particle size composition is a specific characterization of abrasive particle size, which is based on the corresponding detection technology.

There are many technologies for the characterization and detection of particle size. However, due to the limitations of the technology, as well as considerations of efficiency and economy, no one technology has been successfully used.

This technology is fully applicable to the characterization and detection of all particle sizes of abrasives.

Generally, the particle size of coarser abrasives is characterized and tested based on sieving methods; the particle size of finer abrasives is characterized and tested based on sedimentation methods and other methods.

Correspondingly, the particle size of abrasives is divided into coarse abrasive particles and fine powder from coarse to fine.

GB/T 9258 "Testing and marking of abrasive grain size composition for coated abrasives" is intended to consist of two parts.

--- Part 2: Coarse abrasive grains P12~P220. The purpose is to provide the particle size characterization and detection method of coarse abrasive grains for coated abrasives.

law and specifies marking and logo requirements.

--- Part 3: Micropowders P240~P5000. The purpose is to provide the particle size characterization and detection methods of micropowder abrasives for coated abrasives, and Specify marking and signage requirements.

Detection and marking of abrasive particle size composition for coated abrasives Part 2: Coarse abrasive grains P12~P220

1 Scope

This document specifies the determination or test method for the grit composition of coarse abrasive particles P12 to P220 for coated abrasives.

This document applies to abrasives used in the manufacture of coated abrasives and abrasives recovered from coated abrasives for testing purposes.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 4676 Sampling Methods for Common Abrasives (GB/T 4676-2018, ISO 9138:2015, MOD) GB/T 6003.1 Test sieves - Technical requirements and inspection - Part 1: Wire mesh test sieves (GB/T 6003.1-2022, ISO 3310-1:2016, MOD) GB/T 16458 Terminology of Abrasives and Grinding Tools GB/T 18845 Abrasive Sieving Tester (GB/T 18845-2017, ISO 9284:2013, MOD) JB/T 6569 Packaging of general abrasives

3 Terms and Definitions

The terms and definitions defined in GB/T 16458 and the following apply to this document.

Coarse abrasive macrogrit Abrasive particles with a particle size of 3.35 mm to 0.053 mm and a particle size composition (3.2) determined by sieving method.

The mass fraction of abrasive particles of different sizes in a certain particle size number.

[Source. GB/T 16458-2021, 3.1.5.2]

4 Particle size composition of coarse abrasive particles P12~P220

The particle size composition of the coarse abrasive particles (P12 to P220) is determined by sieving using a set of test sieves specified in Table 1.

When the amount meets the limit value in Table 1, the particle size composition is qualified.