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**Coated abrasives — Determination  
and designation of grain size  
distribution —**

Part 2:  
**Macrogrit sizes P12 to P220**

*Abrasifs appliqués — Détermination et désignation de la distribution  
granulométrique —*

*Partie 2: Macrograins P12 à P220*



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Published in Switzerland

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This second edition cancels and replaces ISO 6344-2:1998 and ISO 6344-1:1998, which have been technically revised.

The main changes compared to ISO 6344-2:1998 and ISO 6344-1:1998 are as follows:

- the title and the scope have been changed editorially;
- relevant content of ISO 6344-1:1998 has been updated and transferred to this document and ISO 6344-3;
- references to ISO 6344-1:1998 have been deleted;
- [Clause 3](#) "Terms and definitions" has been updated;
- a new [Clause 4](#) for macrogrit sizes has been added;
- [Table 1](#) (former Table 2) "Grain size distribution of macrogrit sizes P12 to P220" has been moved to the new [Clause 4](#);
- former [Table 1](#) with a summary of nominal sizes of openings of test sieves has been deleted;
- [Clause 5](#) (former [Clause 4](#)) "Test method of macrogrit sizes P12 to P220" has been revised in its content and order;
- [5.6](#) (former [5.3](#)) "Evaluation" has been revised by giving a normative description of the procedure for the determination of a sieving analysis and evaluation of the results;
- former [Clause 8](#) has been moved to a new [Annex A](#) "Template for recording results of sieving analysis of macrogrit P sizes";
- [Clause 8](#) (former [Clause 7](#)) "Marking" has been revised.

A list of all parts in the ISO 6344 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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# Coated abrasives — Determination and designation of grain size distribution —

## Part 2: Macrogrit sizes P12 to P220

### 1 Scope

This document specifies a method for determining and testing the grain size distribution of electrofused aluminium oxide and silicon carbide macrogrit sizes P12 to P220 for coated abrasive products.

It is applicable to grits used in the manufacture of coated abrasive products and to grits extracted from coated abrasive products for test purposes.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 9138, *Abrasive grains — Sampling and splitting*

ISO 9284, *Abrasive grains — Test-sieving machines*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

#### 3.1

##### **macrogrit**

abrasive grit having a diameter of 3,35 mm to 0,053 mm whose *grain size distribution* (3.2) is determined by sieving

#### 3.2

##### **grain size distribution**

##### **particle size distribution**

##### **PSD**

percentage of grains of different sizes composing the *macrogrit* (3.1) or microgrit

### 4 Grain size distribution of macrogrit sizes P12 to P220

Macrogrit sizes (P12 to P220) are measured by a sieving analysis, using a set of sieves as specified in [Table 1](#). The test portion matches the P size in [Table 1](#) when the calculated relative amount fits into the limit values.