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## Bonded abrasive products — General requirements

*Produits abrasifs agglomérés — Exigences générales*



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Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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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. [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. [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.

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This fourth edition cancels and replaces the third edition (ISO 525:1999).

Significant changes against the previous edition are as follows:

- a) clarification has been included in the Scope to explicitly exclude coated abrasive products;
- b) a note has been included in [Clause 4](#) on the relationship with the ISO 603 series and the dimensional requirements given there;
- c) in [Clause 4](#), [Table 2](#), the description of some existing types of bonded abrasives products has been changed and type numbers 17, 17R, 19R, 29 and 40 have been included;
- d) all specific requirements on dimensions (outside diameter, thickness and bore diameter) have been removed from [Clause 5](#) and reference is now made to the ISO 603 series;
- e) in [Clause 5](#), requirements for maximum operating speeds have been deleted;
- f) [Clause 6](#) on designation has been reworded and included in [Clause 5](#);
- g) additional marking requirements have been included.

# Bonded abrasive products — General requirements

## 1 Scope

This International Standard is applicable to bonded abrasive products (e.g. grinding wheels, segments, sticks and stones) in general, excluding superabrasive products and coated abrasive products.

This International Standard specifies:

- a) the ISO type number and shape;
- b) dimensional symbols;
- c) standard profiles;
- d) requirements for dimensions, limit deviations and tolerances as well as permissible unbalance;
- e) the specification mark;
- f) the marking requirements.

NOTE This International Standard is general and is complemented by the ISO 603 series, ISO 6103 and ISO 13942.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6103, *Bonded abrasive products — Permissible unbalances of grinding wheels as delivered — Static testing*

ISO 8486-1, *Bonded abrasives — Determination and designation of grain size distribution — Part 1: Macrogrits F4 to F220*

ISO 8486-2, *Bonded abrasives — Determination and designation of grain size distribution — Part 2: Microgrits F230 to F2000*

ISO 13942, *Bonded abrasive products — Limit deviations and run-out tolerances*

## 3 Symbols

See [Table 1](#).