

Bonded abrasive products — General requirements

ICS 25.100.70

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The UK participation in its preparation was entrusted to Technical Committee MTE/13, Grinding wheels abrasive wheels and powders, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii and iii, a blank page, pages 1 to 19 and a back cover.

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Bonded abrasive products — General requirements

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 525 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This third edition cancels and replaces the second edition (ISO 525:1986) which has been technically revised.

Bonded abrasive products — General requirements

1 Scope

This International Standard covers bonded abrasive products in general (grinding wheels, segments, sticks and stones) excluding abrasive products with diamond or cubic boron nitride.

It gives:

- ¾ the designation;
- ¾ the main form and denomination of bonded abrasive products;
- ¾ the standard profile of straight wheels;
- ¾ the range of outside diameters;
- ¾ the range of thicknesses;
- ¾ the range of bore diameters;
- ¾ specifications;
- ¾ the marking.

This International Standard is general and is complemented by ISO 603-1 to ISO 603-16, ISO 6103 and ISO 13942.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 603-1, *Bonded abrasive products — Dimensions — Part 1: Grinding wheels for external cylindrical grinding between centres.*

ISO 603-2, *Bonded abrasive products — Dimensions — Part 2: Grinding wheels for centreless external cylindrical grinding.*

ISO 603-3, *Bonded abrasive products — Dimensions — Part 3: Grinding wheels for internal cylindrical grinding.*

ISO 603-4, *Bonded abrasive products — Dimensions — Part 4: Grinding wheels for surface grinding/peripheral grinding.*

ISO 603-5, *Bonded abrasive products — Dimensions — Part 5: Grinding wheels for surface grinding/face grinding.*

ISO 603-6, *Bonded abrasive products — Dimensions — Part 6: Grinding wheels for tool and tool room grinding.*

ISO 603-7, *Bonded abrasive products — Dimensions — Part 7: Grinding wheels for manually guided grinding.*

ISO 603-8, *Bonded abrasive products — Dimensions — Part 8: Grinding wheels for deburring and fettling/snagging.*

ISO 603-9, *Bonded abrasive products — Dimensions — Part 9: Grinding wheels for high-pressure grinding.*

ISO 603-10, *Bonded abrasive products — Dimensions — Part 10: Stones for honing and superfinishings.*

ISO 603-11, *Bonded abrasive products — Dimensions — Part 11: Hand finishing sticks.*

ISO 603-12, *Bonded abrasive products — Dimensions — Part 12: Grinding wheels for deburring and fettling on straight grinder.*

ISO 603-13, *Bonded abrasive products — Dimensions — Part 13: Grinding wheels for deburring and fettling on a vertical grinder.*

ISO 603-14, *Bonded abrasive products — Dimensions — Part 14: Grinding wheels for deburring and fettling/snagging on an angle grinder.*

ISO 603-15, *Bonded abrasive products — Dimensions — Part 15: Grinding wheels for cutting-off on stationary and mobile cutting-off machines.*

ISO 603-16, *Bonded abrasive products — Dimensions — Part 16: Grinding wheels for cutting-off on hand held power tools.*

ISO 6103, *Bonded abrasive products — Permissible unbalances of grinding wheels as delivered — 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 F1200.*

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