

Safety requirements for coated abrasives

The European Standard EN 13743:2001 has the status of a
British Standard

ICS 25.100.70

National foreword

This British Standard is the official English language version of EN 13743:2001.

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

- aid enquirers to understand the text;
- present to the responsible 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.

A list of organizations represented on this committee can be obtained on request to its secretary.

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This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 18 January 2002

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 18, an inside back cover and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 18 January 2002

ISBN 0 580 38876 X

English version

Safety requirements for coated abrasives

Prescriptions de sécurité pour les produits abrasifs
appliqués

Sicherheitsanforderungen für Schleifmittel auf Unterlagen

This European Standard was approved by CEN on 26 October 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 143 "Machine tools — Safety" the secretariat of which is held by SNV.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

Annex A is normative, and annex B is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This standard is addressed to designers, manufacturers, and suppliers of the abrasive products described in the scope. It also provides a means of supporting designers, manufacturers, and suppliers of grinding machines in the selection of abrasive products under the aspect of risk reduction and achievement of compliance of the corresponding machines with the essential safety requirements of the Machinery Directive.

The extent to which hazards are covered is indicated in the scope of this standard.

1 Scope

This European Standard applies to the following coated abrasive products: flap wheels, flap discs, vulcanised fibre discs and spindle mounted flap wheels. It also applies to back-up pads for vulcanised fibre discs. It specifies requirements and/or measures for removal or reduction of hazards related to the design and application of the abrasive products and clamping devices.

This standard covers also methods and tests for the assessment of conformity with the requirements as well as information for use which the manufacturer shall make available to the user.

The hazards taken into account are indicated in clause 4 of this standard.

The standard does not apply to non-woven web abrasive products.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*.

3 Terms, definitions and symbols

For the purposes of this European Standard the following terms, definitions and symbols apply.

3.1

coated abrasives

abrasive products composed of backing, abrasive, and bond

3.2

clamping devices

devices for fixing and positioning the abrasive product on the spindle of the grinding machine including e.g. back-up pads for vulcanised fibre discs, and chucking flanges for flap wheels

3.3 Grinding machines

3.3.1

stationary grinding machines

machines fixed to their position during operation due to their nature or their mechanical attachment. They also include e.g. stationary swing-frame grinding machines and mobile machines maintained in position during operation by clamping elements

3.3.2

mobile grinding machines

machines guided manually (but not hand-held) during grinding, e.g. floor grinding machines

3.3.3

hand-held grinding machines

machines, including those with flexible shaft, held in the hand during the grinding process

3.4 Type of application

See Table 1.

3.4.1

mechanically guided grinding

feed movements of the abrasive product and/or workpiece are guided by mechanical means

3.4.2

manually guided grinding

feed movements of the abrasive product and/or the workpiece are manually guided by the operator

3.4.3

hand-held grinding

grinding machine is entirely guided by the operators hands

Table 1 — Type of application

Type of machine	Type of application	Abrasive product	Workpiece
Stationary grinding machines	Mechanically guided grinding	Fixed	Guided mechanically
		Guided mechanically	Fixed
		Guided mechanically	Guided mechanically
Stationary and mobile grinding machines	Manually guided grinding	Guided by hand	Fixed
		Fixed	Guided by hand
Hand-held grinding machines	Hand-held grinding	Guided by hand	Fixed

3.5 Dimensional abbreviations

Table 2 — Dimensional abbreviations

Symbol	Designation
D	Outside diameter of abrasive products
D_1	Diameter of support of flap wheels with fixed flange and of ring groove of flap wheels with loose flange
H	Abrasive product bore diameter
l_s	Length of cross slots of vulcanised fibre discs
L_2	Length of spindle of spindle mounted flap wheels
S_d	Diameter of spindle of spindle mounted flap wheels
T	Thickness of abrasive products