

## DIN EN 12413



ICS 25.100.70

Supersedes  
DIN EN 12413:2011-05

**Safety requirements for bonded abrasive products;  
English version EN 12413:2019,  
English translation of DIN EN 12413:2019-12**

Sicherheitsanforderungen für Schleifwerkzeuge aus gebundenem Schleifmittel;  
Englische Fassung EN 12413:2019,  
Englische Übersetzung von DIN EN 12413:2019-12

Exigences de sécurité pour les produits abrasifs agglomérés;  
Version anglaise EN 12413:2019,  
Traduction anglaise de DIN EN 12413:2019-12

Document comprises 67 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

*A comma is used as the decimal marker.*

## Start of application

The start of application of this standard is 2019-12-01.

## National foreword

This standard includes safety requirements.

This document (EN 12413:2019) has been prepared by Technical Committee CEN/TC 143 “Machine tools — Safety” (Secretariat: SNV, Switzerland).

The responsible German body involved in its preparation was *DIN-Normenausschuss Werkzeuge und Spannzeuge* (DIN Standards Committee Tools and Clamping Devices), Working Committee NA 121-04-04 AA “Bonded abrasives”.

The DIN documents corresponding to the international documents referred to in this document are as follows:

ISO 525	DIN ISO 525
ISO 3864-2	DIN ISO 3864-2
ISO 13942	DIN ISO 13942

## Amendments

This standard differs from DIN EN 12413:2011-05 as follows:

- a) Clause 3 “Terms and definitions” has been revised;
- b) several modifications throughout the document have been made due to a change in concept regarding the terms “grinding” and “cutting-off” where the expression “grinding” no longer includes “cutting-off”;
- c) the abbreviation “RE” for “Restrictions of use” has been deleted;
- d) the designations of the types in Table 6 have been checked and updated (the new edition of ISO 525 that is still under preparation will also include these revised types);
- e) in Table 6, the new Types 17R, 18B, 18P and 19R have been added;
- f) subclause 6.2 “Scope of inspection by the manufacturer” has been moved to an informative Annex F “Recommended scope of the in-process inspection”;
- g) in Annex A, requirements for safety symbols (including symbols for personal protective equipment) have been added;
- h) in Table A.2, the following restrictions to use including safety symbols have been added: “Only for grinding at an angle greater than 10°”. For the restriction to use “Only permitted for totally enclosed working areas”, a safety symbol has been added;
- i) a new Table A.3 including symbols for personal protective equipment and a new safety symbol for “Do not use a damaged abrasive wheel” has been added;
- j) the three point side load test in C.3 has been deleted;
- k) the Bibliography has been updated.

## Previous editions

DIN EN 12413: 1999-06, 2007-09, 2011-05

## **National Annex NA** (informative)

### **Bibliography**

DIN ISO 525, *Bonded abrasive products — General requirements*

DIN ISO 3864-2 *Graphical symbols — Safety colours and safety signs — Part 2: Design principles for product safety labels*

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

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English Version

## Safety requirements for bonded abrasive products

Exigences de sécurité pour les produits abrasifs  
agglomérés

Sicherheitsanforderungen für Schleifwerkzeuge aus  
gebundenem Schleifmittel

This European Standard was approved by CEN on 5 August 2019.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 12413:2019) 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 April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12413:2007+A1:2011.

Significant technical differences between EN 12413:2007+A1:2011 and EN 12413:2019 are as follows:

- a) Clause 3 “Terms and definitions” has been revised;
- b) several modifications throughout the document have been done due to a change of concept regarding the terms “grinding” and “cutting-off” where the expression “grinding” does not include “cutting-off” anymore;
- c) the abbreviation “RE” for the “Restrictions of use” has been deleted;
- d) the type names in Table 6 have been checked and updated (the new edition of ISO 525 that is still under preparation will also include these revised types);
- e) in Table 6, the new Types 17R, 18B, 18P and 19R have been added;
- f) 6.2 “Scope of inspection by the manufacturer” has been moved to an informative Annex F “Recommended scope of the in-process inspection”;
- g) in Annex A, requirements for safety symbols (including symbols for personal protective equipment) have been added;
- h) in Table A.2, the following ‘restrictions to use’ including safety symbols have been added: “Only for grinding at an angle greater than 10°”. For the ‘restriction to use’ “Only permitted for totally enclosed working areas”, a safety symbol has been added;
- i) a new Table A.3 with symbols for personal protective equipment and a new safety symbol for “Do not use a damaged abrasive wheel” has been added;
- j) the three point side load test in C.3 has been deleted;
- k) Bibliography has been updated.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

This document has been prepared to provide one means of conforming with essential safety requirements, e.g. of the General Product Safety Directive and associated EFTA regulations.

This document is addressed to designers, manufacturers and suppliers of the abrasive products described in the scope. In addition, it helps designers, manufacturers and suppliers of grinding machines in the selection of abrasive products, in order to reduce the risks and achieve conformity of the respective machinery with the essential health and safety requirements of the Machinery Directive.

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