

Ohutusnõuded liimühendusega toodetele
KONSOLIDEERITUD TEXT

Safety requirements for bonded abrasive products
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12413:2007+A1:2011 sisaldab Euroopa standardi EN 12413:2007+A1:2011 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 31.03.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 09.03.2011.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12413:2007+A1:2011 consists of the English text of the European standard EN 12413:2007+A1:2011.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.03.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 09.03.2011.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Safety requirements for bonded abrasive products

Exigences de sécurité pour les produits abrasifs
agglomérés

Sicherheitsanforderungen für Schleifkörper aus
gebundenem Schleifmittel

This European Standard was approved by CEN on 10 May 2007 and includes Amendment 1 approved by CEN on 17 January 2011.

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Foreword

This document (EN 12413:2007+A1:2011) 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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

This document includes Amendment 1, approved by CEN on 2011-01-17.

This document supersedes A1 EN 12413:2007 A1 .

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 .

Significant technical differences between A1 EN 12413:2007 A1 and EN 12413:1999 are as follows:

- a) deletion of different abbreviations in Table 1 to Table 4 and Table 7;
- b) deletion of 140 m/s and 160 m/s in Clause 5.1.1;
- c) revision of Table 11 "Maximum operating speeds, safety factors and minimum bursting speeds for different types of machine and types of application". In the revised Table 11 (now Table 4) are there only relations between the range of v_s , the safety factor S_{br} and burst speed factor f_{br} ;
- d) in Clause 5.1.3 "Side load capacity" (new Clause 5.2.3) are the relevant values for the different tests depending on v_s and the outside diameter of the abrasive product;
- e) extension of requirements in Clause 5.6 "Blotters", Annex B "Blotters" (normative) is completely deleted;
- f) revision of Clause 6 in accordance with rules for the structure and drafting of CEN/CENELEC publications;
- g) Table 13 "Safety test speeds" deleted and revision of Table 14 "Scope of the inspection";
- h) revision of Clause 7 "Information for use";
- i) content of Table A.2 "Colour codes and design of colour codes" to change as additional marking in Annex D (informative);
- j) in Table A.3 "Restrictions of use", RE2 deleted and RE8 included;
- k) Figures A.1, A.2 and Clause A.4 "Design of the marking" deleted;
- l) revision of Annex C (normative), [now Annex B (informative)], Mounted points only as an example calculation of the maximum permissible speed of rotation;
- m) extension of Annex D (informative), [now Annex C (normative)], with additional requirements concerning the verification methods for side load capacity.

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

- n) in 6.2, Table 7, the requirements for the scope of inspection of "all other abrasive products" have been changed. A1

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Introduction

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

This standard 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 safety requirements of the Machinery Directive.

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

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1 Scope

This standard is applicable to rotating bonded abrasive products. It specifies requirements and/or measures for the removal or reduction of hazards resulting from the design and application of the abrasive products.

This standard also contains procedures and tests for verification of compliance with the requirements as well as safety information for use, which is to be made available to the user by the manufacturer.

The hazards taken into consideration are listed in Clause 4 of this standard.

This standard does not apply to superabrasives and coated abrasive products.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN ISO 6103, *Bonded abrasive products — Permissible unbalances of grinding wheels as delivered — Static testing (ISO 6103:2005)*

ISO 525, *Bonded abrasive products — General requirements*

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

3 Definitions and symbols

3.1 Bonded abrasive products

Products consisting of abrasives e.g. aluminium oxide, silicon carbide held together by a bond.

Bonded abrasive products within the meaning of this standard are all products as defined, see for example by ISO 525.

3.2 Grinding machines

3.2.1 Stationary machines

Machines that are fixed in position during operation, see for example EN 13218. Included are fixed swing-frame machines and mobile machines clamped firmly in position during use.

3.2.2 Mobile machines

Machines that are not fixed in position during operation. They are manually guided (but not supported) by hand during use, e.g. floor grinding machines, flexibly suspended swing-frame grinding machines.

3.2.3 Hand-held machines

Machines, including those with flexible drives that are held in the hand during the grinding process, see for example EN 792-7, EN 792-9, EN 60745-2-3 and EN ISO 19432.