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Hand-held non-electric power tools - Safety requirements - Part 12: Small circular, small oscillating and reciprocating saws CONSOLIDATED TEXT



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 792-12:2000+A1:2008 sisaldab Euroopa standardi EN 792-12:2000+A1:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 792-12:2000+A1:2008 consists of the English text of the European standard EN 792-12:2000+A1:2008.

Standard on kinnitatud Eesti Standardikeskuse 27.10.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 27.10.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.09.2008.

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ICS 25.140.10, 25.140.99

Võtmesõnad:

Oreview Seneral area of the Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

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EUROPÄISCHE NORM

EN 792-12:2000+A1

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English Version

Hand-held non-electric power tools - Safety requirements - Part 12: Small circular, small oscillating and reciprocating saws

Machines portatives à moteur non électrique - Prescriptions de sécurité - Partie 12: Petites scies circulaires et petites scies oscillantes et alternatives Handgehaltene nicht-elektrisch betriebene Maschinen -Sicherheitsanforderungen - Teil 12: Kleine Kreis-, oszillierende und Stichsägemaschinen

This European Standard was approved by CEN on 26 May 2000 and includes Amendment 1 approved by CEN on 26 July 2008.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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 document (EN 792-12:2000+A1:2008) has been prepared by Technical Committee CEN/TC 255 "Handheld, non-electric power tools - Safety ", the secretariat of which is held by SIS.

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 March 2009 and conflicting national standards shall be withdrawn at the latest by December 2009.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

A) For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. (A)

This document includes Amendment 1, approved by CEN on 2008-07-26.

This document supersedes EN 792-12:2000.

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

The standard has been created in close co-operation with CENELEC/TC 61F with the aim of achieving requirements for mechanical safety in the EN 50144 series, which are similar for hand-held electric and non-electric power tools.

The annexes to this part of the standard are:

Annex A (informative) Examples of power tools covered by this part

Annex B (informative) Labels, signs and tags

Annexes ZA and ZB (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.

This standard also contains a Bibliography.

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

Introduction

This European standard is a type C standard as stated in EN 1070.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of other standards, for machines that have been designed and built according to the provisions of this type C standard.

The European Standard, EN 792, consists of a number of independent parts for individual types of hand-held non-electric power tools.

Other EN standards deal with safety rules for hand-held power tools used in e. g. the following fields:

- agriculture and forestry such as chain saws, hedge-trimmers, brush cutters, grass trimmers;
- construction and building such as cutting-off power tools, concrete vibrators;
- food industry, such as fowl secateurs, sheep shears.

Endeavours have been made to achieve co-ordination with the relevant Technical Committees so that the safety requirements are compatible.

This standard is divided in the following parts:

- Part 1 Assembly power tools for non-threaded mechanical fasteners (former part 14)
- Part 2 Cutting-off and crimping power tools (former part 15)
- Part 3 Drills and tappers
- Part 4 Non rotary percussive power tools
- Part 5 Rotary, percussive power drills
- Part 6 Assembly power tools for threaded fasteners
- Part 7 Grinders
- Part 8 Sanders and polishers
- Part 9 Die grinders
- Part 10 Compression power tools
- Part 11 Nibblers and shears
- Part 12 Small circular, small oscillating and reciprocating saws
- Part 13 Fastener driving tools

Certain parts of EN 792 cover hand-held non-electric power tools, driven by internal combustion engines powered by gaseous or liquid fuel. In these parts, the safety aspects relating to internal combustion engines are found in a normative annex.

The parts are type C standards and refer to pertinent European Standards of type A and B where such standards are applicable.

1 Scope

The standard EN 792 applies to hand-held non-electric power tools driven by rotary or linear motors, powered by compressed air, hydraulic fluid and intended to be used by one operator and supported by:

- the operator's hand or hands,
- a suspension, e.g. a balancer.

This part, EN 792-12, applies to hand-held non-electric small circular and small oscillating and reciprocating power tools for sawing. This part lists the significant hazards caused by such power tools and specifies safety requirements valid for different aspects of safety during their foreseeable lifetime and subsequent disposal.

Power tools covered by this part of the standard:

- circular saws, circular knives,
- jig saws,
- oscillating saws, oscillating knives (windshield knives),
- power hack saws,
- reciprocating saws.

This part of the standard applies to:

- circular saws with saw blades with a diameter of 65 mm or less,
- circular saws with diamond cutting-off wheels with diameters of 65 mm or less and a maximum cutting depth of 10 mm,
- oscillating saws having a saw blade with a radius of 50 mm or less or a diamond cutting-off blade with a radius of 100 mm or less.

NOTE 1 For circular saws having saw blades exceeding 65 mm see requirements for mechanical safety of EN 50144-2-5 and EN 50144-2-10. For circular saws with diamond cutting-off wheels exceeding 65 mm see part 7 of this series

Special requirements and modifications on a hand-held power tool for the purpose of mounting it in a fixture are not covered by this part.

NOTE 2 At the date of publication no power saws driven by internal combustion engines are known.

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 the publications referred to in this European Standard are valid only when they are incorporated in this standard by amendment or revision. For undated references the latest edition of the publication referred to, applies (including amendments).

EN 292-1:1991, Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology

EN 292-2:1991, Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications

EN 563, Safety of machinery - Temperatures of touchable surfaces - Ergonomics data to establish temperature limit values for hot surfaces

EN 614-1, Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles

EN 1070, Safety of machinery - Terminology

EN 12096. Mechanical vibration - Declaration and verification of vibration emission values

EN ISO 4871, Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)

♠ EN ISO 15744:2008, Hand-held non-electric power tools – Noise measurement code – Engineering method (grade 2) (ISO 15744:2002) ♠

EN 28662-1, Hand-held portable power tools - Measurement of vibrations at the handle – Part 1: General (ISO 8662-1:1988)

EN ISO 8662-12, Hand-held portable power tools - Measurement of vibrations at the handle - Part 12: Saws and files with reciprocating action and saws with oscillating or rotating action (ISO 8662-12:1997)

EN 50144-2-5, Safety of hand-held electric motor operated tools – Part 2-5: Particular requirements for circular saws and circular knives

ISO 3857-3, Compressors, pneumatic tools and machines – Vocabulary – Part 3: Pneumatic tools and machines.

ISO 5391, Pneumatic tools and machines - Vocabulary

3 Terms and definitions

For the purposes of this part of the standard, the following terms and definitions apply:

3.1 General terms and definitions

3.1.1

hand-held power tool

machine driven by rotary or linear motors powered by compressed air, hydraulic fluid, gaseous or liquid fuel, electricity or stored energy (e.g. by a spring) to do mechanical work and so designed that the motor and the mechanism form an assembly that can easily be brought to its place of operation. The hand-held power tool is operated by one or two hands

NOTE Hand-held power tools driven by compressed air or gas are called pneumatic tools.

Hand-held power tools driven by hydraulic liquid are called hydraulic tools.

3.1.2

rotary power tool

power tool the output spindle of which rotates

3.1.3

inserted tool

tool inserted in the hand-held power tool to perform the intended work