

**Käeshoitavad mitteelektrilised jõuseadised.  
Ohutusnõuded. Osa 4: Käsitööriistad mittepöörleva  
löögiga (ISO 11148-4:2012)**

Hand-held non-electric power tools - Safety requirements -  
Part 4: Non-rotary percussive power tools (ISO 11148-  
4:2012)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 11148-4:2012 sisaldab Euroopa standardi EN ISO 11148-4:2012 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2012 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 19.12.2012.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 11148-4:2012 consists of the English text of the European standard EN ISO 11148-4:2012.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2012 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

Hand-held non-electric power tools - Safety requirements - Part  
4: Non-rotary percussive power tools (ISO 11148-4:2012)

Machines portatives à moteur non électrique - Exigences  
de sécurité - Partie 4: Machines portatives non rotatives à  
percussion (ISO 11148-4:2012)

Handgehaltene nicht elektrisch betriebene Maschinen -  
Sicherheitsanforderungen - Teil 4: Nicht drehende,  
schlagende Maschinen (ISO 11148-4:2012)

This European Standard was approved by CEN on 17 December 2012.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 11148-4:2012) has been prepared by Technical Committee ISO/TC 118 "Compressors and pneumatic tools, machines and equipment" in collaboration with Technical Committee CEN/TC 255 "Hand-held, 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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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

This document supersedes EN ISO 11148-4:2010.

This document 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 11148-4:2012 has been approved by CEN as a EN ISO 11148-4:2012 without any modification.

**Annex ZA**  
(informative)

**Relationship between this European Standard and the Essential  
Requirements of EU Directive 2006/42/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.**

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## Introduction

This document is a type C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are defined in the Scope of this part of ISO 11148.

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

ISO 11148 consists of a number of independent parts for individual types of hand-held, non-electric power tools.

Certain elements of this part of ISO 11148 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 standards of types A and B where such standards are applicable.

# Hand-held non-electric power tools — Safety requirements —

## Part 4:

## Non-rotary percussive power tools

**IMPORTANT** — The electronic file of this document contains colours that are considered useful for the correct understanding of the document. Users should consider printing this document using a colour printer. ISO 3864-4 provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

### 1 Scope

This part of ISO 11148 applies to hand-held non-electric power tools (hereinafter “non-rotary percussive power tools”) intended for chipping, riveting, breaking of concrete and asphalt, ramming, etc. The non-rotary percussive power tool can be powered by compressed air, hydraulic fluid or internal combustion engines and is intended for use by one operator and supported by the operator’s hand or hands, with or without a suspension, e.g. a balancer.

This part of ISO 11148 covers

- breakers;
- bush hammers;
- chipping hammers;
- small chisels;
- engraving pens;
- needle scalers;
- pick hammers;
- pile drivers;
- portable pile drivers;
- punches;
- rammers;
- riveting hammers;
- scaling hammers;
- stone hammers;
- spades;
- tampers.

NOTE 1 For examples of non-rotary percussive power tools, see Annex B.

This part of ISO 11148 does not cover special requirements and modifications on non-rotary percussive power tools for the purpose of mounting in a fixture.



This part of ISO 11148 deals with all significant hazards, hazardous situations or hazardous events when the tools are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer, with the exception of the use of non-rotary percussive power tools in potentially explosive atmospheres.

NOTE 2 EN 13463-1 gives requirements for non-electrical equipment for potentially explosive atmospheres.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3857-3, *Compressors, pneumatic tools and machines — Vocabulary — Part 3: Pneumatic tools and machines*

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

ISO 5391, *Pneumatic tools and machines — Vocabulary*

ISO 7000, *Graphical symbols for use on equipment — Registered symbols*<sup>1)</sup>

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*<sup>1)</sup>

ISO 9158, *Road vehicles — Nozzle spouts for unleaded gasoline*

ISO 9159, *Road vehicles — Nozzle spouts for leaded gasoline and diesel fuel*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13732-1, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces*

ISO 13732-3, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 3: Cold surfaces*

ISO 15744, *Hand-held non-electric power tools — Noise measurement code — Engineering method (grade 2)*

ISO 17066, *Hydraulic tools — Vocabulary*

ISO 28927-6, *Hand-held portable power tools — Test methods for evaluation of vibration emission — Part 6: Rammers*

ISO 28927-9, *Hand-held portable power tools — Test methods for evaluation of vibration emission — Part 9: Scaling hammers and needle scalers*

ISO 28927-10, *Hand-held portable power tools — Test methods for evaluation of vibration emission — Part 10: Percussive drills, hammers and breakers*

EN 12096, *Mechanical vibration — Declaration and verification of vibration emission values*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3857-3, ISO 5391, ISO 12100 and ISO 17066 (for hydraulic tools), and the following apply.

<sup>1)</sup> The graphical symbol collections of ISO 7000, ISO 7001 and ISO 7010 are also available online in the ISO web store. For more information, consult [http://www.iso.org/iso/fr/publications\\_and\\_e-products/databases.htm](http://www.iso.org/iso/fr/publications_and_e-products/databases.htm).