Käeshoitavad mitteelektrilised jõuseadised. Ohutusnõuded. Osa 9: Stantspeenestid (ISO 11148-9:2011)

Hand-held non-electric power tools - Safety requirements - Part 9: Die grinders (ISO 11148-9:2011)

EESTI STANDARDIKESKUS
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11148-9:2011 sisaldab Euroopa standardi EN ISO 11148-9:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11148-9:2011 consists of the English text of the European standard EN ISO 11148-9:2011.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.12.2011.	Date of Availability of the European standard is 01.12.2011.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Võtmesõnad: chucks, grinding machines (tools), manual controls, milling, operating instructions, pedestrian-controlled systems, powered, safety, safety engineering, safety requirements, specification (approval), specifications, symbols, testing, tools, warnings, wire brushes,

EUROPEAN STANDARD

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English Version

Hand-held non-electric power tools - Safety requirements - Part 9: Die grinders (ISO 11148-9:2011)

Machines portatives à moteur non électrique - Exigences de sécurité - Partie 9: Meuleuses d'outillage (ISO 11148-9:2011)

Handgehaltene nicht elektrisch betriebene Maschinen - Sicherheitsanforderungen - Teil 9: Schleifmaschinen für Schleifstifte (ISO 11148-9:2011)

This European Standard was approved by CEN on 12 November 2011.

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

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Foreword

This document (EN ISO 11148-9:2011) 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 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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 792-9:2001+A1:2008.

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.

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

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, Croatia, 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 the United Kingdom.

Endorsement notice

The text of ISO 11148-9:2011 has been approved by CEN as a EN ISO 11148-9:2011 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 except ER 1.5.7 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 requirements of this type-C standard are different from those which 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 parts 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 type A and B where such standards are applicable.

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

Part 9: Die grinders

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1 Scope

This part of ISO 11148 specifies safety requirements for hand-held non-electric power tools fitted with collets (hereinafter “die grinders”) intended for grinding and surface finishing and chamfering using mounted points, burrs and files and small wire brushes and other accessories mounted on shanks. The die grinders can be powered by compressed air, hydraulic fluid or internal combustion engines and are intended to be used by one operator and supported by the operator's hand or hands, with or without a suspension, e.g. a balancer.

NOTE 1 At the time of publication, no die grinders driven by internal combustion engines are known. Once these are identified, it is intended to amend this part of ISO 11148 to include such power tools.

This part of ISO 11148 is applicable to:

— angle die grinders;

— reciprocating files;

— rotary files;

— straight die grinders.

NOTE 2 For examples of die grinders, see Annex B.

NOTE 3 Grinders without collets, for use with cones and plugs with threaded inserts, are covered by ISO 11148-7.

This part of ISO 11148 deals with all significant hazards, hazardous situations or hazardous events relevant to die grinders when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer, with the exception of the use of die grinders in potentially explosive atmospheres.

NOTE 4 EN 13463-1 gives requirements for non-electrical equipment for potentially explosive atmospheres.

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.

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

ISO 5391, *Pneumatic tools and machines — Vocabulary*

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

ISO 28927-12, *Hand-held portable power tools — Test methods for evaluation of vibration emission — Part 12: Die grinders*

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.

3.1 General terms and definitions

3.1.1
hand-held power tool
machine operated by one or two hands and 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

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

3.1.2
inserted tool
tool inserted in the die grinder to perform the intended work

3.1.3
service tool
tool for performing maintenance or service on the die grinder

3.1.4
control device
device to start and stop the die grinder or to change the direction of the rotation or to control the functional characteristics, such as speed and power

