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Hand-held non-electric power tools - Safety requirements - Part 1: Assembly power tools for nonners (threaded mechanical fasteners (ISO 11148-1:2011)



EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 11148-1:2011 sisaldab Euroopa standardi EN ISO 11148-1:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11148-1:2011 consists of the English text of the European standard EN ISO 11148-1:2011.
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EUROPEAN STANDARD NORME EUROPÉENNE

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English Version

Hand-held non-electric power tools - Safety requirements - Part 1: Assembly power tools for non-threaded mechanical fasteners (ISO 11148-1:2011)

Machines portatives à moteur non électrique - Exigences de sécurité - Partie 1: Machines portatives de pose d'éléments de fixation non filetés (ISO 11148-1:2011)

Handgehaltene nicht elektrisch betriebene Maschinen -Sicherheitsanforderungen - Teil 1: Maschinen für gewindelose mechanische Befestigungen (ISO 11148-1:2011)

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 11148-1:2011) 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of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.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 792-1:2000+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 11148-1:2011 has been approved by CEN as a EN ISO 11148-1:2011 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 S D POENION DE PORTO DE LOS DELOS DE LOS DELOS DE LOS DELOS DE LOS DELOS within the scope of this standard.

Contents Page

Forew	vord	iv
Introd	duction	v
1	Scope	1
2	Normative references	2
3 3.1 3.2	Terms and definitions General terms and definitions Terms and definitions related to assembly power tools for non-threaded mechanical fasteners	2
4 4.1 4.2 4.3 4.4 4.5 4.6 4.7	Safety requirements and/or protective measures General Mechanical safety Thermal safety Noise reduction Vibration Materials and substances processed, used or exhausted Ergonomics Controls	4 5 5 6 6
5 5.1 5.2 5.3 5.4 5.5 5.6	Verification	8 8 8
6 6.1 6.2 6.3 6.4 6.5	Information for use	9 10 14 15
Anne	x A (informative) List of significant hazards	16
	x B (informative) Examples of assembly power tools for non-threaded mechanical fasteners covered by this part of ISO 11148	
Anne	x C (normative) Symbols for labels and signs	
	agraphy	

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.

to pert. 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 1:

Assembly power tools for non-threaded mechanical fasteners

IMPORTANT — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. For the purposes of colour matching, see ISO 3864-4, which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

1 Scope

This part of ISO 11148 specifies safety requirements for hand-held non-electric power tools (hereinafter "assembly power tools for non-threaded mechanical fasteners") intended for installation, tightening or removal of both breakstem and non-breakstem rivets, bolts, plugs and fasteners from one side of a workpiece into metals, plastics and other materials. The assembly power tools for non-threaded mechanical fasteners 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 assembly power tools for non-threaded mechanical fasteners 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:

- breakstem fastener, rivet or plug tools;
- breakstem lockbolt tools;
- mandrel loaded riveting tools;
- rivet nut setters.

NOTE 2 For examples of assembly power tools for non-threaded mechanical fasteners, see Annex B.

This part of ISO 11148 is not applicable to special requirements and modifications of hand-held power tools for the purpose of mounting them in a fixture.

This part of ISO 11148 deals with all significant hazards, hazardous situations or hazardous events relevant to assembly power tools for non-threaded mechanical fasteners 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 power tools in potentially explosive atmospheres.

NOTE 3 EN 13463-1 gives requirements for non-electrical equipment for potentially explosive atmospheres.

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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 20643, Mechanical vibration — Hand-held and hand-guided machinery — Principles for evaluation of vibration emission

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 assembly power tool for non-threaded mechanical fasteners to perform the intended work

3.1.3

service tool

tool for performing maintenance or service on the assembly power tool for non-threaded mechanical fasteners

3.1.4

control device

device to start and stop the assembly power tool for non-threaded mechanical fasteners or to change the direction of the rotation or to control the functional characteristics, such as speed and power