

**Käeshoitavad mitteelektrilised jõuseadised.  
Ohutusnõuded. Osa 6: Keermestatud kinnitusdetailide  
monteerimismasinad**

Hand-held non-electric power tools - Safety requirements -  
Part 6: Assembly power tools for threaded fasteners (ISO  
11148-6:2012)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 11148-6:2012 sisaldab Euroopa standardi EN ISO 11148-6:2012 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 11148-6:2012 consists of the English text of the European standard EN ISO 11148-6:2012.

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.

Date of Availability of the European standard text 19.12.2012.

The standard is available from Estonian standardisation organisation.

ICS 25.140.10

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English Version

Hand-held non-electric power tools - Safety requirements - Part  
6: Assembly power tools for threaded fasteners (ISO 11148-  
6:2012)

Machines portatives à moteur non électrique - Exigences  
de sécurité - Partie 6: Machines d'assemblage pour  
éléments de fixation filetés (ISO 11148-6:2012)

Handgehaltene nicht elektrisch betriebene Maschinen -  
Sicherheitsanforderungen - Teil 6: Maschinen für  
Schraubverbindungen (ISO 11148-6:2012)

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 11148-6:2012) 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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.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 11148-6:2010.

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 11148-6:2012 has been approved by CEN as a EN ISO 11148-6:2012 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.**

# Contents

Page

Foreword .....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
3.1 General definitions .....	2
3.2 Definitions related to assembly power tools for threaded fasteners .....	4
4 Safety requirements and/or protective measures .....	5
4.1 General .....	5
4.2 Mechanical safety .....	5
4.3 Thermal safety .....	6
4.4 Noise reduction .....	6
4.5 Vibration .....	6
4.6 Materials and substances processed, used or exhausted .....	7
4.7 Ergonomics .....	7
4.8 Controls .....	9
5 Verification .....	10
5.1 General conditions for tests .....	10
5.2 Noise .....	10
5.3 Vibration .....	10
5.4 Unintentional start .....	10
5.5 Power tool construction .....	10
5.6 Structure of verification of safety requirements .....	11
6 Information for use .....	11
6.1 Marking, signs and written warnings .....	11
6.2 Instructions handbook .....	12
6.3 Operating instructions .....	17
6.4 Data .....	17
6.5 Maintenance instructions .....	18
Annex A (informative) List of significant hazards .....	19
Annex B (informative) Examples of assembly power tools for threaded fasteners covered by this part of ISO 11148 .....	21
Annex C (normative) Symbols for labels and signs .....	23
Annex D (normative) Additional safety requirements related to internal combustion engine power tools .....	25
Bibliography .....	29

## 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 6:

## Assembly power tools for threaded fasteners

**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 colourimetric 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 “assembly power tools for threaded fasteners”) intended for tightening or installing of threaded fasteners. The assembly power tools for threaded fasteners can be powered by compressed air, hydraulic fluid or internal combustion engines and are 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

- air-hydraulic impulse wrenches;
- impact wrenches;
- fastener installation tools;
- nutrunners;
- open-ended spanners (crow-foot with open-ended socket or tube nut wrench);
- ratchet wrenches;
- screwdrivers.

NOTE 1 For examples of assembly power tools for threaded fasteners, see Annex B.

This part of ISO 11148 does not cover special requirements and modifications of assembly power tools for threaded fasteners for the purpose of mounting them in fixtures.

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 assembly power tools for threaded fasteners in potentially explosive atmospheres.

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